



## **Proposed Protocols for Inventories of Rare Plants of the Grassland Natural Region**

**Fish & Wildlife  
Division**

RESOURCE STATUS AND  
ASSESSMENT BRANCH



**Alberta Species at Risk Report No. 21**

# **Proposed Protocols for Inventories of Rare Plants of the Grassland Natural Region**

Cliff Wallis

**Alberta Species at Risk Report No. 21**

**June 2001**



Publication No. I/027  
ISBN: 0-7785-1813-2 (Printed Edition)  
ISBN: 0-7785-7808-6 (Online Edition)  
ISSN: 1496-7219 (Printed Edition)  
ISSN: 1496-7146 (Online Edition)

For copies of this report, contact:  
Information Centre – Publications  
Alberta Environment  
Natural Resources Service  
Main Floor, Great West Life Building  
9920 – 108 Street  
Edmonton, Alberta, Canada T5K 2M4

Telephone: (780) 422-2079

**OR**

Information Service  
Alberta Environment  
#100, 3115 – 12 Street NE  
Calgary, Alberta, Canada T2E 7J2

Telephone: (403) 297-3362

**OR**

Visit our web site at:  
<http://www.gov.ab.ca/env/fw/status/reports/index.html>

This publication may be cited as:

Wallis, Cliff. 2001. Proposed protocols for inventories of rare plants of the Grassland Natural Region. Alberta Sustainable Resource Development, Fish and Wildlife Service, Alberta Species at Risk Report No. 21. Edmonton, AB. 305 pp.

## TABLE OF CONTENTS

1. INTRODUCTION.....	1
2. METHODS .....	1
2.1 Prioritizing and Ranking Vascular Plant Species.....	1
2.2.1 Defining Priority List of Taxa for Status Reports .....	1
2.2.2 Ranking Species on the Priority List.....	2
2.2.3 Implementation Considerations .....	3
2.2.4 Key Steps in Preparing a Status Report for Vascular Plant Taxa .....	4
3. PROTOCOLS FOR PRIORITY SPECIES 2001-2003.....	5
3.1 Evaluation Results -- Priorities for Status Reports .....	6
3.1.1 Northern Fescue Grassland Natural Subregion .....	6
3.1.2 Foothills Fescue Grassland Natural Subregion.....	8
3.1.3 Mixed Grassland Natural Subregion .....	10
3.1.4 Dry Mixed Grassland Natural Subregion.....	13
4. SUMMARY OF RECOMMENDATIONS FOR PROTOCOLS IN YEAR 2001-2005.....	17
5. COST ESTIMATES.....	17
6. LITERATURE CITED .....	17
7. PROTOCOLS AND ELEMENT OCCURRENCES.....	18
<i>Allium geyeri</i> Geyer's onion .....	18
<i>Amaranthus californicus</i> Californian amaranth .....	22
<i>Ambrosia acanthicarpa</i> bur ragweed .....	23
<i>Anagallis minima</i> ( <i>Centunculus minimus</i> ) chaffweed .....	26
<i>Arabidopsis salsuginea</i> mouse-ear cress .....	29
<i>Aristida purpurea</i> var <i>longiseta</i> red three-awn .....	30
<i>Asclepias viridiflora</i> green milkweed .....	32
<i>Aster campestris</i> meadow aster .....	33
<i>Aster pauciflorus</i> few-flowered aster .....	35
<i>Astragalus kentrophyta</i> var <i>kentrophyta</i> prickly milk vetch.....	42
<i>Astragalus lotiflorus</i> low milk vetch .....	44
<i>Astragalus purshii</i> Pursh's milk vetch .....	48
<i>Atriplex canescens</i> saltbush .....	53
<i>Atriplex powellii</i> Powell's saltbush .....	55
<i>Atriplex truncata</i> saltbush .....	57
<i>Bacopa rotundifolia</i> water hyssop .....	58
<i>Bidens frondosa</i> common beggarticks .....	59
<i>Boisduvalia glabella</i> smooth boisduvalia .....	62
<i>Bromus latiglumis</i> Canada brome .....	65
<i>Calylophus serrulatus</i> shrubby evening-primrose .....	66
<i>Camissonia andina</i> upland evening-primrose .....	69
<i>Camissonia breviflora</i> taraxia .....	70
<i>Carex hystericina</i> porcupine sedge .....	71
<i>Carex nebrascensis</i> Nebraska sedge .....	73
<i>Carex retrorsa</i> turned sedge .....	80
<i>Carex parryana</i> var <i>parryana</i> Parry's sedge .....	84
<i>Castilleja cusickii</i> yellow paintbrush .....	88

<i>Castilleja lutescens</i> stiff yellow paintbrush .....	94
<i>Castilleja sessiliflora</i> downy paintbrush .....	99
<i>Cerastium brachypodum</i> .....	100
<i>Chenopodium desiccatum</i> goosefoot .....	101
<i>Chenopodium incanum</i> goosefoot .....	103
<i>Chenopodium subglabrum</i> smooth narrow-leaved goosefoot .....	104
<i>Chenopodium watsonii</i> Watson's goosefoot .....	105
<i>Coreopsis tinctoria</i> common tickseed .....	106
<i>Crepis occidentalis</i> small-flowered hawk's-beard .....	109
<i>Cryptantha minima</i> small cryptanthe .....	113
<i>Cuscuta gronovii</i> common dodder .....	115
<i>Cyperus schweinitzii</i> sand nut-grass .....	116
<i>Cyperus squarrosus</i> awned nut-grass .....	118
<i>Downingia laeta</i> downingia .....	119
<i>Draba reptans</i> whitlow-grass .....	121
<i>Elatine triandra</i> waterwort .....	123
<i>Eleocharis engelmannii</i> Engelmann's spike-rush = <i>E. ovata</i> .....	124
<i>Ellisia nyctelea</i> waterpod .....	125
<i>Elodea bifoliata</i> .....	128
<i>Elymus virginicus</i> Virginia wild rye .....	130
<i>Erigeron radicans</i> dwarf fleabane .....	132
<i>Eriogonum cernuum</i> nodding umbrella-plant .....	135
<i>Festuca occidentalis</i> western fescue .....	138
<i>Fraxinus pennsylvanica</i> green ash .....	140
<i>Gentiana fremontii</i> .....	141
<i>Gratiola neglecta</i> clammy hedge-hyssop .....	144
<i>Halimolobos virgata</i> halimolobos .....	146
<i>Heliotropium curassavicum</i> spatulate-leaved heliotrope .....	147
<i>Hordeum pusillum</i> little barley .....	148
<i>Hymenopappus filifolius</i> tufted hymenopappus .....	149
<i>Iris missouriensis</i> western blue flag .....	152
<i>Juncus confusus</i> few-flowered rush .....	156
<i>Juncus nevadensis</i> Nevada rush .....	162
<i>Lilaea scilloides</i> flowering-quillwort .....	163
<i>Linanthus septentrionalis</i> linanthus .....	165
<i>Lobelia spicata</i> spiked lobelia .....	167
<i>Lomatogonium rotatum</i> marsh felwort .....	168
<i>Lupinus minimus</i> least lupine .....	171
<i>Lycopus americanus</i> American water-horehound .....	173
<i>Lysimachia hybrida</i> .....	177
<i>Marsilea vestita</i> hairy pepperwort .....	180
<i>Mertensia lanceolata</i> lance-leaved lungwort .....	182
<i>Muhlenbergia asperifolia</i> scratch grass .....	185
<i>Muhlenbergia racemosa</i> marsh muhly .....	191
<i>Munroa squarrosa</i> false buffalo grass .....	193
<i>Nothocalais cuspidata</i> prairie false dandelion .....	195
<i>Nuttallanthus canadensis</i> field toad-flax .....	197
<i>Oenothera flava</i> low yellow evening-primrose .....	198
<i>Onosmodium molle</i> western false gromwell .....	201
<i>Orobanche ludoviciana</i> Louisiana broom-rape .....	205
<i>Oryzopsis micrantha</i> little-seed rice grass .....	207
<i>Osmorhiza longistylis</i> smooth sweet cicely.....	212
<i>Oxytropis lagopus</i> var <i>conjugans</i> hare-footed locoweed .....	215
<i>Parietaria pensylvanica</i> American pellitory .....	218

<i>Picradeniopsis (Bahia) oppositifolia</i> picradeniopsis .....	223
<i>Plantago canescens</i> western ribgrass .....	224
<i>Polanisia dodecandra</i> clammyweed .....	228
<i>Polygonum polygaloides</i> ssp <i>confertiflorum</i> Watson's knotweed .....	231
<i>Potamogeton foliosus</i> leafy pondweed .....	237
<i>Potentilla finitima</i> sandhills cinquefoil .....	240
<i>Potentilla paradoxa</i> bushy cinquefoil .....	241
<i>Potentilla plattensis</i> low cinquefoil .....	246
<i>Psilocarphus elatior</i> woollyheads .....	247
<i>Quercus macrocarpa</i> bur oak .....	252
<i>Ranunculus glaberrimus</i> early buttercup .....	253
<i>Rorippa curvipes</i> var <i>truncata</i> blunt-leaved yellow cress .....	258
<i>Rorippa sinuata</i> spreading yellow cress .....	259
<i>Rorippa tenerrima</i> slender cress .....	260
<i>Ruppia cirrhosa</i> widgeon-grass .....	261
<i>Sagina decumbens</i> .....	263
<i>Shinnersoseris (Lygodesmia) rostrata</i> annual skeletonweed .....	264
<i>Sisyrinchium septentrionale</i> pale blue-eyed grass .....	267
<i>Spartina pectinata</i> prairie cord grass .....	274
<i>Spergularia salina</i> salt-marsh sand spurry .....	276
<i>Sphenopholis obtusata</i> prairie wedge grass .....	280
<i>Stephanomeria runcinata</i> rush-pink .....	283
<i>Suaeda moquinii</i> Moquin's sea-blite .....	289
<i>Suckleya suckleyana</i> poison suckleya .....	291
<i>Thelesperma subnudum</i> var <i>marginatum</i> greenthread .....	292
<i>Townsendia exscapa</i> low townsendia .....	293
<i>Tradescantia occidentalis</i> western spiderwort .....	296
<i>Tripterocalyx micranthus (Abronia micrantha)</i> sand verbena .....	297
<i>Veronica catenata</i> water speedwell .....	300
<i>Viola pedatifida</i> crowfoot violet .....	302
<i>Yucca glauca</i> soapweed .....	305



## **1. INTRODUCTION**

Several reports have been prepared on the status of Alberta's native plant species. More recently, non-vascular plants have been given some attention and tracking lists have been developed. There is a relatively good information base for rare vascular species but a very limited one for rare non-vascular plants.

Alberta Environment needs to develop a longer (3-5 year) term approach for understanding and prioritizing the research and habitat conservation needs with respect to rare plants. This report analyzes the vascular plant species and discusses potential approaches to research, monitoring and conservation of vascular and non-vascular plants in the Grassland Natural Region. There is a fundamental recognition that habitat or landscape level approaches are preferred but that some single species attention may still be required.

112 vascular plant species were selected for detailed analysis and preparation of protocols based on their distribution within the Grassland Natural Region.

## **2. METHODS**

Building on the work previously undertaken by Cheryl Bradley, Joyce Gould and Cliff Wallis in developing rankings for vascular plants, the provincial Alberta Natural Heritage Information Centre database was re-analyzed to update the various fields and re-score the species (see 2.1). The existing fields included global status (GRank), provincial status (SRank), threats to habitat, and threats to population. A short habitat descriptor was also added that divided the habitats into major landscape types, e.g. grassland, sandy grassland, sand dune, slopes-badland, slopes-sandy, wetland, wetland-alkali, wetland-meadow, wetland-sandy, wetland-springs, woodland, and woodland-sandy.

Additional information on the biogeographic distribution of the Great Plains species within the Great Plains region was also added to the data base. This included notations on whether the species was generally distributed in the Great Plains or more regionally restricted to the western or northwestern Great Plains or the glaciated portions.

### **2.1 Prioritizing and Ranking Vascular Plant Species**

This section has been developed by the Rare Plant Technical Advisory Committee (Joyce Gould and Cheryl Bradley, pers. comm.) for ranking species for preparation of status reports. A similar approach is useful in determining priorities for research, monitoring and conservation.

#### **2.2.1 Defining Priority List of Taxa for Status Reports**

The Rare Plant Technical Advisory Committee produced a list of priority taxa for status reports. The following are criteria they used for producing a list of vascular plant taxa to be considered for status reports. Taxa considered are those currently being tracked by the Alberta Natural Heritage Information Centre (ANHIC). Species and subspecies of special conservation concern are tracked by ANHIC. Any of the criteria below would trigger or, in the case of Criteria 1-4, reject, a "priority" ranking.



*Criteria I-1 Global rank \* is < G3 and provincial rank\* is < S3*

This criteria selects for taxa which are known from ≤ 100 occurrences globally as well as provincially. For many of these species a significant part of their global range is in Alberta. Very few of our grassland species meet this criterion.

*Criteria I-2 Threats to known populations and habitat are considered under extreme (A) or moderate (B) threat and provincial rank is < S3*

This criteria selects for taxa which are known from ≤ 100 occurrences provincially and which are assessed by the Alberta Vascular Plant Tracking List Committee as under extreme (A) to moderate (B) threat to population or habitat. Threats to population are defined as observed, inferred, or projected direct exploitation, harassment, or ecological interactions with predators, competitors, pathogens or parasites which may result in population declines. Threats to habitat are defined as observed, inferred, or projected habitat alterations (loss, conversion, degradation, or fragmentation) which may result in population declines. Extreme threats are significant, affect more than half the population, and are unmitigated. Moderate threats are also serious, but affect less than half the population or are mitigated by some level of human protection. The majority of "priority" species meet this criterion.

*Criteria I-3 Populations in Alberta are widely disjunct from the centre of distribution of the taxa*

This criteria selects for taxa with a population in Alberta that is widely separated from the species' centre of distribution outside Alberta. Disjunct populations are more likely to evolve to a separate taxon than contiguous populations and hence are of special concern for conservation. Disjuncts have not yet been identified and none of our "priority" species meet this criterion. This was not used to stratify the data.

*Criteria I-4 There is significant taxonomic uncertainty (Q) with respect to the taxa*

This criteria selects against taxa which are not clear taxonomically, as indicated by a "Q" in the global status designation. These taxa are removed from the priority list.

---

Global Rank	Provincial Rank	Definition of Rank
G1	S1	≤ 5 occurrences or only a few remaining individuals.
G2	S2	6-20 occurrences or with many individuals in few occurrences.
G3	S3	21-100 occurrences may be rare and local throughout its range, or in a restricted range (may be abundant in some locations or may be vulnerable to extirpation because of some factor of its biology).

Other codes: "T\_" - rank for a subspecific taxon; "\_?" - rank uncertain; "Q" – questionable taxon.

### 2.2.2 Ranking Species on the Priority List

Taxa on the priority list are ranked according to a number of additional criteria. The following are criteria used for ranking. Scores for individual criteria are weighted and combined to produce an overall ranking.

---

\* Definition of Element Ranks used by ANHIC - Elements within the Alberta Natural Heritage Information Centre (ANHIC) database are evaluated and ranked on their status globally using a system developed by The Nature Conservancy which is in use throughout North America. Ranking is usually based primarily on the number of occurrences, since that is frequently the only information available. Information, such as population size and trend, life history and reproductive strategies, range and current threats is used when available.

*Criteria II-1 Global Rank (10 points)*

Highest score is given to G1 and G2 taxa and then in descending order G3, G4,G5.

G2	10
G3	5
G4,G?	3
G5	1

*Criteria II-2 Degree of Threat (10 points)*

Both threat to population and threat to habitat are considered. Taxa under extreme threat receive a higher score than those under moderate threat.

ThPop	ThHab	
A	A	10
A	B	5
B	A	5
B	B	2
Other		1

*Criteria II-3 Last Observation Date (5 points)*

Taxa for which occurrences have not been reported for many years are given a higher score than for those recently reported.

Prior to 1951	5
1976	4
1990	3
2000	2

*Criteria II-4 Provincial Rank (5 points)*

Highest score is given to S1 taxa, and then in descending order S2 and S3. It may be useful to consider number of element occurrences (eos)

S1 (1-2 eos)	5
S1 (3-5- eos)	4
S2 (6-10 eos)	3
S2 (11-20- eos)	2
S3 (>20 eos)	1

Additional consideration (but not scoring) was given to species that exhibit a geographic range restriction. Of particular importance are those Great Plains species that show an affinity for glaciated portions of the northern great plains. These are identified in the lists under the "Dist" heading as NWG-g (Northwestern Great Plains-glaciated) or NG-g (Northern Great Plains-glaciated).

### **2.2.3 Implementation Considerations**

Prior to proceeding with obtaining status reports on priority species there are other considerations which will affect the scheduling, manpower and resource needs for status reports, particularly with respect to field work aspects. These considerations include:

*Field Work Effort*

Species which require very little field work effort may proceed sooner than those which require a major field effort. For example it may make sense to proceed with status reports for species which occur in few known locations or whose known and expected occurrences are easily accessible or which have been recently studied and hence little additional field work is required even though there are higher ranking species where field information is unavailable or difficult to obtain.

#### *Ease of Recognition of the Taxa*

Some taxa may not be readily identifiable from gross field characteristics and field identification would require participation by botanists with expertise in these taxa. Availability of this expertise would need to be considered in designing the field work program for status reports.

#### *Proximity to other Priority Taxa*

There may be efficiencies in use of limited resources for field survey to prepare status reports for an aggregation of priority taxa occurring within the same Subregion. Species occurring in close proximity to other species on the priority list may be considered for status reports prior to those which are relatively isolated from other taxa on the priority list.

### **2.2.4 Key Steps in Preparing a Status Report for Vascular Plant Taxa**

- 1) Acquire background information on target species using ANHIC database, bibliographic search, herbarium visits and interviews.
- 2) Conduct field work to relocate previously reported populations and survey potential habitat. Complete element occurrence reports (precise location, population size, phenology, current land use and management, threats or concerns).
- 3) Verify specimens (collection or photo) and label for depositing in herbarium.
- 4) Enter information from element occurrence reports in ANHIC database.
- 5) Prepare the final status report which synthesizes information on habitat, conservation biology, distribution, population size and trends, limiting factors, status designations, and recent management in Alberta.

### 3. PROTOCOLS FOR PRIORITY SPECIES 2001-2003

The species list was reviewed and further refined to remove species that were ranked S3 or higher. The final list comprises 112 species occurring in the Grassland Natural Region.

All species were ranked using the methodology defined in Section 2.2.1. Following ranking and the simplification of habitat information into 13 broad categories, the database was manipulated to determine the highest priority habitats, natural subregions and species within the Grassland Natural Region. These were further analyzed to determine logistical arrangements for conducting field surveys and preparation of status reports as defined in Section 2.2.3. A work plan was created which allocates efforts over five years (2001-2005).

There are two major types of priorities for field work:

- field surveys to assess status and threats
- monitoring known "status" species (ie COSEWIC) to determine trends and conservation priorities

Further assessment work was based first on perceived threat and secondarily on logistical arrangements (geographic proximity, habitat similarities for species' groups). Ease of recognition of taxa played the least important role but is flagged in the protocols for species where there are taxonomic difficulties.

### 3.1 Evaluation Results -- Priorities for Status Reports

#### 3.1.1 Northern Fescue Grassland Natural Subregion

This is a high priority Natural Subregion. Most habitats are under significant threat.

Recommended Year of Action: 2001 for high priority habitats; 2004 for lowest ranked species.

Priorities (12 bold-faced species): Wetland-Meadow, Grassland-Sandy and Wetland-Sandy habitats. An additional group of lower-ranked species (see 2001 Work Plan below) could be surveyed in conjunction with the higher ranked species in these habitat types.

SNAME	SCOMNAME	TOTAL VALUE	PRIORITY	SHORT HABITAT	NFG	FFG	MG	DMG	Dist
<b>Lobelia spicata</b>	<b>spiked lobelia</b>	21	R	Wetland-Meadow	21				G
<b>Potentilla plattensis</b>	<b>low cinquefoil</b>	19	R	Grassland-Sandy	19				NG-g
<b>Lysimachia hybrida</b>		16	R	Wetland-Sandy	16			16	G
<b>Viola pedatifida</b>	<b>crowfoot violet</b>	16	R	Grassland-Sandy	16	16			G
<b>Sagina decumbens</b>	<b>spreading pearlwort</b>	13	R	Wetland-Sandy	13				NG-g
<b>Bromus latiglumis (altissimus)</b>	<b>Canada brome</b>	12	B	Woodland	12				NG
<b>Sisyrinchium septentrionale</b>	<b>pale blue-eyed grass</b>	10	B	Wetland-Meadow	10	10	10	10	NG-g
<b>Atriplex powellii</b>	<b>Powell's saltbush</b>	10	B	Wetland-Alkali	10			10	NWG-g
<b>Rorippa sinuata</b>	<b>spreading yellow cress</b>	9	B	Wetland-Sandy	9	9	9	9	G
<b>Rorippa tenerrima</b>	<b>slender cress</b>	9	B	Wetland-Sandy	9		9	9	NG
<b>Camissonia breviflora</b>	<b>taraxia</b>	9	B	Wetland-Alkali	9			9	WG
<b>Gratiola neglecta</b>	<b>clammy hedge-hyssop</b>	9	B	Wetland	9	9	9		G
<b>Rorippa curvipes var. truncata</b>	<b>blunt-leaved yellow cress</b>	8	Y	Wetland-Sandy	8			8	NG
<b>Aster pauciflorus</b>	<b>few-flowered aster</b>	8	Y	Wetland-Alkali	8			8	NG-g
<b>Heliotropium curassavicum</b>	<b>spatulate-leaved heliotrope</b>	8	Y	Wetland-Alkali	8		8	8	G
<b>Ruppia maritima</b>	<b>widgeon-grass</b>	8	Y	Wetland-Alkali	8	8	8		G
<b>Lomatogonium rotatum</b>	<b>marsh felwort</b>	8	Y	Wetland	8	8		8	NWG-g
<b>Castilleja lutescens</b>	<b>stiff yellow paintbrush</b>	8	Y	Grassland	8	8	8		NWG-g
<b>Elymus virginicus</b>	<b>Virginia wild rye</b>	7	Y	Woodland-Sandy	7	7		7	G
<b>Sphenopholis obtusata</b>	<b>prairie wedge grass</b>	7	Y	Wetland-Springs	7	7	7	7	G
<b>Marsilea vestita</b>	<b>hairy pepperwort</b>	7	Y	Wetland-Sandy	7		7	7	G
<b>Atriplex canescens ssp aptera</b>		7	Y	Wetland-Alkali	7		7	7	WG
<b>Ellisia nyctelea</b>	<b>waterpod</b>	7	Y	Slopes-Sandy	7	7	7	7	G
<b>Townsendia exscapa</b>	<b>low townsendia</b>	7	Y	Grassland-Sandy	7		7	7	WG
<b>Ranunculus glaberrimus</b>	<b>early buttercup</b>	7	Y	Grassland	7	7	7	7	NWG
<b>Potentilla paradoxa</b>	<b>bushy cinquefoil</b>	6	G	Wetland-Sandy	6		6	6	G
<b>Juncus confusus</b>	<b>few-flowered rush</b>	6	G	Wetland-Meadow	6	6	6	6	NWG-g
<b>Spergularia salina</b>	<b>salt-marsh sand spurry</b>	6	G	Wetland-Alkali	6		6	6	NG-g
<b>Calylophus serrulatus</b>	<b>shrubby evening-primrose</b>	6	G	Grassland-Sandy	6	6	6	6	G
<b>Crepis occidentalis</b>	<b>small-flowered hawk's-beard</b>	6	G	Grassland-Sandy	6		6	6	NWG
<b>Muhlenbergia asperifolia</b>	<b>scratch grass</b>	5	G	Wetland-Alkali	5		5	5	G

#### 2001 Work Plan-Northern Fescue Grassland

Priorities (15 species) lie in Wetland-Meadow, Grassland-Sandy and Wetland-Sandy habitats.

SNAME	SCOMNAME	TOTAL VALUE	PRIORITY	SHORT HABITAT	NFG	FFG	MG	DMG	Dist
<b>Potentilla plattensis</b>	<b>low cinquefoil</b>	19	R	Grassland-Sandy	19				NG-g
<b>Viola pedatifida</b>	<b>crowfoot violet</b>	16	R	Grassland-Sandy	16	16			G
<b>Townsendia exscapa</b>	<b>low townsendia</b>	7	Y	Grassland-Sandy	7		7	7	WG
<b>Calylophus serrulatus</b>	<b>shrubby evening-primrose</b>	6	G	Grassland-Sandy	6	6	6	6	G
<b>Crepis occidentalis</b>	<b>small-flowered hawk's-beard</b>	6	G	Grassland-Sandy	6		6	6	NWG
<b>Lobelia spicata</b>	<b>spiked lobelia</b>	21	R	Wetland-Meadow	21				G
<b>Sisyrinchium septentrionale</b>	<b>pale blue-eyed grass</b>	10	B	Wetland-Meadow	10	10	10	10	NG-g
<b>Juncus confusus</b>	<b>few-flowered rush</b>	6	G	Wetland-Meadow	6	6	6	6	NWG-g
<b>Lysimachia hybrida</b>		16	R	Wetland-Sandy	16			16	G
<b>Sagina decumbens</b>	<b>spreading pearlwort</b>	13	R	Wetland-Sandy	13				NG-g
<b>Rorippa sinuata</b>	<b>spreading yellow cress</b>	9	B	Wetland-Sandy	9	9	9	9	G
<b>Rorippa tenerrima</b>	<b>slender cress</b>	9	B	Wetland-Sandy	9		9	9	NG
<b>Rorippa curvipes var. truncata</b>	<b>blunt-leaved yellow cress</b>	8	Y	Wetland-Sandy	8			8	NG
<b>Marsilea vestita</b>	<b>hairy pepperwort</b>	7	Y	Wetland-Sandy	7		7	7	G
<b>Potentilla paradoxa</b>	<b>bushy cinquefoil</b>	6	G	Wetland-Sandy	6		6	6	G

## 2004 Work Plan-Northern Fescue Grassland

16 lower-ranked species in Grassland, Slopes-Sandy, Wetland, Wetland-Alkali, Wetland Springs, Woodland, and Woodland-Sandy habitats.

SNAME	SCOMNAME	TOTAL VALUE	PRIORITY	SHORT HABITAT	NFG	FFG	MG	DMG	Dist
<i>Castilleja lutescens</i>	stiff yellow paintbrush	8	Y	Grassland	8	8	8		NWG-g
<i>Ranunculus glaberrimus</i>	early buttercup	7	Y	Grassland	7	7	7	7	NWG
<i>Elisia nyctelea</i>	waterpod	7	Y	Slopes-Sandy	7	7	7	7	G
<i>Gratiola neglecta</i>	clammy hedge-hyssop	9	B	Wetland	9	9	9		G
<i>Lomatogonium rotatum</i>	marsh felwort	8	Y	Wetland	8	8		8	NWG-g
<i>Atriplex powellii</i>	Powell's saltbush	10	B	Wetland-Alkali	10			10	NWG-g
<i>Camissonia breviflora</i>	taraxia	9	B	Wetland-Alkali	9			9	WG
<i>Aster pauciflorus</i>	few-flowered aster	8	Y	Wetland-Alkali	8			8	NG-g
<i>Heliotropium curassavicum</i>	spatulate-leaved heliotrope	8	Y	Wetland-Alkali	8		8	8	G
<i>Ruppia maritima</i>	widgeon-grass	8	Y	Wetland-Alkali	8	8	8		G
<i>Atriplex canescens ssp aptera</i>		7	Y	Wetland-Alkali	7		7	7	WG
<i>Spergularia salina</i>	salt-marsh sand spurry	6	G	Wetland-Alkali	6		6	6	NG-g
<i>Muhlenbergia asperifolia</i>	scratch grass	5	G	Wetland-Alkali	5		5	5	G
<i>Sphenopholis obtusata</i>	prairie wedge grass	7	Y	Wetland-Springs	7	7	7	7	G
<i>Bromus latiglumis (altissimus)</i>	Canada brome	12	B	Woodland	12				NG
<i>Elymus virginicus</i>	Virginia wild rye	7	Y	Woodland-Sandy	7	7		7	G

### 3.1.2 Foothills Fescue Grassland Natural Subregion

This is a high priority Natural Subregion with many species with moderate to high scores.

Recommended Years of Action: 2001-2002 for high priority species.

Priorities (17 bold-faced species) lie in Wetland-Meadow, Grassland-Sandy, Grassland, Grassland-Unglaciaded, Wetland-Springs, Wetland and Wetland-Sandy habitats. It is likely that an additional group of lower-ranked species (see 2001 work plan below) could be surveyed in conjunction with the higher ranked species in these habitat types.

SNAME	SCOMNAME	TOTAL VALUE	PRIORITY	SHORT HABITAT	FFG	NFG	MG	DMG	Dist
<b>Potentilla finitima*</b>	<b>sandhills cinquefoil</b>	19	R	Grassland-Sandy	19				NG-g
<b>Viola pedatifida*</b>	<b>crowfoot violet</b>	16	R	Grassland-Sandy	16	16			G
<b>Gentiana fremontii*</b>		13	R	Wetland-Springs	13				NWG-g
<b>Lupinus minimus</b>	<b>least lupine</b>	11	B	Grassland	11				NWG-g
<b>Erigeron radicans</b>	<b>dwarf fleabane</b>	11	B	Grassland-Sandy	11		11	11	NWG-g
<b>Iris missouriensis</b>	<b>western blue flag</b>	11	B	Wetland-Meadow	11				WG
<b>Juncus nevadensis</b>	<b>Nevada rush</b>	11	B	Wetland-Springs	11		11		NWG-g
<b>Oxytropis lagopus var conjugans</b>	<b>hare-footed locoweed</b>	10	B	Grassland-Ungl.	10				NWG-g
<b>Elodea bifoliata</b>		10	B	Wetland	10		10	10	NWG-g
<b>Sisyrinchium septentrionale</b>	<b>pale blue-eyed grass</b>	10	B	Wetland-Meadow	10	10	10	10	NG-g
<b>Amaranthus californicus</b>	<b>Californian amaranth</b>	10	B	Wetland-Sandy	10			10	NWG-g
<b>Carex parryana var parryana</b>	<b>Parry's sedge</b>	10	B	Wetland-Springs	10		10	10	NWG-g
<b>Plantago canescens</b>	<b>western ribgrass</b>	9	B	Grassland-Ungl.	9				NWG-g
<b>Muhlenbergia racemosa</b>	<b>marsh muhly</b>	9	B	Slopes-Sandy	9			9	G
<b>Gratiola neglecta</b>	<b>clammy hedge-hyssop</b>	9	B	Wetland	9	9	9		G
<b>Allium geyeri</b>	<b>Geyer's onion</b>	9	B	Wetland-Meadow	9				WG
<b>Rorippa sinuata</b>	<b>spreading yellow cress</b>	9	B	Wetland-Sandy	9	9	9	9	G
<b>Aster campestris</b>	<b>meadow aster</b>	8	Y	Grassland	8		8		WG
<b>Castilleja cusickii</b>	<b>yellow paintbrush</b>	8	Y	Grassland	8				NWG-g
<b>Castilleja lutescens</b>	<b>stiff yellow paintbrush</b>	8	Y	Grassland	8	8	8		NWG-g
<b>Mertensia lanceolata</b>	<b>lance-leaved lungwort</b>	8	Y	Grassland	8				WG
<b>Polanisia dodecandra</b>	<b>clammyweed</b>	8	Y	Sand Dunes; Slopes-Sandy	8		8	8	G
<b>Lomatogonium rotatum</b>	<b>marsh felwort</b>	8	Y	Wetland	8	8		8	NWG-g
<b>Ruppia maritima</b>	<b>widgeon-grass</b>	8	Y	Wetland-Alkali	8	8	8		G
<b>Festuca occidentalis</b>	<b>western fescue</b>	8	Y	Woodland	8				NWG-g
<b>Onosmodium molle</b>	<b>western false gromwell</b>	8	Y	Woodland-Sandy	8		8		G
<b>Ranunculus glaberrimus</b>	<b>early buttercup</b>	7	Y	Grassland	7	7	7	7	NWG
<b>Draba reptans</b>	<b>whitflow-grass</b>	7	Y	Slopes-Sandy	7		7	7	G
<b>Ellisia nyctelea</b>	<b>waterpod</b>	7	Y	Slopes-Sandy	7	7	7	7	G
<b>Orobanche ludoviciana</b>	<b>Louisiana broom-rape</b>	7	Y	Slopes-Sandy	7		7	7	NWG
<b>Veronica catenata</b>	<b>water speedwell</b>	7	Y	Wetland	7		7		G
<b>Sphenopholis obtusata</b>	<b>prairie wedge grass</b>	7	Y	Wetland-Springs	7	7	7	7	G
<b>Elymus virginicus</b>	<b>Virginia wild rye</b>	7	Y	Woodland-Sandy	7	7		7	G
<b>Calylophus serrulatus</b>	<b>shrubby evening-primrose</b>	6	G	Grassland-Sandy	6	6	6	6	G
<b>Stephanomeria runcinata</b>	<b>rush-pink</b>	6	G	Slopes-Badlands	6		6	6	NWG-g
<b>Hymenopappus filifolius</b>	<b>tufted hymenopappus</b>	6	G	Slopes-Sandy	6		6	6	WG
<b>Juncus confusus</b>	<b>few-flowered rush</b>	6	G	Wetland-Meadow	6	6	6	6	NWG-g
<b>Oenothera flava</b>	<b>low yellow evening-primrose</b>	6	G	Wetland-Sandy	6		6	6	NG-g
<b>Carex nebrascensis</b>	<b>Nebraska sedge</b>	6	G	Wetland-Springs	6		6	6	WG
<b>Lycopus americanus</b>	<b>American water-horehound</b>	6	G	Wetland-Springs	6		6	6	G
<b>Oryzopsis micrantha</b>	<b>little-seed rice grass</b>	6	G	Woodland-Sandy	6			6	NWG

\* - outside Alberta Environment's corporate Prairie Region

## 2001 Work Plan-Foothills Fescue Grassland

Priorities (17 species) lie in Wetland-Meadow, Wetland-Springs, Wetland and Wetland-Sandy habitats. One Grassland-Sandy species should be surveyed in conjunction with Northern Fescue Grassland 2001 surveys.

<i>Gentiana fremontii</i> *		13	R	Wetland-Springs	13				NWG-g
<i>Juncus nevadensis</i>	Nevada rush	11	B	Wetland-Springs	11		11		NWG-g
<i>Carex parryana</i> var <i>parryana</i>	Parry's sedge	10	B	Wetland-Springs	10		10	10	NWG-g
<i>Sphenopholis obtusata</i>	prairie wedge grass	7	Y	Wetland-Springs	7	7	7	7	G
<i>Carex nebrascensis</i>	Nebraska sedge	6	G	Wetland-Springs	6		6	6	WG
<i>Lycopus americanus</i>	American water-horehound	6	G	Wetland-Springs	6		6	6	G
<i>Iris missouriensis</i> *	western blue flag	11	B	Wetland-Meadow	11				WG
<i>Sisyrinchium septentrionale</i>	pale blue-eyed grass	10	B	Wetland-Meadow	10	10	10	10	NG-g
<i>Allium geoyeri</i>	Geyer's onion	9	B	Wetland-Meadow	9				WG
<i>Juncus confusus</i>	few-flowered rush	6	G	Wetland-Meadow	6	6	6	6	NWG-g
<i>Amaranthus californicus</i>	Californian amaranth	10	B	Wetland-Sandy	10			10	NWG-g
<i>Rorippa sinuata</i>	spreading yellow cress	9	B	Wetland-Sandy	9	9		9	G
<i>Oenothera flava</i>	low yellow evening-primrose	6	G	Wetland-Sandy	6		6	6	NG-g
<i>Elodea bifoliata</i>		10	B	Wetland	10		10	10	NWG-g
<i>Gratiola neglecta</i>	clammy hedge-hyssop	9	B	Wetland	9	9		9	G
<i>Lomatogonium rotatum</i>	marsh felwort	8	Y	Wetland	8	8		8	NWG-g
<i>Veronica catenata</i>	water speedwell	7	Y	Wetland	7		7		G

\* - recent monitoring work done and status report prepared

<i>Viola pedatifida</i> *	crowfoot violet	16	R	Grassland-Sandy	16	16			G
---------------------------	-----------------	----	---	-----------------	----	----	--	--	---

\* - conduct surveys in conjunction with Northern Fescue Grassland

## 2002 Work Plan-Foothills Fescue Grassland

Priorities (14 species) lie in Grassland-Sandy, Grassland-Unglaciated, Grassland and Slopes-Sandy habitats.

<i>Potentilla finitima</i>	sandhills cinquefoil	19	R	Grassland-Sandy	19				NG-g
<i>Erigeron radicans</i>	dwarf fleabane	11	B	Grassland-Sandy	11		11	11	NWG-g
<i>Calylophus serrulatus</i>	shrubby evening-primrose	6	G	Grassland-Sandy	6	6	6	6	G
<i>Oxytropis lagopus</i> var <i>conjugans</i> *	hare-footed locoweed	10	B	Grassland-Ungl.	10				NWG-g
<i>Plantago canescens</i>	western ribgrass	9	B	Grassland-Ungl.	9				NWG-g
<i>Aster campestris</i>	meadow aster	8	Y	Grassland	8		8		WG
<i>Castilleja cusickii</i>	yellow paintbrush	8	Y	Grassland	8				NWG-g
<i>Castilleja lutescens</i>	stiff yellow paintbrush	8	Y	Grassland	8	8	8		NWG-g
<i>Ranunculus glaberrimus</i>	early buttercup	7	Y	Grassland	7	7	7	7	NWG
<i>Muhlenbergia racemosa</i>	marsh muhly	9	B	Slopes-Sandy	9			9	G
<i>Draba reptans</i>	whitlow-grass	7	Y	Slopes-Sandy	7		7	7	G
<i>Ellisia nyctelea</i>	waterpod	7	Y	Slopes-Sandy	7	7	7	7	G
<i>Orobancha ludoviciana</i>	Louisiana broom-rape	7	Y	Slopes-Sandy	7		7	7	NWG
<i>Hymenopappus filifolius</i>	tufted hymenopappus	6	G	Slopes-Sandy	6		6	6	WG

\*- status report already prepared

## 2005 Work Plan-Foothills Fescue Grassland

7 lower ranked species lie in Sand Dunes, Slopes-Badlands, Wetland-Alkali, Woodland and Woodland-Sandy habitats.

SNAME	SCOMNAME	TOTAL VALUE	PRIORITY	SHORT HABITAT	FFG	NFG	MG	DMG	Dist
<i>Polanisia dodecandra</i>	clammyweed	8	Y	Sand Dunes; Slopes-Sandy	8		8	8	G
<i>Stephanomeria runcinata</i>	rush-pink	6	G	Slopes-Badlands	6		6	6	NWG-g
<i>Ruppia maritima</i>	widgeon-grass	8	Y	Wetland-Alkali	8	8	8		G
<i>Festuca occidentalis</i>	western fescue	8	Y	Woodland	8				NWG-g
<i>Onosmodium molle</i>	western false gromwell	8	Y	Woodland-Sandy	8		8		G
<i>Elymus virginicus</i>	Virginia wild rye	7	Y	Woodland-Sandy	7	7		7	G
<i>Oryzopsis micrantha</i>	little-seed rice grass	6	G	Woodland-Sandy	6			6	NWG

*Lupinus minimus* and *Mertensia lanceolata* are perhaps best surveyed in conjunction with southwestern mountain rare plant surveys:

<i>Lupinus minimus</i>	least lupine	11	B	Grassland	11				NWG-g
<i>Mertensia lanceolata</i>	lance-leaved lungwort	8	Y	Grassland	8				WG



### 3.1.3 Mixed Grassland Natural Subregion

This is a high priority Natural Subregion with many species with moderate to high scores.

Recommended Years of Action: 2002-2004 for high priority species; 2005 for lower-ranked species

Priorities (20 bold-faced species) lie in Wetland-Meadow, Grassland-Sandy, Sand Dunes, Wetland-Alkali, Grassland, Shrubland, Slopes-Badlands, Wetland-Springs, Wetland and Wetland-Sandy habitats.

Additional lower-ranked species can be surveyed in conjunction with the higher ranked .

SNAME	SCOMNAME	TOTAL VALUE	PRIORITY	SHORT HABITAT	MG	NFG	FFG	DMG	Dist
<b>Thelesperma marginatum</b>	<b>greenthread</b>	19	R	Grassland-Sandy	19			19	NWG-g
<b>Chenopodium subglabrum</b>	<b>smooth narrow-leaved goosefoot</b>	13	R	Sand Dunes	13			13	NG-g
<b>Halimolobos virgata</b>	<b>halimolobos</b>	12	B	Grassland-Sandy	12			12	NWG-g
<b>Arabidopsis saisuginea</b>	<b>mouse-ear cress</b>	12	B	Wetland-Alkali	12			12	NWG-g
<b>Erigeron radicans</b>	<b>dwarf fleabane</b>	11	B	Grassland-Sandy	11		11	11	NWG-g
<b>Juncus nevadensis</b>	<b>Nevada rush</b>	11	B	Wetland-Springs	11		11		NWG-g
<b>Eleocharis ovata</b>	<b>Engelmann's spike-rush</b>	10	B	Wetland	10				G
<b>Elodea bifoliata</b>		10	B	Wetland	10		10	10	NWG-g
<b>Suckleya suckleyana</b>	<b>poison suckleya</b>	10	B	Wetland-Alkali	10			10	WG
<b>Sisyrinchium septentrionale</b>	<b>pale blue-eyed grass</b>	10	B	Wetland-Meadow	10	10	10	10	NG-g
<b>Polygonum polygaloides ssp confertiflorum</b>	<b>Watson's knotweed</b>	10	B	Wetland-Sandy	10			10	NWG-g
<b>Carex parryana var parryana</b>	<b>Parry's sedge</b>	10	B	Wetland-Springs	10		10	10	NWG-g
<b>Chenopodium incanum</b>	<b>goosefoot</b>	9	B	Grassland-Sandy	9			9	G
<b>Cryptantha minima</b>	<b>small cryptanthe</b>	9	B	Sand Dunes	9			9	WG
<b>Cuscuta gronovii</b>	<b>common dodder</b>	9	B	Shrubland	9			9	G
<b>Picradeniopsis (Bahia) oppositifolia</b>	<b>picradeniopsis</b>	9	B	Slopes-Badlands	9			9	WG
<b>Elatine triandra</b>	<b>waterwort</b>	9	B	Wetland	9			9	G
<b>Gratiola neglecta</b>	<b>clammy hedge-hyssop</b>	9	B	Wetland	9	9	9		G
<b>Rorippa sinuata</b>	<b>spreading yellow cress</b>	9	B	Wetland-Sandy	9	9	9	9	G
<b>Rorippa tenerrima</b>	<b>slender cress</b>	9	B	Wetland-Sandy	9	9		9	NG
<b>Aster campestris</b>	<b>meadow aster</b>	8	Y	Grassland	8		8		WG
<b>Castilleja lutescens</b>	<b>stiff yellow paintbrush</b>	8	Y	Grassland	8	8	8		NWG-g
<b>Polanisia dodecandra</b>	<b>clammyweed</b>	8	Y	Sand Dunes; Slopes-Sandy	8		8	8	G
<b>Chenopodium desiccatum</b>	<b>goosefoot</b>	8	Y	Sand Dunes	8			8	G
<b>Astragalus kentrophyta var kentrophyta</b>	<b>prickly milk vetch</b>	8	Y	Slopes-Sandy	8			8	NWG
<b>Heliotropium curassavicum</b>	<b>spatulate-leaved heliotrope</b>	8	Y	Wetland-Alkali	8	8		8	G
<b>Ruppia maritima</b>	<b>widgeon-grass</b>	8	Y	Wetland-Alkali	8	8	8		G
<b>Spartina pectinata</b>	<b>prairie cord grass</b>	8	Y	Wetland-Alkali	8			8	G
<b>Psilocarphus elatior</b>	<b>woollyheads</b>	8	Y	Wetland-Sandy	8			8	NWG-g
<b>Onosmodium molle</b>	<b>western false gromwell</b>	8	Y	Woodland-Sandy	8		8		G
<b>Ranunculus glaberrimus</b>	<b>early buttercup</b>	7	Y	Grassland	7	7	7	7	NWG
<b>Astragalus lotiflorus</b>	<b>low milk vetch</b>	7	Y	Grassland-Sandy	7			7	G
<b>Townsendia exscapa</b>	<b>low townsendia</b>	7	Y	Grassland-Sandy	7	7		7	WG
<b>Aristida purpurea var longiseta</b>	<b>red three-awn</b>	7	Y	Slopes-Sandy	7			7	G
<b>Draba reptans</b>	<b>whitlow-grass</b>	7	Y	Slopes-Sandy	7		7	7	G
<b>Ellisia nyctelea</b>	<b>waterpod</b>	7	Y	Slopes-Sandy	7	7	7	7	G
<b>Orobanche ludoviciana</b>	<b>Louisiana broom-rape</b>	7	Y	Slopes-Sandy	7		7	7	NWG
<b>Coreopsis tinctoria</b>	<b>common tickseed</b>	7	Y	Wetland	7			7	G
<b>Potamogeton foliosus</b>	<b>leafy pondweed</b>	7	Y	Wetland	7				G
<b>Veronica catenata</b>	<b>water speedwell</b>	7	Y	Wetland	7		7		G
<b>Atriplex canescens ssp aptera</b>		7	Y	Wetland-Alkali	7	7		7	wg
<b>Downingia laeta</b>	<b>downingia</b>	7	Y	Wetland-Sandy	7			7	NWG-g
<b>Marsilea vestita</b>	<b>hairy pepperwort</b>	7	Y	Wetland-Sandy	7	7		7	G
<b>Sphenopholis obtusata</b>	<b>prairie wedge grass</b>	7	Y	Wetland-Springs	7	7	7	7	G
<b>Osmorhiza longistylis</b>	<b>smooth sweet cicely</b>	7	Y	Woodland-Sandy	7			7	G
<b>Calylophus serrulatus</b>	<b>shrubby evening-primrose</b>	6	G	Grassland-Sandy	6	6	6	6	G
<b>Crepis occidentalis</b>	<b>small-flowered hawk's-beard</b>	6	G	Grassland-Sandy	6	6		6	NWG
<b>Stephanomeria runcinata</b>	<b>rush-pink</b>	6	G	Slopes-Badlands	6		6	6	NWG-g
<b>Hymenopappus filifolius</b>	<b>tufted hymenopappus</b>	6	G	Slopes-Sandy	6		6	6	WG
<b>Spergularia salina</b>	<b>salt-marsh sand spurry</b>	6	G	Wetland-Alkali	6	6		6	NG-g
<b>Juncus confusus</b>	<b>few-flowered rush</b>	6	G	Wetland-Meadow	6	6	6	6	NWG-g
<b>Oenothera flava</b>	<b>low yellow evening-primrose</b>	6	G	Wetland-Sandy	6		6	6	NG-g
<b>Potentilla paradoxa</b>	<b>bushy cinquefoil</b>	6	G	Wetland-Sandy	6	6		6	G
<b>Carex nebrascensis</b>	<b>Nebraska sedge</b>	6	G	Wetland-Springs	6		6	6	WG
<b>Lycopus americanus</b>	<b>American water-horehound</b>	6	G	Wetland-Springs	6		6	6	G
<b>Muhlenbergia asperifolia</b>	<b>scratch grass</b>	5	G	Wetland-Alkali	5	5		5	G
<b>Parietaria pensylvanica</b>	<b>American pellitory</b>	5	G	Woodland-Sandy	5			5	G

## 2002 Work Plan-Mixed Grassland-see Dry Mixed Grass for Recommended Combination Study

Priorities (15 species) lie in Wetland-Meadow, Wetland-Springs and Wetland habitats. Due to considerable overlap, these should be surveyed in conjunction with other Natural Subregions.

<i>Eleocharis ovata</i>	Engelmann's spike-rush	10	B	Wetland	10				G
<i>Elodea bifoliata</i>		10	B	Wetland	10		10	10	NWG-g
<i>Elatine triandra</i>	waterwort	9	B	Wetland	9			9	G
<i>Gratiola neglecta</i>	clammy hedge-hyssop	9	B	Wetland	9	9	9		G
<i>Coreopsis tinctoria</i>	common tickseed	7	Y	Wetland	7			7	G
<i>Potamogeton foliosus</i>	leafy pondweed	7	Y	Wetland	7				G
<i>Veronica catenata</i>	water speedwell	7	Y	Wetland	7		7		G
<i>Sisyrinchium septentrionale</i>	pale blue-eyed grass	10	B	Wetland-Meadow	10	10	10	10	NG-g
<i>Juncus confusus</i>	few-flowered rush	6	G	Wetland-Meadow	6	6	6	6	NWG-g
<i>Juncus nevadensis</i>	Nevada rush	11	B	Wetland-Springs	11		11		NWG-g
<i>Carex parryana</i> var <i>parryana</i>	Parry's sedge	10	B	Wetland-Springs	10		10	10	NWG-g
<i>Sphenopholis obtusata</i>	prairie wedge grass	7	Y	Wetland-Springs	7	7	7	7	G
<i>Carex nebrascensis</i>	Nebraska sedge	6	G	Wetland-Springs	6		6	6	WG
<i>Lycopus americanus</i>	American water-horehound	6	G	Wetland-Springs	6		6	6	G

## 2003 Work Plan-Mixed Grassland-see Dry Mixed Grass for Recommended Combination Study

Priorities (15 species) lie in Wetland-Alkali, Wetland-Springs and Wetland-Sandy habitats. Due to considerable overlap, these should be surveyed in conjunction with other Natural Subregions.

SNAME	SCOMNAME	TOTAL VALUE	PRIORITY	SHORT HABITAT	MG	NFG	FFG	DMG	Dist
<i>Polygonum polygaloides</i> ssp <i>confertiflorum</i>	Watson's knotweed	10	B	Wetland-Sandy	10			10	NWG-g
<i>Rorippa sinuata</i>	spreading yellow cress	9	B	Wetland-Sandy	9	9	9	9	G
<i>Rorippa tenerima</i>	slender cress	9	B	Wetland-Sandy	9	9		9	NG
<i>Psilocarphus elatior</i>	woollyheads	8	Y	Wetland-Sandy	8			8	NWG-g
<i>Downingia laeta</i>	downingia	7	Y	Wetland-Sandy	7			7	NWG-g
<i>Marsilea vestita</i>	hairy pepperwort	7	Y	Wetland-Sandy	7	7		7	G
<i>Oenothera flava</i>	low yellow evening-primrose	6	G	Wetland-Sandy	6		6	6	NG-g
<i>Potentilla paradoxa</i>	bushy cinquefoil	6	G	Wetland-Sandy	6	6		6	G
<i>Arabisopsis salsuginea</i>	mouse-ear cress	12	B	Wetland-Alkali	12			12	NWG-g
<i>Suckleya suckleyana</i>	poison suckleya	10	B	Wetland-Alkali	10			10	WG
<i>Heliotropium curassavicum</i>	spatulate-leaved heliotrope	8	Y	Wetland-Alkali	8	8		8	G
<i>Ruppia maritima</i>	widgeon-grass	8	Y	Wetland-Alkali	8	8	8		G
<i>Spartina pectinata</i>	prairie cord grass	8	Y	Wetland-Alkali	8			8	G
<i>Atriplex canescens</i> ssp <i>aptera</i>		7	Y	Wetland-Alkali	7	7		7	wg
<i>Spergularia salina</i>	salt-marsh sand spurry	6	G	Wetland-Alkali	6	6		6	NG-g
<i>Muhlenbergia asperifolia</i>	scratch grass	5	G	Wetland-Alkali	5	5		5	G

## 2004 Work Plan-Mixed Grassland-see Dry Mixed Grass for Recommended Combination Study

Priorities (18 species) lie in Grassland, Grassland-Sandy, Sand Dune, Shrubland and Slopes-Badlands habitats.

SNAME	SCOMNAME	TOTAL VALUE	PRIORITY	SHORT HABITAT	MG	NFG	FFG	DMG	Dist
<i>Aster campestris</i>	meadow aster	8	Y	Grassland	8		8		WG
<i>Castilleja lutescens</i>	stiff yellow paintbrush	8	Y	Grassland	8	8	8		NWG-g
<i>Ranunculus glaberrimus</i>	early buttercup	7	Y	Grassland	7	7	7		NWG
<i>Thelesperma marginatum</i>	greenthread	19	R	Grassland-Sandy	19			19	NWG-g
<i>Halimolobos virgata</i>	halimolobos	12	B	Grassland-Sandy	12			12	NWG-g
<i>Erigeron radicans</i>	dwarf fleabane	11	B	Grassland-Sandy	11		11	11	NWG-g
<i>Chenopodium incanum</i>	goosefoot	9	B	Grassland-Sandy	9			9	G
<i>Astragalus lotiflorus</i>	low milk vetch	7	Y	Grassland-Sandy	7			7	G
<i>Townsendia exscapa</i>	low townsendia	7	Y	Grassland-Sandy	7	7		7	WG
<i>Calylophus serrulatus</i>	shrubby evening-primrose	6	G	Grassland-Sandy	6	6	6	6	G
<i>Crepis occidentalis</i>	small-flowered hawk's-beard	6	G	Grassland-Sandy	6	6		6	NWG
<i>Chenopodium subglabrum</i> *	smooth narrow-leaved goosefoot	13	R	Sand Dunes	13			13	NG-g
<i>Cryptantha minima</i>	small cryptanthe	9	B	Sand Dunes	9			9	WG
<i>Chenopodium desiccatum</i>	goosefoot	8	Y	Sand Dunes	8			8	G
<i>Polanisia dodecandra</i>	clammyweed	8	Y	Sand Dunes; Slopes-Sandy	8		8	8	G
<i>Cuscuta gronovii</i>	common dodder	9	B	Shrubland	9			9	G
<i>Picradeniopsis</i> (Bahia) <i>oppositifolia</i>	picradeniopsis	9	B	Slopes-Badlands	9			9	WG
<i>Stephanomeria runcinata</i>	rush-pink	6	G	Slopes-Badlands	6		6	6	NWG-g

\* - status report prepared

## 2004 Work Plan-Mixed Grassland

9 lower-ranked species lie in Slopes-Sandy and Woodland-Sandy habitats.

<i>Astragalus kentrophyta</i> var <i>kentrophyta</i>	prickly milk vetch	8	Y	Slopes-Sandy	8			8	NWG
<i>Aristida purpurea</i> var <i>longiseta</i>	red three-awn	7	Y	Slopes-Sandy	7			7	G
<i>Draba reptans</i>	whitlow-grass	7	Y	Slopes-Sandy	7		7	7	G
<i>Ellisia nyctelea</i>	waterpod	7	Y	Slopes-Sandy	7	7	7	7	G
<i>Orobanche ludoviciana</i>	Louisiana broom-rape	7	Y	Slopes-Sandy	7		7	7	NWG
<i>Hymenopappus filifolius</i>	tufted hymenopappus	6	G	Slopes-Sandy	6		6	6	WG
<i>Onosmodium molle</i>	western false gromwell	8	Y	Woodland-Sandy	8		8		G
<i>Osmorhiza longistylis</i>	smooth sweet cicely	7	Y	Woodland-Sandy	7			7	G
<i>Parietaria pensylvanica</i>	American pellitory	5	G	Woodland-Sandy	5			5	G

### 3.1.4 Dry Mixed Grassland Natural Subregion

This is a high priority Natural Subregion with many species with moderate to high scores. Due to a slightly slower rate of change overall, the subregion has been assigned a lower ranked compared with other Subregions that have already lost considerably more habitat percentage-wise than the Dry Mixedgrass or that are facing more extreme current habitat pressures.

Recommended Years of Action: 2003-2005 for high priority species; 2006 for lower-ranked species

Priorities (35 bold-faced species) lie in Wetland-Meadow, Grassland-Sandy, Sand Dunes, Wetland-Alkali, Grassland, Shrubland, Slopes-Badlands, Woodland, Wetland-Springs, Wetland and Wetland-Sandy habitats. Additional lower-ranked species can be surveyed in conjunction with the higher ranked species in these habitat types. The highest priorities for monitoring work lie in this region since most of the status reports already prepared are for species in the Natural Subregion.

SNAME	SCOMNAME	TOTAL VALUE	PRIORITY	SHORT HABITAT	DMG	NFG	FFG	MG	Dist
<b>Cyperus squarrosus</b>	<b>awned nut-grass</b>	20	R	Wetland-Sandy	20				G
<b>Thelesperma marginatum</b>	<b>greenthread</b>	19	R	Grassland-Sandy	19			19	NWG-g
<b>Lysimachia hybrida</b>		16	R	Wetland-Sandy	16	16			G
<b>Bacopa rotundifolia</b>	<b>water hyssop</b>	14	R	Wetland	14				G
<b>Chenopodium subglabrum</b>	<b>smooth narrow-leaved goosefoot</b>	13	R	Sand Dunes	13			13	NG-g
<b>Halimolobos virgata</b>	<b>halimolobos</b>	12	B	Grassland-Sandy	12			12	NWG-g
<b>Hordeum pusillum</b>	<b>little barley</b>	12	B	Slopes-Sandy	12				G
<b>Arabidopsis salsuginea</b>	<b>mouse-ear cress</b>	12	B	Wetland-Alkali	12			12	NWG-g
<b>Camissonia andina</b>	<b>upland evening-primrose</b>	11	B	Grassland-Sandy	11				NWG-g
<b>Erigeron radicans</b>	<b>dwarf fleabane</b>	11	B	Grassland-Sandy	11		11	11	NWG-g
<b>Nuttallanthus canadensis</b>	<b>field toad-flax</b>	11	B	Grassland-Sandy	11				G
<b>Castilleja sessiliflora</b>	<b>downy paintbrush</b>	11	B	Sand Dunes	11				G
<b>Atriplex truncata</b>	<b>saltbush</b>	11	B	Wetland-Alkali	11				NWG-g
<b>Quercus macrocarpa</b>	<b>burr oak</b>	11	B	Woodland	11				G
<b>Fraxinus pensylvanica</b>	<b>green ash</b>	11	B	Woodland?	11				G
<b>Tradescantia occidentalis</b>	<b>western spiderwort</b>	10	B	Sand Dunes	10				G
<b>Elodea bifoliata</b>		10	B	Wetland	10		10	10	NWG-g
<b>Atriplex powellii</b>	<b>Powell's saltbush</b>	10	B	Wetland-Alkali	10	10			NWG-g
<b>Suckleya suckleyana</b>	<b>poison suckleya</b>	10	B	Wetland-Alkali	10			10	WG
<b>Sisyrinchium septentrionale</b>	<b>pale blue-eyed grass</b>	10	B	Wetland-Meadow	10	10	10	10	NG-g
<b>Amaranthus californicus</b>	<b>Californian amaranth</b>	10	B	Wetland-Sandy	10		10		NWG-g
<b>Polygonum polygaloides ssp confertiflorum</b>	<b>Watson's knotweed</b>	10	B	Wetland-Sandy	10			10	NWG-g
<b>Carex parryana var parryana</b>	<b>Parry's sedge</b>	10	B	Wetland-Springs	10		10	10	NWG-g
<b>Chenopodium incanum</b>	<b>goosefoot</b>	9	B	Grassland-Sandy	9			9	G
<b>Cryptantha minima</b>	<b>small cryptanthe</b>	9	B	Sand Dunes	9			9	WG
<b>Cuscuta gronovii</b>	<b>common dodder</b>	9	B	Shrubland	9			9	G
<b>Chenopodium watsonii</b>	<b>Watson's goosefoot</b>	9	B	Slopes-Badlands	9				WG
<b>Picradeniopsis (Bahia) oppositifolia</b>	<b>picradeniopsis</b>	9	B	Slopes-Badlands	9			9	WG
<b>Muhlenbergia racemosa</b>	<b>marsh muhly</b>	9	B	Slopes-Sandy	9		9		G
<b>Yucca glauca</b>	<b>soapweed</b>	9	B	Slopes-Sandy	9				G
<b>Elatine triandra</b>	<b>waterwort</b>	9	B	Wetland	9			9	G
<b>Camissonia breviflora</b>	<b>taraxia</b>	9	B	Wetland-Alkali	9	9			WG
<b>Rorippa sinuata</b>	<b>spreading yellow cress</b>	9	B	Wetland-Sandy	9	9	9	9	G
<b>Rorippa tenerrima</b>	<b>slender cress</b>	9	B	Wetland-Sandy	9	9		9	NG
<b>Carex hystericina</b>	<b>porcupine sedge</b>	9	B	Wetland-Springs	9				G
<b>Munroa squarrosa</b>	<b>false buffalo grass</b>	8	Y	Grassland-Sandy	8				WG
<b>Cyperus schweinitzii</b>	<b>sand nut-grass</b>	8	Y	Sand Dunes	8				G
<b>Franseria acanthicarpa</b>	<b>bur ragweed</b>	8	Y	Sand Dunes	8				WG
<b>Polanisia dodecandra</b>	<b>clammyweed</b>	8	Y	Sand Dunes; Slopes-Sandy	8		8	8	G
<b>Chenopodium desiccatum</b>	<b>goosefoot</b>	8	Y	Sand Dunes	8			8	G
<b>Shimmersoseris (Lygodesmia) rostrata</b>	<b>annual skeletonweed</b>	8	Y	Sand Dunes	8				G
<b>Tripteroalyx micranthus</b>	<b>sand verbena</b>	8	Y	Sand Dunes	8				WG
<b>Asclepias viridiflora</b>	<b>green milkweed</b>	8	Y	Slopes-Sandy	8				G
<b>Astragalus kentrophyta var kentrophyta</b>	<b>prickly milk vetch</b>	8	Y	Slopes-Sandy	8			8	NWG
<b>Lomatogonium rotatum</b>	<b>marsh felwort</b>	8	Y	Wetland	8	8	8		NWG-g
<b>Aster pauciflorus</b>	<b>few-flowered aster</b>	8	Y	Wetland-Alkali	8	8			NG-g
<b>Heliotropium curassavicum</b>	<b>spatulate-leaved heliotrope</b>	8	Y	Wetland-Alkali	8	8		8	G
<b>Spartina pectinata</b>	<b>prairie cord grass</b>	8	Y	Wetland-Alkali	8			8	G
<b>Boisduvalia glabella</b>	<b>smooth boisduvalia</b>	8	Y	Wetland-Sandy	8				NWG-g
<b>Centunculus minimus</b>	<b>chaffweed</b>	8	Y	Wetland-Sandy	8				G
<b>Psilocarphus elator</b>	<b>woollyheads</b>	8	Y	Wetland-Sandy	8			8	NWG-g
<b>Rorippa curvipes var. truncata</b>	<b>blunt-leaved yellow cress</b>	8	Y	Wetland-Sandy	8	8			NG

Dry Mixed Grassland Natural Subregion (continued)

SNAME	SCOMNAME	TOTAL VALUE	PRIORITY	SHORT HABITAT	DMG	NFG	FFG	MG	Dist
Ranunculus glaberrimus	early buttercup	7	Y	Grassland	7	7	7	7	NWG
Astragalus lotiflorus	low milk vetch	7	Y	Grassland-Sandy	7			7	G
Astragalus purshii	Pursh's milk vetch	7	Y	Grassland-Sandy	7				NWG
Linanthus septentrionalis	linanthus	7	Y	Grassland-Sandy	7				NWG-g
Nothocalais cuspidata	prairie false dandelion	7	Y	Grassland-Sandy	7				G
Townsendia exscapa	low townsendia	7	Y	Grassland-Sandy	7	7		7	WG
Suaeda moquinii	Moquin's sea-blite	7	Y	Slopes-Badlands	7				NWG-g
Aristida purpurea var longiseta	red three-awn	7	Y	Slopes-Sandy	7			7	G
Draba reptans	whitlow-grass	7	Y	Slopes-Sandy	7		7	7	G
Ellisia nyctelea	waterpod	7	Y	Slopes-Sandy	7	7	7	7	G
Orobanche ludoviciana	Louisiana broom-rape	7	Y	Slopes-Sandy	7		7	7	NWG
Coreopsis tinctoria	common tickseed	7	Y	Wetland	7			7	G
Atriplex canescens ssp aptera		7	Y	Wetland-Alkali	7	7		7	WG
Lilaea scilloides	flowering-quillwort	7	Y	Wetland-Alkali	7				NWG-g
Cerastium brachypodium		7	Y	Wetland-Sandy	7				G
Downingia laeta	downingia	7	Y	Wetland-Sandy	7			7	NWG-g
Marsilea vestita	hairy pepperwort	7	Y	Wetland-Sandy	7	7		7	G
Bidens frondosa	common beggarticks	7	Y	Wetland-Springs	7				G
Carex retrorsa	turned sedge	7	Y	Wetland-Springs	7				NG-g
Sphenopholis obtusata	prairie wedge grass	7	Y	Wetland-Springs	7	7	7	7	G
Elymus virginicus	Virginia wild rye	7	Y	Woodland-Sandy	7	7	7		G
Osmorhiza longistylis	smooth sweet cicely	7	Y	Woodland-Sandy	7			7	G
Calylophus serrulatus	shrubby evening-primrose	6	G	Grassland-Sandy	6	6	6	6	G
Crepis occidentalis	small-flowered hawk's-beard	6	G	Grassland-Sandy	6	6		6	NWG
Eriogonum cernuum	nodding umbrella-plant	6	G	Sand Dunes/ Slopes-Sandy	6				WG
Stephanomeria runcinata	rush-pink	6	G	Slopes-Badlands	6		6	6	NWG-g
Hymenopappus filifolius	tufted hymenopappus	6	G	Slopes-Sandy	6		6	6	WG
Spergularia salina	salt-marsh sand spurry	6	G	Wetland-Alkali	6	6		6	NG-g
Juncus confusus	few-flowered rush	6	G	Wetland-Meadow	6	6	6	6	NWG-g
Oenothera flava	low yellow evening-primrose	6	G	Wetland-Sandy	6		6	6	NG-g
Potentilla paradoxa	bushy cinquefoil	6	G	Wetland-Sandy	6	6		6	G
Carex nebrascensis	Nebraska sedge	6	G	Wetland-Springs	6		6	6	WG
Lycopus americanus	American water-horehound	6	G	Wetland-Springs	6		6	6	G
Oryzopsis micrantha	little-seed rice grass	6	G	Woodland-Sandy	6		6		NWG
Muhlenbergia asperifolia	scratch grass	5	G	Wetland-Alkali	5	5		5	G
Parietaria pensylvanica	American pellitory	5	G	Woodland-Sandy	5			5	G

## 2001 Work Plan-Dry Mixed Grassland

Priorities (3 species) for monitoring lie in Sand Dune habitats. This work should be done in conjunction with Mixed Grassland studies in 2001.

SNAME	SCOMNAME	TOTAL VALUE	PRIORITY	SHORT HABITAT	DMG	NFG	FFG	MG	Dist
<i>Chenopodium subglabrum</i> *	smooth narrow-leaved goosefoot	13	R	Sand Dunes	13			13	NG-g
<i>Tradescantia occidentalis</i> *	western spiderwort	10	B	Sand Dunes	10				G
<i>Tripterocalyx micranthus</i> *	sand verbena	8	Y	Sand Dunes	8				WG

\* - status report prepared

## 2002 Work Plan-Wetlands (1) in Mixed Grassland and Dry Mixed Grassland

Priorities (19 species) lie in Wetland-Meadow, Wetland-Springs and Wetland habitats. Due to considerable overlap, these should be surveyed in conjunction with other Natural Subregions.

SNAME	SCOMNAME	TOTAL VALUE	PRIORITY	SHORT HABITAT	MG	NFG	FFG	DMG	Dist
<i>Bacopa rotundifolia</i>	water hyssop	14	R	Wetland				14	G
<i>Eleocharis ovata</i>	Engelmann's spike-rush	10	B	Wetland	10				G
<i>Elodea bifoliata</i>		10	B	Wetland	10		10	10	NWG-g
<i>Elatine triandra</i>	waterwort	9	B	Wetland	9			9	G
<i>Gratiola neglecta</i>	clammy hedge-hyssop	9	B	Wetland	9	9	9		G
<i>Lomatogonium rotatum</i>	marsh felwort	8	Y	Wetland		8	8	8	NWG-g
<i>Coreopsis tinctoria</i>	common tickseed	7	Y	Wetland	7			7	G
<i>Potamogeton foliosus</i>	leafy pondweed	7	Y	Wetland	7				G
<i>Veronica catenata</i>	water speedwell	7	Y	Wetland	7		7		G
<i>Sisyrinchium septentrionale</i>	pale blue-eyed grass	10	B	Wetland-Meadow	10	10	10	10	NG-g
<i>Juncus confusus</i>	few-flowered rush	6	G	Wetland-Meadow	6	6	6	6	NWG-g
<i>Juncus nevadensis</i>	Nevada rush	11	B	Wetland-Springs	11		11		NWG-g
<i>Carex parryana</i> var. <i>parryana</i>	Parry's sedge	10	B	Wetland-Springs	10		10	10	NWG-g
<i>Carex hystericina</i>	porcupine sedge	9	B	Wetland-Springs				9	G
<i>Sphenopholis obtusata</i>	prairie wedge grass	7	Y	Wetland-Springs	7	7	7	7	G
<i>Bidens frondosa</i>	common beggarticks	7	Y	Wetland-Springs				7	G
<i>Carex retrorsa</i>	turned sedge	7	Y	Wetland-Springs				7	NG-g
<i>Carex nebrascensis</i>	Nebraska sedge	6	G	Wetland-Springs	6		6	6	WG
<i>Lycopus americanus</i>	American water-horehound	6	G	Wetland-Springs	6		6	6	G

## 2003 Work Plan-Wetlands (2) in Mixed Grassland and Dry Mixed Grassland

Priorities (28 species) lie in Wetland-Alkali, Wetland-Springs and Wetland-Sandy habitats.

SNAME	SCOMNAME	TOTAL VALUE	PRIORITY	SHORT HABITAT	MG	NFG	FFG	DMG	Dist
<i>Arabidopsis salsuginea</i>	mouse-ear cress	12	B	Wetland-Alkali	12			12	NWG-g
<i>Atriplex truncata</i>	saltbush	11	B	Wetland-Alkali				11	NWG-g
<i>Atriplex powellii</i>	Powell's saltbush	10	B	Wetland-Alkali		10		10	NWG-g
<i>Suckleya suckleyana</i>	poison suckleya	10	B	Wetland-Alkali	10			10	WG
<i>Camissonia breviflora</i>	taraxia	9	B	Wetland-Alkali		9		9	WG
<i>Heliotropium curassavicum</i>	spatulate-leaved heliotrope	8	Y	Wetland-Alkali	8	8		8	G
<i>Ruppia maritima</i>	widgeon-grass	8	Y	Wetland-Alkali	8	8	8		G
<i>Spartina pectinata</i>	prairie cord grass	8	Y	Wetland-Alkali	8			8	G
<i>Aster pauciflorus</i>	few-flowered aster	8	Y	Wetland-Alkali		8		8	NG-g
<i>Atriplex canescens</i> ssp. <i>aptera</i>		7	Y	Wetland-Alkali	7	7		7	wg
<i>Lilaea scilloides</i>	flowering-quillwort	7	Y	Wetland-Alkali				7	NWG-g
<i>Spergularia salina</i>	salt-marsh sand spurry	6	G	Wetland-Alkali	6	6		6	NG-g
<i>Muhlenbergia asperifolia</i>	scratch grass	5	G	Wetland-Alkali	5	5		5	G
<i>Cyperus squarrosus</i>	awned nut-grass	20	R	Wetland-Sandy				20	G
<i>Lysimachia hybrida</i>		16	R	Wetland-Sandy		16		16	G
<i>Amaranthus californicus</i>	Californian amaranth	10	B	Wetland-Sandy			10	10	NWG-g
<i>Polygonum polygaloides</i> ssp. <i>confertiflorum</i>	Watson's knotweed	10	B	Wetland-Sandy	10			10	NWG-g
<i>Rorippa sinuata</i>	spreading yellow cress	9	B	Wetland-Sandy	9	9	9	9	G
<i>Rorippa tenerrima</i>	slender cress	9	B	Wetland-Sandy	9	9		9	NG
<i>Psilocarphus elatior</i>	woollyheads	8	Y	Wetland-Sandy	8			8	NWG-g
<i>Boisduvalia glabella</i>	smooth boisduvalia	8	Y	Wetland-Sandy				8	NWG-g
<i>Centunculus minimus</i>	chaffweed	8	Y	Wetland-Sandy				8	G
<i>Rorippa curvipes</i> var. <i>truncata</i>	blunt-leaved yellow cress	8	Y	Wetland-Sandy		8		8	NG
<i>Downingia laeta</i>	downingia	7	Y	Wetland-Sandy	7			7	NWG-g
<i>Marsilea vestita</i>	hairy pepperwort	7	Y	Wetland-Sandy	7	7		7	G
<i>Cerastium brachypodium</i>		7	Y	Wetland-Sandy				7	G
<i>Oenothera flava</i>	low yellow evening-primrose	6	G	Wetland-Sandy	6		6	6	NG-g
<i>Potentilla paradoxa</i>	bushy cinquefoil	6	G	Wetland-Sandy	6	6		6	G

## 2004 Work Plan-Mixed and Dry Mixed Grassland

Priorities (31 species) lie in Grassland, Grassland-Sandy, Sand Dune, Shrubland, Slopes-Badlands and Slopes-Sandy habitats.

SNAME	SCOMNAME	TOTAL VALUE	PRIORITY	SHORT HABITAT	MG	NFG	FFG	DMG	Dist
Aster campestris	meadow aster	8	Y	Grassland	8		8		WG
Castilleja lutescens	stiff yellow paintbrush	8	Y	Grassland	8	8	8		NWG-g
Ranunculus glaberrimus	early buttercup	7	Y	Grassland	7	7	7	7	NWG
Thelesperma marginatum	greenthread	19	R	Grassland-Sandy	19			19	NWG-g
Halimolobos virgata	halimolobos	12	B	Grassland-Sandy	12			12	NWG-g
Erigeron radicans	dwarf fleabane	11	B	Grassland-Sandy	11		11	11	NWG-g
Chenopodium incanum	goosefoot	9	B	Grassland-Sandy	9			9	G
Astragalus lotiflorus	low milk vetch	7	Y	Grassland-Sandy	7			7	G
Townsendia exscapa	low townsendia	7	Y	Grassland-Sandy	7	7		7	WG
Calylophus serrulatus	shrubby evening-primrose	6	G	Grassland-Sandy	6	6	6	6	G
Crepis occidentalis	small-flowered hawk's-beard	6	G	Grassland-Sandy	6	6		6	NWG
Eriogonum cernuum	nodding umbrella-plant	6	G	Sand Dunes/ Slopes-Sandy				6	WG
Chenopodium subglabrum*	smooth narrow-leaved goosefoot	13	R	Sand Dunes	13			13	NG-g
Cryptantha minima	small cryptanthe	9	B	Sand Dunes	9			9	WG
Chenopodium desiccatum	goosefoot	8	Y	Sand Dunes	8			8	G
Polanisia dodecandra	clammyweed	8	Y	Sand Dunes; Slopes- Sandy	8		8	8	G
Cuscuta gronovii	common dodder	9	B	Shrubland	9			9	G
Picradeniopsis (Bahia) oppositifolia	picradeniopsis	9	B	Slopes-Badlands	9			9	WG
<b>Chenopodium watsonii</b>	<b>Watson's goosefoot</b>	9	B	Slopes-Badlands				9	WG
Suaeda moquinii	Moquin's sea-blite	7	Y	Slopes-Badlands				7	NWG-g
Stephanomeria runcinata	rush-pink	6	G	Slopes-Badlands	6		6	6	NWG-g
<b>Hordeum pusillum</b>	<b>little barley</b>	12	B	Slopes-Sandy				12	G
<b>Muhlenbergia racemosa</b>	<b>marsh muhly</b>	9	B	Slopes-Sandy			9	9	G
<b>Yucca glauca</b>	<b>soapweed</b>	9	B	Slopes-Sandy				9	G
Asclepias viridiflora	green milkweed	8	Y	Slopes-Sandy				8	G
Astragalus kentrophyta var kentrophyta	prickly milk vetch	8	Y	Slopes-Sandy	8			8	NWG
Aristida purpurea var longiseta	red three-awn	7	Y	Slopes-Sandy	7			7	G
Draba reptans	whitlow-grass	7	Y	Slopes-Sandy	7		7	7	G
Ellisia nyctelea	waterpod	7	Y	Slopes-Sandy	7	7	7	7	G
Orobanche ludoviciana	Louisiana broom-rape	7	Y	Slopes-Sandy	7		7	7	NWG
Hymenopappus filifolius	tufted hymenopappus	6	G	Slopes-Sandy	6		6	6	WG

\* - status report prepared?

## 2005 Work Plan-Dry Mixed Grassland

6 lower-ranked species lie in Woodland types. Two higher ranked species have been included here due to their doubtful native status.

SNAME	SCOMNAME	TOTAL VALUE	PRIORITY	SHORT HABITAT	DMG	NFG	FFG	MG	Dist
Quercus macrocarpa	burr oak	11	B	Woodland	11				G
Fraxinus pensylvanica	green ash	11	B	Woodland?	11				G
Elymus virginicus	Virginia wild rye	7	Y	Woodland-Sandy	7	7	7		G
Osmorhiza longistylis	smooth sweet cicely	7	Y	Woodland-Sandy	7			7	G
Oryzopsis micrantha	little-seed rice grass	6	G	Woodland-Sandy	6		6		NWG
Parietaria pensylvanica	American pellitory	5	G	Woodland-Sandy	5			5	G

#### 4. SUMMARY OF RECOMMENDATIONS FOR PROTOCOLS IN YEAR 2001-2005

	2001	2002	2003	2004	2005
<b>Northern Fescue Grassland</b>	15 species			16 lower ranked species	
<b>Foothills Fescue Grassland</b>	17 species	16 species			7 lower ranked species
<b>Mixedgrass</b>		19 combined species	29 combined species	29 combined species	9 lower ranked species
<b>Dry Mixedgrass</b>	3 species for monitoring				6 lower ranked species

#### 5. COST ESTIMATES

Cost estimates are based on \$2000/ species to conduct background research, undertake field work and prepare a report. Economies have been made by programming several species that are phenologically and/or habitat related, e.g. fescue grassland, mixed grassland wetland.

Cost per priority Natural Subregion or combination, 15-29 species -- = \$30,000-60,000

#### 6. LITERATURE CITED

Barkley, T.M. 1986. Introduction. Pp. 1-6, *In*: Great Plains Flora Association (ed.), Flora of the Great Plains. University Press of Kansas, Lawrence.



## 7. PROTOCOLS AND ELEMENT OCCURRENCES

The following is a summary of recommended survey protocols (natural region, habitat, phenology, specific search strategies where these are known) and element occurrence (EOs) in the Alberta Natural Heritage Information Centre database. EOs outside the study area are included to give a better picture of the range of habitats and phenology.

### ***Allium geyeri* Geyer's onion**

**Natural Region:** Foothills Fescue Grassland

**Habitat:** Wetland-Meadow; may also occur in rocky grassland

**Phenology:** flowers early June to late July

**Specific Search Strategies (if any):** check *Camassia quamash* sites and moist disturbed sites in extreme southwestern Alberta; populations may be large where found; highly visible and distinctive species, even in fruit. Should be searched for in Foothills Parkland region especially or in Foothills Fescue where there is some lush vegetation, e.g. deciduous woodlands

### **Element Occurrences:**

**Element Code:** PMLIL02100 **Occurrence Code #:** 001 **Survey Date:** 1989-07-27

**Last Observed:** 1989-07-27 **First Observed:** 1989-07-27 **Actual Mapping Precision (m):** 100 **Precision Code:** S

**Directions:** Hwy 6 and Dungarvan Creek crossing, 0.3 km S of.

**General Description:** ditch along hwy

**Min Elev. (m):** 1380 **Max Elev. (m):** 1380 **Best Source of Info:** U89ESR01ABCA

**Map UTM Zone UTM Easting UTM Northing Survey Site Name Notes # Dot ID #**

82H04 12 291859 5455100 Dungarvan Creek LSD16-17-3-29 W4M; Site #1 116 5061

**Source Code Author Publisher Year Title**

U89ESR01ABCA Eastern Slopes Rangeland Consultants 1989 A Population Study of Geyer's wild onion Along Highway #6 for Natural and Protected Areas, Public Lands Division

**Date Source Abstract Code Observer Occurrence Data**

1989-07-27 U89ESR01ABCA K.E. & C.A. Tannas more than 300 plants fruiting and flowering

***Allium geyeri*** Geyer's onion SRank: S2

+++++

**Element Code:** PMLIL02100 **Occurrence Code #:** 002 **Survey Date:** 1989-07-26

**Last Observed:** 1989-07-26 **First Observed:** 1989-07-26 **Actual Mapping Precision (m):** 100 **Precision Code:** S

**Directions:** Hwy 6 and Dungarvan Creek crossing, 1.5 km N of.

**General Description:** roadside ditch; habitat not semi aquatic but low and wet; also a dense *Populus tremuloides* and *Salix bebbiana* stand to the west

**Min Elev. (m):** 1385 **Max Elev. (m):** 1385

**Slope:** 5.00 **Best Source of Info:** U89ESR01ABCA

**Map UTM Zone UTM Easting UTM Northing Survey Site Name Notes # Dot ID #**

82H04 12 291950 5456950 Dungarvan Creek LSD16-20-3-29 W4M; Site #2 117 5062

**Source Code Author Publisher Year Title**

U89ESR01ABCA Eastern Slopes Rangeland Consultants 1989 A Population Study of Geyer's wild onion Along Highway #6 for Natural and Protected Areas, Public Lands Division

**Date Source Abstract Code Observer Occurrence Data**

1989-07-26 U89ESR01ABCA K.E. & C.A. Tannas about 150 plants flowering and fruiting

***Allium geyeri*** Geyer's onion SRank: S2

+++++

**Element Code:** PMLIL02100 **Occurrence Code #:** 003 **Survey Date:** 1966-06-14

**Last Observed:** 1966-06-14 **First Observed:** 1966-06-14 **Precision Code:** S

**Directions:** Cardston, SW of; Along road to Beazer, 1 MI. S. OF JCT. WITH HWY 5

**General Description:** WET MEADOW **Best Source of Info:** S66DEVUCABCA02

**Specimen Source Code Collector Herbarium Accession # Date ID OK? Observation Detail**

S66DEVUCABCA02 de Vries, B.D. UC 06175 1966-06-14 Occuring locally

**Map UTM Zone UTM Easting UTM Northing Survey Site Name Notes # Dot ID #**

82H04 12 315350 5444625 Beazer 137 1081

***Allium geyeri*** Geyer's onion SRank: S2

+++++

**Element Code:** PMLIL02100 **Occurrence Code #:** 004 **Survey Date:** 1942-07-12  
**Last Observed:** 1942-07-12 **First Observed:** 1942-07-12 **Precision Code:** G  
**Directions:** TWIN BUTTE;  
**General Description:** MEADOW  
**Min Elev. (m):** 1350 **Max Elev. (m):** 1350  
**Other Comments:** DET. AS A. RUBRUM; REV. TO A. GEYERI WATS. VAR. TENERUM M.E. JONES **Best Source of Info:**  
S42SEXUAABCA01

**Specimen Source Code Collector Herbarium Accession # Date ID OK? Observation Detail**

S42SEXUAABCA01 Sexsmith, J.J. UA 4822 1942-07-12 Y [bulbils]

**Map UTM Zone UTM Easting UTM Northing Survey Site Name Notes # Dot ID #**

82H05 12 292300 5460400 Twin Butte 49 16/113 51 1 1329

**Allium geyeri** Geyer's onion SRank: S2

+++++

**Element Code:** PMLIL02100 **Occurrence Code #:** 007 **Survey Date:** 1935-06-18

**Last Observed:** 1935-06-18 **First Observed:** 1935-06-18 **Precision Code:** S

**Directions:** Waterton Lakes N.P.; Red Rock Canyon.

**General Description:** open, dry slope

**Min Elev. (m):** 1750 **Max Elev. (m):** 1750 **Best Source of Info:** S35MOSUAABCA02

**Specimen Source Code Collector Herbarium Accession # Date ID OK? Observation Detail**

S35MOSUAABCA02 Moss, E.H. UA 4818 1935-06-18 Y [flowers, bulbils]

**Map UTM Zone UTM Easting UTM Northing Survey Site Name Notes # Dot ID #**

82G01 11 717700 5446600 Red Rock Canyon 49 08/114 01 29 504

**Allium geyeri** Geyer's onion SRank: S2

+++++

**Element Code:** PMLIL02100 **Occurrence Code #:** 008 **Survey Date:** 1966-06-20

**Last Observed:** 1966-06-20 **First Observed:** 1966-06-20 **Actual Mapping Precision (m):** 500 **Precision Code:** M

**Directions:** Cardston, 1 km directly S of.

**General Description:** locally common on wet meadow

**Min Elev. (m):** 1149 **Max Elev. (m):** 1149 **Best Source of Info:** S66DEVPMABCA07

**Specimen Source Code Collector Herbarium Accession # Date ID OK? Observation Detail**

S66DEVPMABCA07 de Vries, Bernard PM B68.4.215 1966-06-20 Y purple flowers, bulbils present

**Map UTM Zone UTM Easting UTM Northing Survey Site Name Notes # Dot ID #**

82H03 12 331800 5450050 Cardston 49 11/113 18 6 946

**Allium geyeri** Geyer's onion SRank: S2

+++++

**Element Code:** PMLIL02100 **Occurrence Code #:** 009 **Survey Date:** 1996-07-04

**Last Observed:** 1996-07-04 **First Observed:** 1953-07-16 **Precision Code:** S

**Directions:** Waterton Lakes National Park; Red rock , 1mile N of; Red Rock Canyon, up SE ridge from; Mt Glendowan, toward; trail, along gully above.

**General Description:** DAMP GRASSY SW SLOPE; Lower slope, in early season seepy areas, drying by mid-July; with Festuca scabrella & F.

idahoensis, Sygadenus elegans, Allium cernuum, A. Schoenoprasum.

**Min Elev. (m):** 1510 **Max Elev. (m):** 1580

**Slope:** 35.00 **Aspect:** SW **Size of Occurrence:** 3.00

**Other Comments:** White, with red strip(S69BLAULABCA01). **Best Source of Info:** PNDACH01ABCA

**Specimen Source Code Collector Herbarium Accession # Date ID OK? Observation Detail**

S53BREUAABCA04 Breitung, A.J. UA 4821 1953-07-16 Y [flowers, bulbils]

S69BLANMONCA01 Blais, W. NM 339493 1969-06-23 GWD

S69BLAULABCA01 Blais, W. & J. Nagy UL none 1969-06-23 [90%]

**Map UTM Zone UTM Easting UTM Northing Survey Site Name Notes # Dot ID #**

82G01 11 716550 5446725 Mt. Glendowan PA 6005.4 & 6005.5 337 649

**Date Source Abstract Code Observer Occurrence Data**

thousands of plants, flowering & fruiting (PNDACH01ABCA - 1996)

**Allium geyeri** Geyer's onion SRank: S2

+++++

**Element Code:** PMLIL02100 **Occurrence Code #:** 010 **Survey Date:** 1966-06-20  
**Last Observed:** 1966-06-20 **First Observed:** 1966-06-20 **Precision Code:** G  
**Directions:** RED ROCK CANYON ROAD ABOVE SECOND CAMPSITE  
**General Description:** MOIST BANK ALONG CREEK  
**Min Elev. (m):** 1430 **Max Elev. (m):** 1430 **Best Source of Info:** S66PACUAABCA01  
**Specimen Source Code Collector Herbarium Accession # Date ID OK? Observation Detail**  
S66PACUAABCA01 Packer, J.G. UA 32105 1966-06-20 Y [flowers, bulbils]  
**Map UTM Zone UTM Easting UTM Northing Survey Site Name Notes # Dot ID #**  
82H04 12 281650 5443950 Blakiston "Above" means "past" in this context 59 1026  
**Allium geyeri** Geyer's onion SRank: S2  
+++++

**Element Code:** PMLIL02100 **Occurrence Code #:** 011 **Survey Date:** 1996-07-04  
**Last Observed:** 1996-07-04 **First Observed:** 1935-06-18 **Precision Code:** S  
**Directions:** Waterton Lakes National Park; Red Rock Canyon, near, seeping rock ledge; bridge on west side of creek, ca 50 m up from.  
**General Description:** Open, moist shaded poplar grove, slope; shallow soil over rock ledges with early season seepage, assoc. species *Minuartia rubella*, *Dodecatheon conjugens*, *Androsace* (see Comments...)  
**Min Elev. (m):** 1500 **Max Elev. (m):** 1525  
**Slope:** 10.00 **Aspect:** E **Size of Occurrence:** 1.00  
**Other Comments:** DET. AS A. GEYERI WATS. VAR. TENERUM M.E. JONES; (continued from Gen. Descrip.)...*setentrivalis*, *Ranunculus glaberrimus*, *Claytonia lanceolata* & *Mertensia longiflora*. **Best Source of Info:** PNDACH01ABCA  
**Specimen Source Code Collector Herbarium Accession # Date ID OK? Observation Detail**  
S35MOSUAABCA03 Moss, E.H. UA 4817 1935-06-18 Y [flowers, bulbils]  
S52MOSMONCA01 Moss, E.H. NM 219395 1952-06-04 GWD  
S52MOSUAABCA01 Moss, E.H. UA 4820 1952-06-18 Y  
**Map UTM Zone UTM Easting UTM Northing Survey Site Name Notes # Dot ID #**  
82G01 11 716900 5445950 Red Rock Canyon 130 562  
**Date Source Abstract Code Observer Occurrence Data**  
ca 100 plants, flower & fruit(PNDACH01ABCA - 1996)  
**Allium geyeri** Geyer's onion SRank: S2  
+++++

**Element Code:** PMLIL02100 **Occurrence Code #:** 013 **Survey Date:** 1988-00-00  
**Last Observed:** 1988-00-00 **First Observed:** 1986-00-00 **Precision Code:** S  
**General Description:** Moist meadow, *Senecio integerrimus*, *Alopecurus occidentalis*, *Castilleja cusickii*, *Camassia quamash*.  
**Management Comments:** Horses used in logging operations may have been the culprits and the feed brought in for the animals.  
**Best Source of Info:** B89EAS01ABCA  
**Map UTM Zone UTM Easting UTM Northing Survey Site Name Notes # Dot ID #**  
82H04 12 306200 5432000 Poll Haven Community  
Pasture  
LSD 13 89 1047  
**Source Code Author Publisher Year Title**  
B89EAS01ABCA Eastern Slopes Rangeland Consultants Alberta Forestry, Lands & Wildlife 1989 Survey of Rare, Uncommon and Disjunct Vascular Plants of the Poll Haven Community  
Pasture Grazing Lease 33957  
**Allium geyeri** Geyer's onion SRank: S2  
+++++

**Element Code:** PMLIL02100 **Occurrence Code #:** 014 **Survey Date:** 1953-07-28  
**Last Observed:** 1953-07-28 **First Observed:** 1953-07-28 **Precision Code:** M  
**Directions:** WATERTON LKS NAT'L PARK; Waterton River Crossing, near  
**General Description:** MOIST PRAIRIE MEADOW  
**Min Elev. (m):** 1280 **Max Elev. (m):** 1280 **Best Source of Info:** S53BREACONCA09  
**Specimen Source Code Collector Herbarium Accession # Date ID OK? Observation Detail**  
S53BREACONCA09 Breitung, A.J. AC none 1953-07-28 GWD  
**Map UTM Zone UTM Easting UTM Northing Survey Site Name Notes # Dot ID #**  
82H04 12 293100 5443600 Waterton River Crossing UTM grid TK94 138 1082  
**Allium geyeri** Geyer's onion SRank: S2  
+++++

**Element Code:** PMLIL02100 **Occurrence Code #:** 016 **Survey Date:** 1997-07-00  
**Last Observed:** 1997-07-00 **First Observed:** 1997-06-00 **Actual Mapping Precision (m):** 100 **Precision Code:** S  
**Directions:** Fish Lake, 1.5 km NW of; Pincher Creek, 300 m from.  
**General Description:** more than 100 plants south of existing right-of-way  
**Min Elev. (m):** 1448 **Max Elev. (m):** 1448  
**Other Comments:** LSD 14 is incorrect, should be 16. **Best Source of Info:** U97AXY01ABCA  
**Map UTM Zone UTM Easting UTM Northing Survey Site Name Notes # Dot ID #**  
82G08 11 715950 5470100 Fish Lake LSD 14 NE35-4-1 W5M - NE 35 4-1-5 LSD 16 16 3799  
**Source Code Author Publisher Year Title**  
U97AXY01ABCA Bush, Dana Axys Environmental Consulting Ltd. 1997 Cp 380 Canadian 88 Waterton Pipeline from the Waterton  
Gas Plant to Junction J  
**Allium geyeri** Geyer's onion SRank: S2  
+++++

**Element Code:** PMLIL02100 **Occurrence Code #:** 017 **Survey Date:** 1997-06-27  
**Last Observed:** 1997-06-27 **First Observed:** 1997-06-27 **Actual Mapping Precision (m):** 250 **Precision Code:** S  
**Directions:** Fish Lake, ~3km S of; Drywood Creek, 1km N of.  
**General Description:** >200 in 100m stretch along transmission line, 12 n creek W of RoW. SW 24 4-1-5 LSD 6 11U E 0717270,  
UTM 5465928 - 11U, 0717262 to UTM5465789 toSW 24 4-1-5 LSD 6 11U 0717270 UTM 5465928  
**Min Elev. (m):** 1519 **Max Elev. (m):** 1633 **Best Source of Info:** U97AXY01ABCA  
**Map UTM Zone UTM Easting UTM Northing Survey Site Name Notes # Dot ID #**  
82G08 11 717270 5465928 Fish Lake SW 24 4-1-5 LSD 6 11U E 0717270, UTM 5465928 - 11U 0717262 to UTM5465789 toSW 24  
4-1-5 LSD 6 11U 0717270 UTM 5465928 - NW 24 4-1-5 LSD 11 17 3892  
**Source Code Author Publisher Year Title**  
U97AXY01ABCA Bush, Dana Axys Environmental Consulting Ltd. 1997 Cp 380 Canadian 88 Waterton Pipeline from the Waterton  
Gas Plant to Junction J  
**Allium geyeri** Geyer's onion SRank: S2  
+++++

**Element Code:** PMLIL02100 **Occurrence Code #:** 018 **Survey Date:** 1989-07-26  
**Last Observed:** 1989-07-26 **First Observed:** 1989-07-26 **Actual Mapping Precision (m):** 100 **Precision Code:** S  
**Directions:** Hwy 6 and Dungarvan Creek crossing, 2.3 km N of.  
**General Description:** roadside ditch; wet area; poplar and willow to the West, giving site some afternoon shading  
**Min Elev. (m):** 1380 **Max Elev. (m):** 1380  
**Slope:** 10.00 **Best Source of Info:** U89ESR01ABCA  
**Map UTM Zone UTM Easting UTM Northing Survey Site Name Notes # Dot ID #**  
82H04 12 292000 5457900 Dungarvan Creek LSD9-29-3-29 W4M; Site #3 118 5063  
**Source Code Author Publisher Year Title**  
U89ESR01ABCA Eastern Slopes Rangeland Consultants 1989 A Population Study of Geyer's wild onion Along Highway #6 for  
Natural and Protected Areas, Public Lands Division  
**Date Source Abstract Code Observer Occurrence Data**  
1989-07-26 U89ESR01ABCA K.E. & C.A. Tannas 30 on E side of road; 150 on W side of road, S of wet area, and 12 on W side of  
road, N of wet area; flowering and fruiting  
**Allium geyeri** Geyer's onion SRank: S2

**Amaranthus californicus Californian amaranth**

**Natural Region:** Foothills Fescue Grassland, Dry Mixedgrass

**Habitat:** Wetland-Sandy

**Phenology:** flowers late July to August

**Specific Search Strategies (if any):** shallow depressions along seasonal streams and ephemeral wetlands, sometimes appearing weedy; quite visible into September; mostly very low growing but abundant where found. May be useful to check some cultivated areas for identification problems.

**Element Occurrences:**

**Element Code:** PDAMA040A0 **Occurrence Code #:** 001 **Survey Date:** 1951-00-00

**Last Observed:** 1951-00-00 **First Observed:** 1951-00-00 **Precision Code:** M

**Directions:** High River, in ?.

**General Description:** Weedy area.

**Min Elev. (m):** 1028 **Max Elev. (m):** 1028 **Best Source of Info:** SNDGETUCABCA01

**Specimen Source Code Collector Herbarium Accession # Date ID OK? Observation Detail**

SNDGETUCABCA01 Getty, J. UC 09469 0000-00-00 Y

**Map UTM Zone UTM Easting UTM Northing Survey Site Name Notes # Dot ID #**

82I12 12 296650 5607350 High River 3 1423

**Amaranthus californicus** Californian amaranth SRank: S1

+++++

**Element Code:** PDAMA040A0 **Occurrence Code #:** 002 **Survey Date:** 1914-08-12

**Last Observed:** 1914-08-12 **First Observed:** 1914-08-12 **Actual Mapping Precision (m):** 2500 **Precision Code:** M

**Directions:** Cardson.

**General Description:** cultivated ground

**Min Elev. (m):** 1158 **Max Elev. (m):** 1158 **Best Source of Info:** S14MOOACONCA01

**Specimen Source Code Collector Herbarium Accession # Date ID OK? Observation Detail**

S14MOOACONCA01 Moodie, M.E. AC none 1914-08-12

**Map UTM Zone UTM Easting UTM Northing Survey Site Name Notes # Dot ID #**

82H03 12 331300 5451000 Cardston 24 3855

**Amaranthus californicus** Californian amaranth SRank: S1

+++++

**Element Code:** PDAMA040A0 **Occurrence Code #:** 003 **Survey Date:** 1933-08-07

**Last Observed:** 1933-08-07 **First Observed:** 1933-08-07 **Actual Mapping Precision (m):** 2500 **Precision Code:** M

**Directions:** Herronton.

**Min Elev. (m):** 998 **Max Elev. (m):** 998 **Best Source of Info:** S33GROACONCA01

**Specimen Source Code Collector Herbarium Accession # Date ID OK? Observation Detail**

S33GROACONCA01 Groh, H. AC 11485 1933-08-07 Y

**Map UTM Zone UTM Easting UTM Northing Survey Site Name Notes # Dot ID #**

82I11 12 327800 5610700 Herronton 1 3856

**Amaranthus californicus** Californian amaranth SRank: S1

+++++

**Element Code:** PDAMA040A0 **Occurrence Code #:** 004 **Survey Date:** 1928-00-00

**Last Observed:** 1928-00-00 **First Observed:** 1928-00-00 **Actual Mapping Precision (m):** 2500 **Precision Code:** M

**Directions:** Manyberries.

**Min Elev. (m):** 907 **Max Elev. (m):** 907 **Best Source of Info:** S28CLEACONCA01

**Specimen Source Code Collector Herbarium Accession # Date ID OK? Observation Detail**

S28CLAACONCA01 Clarke, S.E. AC 11476 1928-00-00 ?

**Map UTM Zone UTM Easting UTM Northing Survey Site Name Notes # Dot ID #**

72E07 12 522073 5471783 Manyberries 12 3752

**Amaranthus californicus** Californian amaranth SRank: S1

**Ambrosia acanthicarpa bur ragweed**

**Natural Region:** Dry Mixedgrass

**Habitat:** Sand Dunes

**Phenology:** flowering late July to August

**Specific Search Strategies (if any):** mostly confined to silty (fine-grained) sand dunes/blowouts/eroding sandy soils, sometimes on slopes. Visible and distinctive at most seasons, even if not flowering. Confined to active dunes.

**Element Occurrences:**

**Element Code:** PDAST0C010 **Occurrence Code #:** 001 **Survey Date:** 1986-07-19

**Last Observed:** 1986-07-19 **First Observed:** 1986-07-19 **Precision Code:** M

**Directions:** Orion, SW of; Pakowki Sand dunes.

**General Description:** Slight depression in low sand dunes.

**Min Elev. (m):** 800 **Max Elev. (m):** 880

**Other Comments:** Dupl. sheet with access. # B86.139.8b **Best Source of Info:** S86HRAPMABCA05

**Specimen Source Code Collector Herbarium Accession # Date ID OK? Observation Detail**

S86HRAPMABCA05 Hrapko, J.O. & R. B. Dickinson PM B86.139.89b 1986-07-19 Flowers

S86HRAPMABCA14 Hrapko, J.O., Parker, M.E. PM B86.139.8a 1986-07-19 Y

**Map UTM Zone UTM Easting UTM Northing Survey Site Name Notes # Dot ID #**

72E07 12 509873 5471783 Pakowki Sand Dunes Lat/Long: 49 24/110 52 2 83

**Date Source Abstract Code Observer Occurrence Data**

Flowers

**Ambrosia acanthicarpa** bur ragweed SRank: S2

+++++

**Element Code:** PDAST0C010 **Occurrence Code #:** 002 **Survey Date:** 1988-07-21

**Last Observed:** 1988-07-21 **First Observed:** 1988-07-21 **Precision Code:** S

**General Description:** sand dunes

**Min Elev. (m):** 707 **Max Elev. (m):** 707 **Best Source of Info:** S88ALLPPABCA02

**Specimen Source Code Collector Herbarium Accession # Date ID OK? Observation Detail**

S88ALLPPABCA02 Allen, L & MacDonald, C PP 763 1988-07-21

**Map UTM Zone UTM Easting UTM Northing Survey Site Name Notes # Dot ID #**

72E13 12 436250 5529850 Wolf Island 2 149

**Date Source Abstract Code Observer Occurrence Data**

Rare-SE Alta sand dunes

**Ambrosia acanthicarpa** bur ragweed SRank: S2

+++++

**Element Code:** PDAST0C010 **Occurrence Code #:** 003 **Survey Date:** 1995-00-00

**Last Observed:** 1995-00-00 **First Observed:** 1993-06-14 **Precision Code:** S

**Directions:** Canadian Forces Base Suffield National Wildlife Area; Mule Deer Road, the dugout along.

**General Description:** subxeric to xeric, disturbed sandy dry barrens; assoc. plants: Helianthus couplandii, Chenopodium pratericola, Polygonum arenastrum, P. convolvulus, Psoralidium lanceolatum, Cryptantha...open successional meadow

**Min Elev. (m):** 686 **Max Elev. (m):** 686 **Size of Occurrence:** 0.05

**Other Comments:** Area was heavily trampled by horses and there was very little plant growth.

**Management Comments:** threatened from encroachment of vegetation on active blowouts, through habitat reduction. **Best**

**Source of Info:** U97CWS01ABCA

**Specimen Source Code Collector Herbarium Accession # Date ID OK? Observation Detail**

S94MACPMABCA12 Macdonald, I.D. PM B94.4.531 1994-07-07 Y

S94MACPMABCA13 Macdonald, I.D. PM B94.4.661 1994-08-31 Y

S94TROPABCA09 Trotter, Garry PM B94.11.487 1994-07-18 Y

**Map UTM Zone UTM Easting UTM Northing Survey Site Name Notes # Dot ID #**

72L08 12 536220 5591000 South Saskatchewan River UTM WL 536220 / 5591000; 50-27'40"N/110-29'15"W 7 210

**Source Code Author Publisher Year Title**

R97MAC01ABCA Macdonald, I.D. Canadian Wildlife Service, Environment Canada, Prairie and 1997 Vascular Flora of Canadian Forces Base Suffield National Wildlife Area

U96MAC01ABCA Macdonald, I.D. Canadian Wildlife Service, Environment Canada, Prairie and 1996 Vascular Flora of Canadian Forces Base Suffield National Wildlife Area

U97CWS01ABCA Canadian Wildlife Service CWS 1997 Plant Database from Suffield Survey 1994-1995

U99WIL02ABCA Wilkinson, Kathleen 1999 Letter from K. Wilkinson to John Rintoul - at March 3, 1999

**Date Source Abstract Code Observer Occurrence Data**

rare in SNWA; well over 300 plants covering a 20 X 25 m area

**Ambrosia acanthicarpa** bur ragweed SRank: S2

**Element Code:** PDAST0C010 **Occurrence Code #:** 004 **Survey Date:** 1990-07-15  
**Last Observed:** 1990-07-15 **First Observed:** 1990-07-08 **Precision Code:** S  
**Directions:** Vauxhall, near; Fransaria Dunes.  
**General Description:** Open active dune.  
**Min Elev. (m):** 792 **Max Elev. (m):** 792  
**Management Comments:** Most plants were grazed to some extent by cattle. **Best Source of Info:** UNDESR02ABCA  
**Specimen Source Code Collector Herbarium Accession # Date ID OK? Observation Detail**  
S90TANPPABCA01 Tannas, K.E. & C. A. PP 787 1990-07-15  
**Map UTM Zone UTM Easting UTM Northing Survey Site Name Notes # Dot ID #**  
72E13 12 437025 5536300 The Grand Forks 3 150  
**Source Code Author Publisher Year Title**  
UNDESR02ABCA Eastern Slopes Rangeland Consultants A Fransaria Sand Dune, a Flora Study Near Vauxhall  
**Date Source Abstract Code Observer Occurrence Data**  
rare; percentage prominence - 39.9%; several hundreds of plants  
**Ambrosia acanthicarpa** bur ragweed SRank: S2  
+++++

**Element Code:** PDAST0C010 **Occurrence Code #:** 005 **Survey Date:** 1995-07-13  
**Last Observed:** 1995-07-13 **First Observed:** 1993-00-00 **Precision Code:** S  
**Directions:** Canadian Forces Base Suffield National Wildlife Area; South Saskatchewan River valley, a nip slope along the; Bull Pen, northwest of.  
**General Description:** subxeric sands; in association with Polanisia dodecandra (prov. rare). Sandy loam of steep slope, crest of river valley with Calamovilfa longifolia - Stipa comata - Opunita frag, Ambrosia artemisifolia  
**Min Elev. (m):** 663 **Max Elev. (m):** 670  
**Slope:** 58.00 **Aspect:** E  
**Other Comments:** The immediate vicinity of this station was originally recorded in the range assessment study of Weerstra & Wilkinson (1993, p. 63-64) **Best Source of Info:** U97CWS01ABCA  
**Specimen Source Code Collector Herbarium Accession # Date ID OK? Observation Detail**  
S95MACPMABCA13 Macdonald, I.D. PM B95.9.35 1995-07-13 Y  
**Map UTM Zone UTM Easting UTM Northing Survey Site Name Notes # Dot ID #**  
72L07 12 523950 5566700 Brush Flats UTM 523950 / 5566700 and UTM WL ca 524100 / 5566700;50-15'08"N/110-39'50"W 8 193  
**Source Code Author Publisher Year Title**  
U96MAC01ABCA Macdonald, I.D. Canadian Wildlife Service, Environment Canada, Prairie and 1996 Vascular Flora of Canadian Forces Base Suffield National Wildlife Area  
U97CWS01ABCA Canadian Wildlife Service CWS 1997 Plant Database from Suffield Survey 1994-1995  
**Date Source Abstract Code Observer Occurrence Data**  
rare in SNWA; "very common in active sand...5-15% cover"(from Weerstra & Wilkinson 1993)  
**Ambrosia acanthicarpa** bur ragweed SRank: S2  
+++++

**Element Code:** PDAST0C010 **Occurrence Code #:** 006 **Survey Date:** 1999-08-11  
**Last Observed:** 1999-08-11 **First Observed:** 1997-07-04 **Actual Mapping Precision (m):** 250 **Precision Code:** S  
**Directions:** CFB Suffield; SE side of.; Old Channel Lake; ~ 9.5 km W of.; S Border of Base; ~ 250 m N of.  
**General Description:** 350 on RoW in wetland, 120 NE of RoW; depressional wetland in Dry Mixed Grass Prairie. Spike Rush CT.  
**Min Elev. (m):** 739 **Max Elev. (m):** 739 **Best Source of Info:** U99BUS02ABCA  
**Map UTM Zone UTM Easting UTM Northing Survey Site Name Notes # Dot ID #**  
72L02 12 515500 5563500 CFB Suffield 1-5-15-6-W4M, 4-4-15-6-W4M 16 3912  
**Source Code Author Publisher Year Title**  
U97AXY03ABCA AXYS Environmental Consulting Ltd. 1997 AEC Suffield Pipeline U99BUS02ABCA Bush, Dana 1999 Axys Environmental Consulting Ltd.- Rare Native Plant Report Forms  
**Date Source Abstract Code Observer Occurrence Data**  
1999-08-11 U99BUS02ABCA Dana Bush site 4-4-15-6- >1000 plants. site 2 1-5-15-6- >300 plants, 80 % in flower? hard rain-difficult to count  
**Ambrosia acanthicarpa** bur ragweed SRank: S2  
+++++

**Element Code:** PDAST0C010 **Occurrence Code #:** 007 **Survey Date:** 1969-12-08  
**Last Observed:** 1969-12-08 **First Observed:** 1969-12-08 **Actual Mapping Precision (m):** 2500 **Precision Code:** M  
**Directions:** Writing-on-Stone Provincial Park  
**General Description:** Sandy soil, near Milk River. Common, leaves bluish green.  
**Min Elev. (m):** 915 **Max Elev. (m):** 915 **Best Source of Info:** S69BASACONCA03  
**Specimen Source Code Collector Herbarium Accession # Date ID OK? Observation Detail**  
S69BASACONCA03 Bassett, I.J. & B. Baum AC 366101 1969-08-12 common in sandy soil, leaves bluish green  
**Map UTM Zone UTM Easting UTM Northing Survey Site Name Notes # Dot ID #**  
72E04 12 454074 5436383 Writing-on-Stone Provincial Park 49-05N/111-37W 7 55  
**Ambrosia acanthicarpa** bur ragweed SRank: S2  
+++++

**Element Code:** PDAST0C010 **Occurrence Code #:** 009 **Survey Date:** 1977-08-21  
**Last Observed:** 1977-08-21 **First Observed:** 1977-08-21 **Actual Mapping Precision (m):** 550 **Precision Code:** M  
**Directions:** Empress, 12 km SSW of; Border, 3.5 km W of.  
**General Description:** active sand dune  
**Min Elev. (m):** 708 **Max Elev. (m):** 708 **Best Source of Info:** S77BRAUAABCA08  
**Specimen Source Code Collector Herbarium Accession # Date ID OK? Observation Detail**  
S77BRAUAABCA08 Bradley, C. Wallis, C. UA 75300 1977-08-21 Y flowers, fruits  
**Map UTM Zone UTM Easting UTM Northing Survey Site Name Notes # Dot ID #**  
72L16 12 566525 5633600 South Saskatchewan River SE 10-22-1 W4M 7 254  
**Ambrosia acanthicarpa** bur ragweed SRank: S2  
+++++

**Element Code:** PDAST0C010 **Occurrence Code #:** 010 **Survey Date:** 1985-00-00  
**Last Observed:** 1985-00-00 **First Observed:** 1985-00-00 **Actual Mapping Precision (m):** 50 **Precision Code:** S  
**Directions:** USA border, 7.5 km N of; Lost River Valley rim of.  
**General Description:** active blowout  
**Min Elev. (m):** 899 **Max Elev. (m):** 899 **Best Source of Info:** R86WER01ABCA  
**Map UTM Zone UTM Easting UTM Northing Survey Site Name Notes # Dot ID #**  
72E02 12 536048 5434735 Lost River 33 4555  
**Source Code Author Publisher Year Title**  
R86WER01ABCA Wershler C. & C. Wallis 1986 Lost River Significant Features Assessment  
**Date Source Abstract Code Observer Occurrence Data**  
R86WER01ABCA C. Wershler & C. Wallis leading species in active dunes, occasional in stabilized dunes  
**Ambrosia acanthicarpa** bur ragweed SRank: S2  
+++++

**Element Code:** PDAST0C010 **Occurrence Code #:** 011 **Survey Date:** 1895-08-09  
**Last Observed:** 1895-08-09 **First Observed:** 1895-08-09 **Actual Mapping Precision (m):** 1000 **Precision Code:** M  
**Directions:** Medicine Hat; Police Point.  
**General Description:** sandy ground  
**Min Elev. (m):** 650 **Max Elev. (m):** 680 **Size of Occurrence:** **Best Source of Info:** S95MACNMONCA44  
**Specimen Source Code Collector Herbarium Accession # Date ID OK? Observation Detail**  
S95MACNMONCA44 Macoun NM 106554 1895-08-09  
**Map UTM Zone UTM Easting UTM Northing Survey Site Name Notes # Dot ID #**  
72L02 12 525800 5543150 Medicine Hat Lat/Long: 50 03/110 38 2 169  
**Ambrosia acanthicarpa** bur ragweed SRank: S2



**Anagallis minima (Centunculus minimus) chaffweed**

**Natural Region:** Dry Mixedgrass

**Habitat:** Wetland-Sandy

**Phenology:** flowers early July to late August

**Specific Search Strategies (if any):** search interface along ephemeral wetland borders; may also occur in basin depending on size and configuration. Abundant where found but very tiny.

**Element Occurrences:**

**Element Code:** PDPRI01020 **Occurrence Code #:** 001 **Survey Date:** 1953-08-13  
**Last Observed:** 1953-08-13 **First Observed:** 1953-08-13 **Actual Mapping Precision (m):** 1500 **Precision Code:** M  
**Directions:** Redcliff, 15 km NNW of; BM2570, 2 km W of.  
**General Description:** border of large slough  
**Min Elev. (m):** 784 **Max Elev. (m):** 784 **Best Source of Info:** S53MOSUAABCA31  
**Specimen Source Code Collector Herbarium Accession # Date ID OK? Observation Detail**  
S53MOSUAABCA31 Moss, E.H. UA 49282 1953-08-13 flowers; fruits  
**Map UTM Zone UTM Easting UTM Northing Survey Site Name Notes # Dot ID #**  
72L02 12 500950 5550250 Redcliff 6 172  
**Anagallis minima** chaffweed SRank: S1S2  
+++++

**Element Code:** PDPRI01020 **Occurrence Code #:** 002 **Survey Date:** 1952-08-26  
**Last Observed:** 1952-08-26 **First Observed:** 1952-08-26 **Actual Mapping Precision (m):** 1000 **Precision Code:** M  
**Directions:** Empress, 4 km SW of.  
**General Description:** dry slough bottom  
**Min Elev. (m):** 670 **Max Elev. (m):** 670 **Best Source of Info:** S52MOSUAABCA24  
**Specimen Source Code Collector Herbarium Accession # Date ID OK? Observation Detail**  
S52MOSACONCA03 Moss, E.H. AC 484432 1952-08-26  
S52MOSUAABCA24 Moss, E.H. UA 14188 1952-08-26 fruits  
**Map UTM Zone UTM Easting UTM Northing Survey Site Name Notes # Dot ID #**  
72L16 12 567000 5642200 Empress 1 248  
**Anagallis minima** chaffweed SRank: S1S2  
+++++

**Element Code:** PDPRI01020 **Occurrence Code #:** 003 **Survey Date:** 1998-09-23  
**Last Observed:** 1998-09-23 **First Observed:** 1997-07-09 **Actual Mapping Precision (m):** 100 **Precision Code:** S  
**Directions:** Schuler, 13 km NW of; Hwy 41, 8.5km W of.  
**General Description:** In wet area: Eleocharis palustris-Carex atherodes-Carex lanuginosa- Alopecurus aequalis- Polygonum  
coccineum-Potamogetan gramineus-Deschampsia cespitosa. Wet ecotone above wet area: Carex douglasii- Agrostis scabra-  
cont'd  
**Min Elev. (m):** 808 **Max Elev. (m):** 808  
**Other Comments:** Achillea millefolium- Agropyron smithii-Poa pratensis-Centunculus minimus- Elatine triandra-Eleocharis  
acicularis. Centunculus minimus will be affected by pipeline, Elatine triandra will not. specimen collected.  
**Management Comments:** Grazing lease and proposed pipeline threaten species. **Best Source of Info:** U97AXY03ABCA  
**Map UTM Zone UTM Easting UTM Northing Survey Site Name Notes # Dot ID #**  
72L08 12 555550 5584850 Lat 50 degrees 24 min 93 s N, Long 110 degrees 13 min 11 s W, LSD 7-9-17-2-W4M 14 3903  
**Source Code Author Publisher Year Title**  
U97AXY03ABCA AXYS Environmental Consulting Ltd. 1997 AEC Suffield Pipeline  
**Date Source Abstract Code Observer Occurrence Data**  
1997-07-09 U97TAN01ABCA several 1000 individuals, vegetative, flowering, fruiting  
**Anagallis minima** chaffweed SRank: S1S2  
+++++

**Element Code:** PDPRI01020 **Occurrence Code #:** 004 **Survey Date:** 1996-00-00  
**Last Observed:** 1996-00-00 **First Observed:** 1996-00-00 **Actual Mapping Precision (m):** 250 **Precision Code:** S  
**Directions:** Bain Station, 5 km NE of; Bare Creek, 2.5 km W of.  
**General Description:** occasional. Late season wetland with exposed mud. KP 398.7:Original location disturbed. Seed collected and reseeded

**Min Elev. (m):** 1013 **Max Elev. (m):** 1013 **Best Source of Info:** U96EXP01ABCA

**Map UTM Zone UTM Easting UTM Northing Survey Site Name Notes # Dot ID #**

72E08 12 548400 5459925 Bare Creek SW 3-15 4-3-4, Km 398.3 & 398.7, LS # 60; 548578.12E, 5459616.13N., NW 10 4-3-4 10 3973

**Source Code Author Publisher Year Title**

U96EXP01ABCA AXYS Environmental Consulting 1996 Express Pipeline Project

**Anagallis minima** chaffweed SRank: S1S2

+++++

**Element Code:** PDPRI01020 **Occurrence Code #:** 005 **Survey Date:** 1996-00-00  
**Last Observed:** 1996-00-00 **First Observed:** 1996-00-00 **Actual Mapping Precision (m):** 250 **Precision Code:** S  
**Directions:** Milk River Lake, 3.5 km from bridge over; Rd to One-Four, 1.5 km S of.

**General Description:** RoW narrowed. No seed mix applied.

**Min Elev. (m):** 869 **Max Elev. (m):** 869 **Best Source of Info:** U96EXP01ABCA

**Map UTM Zone UTM Easting UTM Northing Survey Site Name Notes # Dot ID #**

72E01 12 551772 5432141 Milk River Lake NW 13-13-1-3-4, 551772.72E, 5432142.28N, LS # 64, Km 426.9 25 4047

**Source Code Author Publisher Year Title**

U96EXP01ABCA AXYS Environmental Consulting 1996 Express Pipeline Project

**Anagallis minima** chaffweed SRank: S1S2

+++++

**Element Code:** PDPRI01020 **Occurrence Code #:** 006 **Survey Date:** 1999-08-16  
**Last Observed:** 1999-08-16 **First Observed:** 1997-07-25 **Actual Mapping Precision (m):** 100 **Precision Code:** S  
**Directions:** Hwy 555, 15.25 km N of; Red Deer River, 10.25 km N of; Alkali Creek, 1 km E of.

**General Description:** perimeter of ephemeral wetland in dry mixed grassland; Care pen (6), Agro smi (5), Arte lud (var. gnepch) (2); Hede his, Gnap

pal, Ache mil, Orth lut; mesic; slope various; aspect shallow 1-5 deg.

**Min Elev. (m):** 732 **Max Elev. (m):** 732

**Other Comments:** specimens collected; UAC and home (Jane Lancaster)

**Management Comments:** Stake boundaries of areas to be protected. **Best Source of Info:** U99GOL01ABCA

**Map UTM Zone UTM Easting UTM Northing Survey Site Name Notes # Dot ID #**

72L15 12 533275 5643175 Alkali Creek 07-08-23-04-W4M, Lat 50 56.420' Lon 110 31.565' 3 5327

**Source Code Author Publisher Year Title**

U99GOL01ABCA Golder Associates & Boss environmental consulting ltd. 1999 Alberta Ethane Gathering System (AEGS) Looping Project - East Leg Conservation and Reclamation Plan vol. 2 (Empress to Hanna)

**Date Source Abstract Code Observer Occurrence Data**

1997-07-25 100% fruiting

1999-08-16 U99GOL01ABCA abundant (thousands)

**Anagallis minima** chaffweed SRank: S1S2

+++++

**Element Code:** PDPRI01020 **Occurrence Code #:** 007 **Survey Date:** 1999-08-17  
**Last Observed:** 1999-08-17 **First Observed:** 1997-07-24 **Actual Mapping Precision (m):** 100 **Precision Code:** S  
**Directions:** Highway 555, 17.5 km N of; Red Deer River, 12.5 km N of; Alkali Creek, 500 m W of.

**General Description:** ephemeral wetland west of Alkali Creek in dry mixed grass prairie; Care pen (6), Agro smi (5), Arte lud (var. gnep) (2), Hede his, Gnap pal; subhygric-mesic, concavity (aspect)

**Min Elev. (m):** 747 **Max Elev. (m):** 747

**Other Comments:** specimens collected

**Management Comments:** Stake boundaries around areas to be protected. **Best Source of Info:** U99GOL01ABCA

**Map UTM Zone UTM Easting UTM Northing Survey Site Name Notes # Dot ID #**

72L15 12 528850 5645550 Highway 555 16-14-23-05-W4M 4 5328

**Source Code Author Publisher Year Title**

U99GOL01ABCA Golder Associates & Boss environmental consulting ltd. 1999 Alberta Ethane Gathering System (AEGS) Looping Project - East Leg Conservation and Reclamation Plan vol. 2 (Empress to Hanna)

**Date Source Abstract Code Observer Occurrence Data**

1997-07-24 100% fruiting

1999-08-17 U99GOL01ABCA > 100

**Anagallis minima** chaffweed SRank: S1S2

+++++

**Element Code:** PDPRI01020    **Occurrence Code #:** 008    **Survey Date:** 1999-08-17  
**Last Observed:** 1999-08-17    **First Observed:** 1997-07-25    **Actual Mapping Precision (m):** 100    **Precision Code:** S  
**Directions:** Cappon, 12.5 km NE of; Hwy 886, 8.75 km E of.

**General Description:** south end of an ephemeral wetland in dry mixed grassland; Care peu (5), Dist str (3), Agro smi (3);  
subhygric-mesic; slope 1-3 degrees; aspect-various

**Min Elev. (m):** 808    **Max Elev. (m):** 808

**Other Comments:** 6 specimens collected

**Management Comments:** Stake boundaries of areas to be protected.    **Best Source of Info:** U99GOL01ABCA

**Map UTM Zone UTM Easting UTM Northing Survey Site Name Notes # Dot ID #**

72M02 12 523250 5650000 Cappon 11-32-23-05-W4M, Lat 51 0.15' Lon 110 40.10' 1 5330

**Source Code Author Publisher Year Title**

U99GOL01ABCA Golder Associates & Boss environmental consulting ltd. 1999 Alberta Ethane Gathering System (AEGS) Looping  
Project - East Leg Conservation and Reclamation Plan vol. 2 (Empress to Hanna)

**Date Source Abstract Code Observer Occurrence Data**

1997-07-25 100% fruiting

1999-08-17 U99GOL01ABCA population 200-300

**Anagallis minima** chaffweed SRank: S1S2

***Arabidopsis salsuginea* mouse-ear cress**

**Natural Region:** Mixedgrass, Dry Mixedgrass

**Habitat:** Wetland-Alkali

**Phenology:** flowers early in season (late May, early June) in grassland regions

**Specific Search Strategies (if any):** heavily alkaline areas near perimeter of wetland; quite distinctive sprawling plant and usually occurs in small groups of plants

**Element Occurrences:**

**Element Code:** PDBRA05020 **Occurrence Code #:** 001 **Survey Date:** 1991-07-28

**Last Observed:** 1991-07-28 **First Observed:** 1991-07-28 **Precision Code:** S

**Directions:** La Saline Natural Area

**General Description:** Xeric tufa dome, La Saline spring with *Spergularia marina*, *Aster ericoides*.

**Min Elev. (m):** 250 **Max Elev. (m):** 250 **Best Source of Info:** S91TIMPPABCA02

**Specimen Source Code Collector Herbarium Accession # Date ID OK? Observation Detail**

S91TIMPPABCA02 Timoney, K. PP 798 1991-07-28

**Map UTM Zone UTM Easting UTM Northing Survey Site Name Notes # Dot ID #**

74E04 12 469150 6325450 La Saline Natural Area LSD 16 7 414

**Source Code Author Publisher Year Title**

R91TIM01ABCA Timoney, Kevin P and Anne L. Robinson Alberta Forestry, Lands and Wildlife 1991 Biophysical Inventory of the La Saline Natural Area

***Arabidopsis salsuginea* mouse-ear cress SRank:** S1

+++++

**Element Code:** PDBRA05020 **Occurrence Code #:** 003 **Survey Date:** 1990-00-00

**Last Observed:** 1990-00-00 **First Observed:** 1990-00-00 **Actual Mapping Precision (m):** 250 **Precision Code:** S

**Directions:** Bindloss, 8.5 km SW of; Prince's Springs (formerly Bindloss Depression); Sects 27,28,34,35-Tp21-R3-W4M

**General Description:** Perm. relatively fresh springs feeding a moder. saline to saline waer body surr. by native mixed grassland; in driest grazed

portion, of dist str-Pucc nut ct; grows most abund. in open unveg. clay flats and their edges

**Min Elev. (m):** 617 **Max Elev. (m):**

**Other Comments:** recommend addtl fencing of spring-dependent vegn; (see Wershler, 1991), protection of basin; no groundwater pumping for injection wells, survey in wetter years

**Management Comments:** threats from cattle trampling, pumping water out of the springs to water cattle; natural gas well dev't

**Best Source of Info:** U90WAL01ABCA

**Map UTM Zone UTM Easting UTM Northing Survey Site Name Notes # Dot ID #**

72L16 12 546450 5629250 Bindloss Sects. 27,28,34,35-Tp210R3-W4M; mapped as polygon 33 6040

**Source Code Author Publisher Year Title**

U90WAL01ABCA Wallis, Cliff 1990 Reconnaissance Survey of Saline Wetlands and Springs in the Grassland-Parkland Region of Eastern Alberta

**Date Source Abstract Code Observer Occurrence Data**

1990-00-00 U90WAL01ABCA C Wallis UTM coordinates prov. by CW, 2000-04-10

***Arabidopsis salsuginea* mouse-ear cress SRank:** S1

***Aristida purpurea* var *longiseta* red three-awn**

**Natural Region:** Mixedgrass, Dry Mixedgrass

**Habitat:** Slopes-Sandy

**Phenology:** heads out mid July-August

**Specific Search Strategies (if any):** search in eroding sandy soils on valley slopes; quite distinctive but usually only found as a scattered few individuals.

**Element Occurrences:**

**Element Code:** PMPOA0K0W1 **Occurrence Code #:** 001 **Survey Date:** 1978-08-01

**Last Observed:** 1978-08-01 **First Observed:** 1978-07-25 **Precision Code:** M

**Directions:** Lethbridge Community College, west of

**General Description:** sandy coulee

**Min Elev. (m):** 875 **Max Elev. (m):** 875 **Best Source of Info:** S78GSCALABCA02

**Specimen Source Code Collector Herbarium Accession # Date ID OK? Observation Detail**

S78GSCALABCA02 Gschaid R. & Sylver Smoliak AL none 1978-08-01 Y headed

S78SMOALABCA07 Smoliak, S. AL none 1978-07-25 Y headed

**Map UTM Zone UTM Easting UTM Northing Survey Site Name Notes # Dot ID #**

82H10 12 368500 5502500 Six Miles Coulee 2 1353

***Aristida purpurea* var *longiseta* red three-awn SRank:** S1

+++++

**Element Code:** PMPOA0K0W1 **Occurrence Code #:** 002 **Survey Date:** 1997-07-00

**Last Observed:** 1997-07-00 **First Observed:** 1997-06-00 **Actual Mapping Precision (m):** 50 **Precision Code:** S

**Directions:** Oldman River Valley, E slope of; High Level Bridge, 400 m N of.

**General Description:** steep to mid dry south facing slopes; *Stipa* spp., *Agropyron smithii*, *Bouteloua gracilis*, *Koeleria*

**Min Elev. (m):** 830 **Max Elev. (m):** 830 **Aspect:** S

**Other Comments:** Specimen seen by A.J.G. **Best Source of Info:** U97ERN01ABCA

**Map UTM Zone UTM Easting UTM Northing Survey Site Name Notes # Dot ID #**

82H10 12 366200 5506900 Lethbridge 17 3787

**Source Code Author Publisher Year Title**

U97ERN01ABCA Ernst, Reg 1997 Rare Native Plant Survey Forms

**Date Source Abstract Code Observer Occurrence Data**

U97ERN01ABCA Reg Ernst numerous

***Aristida purpurea* var *longiseta* red three-awn SRank:** S1

+++++

**Element Code:** PMPOA0K0W1 **Occurrence Code #:** 003 **Survey Date:** 1997-07-00

**Last Observed:** 1997-07-00 **First Observed:** 1997-06-00 **Actual Mapping Precision (m):** 100 **Precision Code:** S

**Directions:** Lethbridge; Oldman River Valley, E slopes of. Community College, 1.5 km NW of.

**General Description:** steep and moderate dry south facing slopes; *Stipa* spp., *Agropyron smithii*, *Bouteloua gracilis*, *Koeleria*

**Min Elev. (m):** 850 **Max Elev. (m):** 850 **Aspect:** S

**Other Comments:** Specimen seen by A.J.G. **Best Source of Info:** U97ERN01ABCA

**Map UTM Zone UTM Easting UTM Northing Survey Site Name Notes # Dot ID #**

82H10 12 368175 5502850 Lethbridge 3TM 83648.11 5505255.48; 83776.12 5504956.20 23 3794

**Source Code Author Publisher Year Title**

U97ERN01ABCA Ernst, Reg 1997 Rare Native Plant Survey Forms

**Date Source Abstract Code Observer Occurrence Data**

U97ERN01ABCA Reg Ernst numerous; locally abundant

***Aristida purpurea* var *longiseta* red three-awn SRank:** S1

+++++

**Element Code:** PMPOA0K0W1 **Occurrence Code #:** 004 **Survey Date:** 1996-00-00  
**Last Observed:** 1996-00-00 **First Observed:** 1996-00-00 **Actual Mapping Precision (m):** 250 **Precision Code:** S  
**Directions:** Suffield; ~23km SE of; Hwy 1; ~15.5km S of; S Saskatchewan River; ~1.5km N of.  
**General Description:** 29 plants. In thin soils on crest of S facing slope. Original location disturbed. Seed collected and reseeded. Robinson coulee.

**Min Elev. (m):** 777 **Max Elev. (m):** 777

**Other Comments:** note: utm's were given as a range therefore include these coordinates although they are only a few meters different- 499446.99E, 5542045.36 N **Best Source of Info:** U96EXP01ABCA

**Map UTM Zone UTM Easting UTM Northing Survey Site Name Notes # Dot ID #**

72L03 12 499362 5542098 S. Saskatchewan River LS # 45- 299.8 km-NW 26 12 8 4. 6 3959

**Source Code Author Publisher Year Title**

U96EXP01ABCA AXYS Environmental Consulting 1996 Express Pipeline Project

**Aristida purpurea var longiseta** red three-awn SRank: S1

+++++

**Element Code:** PMPOA0K0W1 **Occurrence Code #:** 005 **Survey Date:** 1996-00-00  
**Last Observed:** 1996-00-00 **First Observed:** 1996-00-00 **Actual Mapping Precision (m):** 250 **Precision Code:** S

**Directions:** Bowell; ~15km SW of; S. Saskatchewan River; on N shore of.

**General Description:** North shore of S Saskatchewan River. Original location disturbed. Seed collected and reseeded. Robinson coulee. 14 plants.

**Min Elev. (m):** 671 **Max Elev. (m):** 671

**Other Comments:** UTM given does not coorespond to N shore (it is S shore). Dot plotted on N. shore. UTM of dot = 500275E, 5540625. **Best Source of Info:** U96EXP01ABCA

**Map UTM Zone UTM Easting UTM Northing Survey Site Name Notes # Dot ID #**

72L02 12 500219 5540404 Bowell SW 3-26 12-8-4 18 3960

**Source Code Author Publisher Year Title**

U96EXP01ABCA AXYS Environmental Consulting 1996 Express Pipeline Project

**Aristida purpurea var longiseta** red three-awn SRank: S1

+++++

**Element Code:** PMPOA0K0W1 **Occurrence Code #:** 006 **Survey Date:** 1996-00-00  
**Last Observed:** 1996-00-00 **First Observed:** 1996-00-00 **Actual Mapping Precision (m):** 250 **Precision Code:** S

**Directions:** Bullshead Creek; ~8.5km W of; Fitzgerald; ~4.75 km SE of.

**General Description:** 1 plant, upper slope of Robinson's Coulee; off RoW. 5 m E of RoW, population avoided.

**Min Elev. (m):** 785 **Max Elev. (m):** 785

**Other Comments:** Plotted as site #24 (see B95WIL01ABCA). **Best Source of Info:** U96EXP01ABCA

**Map UTM Zone UTM Easting UTM Northing Survey Site Name Notes # Dot ID #**

72E15 12 516000 5522400 Fitzgerald LS#49; km:326.1; NE 29 10-6-W4 7 3961

**Source Code Author Publisher Year Title**

U96EXP01ABCA AXYS Environmental Consulting 1996 Express Pipeline Project

**Aristida purpurea var longiseta** red three-awn SRank: S1

+++++

**Element Code:** PMPOA0K0W1 **Occurrence Code #:** 007 **Survey Date:** 1963-08-28  
**Last Observed:** 1963-08-28 **First Observed:** 1963-08-28 **Actual Mapping Precision (m):** 500 **Precision Code:** M

**Directions:** Lethbridge; Martha Centre; Coulee W of.

**General Description:** On grassland slopes to Oldman River (off W end of 12th Ave S); several patches in Stipa-Bouteloua natural grassland known to A. Johnston for some years but not present elsewhere.

**Min Elev. (m):** 860 **Max Elev. (m):** 890 **Best Source of Info:** S63DORACONCA09

**Specimen Source Code Collector Herbarium Accession # Date ID OK? Observation Detail**

S63DORACONCA09 Dore, W.G., Alex Johnston & H.T. Allan AC 210316 1963-08-28 3 rep. & root; several patches

**Map UTM Zone UTM Easting UTM Northing Survey Site Name Notes # Dot ID #**

82H10 12 367350 5504700 Lethbridge 3 1354

**Aristida purpurea var longiseta** red three-awn SRank: S1

***Asclepias viridiflora* green milkweed**

**Natural Region:** Dry Mixedgrass

**Habitat:** Slopes-Sandy

**Phenology:** flowers late June to early July

**Specific Search Strategies (if any):** search in coarse-grained sands and gravelly sands on southerly facing slopes; very distinctive and quite visible beyond the flowering season.

**Element Occurrences:**

**Element Code:** PDASC02260 **Occurrence Code #:** 001 **Survey Date:** 1999-07-22  
**Last Observed:** 1999-07-22 **First Observed:** 1941-07-13 **Actual Mapping Precision (m):** 250 **Precision Code:** S  
**Directions:** Writing On Stone Provincial Park, 25 miles East of Milk River.

**General Description:** dry hillside, mixed prairie; Hoodoo Trail, start of (near group campsite A) and near viewpoint

**Min Elev. (m):** 922 **Max Elev. (m):** 922 **Aspect:** S **Best Source of Info:** S77BRUDBONCA01

**Specimen Source Code Collector Herbarium Accession # Date ID OK? Observation Detail**

S41SEXALABCA01 Sexmith, J.J. AL 4683 1941-07-13

S41SEXALABCA02 Sexmith, J.J. AL 4683 1941-07-13

S58BOIACONCA02 Boivin, Bernard & J.-M. Perron AC 127571 1958-06-27

S58BOIUABCA09 Boivin, Bernard, Perron, J.-M. UA 73558 1958-06-27 Y flowers

S58MOSUAABCA31 Moss, E.H. UA 14579 1958-08-24 Y fruits

S58MOSUAABCA32 Moss, E.H. UA 14578 1958-08-24 Y fruits; remains of flowers

S75KLAUAABCA11 Klar, Andrew UA 80686 1975-07-23 Y flowers

S77BRUDBONCA01 Brunton, D. F. DB none 1977-09-24 Y scattered fairly commonly

**Map UTM Zone UTM Easting UTM Northing Survey Site Name Notes # Dot ID #**

72E04 12 453702 5436309 Writing-on-Stone Provincial Park 38 5227

**Source Code Author Publisher Year Title**

F99GOU01ABCA Gould, Joyce 1999 Field Notes (the site is described)

**Date Source Abstract Code Observer Occurrence Data**

1999-07-22 F99GOU01ABCA J. Gould sandy soil with Linu lew, Stip com, Cala lon, Arte fri etc.; Liat spi, Stip vir; 13 plants-2 in bloom; 453702 5436309 & 454715 5436633

***Asclepias viridiflora* green milkweed SRank:** S1

+++++

**Element Code:** PDASC02260 **Occurrence Code #:** 002 **Survey Date:** 1985-00-00  
**Last Observed:** 1985-00-00 **First Observed:** 1979-08-14 **Actual Mapping Precision (m):** 50 **Precision Code:** S  
**Directions:** Lost River, 0.5 km W of; USA border,at; and area about.

**General Description:** sandy soil; dry-sandy loam-in stand of *Yucca glauca*; assoc. sp.: *Yucca glauca*

**Min Elev. (m):** 846 **Max Elev. (m):** 876 **Best Source of Info:** S79WALUAABCA12

**Specimen Source Code Collector Herbarium Accession # Date ID OK? Observation Detail**

S79WALUAABCA12 Wallis, C., Woerns, N. UA 84165 1979-08-14 Y fruit; dehisced fruit

**Map UTM Zone UTM Easting UTM Northing Survey Site Name Notes # Dot ID #**

72E01 12 540550 5427325 Lost River 46 4547

**Source Code Author Publisher Year Title**

R86WER01ABCA Wershler C. & C. Wallis 1986 Lost River Significant Features Assessment

***Asclepias viridiflora* green milkweed SRank:** S1

+++++

**Element Code:** PDASC02260 **Occurrence Code #:** 003 **Survey Date:** 1985-00-00  
**Last Observed:** 1985-00-00 **First Observed:** 1985-00-00 **Actual Mapping Precision (m):** 50 **Precision Code:** S  
**Directions:** Onefour, 8 km SSW of; Lost River Valley, slope of.

**General Description:** sandy soil

**Min Elev. (m):** 869 **Max Elev. (m):** 869 **Best Source of Info:** R86WER01ABCA

**Map UTM Zone UTM Easting UTM Northing Survey Site Name Notes # Dot ID #**

72E01 12 536900 5433050 Lost River 49 4550

**Source Code Author Publisher Year Title**

R86WER01ABCA Wershler C. & C. Wallis 1986 Lost River Significant Features Assessment

***Asclepias viridiflora* green milkweed SRank:** S1

**Aster campestris meadow aster**

**Natural Region:** Foothills Fescue Grassland, Mixedgrass

**Habitat:** Grassland

**Phenology:** flowers late July, August, sometimes into September

**Specific Search Strategies (if any):** lush slopes in fescue grassland; quite visible and distinctive when in flower.

**Element Occurrences:**

**Element Code:** PDAST0T0F0 **Occurrence Code #:** 001 **Survey Date:** 1950-08-29

**Last Observed:** 1950-08-29 **First Observed:** 1950-08-29 **Precision Code:** M

**Directions:** Blairmore

**General Description:** railway

**Min Elev. (m):** 1310 **Max Elev. (m):** 1310 **Best Source of Info:** S50MOSUAABCA01

**Specimen Source Code Collector Herbarium Accession # Date ID OK? Observation Detail**

S50MOSNMONCA01 Moss, E.H. & J.H. W. NM 236369 1950-08-29

S50MOSUAABCA01 Moss, E.H.; J.H.W. UA 17217 1950-08-29 [flowers]

**Map UTM Zone UTM Easting UTM Northing Survey Site Name Notes # Dot ID #**

82G09 11 683400 5498650 Blairmore 6 825

**Aster campestris** meadow aster SRank: S2

+++++

**Element Code:** PDAST0T0F0 **Occurrence Code #:** 003 **Survey Date:** 1956-07-31

**Last Observed:** 1956-07-31 **First Observed:** 1897-08-11 **Precision Code:** M

**Directions:** Coleman, 4 mi W of; Crownest Lake, E of; Chinook Cabins

**General Description:** rocky plateau

**Min Elev. (m):** 1349 **Max Elev. (m):** 1349 **Best Source of Info:** S56HERUAABCA02

**Specimen Source Code Collector Herbarium Accession # Date ID OK? Observation Detail**

S56HERUAABCA02 Hermann, F.J. UA 17213 1956-07-31

S97MACNMONCA01 Macoun, NM 102309 1897-08-11 GWD

S97MACNMONCA02 Macoun, J. NM 102307 1897-08-11 GWD

**Map UTM Zone UTM Easting UTM Northing Survey Site Name Notes # Dot ID #**

82G10 11 674150 5500600 Sentinel 9 847

**Aster campestris** meadow aster SRank: S2

+++++

**Element Code:** PDAST0T0F0 **Occurrence Code #:** 005 **Survey Date:** 1978-08-23

**Last Observed:** 1978-08-23 **First Observed:** 1978-08-23 **Precision Code:** S

**Directions:** Old Man River; tributary to the Callum Creek

**General Description:** deep loam, well watered soil; Festuca scabrella meadow

**Min Elev. (m):** 1516 **Max Elev. (m):** 1516 **Best Source of Info:** S78JONUCABCA01

**Specimen Source Code Collector Herbarium Accession # Date ID OK? Observation Detail**

S63DORACONCA06 Dore, W.G. & Tusko, F. AC none 1963-08-14

S78JONUCABCA01 Jonker, P. & D. Cressman UC 43054 1978-08-23 Occasional; [90%]

**Map UTM Zone UTM Easting UTM Northing Survey Site Name Notes # Dot ID #**

82G16 11 708000 5535300 Callum Creek UTM 11U QF 080353; 12 885

**Date Source Abstract Code Observer Occurrence Data**

occasional, [90%]

**Aster campestris** meadow aster SRank: S2

+++++



**Element Code:** PDAST0T0F0 **Occurrence Code #:** 006 **Survey Date:** 1988-07-13  
**Last Observed:** 1988-07-13 **First Observed:** 1988-07-13 **Precision Code:** M  
**Directions:** Waldron; South end of  
**General Description:** In good condition festuca grassland.  
**Min Elev. (m):** 1430 **Max Elev. (m):** 1430  
**Management Comments:** An upland area, little used by livestock; cattle tend to hang in valleys below. Thus not likely to be grazed out. **Best Source of Info:** S88TANPPABCA01  
**Specimen Source Code Collector Herbarium Accession # Date ID OK? Observation Detail**  
S88TANPPABCA01 Tannas, K.E. & C. A. Tannas PP 757 1988-07-13 [flowers]  
**Map UTM Zone UTM Easting UTM Northing Survey Site Name Notes # Dot ID #**  
82G16 11 702150 5525750 Whaleback Ridge 14 887  
**Source Code Author Publisher Year Title**  
UNDTAN01ABCA Tannas, K.E. Native Species Inventory Forms  
**Date Source Abstract Code Observer Occurrence Data**  
a few sporadically occurring individuals(UNDTAN01ABCA).  
**Aster campestris** meadow aster SRank: S2  
+++++

**Element Code:** PDAST0T0F0 **Occurrence Code #:** 007 **Survey Date:** 1960-08-02  
**Last Observed:** 1960-08-02 **First Observed:** 1960-08-02 **Precision Code:** M  
**Directions:** at border crossing Carway  
**General Description:** meadow  
**Min Elev. (m):** 1358 **Max Elev. (m):** 1358 **Best Source of Info:** S60DORACONCA01  
**Specimen Source Code Collector Herbarium Accession # Date ID OK? Observation Detail**  
S60DORACONCA01 Dore, W. & Breitung AC 153327 1960-08-02  
**Map UTM Zone UTM Easting UTM Northing Survey Site Name Notes # Dot ID #**  
82H03 12 326100 5429900 Carway 26 965  
**Aster campestris** meadow aster SRank: S2  
+++++

**Element Code:** PDAST0T0F0 **Occurrence Code #:** 008 **Survey Date:** 1963-08-14  
**Last Observed:** 1963-08-14 **First Observed:** 1963-08-14 **Precision Code:** M  
**Directions:** Lundbreck, 12 miles north of; Old Man River, near.  
**General Description:** native grassland  
**Min Elev. (m):** 1219 **Max Elev. (m):** 1219 **Best Source of Info:** S63DORACONCA06  
**Map UTM Zone UTM Easting UTM Northing Survey Site Name Notes # Dot ID #**  
82G09 11 693050 5496300 Gold Creek-Livingston Range Site 41 on air photo. 23 839  
**Aster campestris** meadow aster SRank: S2  
+++++

**Element Code:** PDAST0T0F0 **Occurrence Code #:** 009 **Survey Date:** 1988-08-10  
**Last Observed:** 1988-08-10 **First Observed:** 1988-08-10 **Precision Code:** S  
**Directions:** North Fork Milk River- A  
**General Description:** Fescue grassland.  
**Min Elev. (m):** 1325 **Max Elev. (m):** 1325 **Best Source of Info:** S88WEEPPABCA04  
**Specimen Source Code Collector Herbarium Accession # Date ID OK? Observation Detail**  
S88WEEPPABCA04 Weerstra, A. PP 000756 1988-08-10  
**Map UTM Zone UTM Easting UTM Northing Survey Site Name Notes # Dot ID #**  
82H02 12 359350 5439000 North Milk River Plot 46b 6 924  
**Aster campestris** meadow aster SRank: S2

**Aster pauciflorus** few-flowered aster

**Natural Region:** Northern Fescue Grassland, Dry Mixedgrass

**Habitat:** Wetland-Alkali

**Phenology:** flowers early July to August

**Specific Search Strategies (if any):** alkaline, sandy seepage, especially in springs and along the borders of alkali wetlands; found in upland wetlands and in coulee springs. May be abundant and quite visible where found. Additional populations in Central Aspen Parkland.

**Element Occurrences:**

**Element Code:** PDAST0T2B0 **Occurrence Code #:** 001 **Survey Date:** 1985-08-17

**Last Observed:** 1985-08-17 **First Observed:** 1985-08-17 **Precision Code:** M

**Directions:** Mirror, 8 km SE of; Buffalo Lake, S side of.

**General Description:** Alkaline Flat

**Min Elev. (m):** 790 **Max Elev. (m):** 790 **Best Source of Info:** S85BIRCFABCA01

**Specimen Source Code Collector Herbarium Accession # Date ID OK? Observation Detail**

S85BIRCFABCA01 Bird, C.D. CF 860168 1985-08-17 flowers

**Map UTM Zone UTM Easting UTM Northing Survey Site Name Notes # Dot ID #**

83A07 12 365000 5809900 Buffalo Lake 1 2318

**Aster pauciflorus** few-flowered aster SRank: S1

+++++

**Element Code:** PDAST0T2B0 **Occurrence Code #:** 002 **Survey Date:** 1978-07-05

**Last Observed:** 1978-07-05 **First Observed:** 1978-07-05 **Precision Code:** M

**Directions:** Wainwright, about 6 mi. S & 3 mi. E of; Rough Lake.

**General Description:** Plants were growing on shore of lake.

**Min Elev. (m):** 655 **Max Elev. (m):** 655

**Other Comments:** Det. by K. Tannas; specimen housed at East Slopes Rangeland Consultants herbarium; detailed inventory data can be obtained from Barry Adams or Chuck Richardsons, Public Lands Division. **Best Source of Info:** UNDTAN01ABCA

**Map UTM Zone UTM Easting UTM Northing Survey Site Name Notes # Dot ID #**

73D10 12 513750 5843150 David Lake 36 303

**Source Code Author Publisher Year Title**

UNDTAN01ABCA Tannas, K.E. Native Species Inventory Forms

**Date Source Abstract Code Observer Occurrence Data**

several sporadically occurring individuals; flowering

**Aster pauciflorus** few-flowered aster SRank: S1

+++++

**Element Code:** PDAST0T2B0 **Occurrence Code #:** 003 **Survey Date:** 1977-08-13

**Last Observed:** 1977-08-13 **First Observed:** 1977-08-13 **Precision Code:** M

**Directions:** Dry Island Provincial Park

**General Description:** badland slope

**Min Elev. (m):** 732 **Max Elev. (m):** 732 **Best Source of Info:** S77BRAUAABCA02

**Specimen Source Code Collector Herbarium Accession # Date ID OK? Observation Detail**

S77BRAUAABCA02 Bradley, C. UA 75724 1977-08-13 Y flowers

**Map UTM Zone UTM Easting UTM Northing Survey Site Name Notes # Dot ID #**

82P15 12 366000 5756000 Dry Island Buffalo Jump Provincial Park 2 2297

**Date Source Abstract Code Observer Occurrence Data**

flowers

**Aster pauciflorus** few-flowered aster SRank: S1

+++++

**Element Code:** PDAST0T2B0 **Occurrence Code #:** 004 **Survey Date:** 1990-00-00  
**Last Observed:** 1990-00-00 **First Observed:** 1990-00-00 **Actual Mapping Precision (m):** 2500 **Precision Code:** M  
**Directions:** Altario south wetlands; 2.25 km NW of Altario; Sect 23-Tp34-R2-W4M  
**General Description:** successive bands of halophytic vegetation along shores of hypersaline (unveg.) ponds  
**Min Elev. (m):** 732 **Max Elev. (m):**  
**Management Comments:** impact of heavy grazing; groundwater pumping should not occur **Best Source of Info:**  
U90WAL01ABCA

**Map UTM Zone UTM Easting UTM Northing Survey Site Name Notes # Dot ID #**

72M16 12 556250 5753750 Altario Sec. 23-Tp34-R2-W4M 3 5943

**Source Code Author Publisher Year Title**

U90WAL01ABCA Wallis, Cliff 1990 Reconnaissance Survey of Saline Wetlands and Springs in the Grassland-Parkland Region of Eastern Alberta

**Date Source Abstract Code Observer Occurrence Data**

U90WAL01ABCA C Wallis See unpubl. report

**Aster pauciflorus** few-flowered aster SRank: S1

+++++

**Element Code:** PDAST0T2B0 **Occurrence Code #:** 005 **Survey Date:** 1990-00-00  
**Last Observed:** 1990-00-00 **First Observed:** 1990-00-00 **Actual Mapping Precision (m):** 250 **Precision Code:** S  
**Directions:** Altario North wetlands, 5.25 km NE of Altario; & Lakevold Springs & associated wetlands, 6.5 km NW of Altario; domed moderately saline springs

**General Description:** in springs and wet meadow outflows from springs

**Min Elev. (m):** 693 **Max Elev. (m):** 701

**Other Comments:** locally common

**Management Comments:** impact of heavy grazing; groundwater pumping should not occur **Best Source of Info:**

U90WAL01ABCA

**Map UTM Zone UTM Easting UTM Northing Survey Site Name Notes # Dot ID #**

72M16 12 556000 5758550 Altario Sect. 31-Tp34-R1-W4M; Sect. 2 & Sect.11-Tp35-R2-W4M 5 5962

**Source Code Author Publisher Year Title**

U90WAL01ABCA Wallis, Cliff 1990 Reconnaissance Survey of Saline Wetlands and Springs in the Grassland-Parkland Region of Eastern Alberta

**Date Source Abstract Code Observer Occurrence Data**

U90WAL01ABCA C Wallis See unpubl. report

**Aster pauciflorus** few-flowered aster SRank: S1

+++++

**Element Code:** PDAST0T2B0 **Occurrence Code #:** 006 **Survey Date:** 1990-00-00  
**Last Observed:** 1990-00-00 **First Observed:** 1990-00-00 **Actual Mapping Precision (m):** 250 **Precision Code:** S  
**Directions:** MD of Provost; Cadogan, 12.75 km SW of; Sect. 4, 6, 7 in Tp38-R4-W4M  
**General Description:** non-saline backshore of saline ponds, alkali shores

**Min Elev. (m):** 648 **Max Elev. (m):**

**Management Comments:** heavy grazing pressure on part of shoreline; recommend retain with sufficient setback to reduce adverse effects **Best Source of Info:** U90WAL01ABCA

**Map UTM Zone UTM Easting UTM Northing Survey Site Name Notes # Dot ID #**

73D02 12 530100 5787000 Cadogan Sects. 4,6,7 in Tp38-R4-W4M (Multipolygon) 8 5975

**Source Code Author Publisher Year Title**

U90WAL01ABCA Wallis, Cliff 1990 Reconnaissance Survey of Saline Wetlands and Springs in the Grassland-Parkland Region of Eastern Alberta

**Date Source Abstract Code Observer Occurrence Data**

U90WAL01ABCA C Wallis See unpublished report

**Aster pauciflorus** few-flowered aster SRank: S1

+++++

**Element Code:** PDAST0T2B0 **Occurrence Code #:** 007 **Survey Date:** 1990-00-00  
**Last Observed:** 1990-00-00 **First Observed:** 1990-00-00 **Actual Mapping Precision (m):** 250 **Precision Code:** S  
**Directions:** Cipher Lake, 5 km ESE of Chauvin; Tp43-R1-W4M  
**General Description:** lush backshore of temporary hypesaline shallow water body  
**Min Elev. (m):** 594 **Max Elev. (m):**  
**Other Comments:** cattle should continue to be excluded from site; retain as nat'l water body with sufficient setback  
**Management Comments:** some cultiv. behind backshore, but separated from backshore by nat'l veg.; current mgmt practices compatible **Best Source of Info:** U90WAL01ABCA  
**Map UTM Zone UTM Easting UTM Northing Survey Site Name Notes # Dot ID #**  
 73D09 12 563000 5837700 Cipher Lake Tp43-R1-W4M; mapped as polygon 18 5990  
**Source Code Author Publisher Year Title**  
 U90WAL01ABCA Wallis, Cliff 1990 Reconnaissance Survey of Saline Wetlands and Springs in the Grassland-Parkland Region of Eastern Alberta  
**Date Source Abstract Code Observer Occurrence Data**  
 U90WAL01ABCA C Wallis See unpubl. report in-house  
**Aster pauciflorus** few-flowered aster SRank: S1  
 ++++++

**Element Code:** PDAST0T2B0 **Occurrence Code #:** 008 **Survey Date:** 1990-00-00  
**Last Observed:** 1990-00-00 **First Observed:** 1990-00-00 **Actual Mapping Precision (m):** 1000 **Precision Code:** M  
**Directions:** Empress Springs, 5 km NW of Empress; N side of Red Deer River; Sects. 21 & 22-Tp23-R1-W4M  
**General Description:** valley springs, diverse, slightly to moderately saline  
**Min Elev. (m):** 594 **Max Elev. (m):**  
**Other Comments:** need to protect springs & groundwater sources; no groundwater pumping for injection wells; reduce grazing press. on W side of sect. line  
**Management Comments:** heavy grazing may be detrimental in spring ecosystems **Best Source of Info:** U90WAL01ABCA  
**Map UTM Zone UTM Easting UTM Northing Survey Site Name Notes # Dot ID #**  
 72L16 12 565000 5647350 Empress Sect. 21 & 22-Tp23-R1-W4M 31 5996  
**Source Code Author Publisher Year Title**  
 U90WAL01ABCA Wallis, Cliff 1990 Reconnaissance Survey of Saline Wetlands and Springs in the Grassland-Parkland Region of Eastern Alberta  
**Date Source Abstract Code Observer Occurrence Data**  
 U90WAL01ABCA C Wallis See publish. report in-house  
**Aster pauciflorus** few-flowered aster SRank: S1  
 ++++++

**Element Code:** PDAST0T2B0 **Occurrence Code #:** 009 **Survey Date:** 1990-00-00  
**Last Observed:** 1990-00-00 **First Observed:** 1990-00-00 **Actual Mapping Precision (m):** 250 **Precision Code:** S  
**Directions:** Gooseberry Lake, 13 km N of Consort; Tp36-R5-6-W4M  
**General Description:** permanent saline lake with narrow to broad unvegetated shore, N shore of lake  
**Min Elev. (m):** 700 **Max Elev. (m):**  
**Other Comments:** Mapped as polygon  
**Management Comments:** protect wetland basin with sufficient setback; no groundwater pumping for injection wells s/b allowed close to springs **Best Source of Info:** U90WAL01ABCA  
**Map UTM Zone UTM Easting UTM Northing Survey Site Name Notes # Dot ID #**  
 73D02 12 519725 5773850 Gooseberry Lake Mapped as polygon 3 4421  
**Source Code Author Publisher Year Title**  
 U90WAL01ABCA Wallis, Cliff 1990 Reconnaissance Survey of Saline Wetlands and Springs in the Grassland-Parkland Region of Eastern Alberta  
**Date Source Abstract Code Observer Occurrence Data**  
 U90WAL01ABCA C Wallis See unpubl. report in-house  
**Aster pauciflorus** few-flowered aster SRank: S1  
 ++++++

**Element Code:** PDAST0T2B0 **Occurrence Code #:** 010 **Survey Date:** 1990-00-00  
**Last Observed:** 1990-00-00 **First Observed:** 1990-00-00 **Actual Mapping Precision (m):** 250 **Precision Code:** S  
**Directions:** Irma-Jarrow Lakes, 10 km SW of Irma; Sect. 10, 11, 15-Tp45-R10-W4M  
**General Description:** semi-perm. hypersaline lakes, and flowing, domed, moder. saline springs; surround. by natural sandy parkland  
**Min Elev. (m):** 640 **Max Elev. (m):**  
**Other Comments:** retain as water body with sufficient setback; no groundwater pump. for inject. wells; reduce grazing in parts; survey in wet periods  
**Management Comments:** heavy grazing in some springs **Best Source of Info:** U90WAL01ABCA  
**Map UTM Zone UTM Easting UTM Northing Survey Site Name Notes # Dot ID #**  
73D14 12 475250 5858000 Irma-Jarrow Lakes Sect. 10, 11, 15-Tp45-R10-W4M; polygon 5 5997  
**Source Code Author Publisher Year Title**  
U90WAL01ABCA Wallis, Cliff 1990 Reconnaissance Survey of Saline Wetlands and Springs in the Grassland-Parkland Region of Eastern Alberta  
**Date Source Abstract Code Observer Occurrence Data**  
U90WAL01ABCA C Wallis See unpubl. report  
**Aster pauciflorus** few-flowered aster SRank: S1  
+++++

**Element Code:** PDAST0T2B0 **Occurrence Code #:** 011 **Survey Date:** 1990-00-00  
**Last Observed:** 1990-00-00 **First Observed:** 1990-00-00 **Actual Mapping Precision (m):** 250 **Precision Code:** S  
**Directions:** Leane Lake; 2.5 km SW of Dilberry PP; Tp41-R1-W4M  
**General Description:** drier outer shores of hypersaline, semipermanent lake  
**Min Elev. (m):** 617 **Max Elev. (m):** 617  
**Other Comments:** recommend retain as nat'l water body with sufficient setback  
**Management Comments:** relat. undisturbed basin & lakeshore; nearby petroleum development **Best Source of Info:** U90WAL01ABCA  
**Map UTM Zone UTM Easting UTM Northing Survey Site Name Notes # Dot ID #**  
73D09 12 564750 5824000 Leane Lake Tp41-R1-W4M; mapped as polygon 19 6004  
**Source Code Author Publisher Year Title**  
U90WAL01ABCA Wallis, Cliff 1990 Reconnaissance Survey of Saline Wetlands and Springs in the Grassland-Parkland Region of Eastern Alberta  
**Date Source Abstract Code Observer Occurrence Data**  
U90WAL01ABCA C Wallis See unpubl. report  
**Aster pauciflorus** few-flowered aster SRank: S1  
+++++

**Element Code:** PDAST0T2B0 **Occurrence Code #:** 012 **Survey Date:** 1990-00-00  
**Last Observed:** 1990-00-00 **First Observed:** 1990-00-00 **Actual Mapping Precision (m):** 250 **Precision Code:** S  
**Directions:** "Neutral Hills Northwest"; [Special Area #4]; 10 km NW of Gooseberry Lake PP; Sects. 2 & 11-Tp37-R7-W4M  
**General Description:** alkaline shore of saline, semi-permanent lake  
**Min Elev. (m):** 724 **Max Elev. (m):** 724  
**Other Comments:** recommend addit'l monitoring of site over time to assess significance  
**Management Comments:** considerable oil development in/around wetland; heavy cattle use in places **Best Source of Info:** U90WAL01ABCA  
**Map UTM Zone UTM Easting UTM Northing Survey Site Name Notes # Dot ID #**  
73D02 12 507000 5778550 "Neutral Hills Northwest" Sect. 2 & 11-Tp37-R7-W4M; mapped as polygon 9 6006  
**Source Code Author Publisher Year Title**  
U90WAL01ABCA Wallis, Cliff 1990 Reconnaissance Survey of Saline Wetlands and Springs in the Grassland-Parkland Region of Eastern Alberta  
**Date Source Abstract Code Observer Occurrence Data**  
U90WAL01ABCA C Wallis See unpubl. report in-house  
**Aster pauciflorus** few-flowered aster SRank: S1  
+++++

**Element Code:** PDAST0T2B0 **Occurrence Code #:** 013 **Survey Date:** 1990-00-00  
**Last Observed:** 1990-00-00 **First Observed:** 1990-00-00 **Actual Mapping Precision (m):** 250 **Precision Code:** S  
**Directions:** Consort, 12.5 km NW of; "Neutral Hills South"; "Lake A"; Sects. 3 & 4-Tp36-R7-W4M  
**General Description:** moist shores and creek edges  
**Min Elev. (m):** 750 **Max Elev. (m):** 750  
**Other Comments:** recommend retain as nat'l water body with suffic. setback; addit'l site monitoring  
**Management Comments:** locally heavy grazing along shore but otherwise compatible with ecosystem maintenance; petrol. dev't on adjacent lands **Best Source of Info:** U90WAL01ABCA  
**Map UTM Zone UTM Easting UTM Northing Survey Site Name Notes # Dot ID #**  
73D02 12 503900 5768075 "Neutral Hills Lake A" 4-36-7 W4M; 110 56/52 04; UTM 503414/5767401; mapped as polygon 5 4594  
**Source Code Author Publisher Year Title**  
U90WAL01ABCA Wallis, Cliff 1990 Reconnaissance Survey of Saline Wetlands and Springs in the Grassland-Parkland Region of Eastern Alberta  
**Date Source Abstract Code Observer Occurrence Data**  
U90WAL01ABCA C Wallis See unpubl. report in-house  
**Aster pauciflorus** few-flowered aster SRank: S1  
+++++

**Element Code:** PDAST0T2B0 **Occurrence Code #:** 014 **Survey Date:** 1990-00-00  
**Last Observed:** 1990-00-00 **First Observed:** 1990-00-00 **Actual Mapping Precision (m):** 250 **Precision Code:** S  
**Directions:** Consort, 12.5 km NW of; "Neutral Hills South"; "Lake B1"; sects. 16 & 17-Tp36-R7-W4M  
**General Description:** moist shores of hypersaline, semi-permanent ponds, and along creek  
**Min Elev. (m):** 750 **Max Elev. (m):** 750  
**Other Comments:** recommend retain as nat'l water body with suffic. setback; addit'l monitoring to assess site over time  
**Management Comments:** locally heavy grazing but mgmt mostly compatible with ecosystem mainten.; petrol. dev't on adjacent lands **Best Source of Info:** U90WAL01ABCA  
**Map UTM Zone UTM Easting UTM Northing Survey Site Name Notes # Dot ID #**  
73D02 12 503825 5770150 "Neutral Hills Lake B1" 9-7-36 W4M; 52 04/110 57; 503413/5769019 ; mapped as polygon 6 4595  
**Source Code Author Publisher Year Title**  
U90WAL01ABCA Wallis, Cliff 1990 Reconnaissance Survey of Saline Wetlands and Springs in the Grassland-Parkland Region of Eastern Alberta  
**Date Source Abstract Code Observer Occurrence Data**  
U90WAL01ABCA C Wallis See unpubl report in-house  
**Aster pauciflorus** few-flowered aster SRank: S1  
+++++

**Element Code:** PDAST0T2B0 **Occurrence Code #:** 015 **Survey Date:** 1990-00-00  
**Last Observed:** 1990-00-00 **First Observed:** 1990-00-00 **Actual Mapping Precision (m):** 250 **Precision Code:** S  
**Directions:** Medicine Hat, N of; Old Channel Lake; Old Channel Lake spring; Sect. 32-Tp14-R5-W4M  
**General Description:** diverse moderately saline spring along uphill springline, rel. wet ct  
**Min Elev. (m):** 640 **Max Elev. (m):** 640  
**Other Comments:** recommend protection of spring wetlands; no groundwater pumping for injection wells  
**Management Comments:** heavy cattle grazing in one spring; adj. petroleum development **Best Source of Info:** U90WAL01ABCA  
**Map UTM Zone UTM Easting UTM Northing Survey Site Name Notes # Dot ID #**  
72L02 12 525000 5563000 Old Channel Lake Sect. 32-Tp14-R5-W4M; mapped as polygon 43 6009  
**Source Code Author Publisher Year Title**  
U90WAL01ABCA Wallis, Cliff 1990 Reconnaissance Survey of Saline Wetlands and Springs in the Grassland-Parkland Region of Eastern Alberta  
**Date Source Abstract Code Observer Occurrence Data**  
U90WAL01ABCA C Wallis See unpubl. report in-house  
**Aster pauciflorus** few-flowered aster SRank: S1  
+++++

**Element Code:** PDAST0T2B0 **Occurrence Code #:** 016 **Survey Date:** 1990-00-00  
**Last Observed:** 1990-00-00 **First Observed:** 1990-00-00 **Actual Mapping Precision (m):** 250 **Precision Code:** S  
**Directions:** Chauvin, 8 km SE of; Reflex Lake [Salt Lake]; Tp42 & 43-R1-W4M  
**General Description:** forb-rich meadows assoc. with with permanent, moder. saline springs  
**Min Elev. (m):** 600 **Max Elev. (m):** 600  
**Other Comments:** recommend: protectn of wetland basin, no groundwater pumping, explore purchase of critical lands, fencing & grazing mgt; confine cottage area  
**Management Comments:** threats due to cattle grazing, OHV use, expansion of cottage area **Best Source of Info:** U90WAL01ABCA  
**Map UTM Zone UTM Easting UTM Northing Survey Site Name Notes # Dot ID #**  
73D09 12 565600 5835300 Reflex Lake Polygon 15 4598  
**Source Code Author Publisher Year Title**  
U90WAL01ABCA Wallis, Cliff 1990 Reconnaissance Survey of Saline Wetlands and Springs in the Grassland-Parkland Region of Eastern Alberta  
**Date Source Abstract Code Observer Occurrence Data**  
U90WAL01ABCA C Wallis See unpubl report in-house  
**Aster pauciflorus** few-flowered aster SRank: S1  
+++++

**Element Code:** PDAST0T2B0 **Occurrence Code #:** 017 **Survey Date:** 1990-00-00  
**Last Observed:** 1990-00-00 **First Observed:** 1990-00-00 **Actual Mapping Precision (m):** 250 **Precision Code:** S  
**Directions:** Consort, NE of; Sounding Lake; Tps 36 & 37-R4-W4M  
**General Description:** drier shores of lake basin  
**Min Elev. (m):** 660 **Max Elev. (m):** 660  
**Other Comments:** recommend protectn of wetland basin, fencing & changes in grazing mgt, oil well dev't kept out of basin, no groundwater pumping for injection wells  
**Management Comments:** threats from oil well dev't, grazing & cultivation **Best Source of Info:** U90WAL01ABCA  
**Map UTM Zone UTM Easting UTM Northing Survey Site Name Notes # Dot ID #**  
73D01 12 535350 5779550 Sounding Lake Polygon 2 4602  
**Source Code Author Publisher Year Title**  
U90WAL01ABCA Wallis, Cliff 1990 Reconnaissance Survey of Saline Wetlands and Springs in the Grassland-Parkland Region of Eastern Alberta  
**Date Source Abstract Code Observer Occurrence Data**  
1990-00-00 U90WAL01ABCA C Wallis  
**Aster pauciflorus** few-flowered aster SRank: S1  
+++++

**Element Code:** PDAST0T2B0 **Occurrence Code #:** 018 **Survey Date:** 1990-00-00  
**Last Observed:** 1990-00-00 **First Observed:** 1990-00-00 **Actual Mapping Precision (m):** 250 **Precision Code:** S  
**Directions:** Metiskow, 2.5 km S of; Sunken Lake; Tp39-R5-W4M  
**General Description:** temporary, hypersaline lake in deep basin; in rel. dry vegetation zone  
**Min Elev. (m):** 670 **Max Elev. (m):** 670  
**Other Comments:** recommend: retain as nat'l water body with sufficient setback; addit'l monitoring of site for changes in grazing levels, long-term assess., no groundwater pumping for injection wells  
**Management Comments:** threats from further clearing & cultivn; nearby petroleum dev't; some light grazing on backshore **Best Source of Info:** U90WAL01ABCA  
**Map UTM Zone UTM Easting UTM Northing Survey Site Name Notes # Dot ID #**  
73D07 12 523550 5802000 Sunken Lake Polygon 7 4604  
**Source Code Author Publisher Year Title**  
U90WAL01ABCA Wallis, Cliff 1990 Reconnaissance Survey of Saline Wetlands and Springs in the Grassland-Parkland Region of Eastern Alberta  
**Date Source Abstract Code Observer Occurrence Data**  
1990-00-00 U90WAL01ABCA C Wallis See unpubl rept  
**Aster pauciflorus** few-flowered aster SRank: S1  
+++++

**Element Code:** PDAST0T2B0    **Occurrence Code #:** 019    **Survey Date:** 1990-00-00  
**Last Observed:** 1990-00-00    **First Observed:** 1990-00-00    **Actual Mapping Precision (m):** 500    **Precision Code:** M  
**Directions:** Bindloss, W of; Dune Point Springs; N side of Red Deer River; Tp23-R3-4-W4M  
**General Description:** extensive valley spring, moder. saline; wetter parts of spring  
**Min Elev. (m):** 610    **Max Elev. (m):** 610  
**Management Comments:** current management consistent with protection, i.e., no cattle grazing, no groundwater pumping    **Best Source of Info:** U90WAL01ABCA  
**Map UTM Zone UTM Easting UTM Northing Survey Site Name Notes # Dot ID #**  
72L16 12 543000 5643000 Bindloss 2 249  
**Source Code Author Publisher Year Title**  
U90WAL01ABCA Wallis, Cliff 1990 Reconnaissance Survey of Saline Wetlands and Springs in the Grassland-Parkland Region of Eastern Alberta  
**Date Source Abstract Code Observer Occurrence Data**  
1990-00-00 U90WAL01ABCA C Wallis See unpubl rept in-house  
2000-04-10 EO UTM coordinates suppl by C Wallis  
**Aster pauciflorus** few-flowered aster SRank: S1  
+++++

**Element Code:** PDAST0T2B0    **Occurrence Code #:** 020    **Survey Date:** 1990-00-00  
**Last Observed:** 1990-00-00    **First Observed:** 1990-00-00    **Actual Mapping Precision (m):** 250    **Precision Code:** S  
**Directions:** Wainwright, S of, & N of Metiskow; David Lake; Tps 41, 42-R5-W4M  
**General Description:** wet saline and subsaline meadows round lake; higher subsaline edges and on hummocks  
**Min Elev. (m):** 665    **Max Elev. (m):** 665  
**Other Comments:** recommend protect entire wetland basin with suffic. setback; reduce grazing pressure on wet meadow cts to W of lake  
**Management Comments:** ecological reserve    **Best Source of Info:** U90WAL01ABCA  
**Map UTM Zone UTM Easting UTM Northing Survey Site Name Notes # Dot ID #**  
73D10 12 526500 5826250 David Lake 38 305  
**Source Code Author Publisher Year Title**  
U90WAL01ABCA Wallis, Cliff 1990 Reconnaissance Survey of Saline Wetlands and Springs in the Grassland-Parkland Region of Eastern Alberta  
**Date Source Abstract Code Observer Occurrence Data**  
1990-00-00 U90WAL01ABCA C Wallis See unpubl report in-house  
**Aster pauciflorus** few-flowered aster SRank: S1



***Astragalus kentrophyta* var *kentrophyta* prickly milk vetch**

**Natural Region:** Mixedgrass, Dry Mixedgrass

**Habitat:** Slopes-Sandy

**Phenology:** flowers late May to early July

**Specific Search Strategies (if any):** search in eroding sandy soils on valley slopes; quite distinctive and sometimes occurs in moderate sized groups. Visible before and after flowering due to distinctive sharp-pointed leaves.

**Element Occurrences:**

**Element Code:** PDFAB0F4J7 **Occurrence Code #:** 001 **Survey Date:** 1976-07-00

**Last Observed:** 1976-07-00 **First Observed:** 1976-07-00 **Precision Code:** M

**Directions:** Suffield Military Reserve, in the; South Saskatchewan River, on the; Drowning Ford, N of.

**General Description:** Sandy dry uplands. Revegetated (mostly native grasses), old cultivation.

**Min Elev. (m):** 617 **Max Elev. (m):** 617 **Best Source of Info:** S76CORUAABCA03

**Specimen Source Code Collector Herbarium Accession # Date ID OK? Observation Detail**

S76CORUAABCA03 Corbin, J. & D. Jacques UA 90245 1976-07-00

**Map UTM Zone UTM Easting UTM Northing Survey Site Name Notes # Dot ID #**

72L07 12 529950 5589700 Drowning Ford 50 27/110 34 1 186

**Date Source Abstract Code Observer Occurrence Data**

Basifixed hairs, 3 to 4 ovules and an apparent white banner. This does not agree w/ description of var. douglasii, the most likely variety. Flowers and fruits.

***Astragalus kentrophyta* var *kentrophyta*** SRank: S1S2

+++++

**Element Code:** PDFAB0F4J7 **Occurrence Code #:** 002 **Survey Date:** 1946-07-30

**Last Observed:** 1946-07-30 **First Observed:** 1932-06-24 **Precision Code:** M

**Directions:** Milk Rver, along; Milk River the town, near.

**General Description:** In sand, among rocks

**Min Elev. (m):** 1044 **Max Elev. (m):** 1044 **Best Source of Info:** S32MCCUAABCA01

**Specimen Source Code Collector Herbarium Accession # Date ID OK? Observation Detail**

S32MCCUAABCA01 McCalla, W.C. UA 60323 1932-06-24 Flowers

S46MOSUAABCA02 Moss, E.H. UA 11675 1946-07-30 fruits

**Map UTM Zone UTM Easting UTM Northing Survey Site Name Notes # Dot ID #**

82H01 12 420000 5444100 Milk River Town 4 914

***Astragalus kentrophyta* var *kentrophyta*** SRank: S1S2

+++++

**Element Code:** PDFAB0F4J7 **Occurrence Code #:** 003 **Survey Date:** 1971-05-23

**Last Observed:** 1971-05-23 **First Observed:** 1932-06-28 **Actual Mapping Precision (m):** 250 **Precision Code:** S

**Directions:** Writing-on-Stone Provincial Park

**General Description:** Between rock outcrops; on loose sand.

**Min Elev. (m):** 922 **Max Elev. (m):** 922 **Best Source of Info:** S71KUIULABCA38

**Specimen Source Code Collector Herbarium Accession # Date ID OK? Observation Detail**

S32WHIACONCA02 White, R.M. AC none 1932-00-00

S32WHIALABCA03 White, R.M. AL 555 1932-06-28

S39SKOALABCA01 Skoglund, N.A. AL 1190 1939-06-09

S41SEXALABCA06 Sexmith, J.J. AL none 1941-07-13

S58BOIACONCA03 Boivin, B. & J.M. Perron AC none 1958-06-26

S58BOIUABCA01 Boivin, B. & J.M. Perron UA 11676 1958-06-26 flowers

S64DEVACONCA10 de Vries, B. AC 666477 1964-06-12 infrequent

S64DEVUCABCA28 de Vries, B. UC 16460 1964-06-12 Y blooming

S70GILACONCA01 Gillett, J.M. & T.B. Slater AC 610236 1970-06-09 flower has a slight violet tinge

S71KUIULABCA38 Kuijt, J. UL none 1971-05-23

**Map UTM Zone UTM Easting UTM Northing Survey Site Name Notes # Dot ID #**

72E04 12 454849 5436708 Writing-on-stone Provincial Park 28 76

***Astragalus kentrophyta* var *kentrophyta*** SRank: S1S2

+++++

**Element Code:** PDFAB0F4J7 **Occurrence Code #:** 004 **Survey Date:** 1995-00-00  
**Last Observed:** 1995-00-00 **First Observed:** 1988-00-00 **Precision Code:** M  
**Directions:** Canadian Forces Base Suffield National Wildlife Area, Mule Deer Road, off; Murphys Horn, ca 10 km NW of.  
**General Description:** submesic - xeric sites of aeolian sand plain, dune field blowout & prairie grasslands,hard-packed  
gravelly,exposed sand in sand blowout areas,rarely on man-made exposed sandy soils  
**Min Elev. (m):** 724 **Max Elev. (m):** 724  
**Other Comments:** Wallis, 1994 pers. comm.  
**Management Comments:** threatened by trampling & dune site stabilization succession, & its northern populations are threatened  
by dune invasion **Best Source of Info:** U96MAC01ABCA  
**Map UTM Zone UTM Easting UTM Northing Survey Site Name Notes # Dot ID #**  
72L08 12 536200 5593500 South Saskatchewan River UTM WL ca 536200 / 5593500? 1 204  
**Source Code Author Publisher Year Title**  
U96MAC01ABCA Macdonald, I.D. Canadian Wildlife Service, Environment Canada, Prairie and 1996 Vascular Flora of Canadian  
Forces Base Suffield National Wildlife Area  
**Date Source Abstract Code Observer Occurrence Data**  
10 plants  
**Astragalus kentrophyta var kentrophyta** SRank: S1S2  
+++++

**Element Code:** PDFAB0F4J7 **Occurrence Code #:** 005 **Survey Date:** 1994-00-00  
**Last Observed:** 1995-00-00 **First Observed:** 1994-00-00 **Precision Code:** S  
**Directions:** Canadian Forces Base Suffield National Wildlife Area; South Saskatchewan River valley, along the crest of the  
**General Description:** submesic to xeric sites of aeolian sand plain & dune field blowout & prairie grasslands;hard packed or  
gravelly,exposed sand in sand blowout areas  
**Min Elev. (m):** 701 **Max Elev. (m):** 701  
**Management Comments:** threatened by trampling & dune site stabilization succession, & its northern populations are threatened  
by dune invasion **Best Source of Info:** U96MAC01ABCA  
**Specimen Source Code Collector Herbarium Accession # Date ID OK? Observation Detail**  
SNDTROXXXCA01 Trottier XX none 0000-00-00  
**Map UTM Zone UTM Easting UTM Northing Survey Site Name Notes # Dot ID #**  
72L09 12 546980 5605555 Middle Sand Hills UTM WM 546980 / 5605555 3 217  
**Source Code Author Publisher Year Title**  
U96MAC01ABCA Macdonald, I.D. Canadian Wildlife Service, Environment Canada, Prairie and 1996 Vascular Flora of Canadian  
Forces Base Suffield National Wildlife Area  
**Date Source Abstract Code Observer Occurrence Data**  
very small population, and scarce in SNWA  
**Astragalus kentrophyta var kentrophyta** SRank: S1S2  
+++++

**Element Code:** PDFAB0F4J7 **Occurrence Code #:** 006  
Identification OK?: **Survey Date:** 1986-07-10  
**Last Observed:** 1986-07-10 **First Observed:** 1986-07-10 **Actual Mapping Precision (m):** 600 **Precision Code:** M  
**Directions:** Milk River, 30 km WSW of; North Milk River, 2 km S of.  
**General Description:** eroded badland slopes, rocky outcrops and gullies; associated with *Stipa comata*, *Hordeum jubatum*,  
*Agropyron dasystachyum* and *Oryzopsis hymenoides*  
**Min Elev. (m):** 1150 **Max Elev. (m):** 1150 **Aspect:** W **Best Source of Info:** U99WIL02ABCA  
**Map UTM Zone UTM Easting UTM Northing Survey Site Name Notes # Dot ID #**  
82H01 12 391125 5441600 North Milk River SW16-2-19 W4M 14 5069  
**Source Code Author Publisher Year Title**  
U99WIL02ABCA Wilkinson, Kathleen 1999 Letter from K. Wilkinson to John Rintoul - at March 3, 1999  
**Astragalus kentrophyta var kentrophyta** SRank: S1S2  
+++++

**Element Code:** PDFAB0F4J7 **Occurrence Code #:** 007  
Identification OK?: **Survey Date:** 1986-07-10  
**Last Observed:** 1986-07-10 **First Observed:** 1986-07-10 **Actual Mapping Precision (m):** 600 **Precision Code:** M  
**Directions:** Milk River, 30 km W of; North Milk River, 0.5 km S of.  
**General Description:** flat saline terrace; associated with *Poa interior*, *Heterotheca villosa*, *Poa sandbergii* and *Koeleria macrantha*  
**Min Elev. (m):** 1105 **Max Elev. (m):** 1105 **Best Source of Info:** U99WIL02ABCA  
**Map UTM Zone UTM Easting UTM Northing Survey Site Name Notes # Dot ID #**  
82H01 12 391950 5443200 North Milk River SE21-2-19 W4M 15 5070  
**Source Code Author Publisher Year Title**  
U99WIL02ABCA Wilkinson, Kathleen 1999 Letter from K. Wilkinson to John Rintoul - at March 3, 1999  
**Astragalus kentrophyta var kentrophyta** SRank: S1S2

**Astragalus lotiflorus low milk vetch**

**Natural Region:** Mixedgrass, Dry Mixedgrass

**Habitat:** Grassland-Sandy

**Phenology:** flowers late May to mid-June

**Specific Search Strategies (if any):** also in sand dune blowouts, quite often gravelly; look for small eroding patches or disturbance patches in sandy/gravelly grassland; sometimes difficult to see since it occurs in small numbers

**Element Occurrences:**

**Element Code:** PDFAB0F4Z0 **Occurrence Code #:** 001 **Survey Date:** 1988-08-05

**Last Observed:** 1988-08-05 **First Observed:** 1988-08-05 **Precision Code:** M

**Directions:** Turin Dunes

**General Description:** Blowout

**Min Elev. (m):** 785 **Max Elev. (m):** 785 **Best Source of Info:** S88WEEPPABCA03

**Specimen Source Code Collector Herbarium Accession # Date ID OK? Observation Detail**

S88WEEPPABCA03 Weerstra, A. PP 693 1988-08-05

**Map UTM Zone UTM Easting UTM Northing Survey Site Name Notes # Dot ID #**

82H15 12 388700 5526000 Turin 2 1399

**Astragalus lotiflorus** low milk vetch SRank: S2

+++++

**Element Code:** PDFAB0F4Z0 **Occurrence Code #:** 002 **Survey Date:** 1995-00-00

**Last Observed:** 1995-00-00 **First Observed:** 1994-00-00 **Precision Code:** S

**Directions:** Canadian Forces Base Suffield National Wildlife Area

**General Description:** submesic to xeric sites on rolling ground moraine, glaciofluvial outwash plain and interdunal plain prairie grasslands

**Min Elev. (m):** 648 **Max Elev. (m):** 648

**Other Comments:** at northern limit of its range **Best Source of Info:** U96MAC01ABCA

**Map UTM Zone UTM Easting UTM Northing Survey Site Name Notes # Dot ID #**

72L07 12 526000 5573000 Cottonwood Grove UTM WL 526000 / 5573000; 526500/556700 9 194

**Source Code Author Publisher Year Title**

U96MAC01ABCA Macdonald, I.D. Canadian Wildlife Service, Environment Canada, Prairie and 1996 Vascular Flora of Canadian Forces Base Suffield National Wildlife Area

**Date Source Abstract Code Observer Occurrence Data**

rare in SNWA

**Astragalus lotiflorus** low milk vetch SRank: S2

+++++

**Element Code:** PDFAB0F4Z0 **Occurrence Code #:** 003 **Survey Date:** 1995-00-00

**Last Observed:** 1995-00-00 **First Observed:** 1994-06-08 **Precision Code:** S

**Directions:** Canadian Forces Base Suffield National Wildlife Area

**General Description:** from submesic to xeric sites on the rolling ground moraine, glaciofluvial outwash plain and interdunal plain prairie grasslands.

Sandy interdunal plain with heavy grazing: Agropyron dasystachyum - Calamovilfa longifolia community.

**Min Elev. (m):** 700 **Max Elev. (m):** 700

**Other Comments:** at northern limit of its range **Best Source of Info:** U96MAC01ABCA

**Specimen Source Code Collector Herbarium Accession # Date ID OK? Observation Detail**

S94CANPMABCA01 Canadian Wildlife Service, PM B94.11.105 1994-06-08 Y

**Map UTM Zone UTM Easting UTM Northing Survey Site Name Notes # Dot ID #**

72L09 12 548500 5606000 Middle Sand Hills UTM WM 548500 / 5606000; 50-36'15"N/110- 18'45"W. 4 218

**Source Code Author Publisher Year Title**

U96MAC01ABCA Macdonald, I.D. Canadian Wildlife Service, Environment Canada, Prairie and 1996 Vascular Flora of Canadian Forces Base Suffield National Wildlife Area

**Date Source Abstract Code Observer Occurrence Data**

rare in SNWA

**Astragalus lotiflorus** low milk vetch SRank: S2

+++++

**Element Code:** PDFAB0F4Z0 **Occurrence Code #:** 004 **Survey Date:** 1995-00-00  
**Last Observed:** 1999-50-00 **First Observed:** 1994-00-00 **Precision Code:** S  
**Directions:** Canadian Forces Base Suffield National Wildlife Area; Bull Pen, about 1.5 km west of  
**General Description:** gravel at mid-slope  
**Min Elev. (m):** 663 **Max Elev. (m):** 663  
**Other Comments:** at Northern limit of its range **Best Source of Info:** U96MAC01ABCA  
**Map UTM Zone UTM Easting UTM Northing Survey Site Name Notes # Dot ID #**  
72L07 12 524100 5566700 Brush Flats UTM WL ca 524100 / 5566700 3 188  
**Source Code Author Publisher Year Title**  
U96MAC01ABCA Macdonald, I.D. Canadian Wildlife Service, Environment Canada, Prairie and 1996 Vascular Flora of Canadian  
Forces Base Suffield National Wildlife Area  
**Date Source Abstract Code Observer Occurrence Data**  
rare in SNWA; 12 plants  
**Astragalus lotiflorus** low milk vetch SRank: S2  
+++++

**Element Code:** PDFAB0F4Z0 **Occurrence Code #:** 005 **Survey Date:** 1964-05-20  
**Last Observed:** 1964-05-20 **First Observed:** 1964-05-20 **Actual Mapping Precision (m):** 2500 **Precision Code:** M  
**Directions:** Grassy Lake, village  
**General Description:** prairie  
**Min Elev. (m):** 808 **Max Elev. (m):** 808 **Best Source of Info:** S64SEXALABCA01  
**Specimen Source Code Collector Herbarium Accession # Date ID OK? Observation Detail**  
S64SEXALABCA01 Sexsmith, J.J. AL 4440 1964-05-20 Y blooming  
**Map UTM Zone UTM Easting UTM Northing Survey Site Name Notes # Dot ID #**  
72E13 12 449725 5519350 Grassy Lake 6 152  
**Astragalus lotiflorus** low milk vetch SRank: S2  
+++++

**Element Code:** PDFAB0F4Z0 **Occurrence Code #:** 006 **Survey Date:** 1953-07-07  
**Last Observed:** 1953-07-07 **First Observed:** 1953-07-07 **Actual Mapping Precision (m):** 2500 **Precision Code:** M  
**Directions:** Turin  
**General Description:** prairie  
**Min Elev. (m):** 834 **Max Elev. (m):** 834 **Best Source of Info:** S53SEXALABCA04  
**Specimen Source Code Collector Herbarium Accession # Date ID OK? Observation Detail**  
S53SEXALABCA04 Sexsmith, J.J. AL 4439 1953-07-07 Y fruiting  
**Map UTM Zone UTM Easting UTM Northing Survey Site Name Notes # Dot ID #**  
82H15 12 390650 5536000 Turin 9 1404  
**Astragalus lotiflorus** low milk vetch SRank: S2  
+++++

**Element Code:** PDFAB0F4Z0 **Occurrence Code #:** 007 **Survey Date:** 1997-05-29  
**Last Observed:** 1997-05-29 **First Observed:** 1997-05-29 **Actual Mapping Precision (m):** 250 **Precision Code:** S  
**Directions:** CFB Suffield, SE side of , ~ 2.5 km E of; Old Channel Lake, 4 km NE of  
**General Description:** Stipa-Bouteloua gracilis community, Koeleria macrantha  
**Min Elev. (m):** 701 **Max Elev. (m):** 701  
**Slope:** 5.00 **Aspect:** s  
**Other Comments:** specimen collected, dry sandy soil  
**Management Comments:** Threats: pipeline and grazing **Best Source of Info:** U97AXY03ABCA  
**Map UTM Zone UTM Easting UTM Northing Survey Site Name Notes # Dot ID #**  
72L07 12 529600 5566854 Bush Flats 21 3907  
**Source Code Author Publisher Year Title**  
U97AXY03ABCA AXYS Environmental Consulting Ltd. 1997 AEC Suffield Pipeline  
**Date Source Abstract Code Observer Occurrence Data**  
1997-05-29 U97AXY03ABCA Ann Smreciu 6 plants on pipeline, vegetative, flowering, 1 seed  
**Astragalus lotiflorus** low milk vetch SRank: S2  
+++++

**Element Code:** PDFAB0F4Z0 **Occurrence Code #:** 008 **Survey Date:** 1996-00-00  
**Last Observed:** 1996-00-00 **First Observed:** 1996-00-00 **Actual Mapping Precision (m):** 250 **Precision Code:** S  
**Directions:** N end Milk River Lake, 2 km S of; Hwy 48, 1.9 km W of.  
**General Description:** 8 plants on RoW, locally common. Uplands, south of Cypress Hills. Original location disturbed. Seed  
collected and reseeded.  
**Min Elev. (m):** 785 **Max Elev. (m):** 785 **Best Source of Info:** U96EXP01ABCA  
**Map UTM Zone UTM Easting UTM Northing Survey Site Name Notes # Dot ID #**  
72E01 12 553415 5428643 Milk River Lake 19 3966  
**Source Code Author Publisher Year Title**  
U96EXP01ABCA AXYS Environmental Consulting 1996 Express Pipeline Project  
**Astragalus lotiflorus** low milk vetch SRank: S2

**Element Code:** PDFAB0F4Z0 **Occurrence Code #:** 009 **Survey Date:** 1996-00-00  
**Last Observed:** 1996-00-00 **First Observed:** 1996-00-00 **Actual Mapping Precision (m):** 2500 **Precision Code:** M  
**Directions:** Milk River Lake, 1 km N W of NW corner.  
**Min Elev. (m):** 869 **Max Elev. (m):** 869 **Best Source of Info:** U96EXP01ABCA  
**Map UTM Zone UTM Easting UTM Northing Survey Site Name Notes # Dot ID #**  
72E01 12 552400 5431350 Milk River Lake LLD 24, 13,12 1-3-4, Km 425-432, LS # 65-64 27 4076  
**Source Code Author Publisher Year Title**  
U96EXP01ABCA AXYS Environmental Consulting 1996 Express Pipeline Project  
**Astragalus lotiflorus** low milk vetch SRank: S2  
+++++

**Element Code:** PDFAB0F4Z0 **Occurrence Code #:** 010 **Survey Date:** 1996-00-00  
**Last Observed:** 1996-00-00 **First Observed:** 1996-00-00 **Actual Mapping Precision (m):** 1000 **Precision Code:** M  
**Directions:** Medicine Hat, 18 km W of, S. Sask. River, 1.25 km S. of.  
**Min Elev. (m):** 686 **Max Elev. (m):** 686 **Best Source of Info:** U96EXP01ABCA  
**Map UTM Zone UTM Easting UTM Northing Survey Site Name Notes # Dot ID #**  
72L02 12 501650 5538500 South Saskatchewan River NW 13 12-8-4 21 4103  
**Source Code Author Publisher Year Title**  
U96EXP01ABCA AXYS Environmental Consulting 1996 Express Pipeline Project  
**Astragalus lotiflorus** low milk vetch SRank: S2  
+++++

**Element Code:** PDFAB0F4Z0 **Occurrence Code #:** 011 **Survey Date:** 1970-06-09  
**Last Observed:** 1970-06-09 **First Observed:** 1970-06-09 **Actual Mapping Precision (m):** 2500 **Precision Code:** M  
**Directions:** Hilda Community Pasture; SW of Hilda.  
**General Description:** grassland  
**Min Elev. (m):** 790 **Max Elev. (m):** 790 **Best Source of Info:** S70HRAPMABCA26  
**Specimen Source Code Collector Herbarium Accession # Date ID OK? Observation Detail**  
S70HRAPMABCA26 Hrapko, J.O., Wyn-Evans, T.C. PM B70.18.17 1970-06-09 Y  
**Map UTM Zone UTM Easting UTM Northing Survey Site Name Notes # Dot ID #**  
72L08 12 559150 5585150 Schuler 50 25/110 10 11 214  
**Astragalus lotiflorus** low milk vetch SRank: S2  
+++++

**Element Code:** PDFAB0F4Z0 **Occurrence Code #:** 012 **Survey Date:** 1994-06-01  
**Last Observed:** 1994-06-01 **First Observed:** 1994-06-01 **Actual Mapping Precision (m):** 350 **Precision Code:** M  
**Directions:** Buffalo Road; ~5.1km E of; North Saskatchewan River; ~500m W of.  
**General Description:** sandy slope. Stipa comata-Agropyron dasystachyum-Koeleria macrantha community.  
**Min Elev. (m):** 630 **Max Elev. (m):** 630 **Best Source of Info:** S94TROPMABCA07  
**Specimen Source Code Collector Herbarium Accession # Date ID OK? Observation Detail**  
S94TROPMABCA07 Trottier, Garry PM B94.11.85 1994-06-01 Y  
**Map UTM Zone UTM Easting UTM Northing Survey Site Name Notes # Dot ID #**  
72L07 12 526550 5574825 CFB Suffield 50-19'35"N/110-37'40"W 24 4255  
**Astragalus lotiflorus** low milk vetch SRank: S2  
+++++

**Element Code:** PDFAB0F4Z0 **Occurrence Code #:** 013 **Survey Date:** 1996-00-00  
**Last Observed:** 1996-00-00 **First Observed:** 1996-00-00 **Actual Mapping Precision (m):** 600 **Precision Code:** M  
**Directions:** Medicine Hat, 14 km N of city limits; South Saskatchewan River, 4 km W of  
**General Description:** undulating, subxeric sandyloam, in grassland of Needle-and-thread, Sand Grass, Blue Grama, Northern Wheat Grass, Low Sedge, June Grass [community SF7-A]  
**Min Elev. (m):** 701 **Max Elev. (m):** 701  
**Other Comments:** ---Wallis & Wershler (1988) indicated threats from cultivation in sandy areas and by encroachment by weeds such as Russian Thistle (Salsola kali) in sandy-gravelly dune slack sites  
**Management Comments:** disturbance upslope by construction could affect this species ---Wallis & Wershler (1988) indicated threats from... **Best Source of Info:** U98FRY01ABCA  
**Map UTM Zone UTM Easting UTM Northing Survey Site Name Notes # Dot ID #**  
72L02 12 523550 5561200 Old Channel Lake NE 30-14-5-4 31 4233  
**Source Code Author Publisher Year Title**  
U98FRY01ABCA Fryer, Gina 1998 Memo from Gina Fryer to John Rintoul: rare plant locations for the Palliser Pipeline Project  
**Astragalus lotiflorus** low milk vetch SRank: S2  
+++++

**Element Code:** PDFAB0F4Z0 **Occurrence Code #:** 014 **Survey Date:** 1996-05-30  
**Last Observed:** 1996-05-30 **First Observed:** 1996-05-30 **Actual Mapping Precision (m):** 250 **Precision Code:** S  
**Directions:** Turin, 2.5 km NE of; Oldman River, 11 km N of.  
**General Description:** dry grazed dormant sand dune, sandy dry soil, surrounding vegetation on average shorter than 4 in;  
Astragalus agrestis, A. crassicaupus, A. drummondii, A. pectinatus, Lesquerella arenosa, Senecio canus, Antennaria sp.,  
Androsace septen-Min  
Elev. (m): 823 **Max Elev. (m):** 823  
**Other Comments:** trionalis, A. occidentalis, Arabis sp., Glaux maritima  
**Management Comments:** under cattle grazing, also near section that has been cultivated **Best Source of Info:**  
UNDCOR01ABCA  
**Map UTM Zone UTM Easting UTM Northing Survey Site Name Notes # Dot ID #**  
82H16 12 392550 5537600 Turin LSD SW11-11-12-19 W4M 2 4567  
**Source Code Author Publisher Year Title**  
UNDCOR01ABCA Corbiere, Adrien & Don MacKay Rare Native Plant Survey Form  
**Date Source Abstract Code Observer Occurrence Data**  
1996-05-30 UNDCOR01ABCA Adrien Corbiere and Don MacKay 1 plant flowering  
**Astragalus lotiflorus** low milk vetch SRank: S2  
+++++

**Element Code:** PDFAB0F4Z0 **Occurrence Code #:** 015 **Survey Date:** 1998-09-23  
**Last Observed:** 1998-09-23 **First Observed:** 1997-00-00 **Actual Mapping Precision (m):** 250 **Precision Code:** S  
**Directions:** Brush Flats, 3.5 km E of; Old Channel Lake, 3 km NE of.  
**General Description:** sandhills; xeric  
**Min Elev. (m):** 700 **Max Elev. (m):** 700 **Aspect:** N  
**Other Comments:** Specimen has been collected and housed in U of C Herbarium. **Best Source of Info:** U98BUS01ABCA  
**Map UTM Zone UTM Easting UTM Northing Survey Site Name Notes # Dot ID #**  
72L02 12 529250 5565800 South Saskatchewan River U12 529405/5566138 NAD83; LSD 10-11-15-5- W4M 38 5056  
**Source Code Author Publisher Year Title**  
U98BUS01ABCA Bush, C. Dana 1998 Rare Native Plant Survey Forms  
**Date Source Abstract Code Observer Occurrence Data**  
1997-00-00 U98BUS01ABCA Dana Bush 6 plants  
1998-09-23 U98BUS01ABCA Dana Bush 3 plants on right-of-way and 6 off Row  
**Astragalus lotiflorus** low milk vetch SRank: S2  
+++++

**Element Code:** PDFAB0F4Z0 **Occurrence Code #:** 016 **Survey Date:** 1999-07-21  
**Last Observed:** 1999-07-21 **First Observed:** 1999-07-21 **Actual Mapping Precision (m):** 250 **Precision Code:** S  
**Directions:** Bindloss, 6.5 km SW of; CP railway, 2 km N of.  
**General Description:** dry mixedgrass-depression in dry coulee; Arte can-Stip com/Bout gra/Opun pol; Additional species: Cory viv,  
Coll lin, Hete vil, Plan pat, Firc pum, Orth lut, Hete his, associated with Rare Orobanche lud.  
**Min Elev. (m):** 595 **Max Elev. (m):** 595  
**Other Comments:** specimen collected; UAC; 1 individual sited  
**Management Comments:** Stake boundaries around area to be protected **Best Source of Info:** U99GOL01ABCA  
**Map UTM Zone UTM Easting UTM Northing Survey Site Name Notes # Dot ID #**  
72L16 12 544750 5634725 Bindloss 03-16-22-03-W4M 22 5323  
**Source Code Author Publisher Year Title**  
U99GOL01ABCA Golder Associates & Boss environmental consulting ltd. 1999 Alberta Ethane Gathering System (AEGS)  
Looping Project - East Leg Conservation and Reclamation Plan vol. 2 (Empress to Hanna)  
**Date Source Abstract Code Observer Occurrence Data**  
1999-08-16 U99GOL01ABCA 1 individual sighted; 6 vegetative, 11 flowering  
**Astragalus lotiflorus** low milk vetch SRank: S2  
+++++

**Element Code:** PDFAB0F4Z0 **Occurrence Code #:** 017 **Survey Date:** 1999-07-21  
**Last Observed:** 1999-07-21 **First Observed:** 1999-07-21 **Actual Mapping Precision (m):** 100 **Precision Code:** S  
**Directions:** Cavendish, 7.5 km NE of; Hwy 555, 4.25 km N of.  
**General Description:** dry mixed grass habitat with a shallow coulee running throughout; mesic; Arte can-Bout gra/Stip com-Opun  
pol; Additional plants:  
Psor org, Rosa sp., Arte fri, Euro lan, Carex spp., Cirs vul, Agro smi, Agro pec, Koel mac  
**Min Elev. (m):** 632 **Max Elev. (m):** 632  
**Other Comments:** 2 individuals sited (vegetative); 1 on the R.O.W. and 1 off (within 10 m) **Best Source of Info:**  
U99GOL02ABCA  
**Map UTM Zone UTM Easting UTM Northing Survey Site Name Notes # Dot ID #**  
72L16 12 543150 5636100 Bindloss 14-17-22-03-W4M 30 5502  
**Source Code Author Publisher Year Title**  
U99GOL02ABCA Golder Associates 1999 Rare Native Plant Forms- Golder's survey along BP Amoco Alberta Ethane Gathering  
System Pipeline right of way  
**Astragalus lotiflorus** low milk vetch SRank: S2

**Astragalus purshii** Pursh's milk vetch

**Natural Region:** Dry Mixedgrass

**Habitat:** Grassland-Sandy

**Phenology:** flowers early (late May to early June)

**Specific Search Strategies (if any):** flat sandy grassland; fairly common in places; hairy pods quite visible into July

**Element Occurrences:**

**Element Code:** PDFAB0F7A0 **Occurrence Code #:** 001 **Survey Date:** 1979-07-04  
**Last Observed:** 1979-07-04 **First Observed:** 1979-07-04 **Precision Code:** M  
**Directions:** Sage Creek; facing East.  
**General Description:** Mixed grassland, barren flats  
**Min Elev. (m):** 914 **Max Elev. (m):** 914 **Aspect:** E **Best Source of Info:** S79WALUAABCA03  
**Specimen Source Code Collector Herbarium Accession # Date ID OK? Observation Detail**  
S79WALUAABCA03 Wallis, C. UA 84611 1979-07-04 Fruits  
**Map UTM Zone UTM Easting UTM Northing Survey Site Name Notes # Dot ID #**  
72E01 12 552100 5445500 Sage Creek 2 2  
**Astragalus purshii** Pursh's milk vetch SRank: S2  
+++++

**Element Code:** PDFAB0F7A0 **Occurrence Code #:** 002 **Survey Date:** 1975-06-23  
**Last Observed:** 1975-06-23 **First Observed:** 1975-06-23 **Precision Code:** M  
**Directions:** Comrey; roadside, near; Milk River Gorge, near the.  
**Min Elev. (m):** 990 **Max Elev. (m):** 990 **Best Source of Info:** S75MILULABCA01  
**Specimen Source Code Collector Herbarium Accession # Date ID OK? Observation Detail**  
S75MILULABCA01 Miller & Toth UL none 1975-06-23 100% fruit  
**Map UTM Zone UTM Easting UTM Northing Survey Site Name Notes # Dot ID #**  
72E02 12 519073 5441433 Comrey 8 19  
**Astragalus purshii** Pursh's milk vetch SRank: S2  
+++++

**Element Code:** PDFAB0F7A0 **Occurrence Code #:** 003 **Survey Date:** 1989-06-15  
**Last Observed:** 1989-06-15 **First Observed:** 1989-06-15 **Precision Code:** S  
**Directions:** Milk River Natural Area  
**General Description:** In very short vegetation in sandy mixed grassland  
**Min Elev. (m):** 975 **Max Elev. (m):** 975 **Best Source of Info:** S89WALPPABCA13  
**Specimen Source Code Collector Herbarium Accession # Date ID OK? Observation Detail**  
S89WALPPABCA13 Wallis, C. PP 694 1989-06-15 About 25 plants  
**Map UTM Zone UTM Easting UTM Northing Survey Site Name Notes # Dot ID #**  
72E02 12 522923 5427334 Milk River Natural Area LSD 3 17 28  
**Source Code Author Publisher Year Title**  
I85WER01ABCA Wershler, C. 1985  
**Astragalus purshii** Pursh's milk vetch SRank: S2  
+++++

**Element Code:** PDFAB0F7A0 **Occurrence Code #:** 004 **Survey Date:** 1995-00-00  
**Last Observed:** 1995-00-00 **First Observed:** 1994-00-00 **Precision Code:** S  
**Directions:** Canadian Forces Base Suffield National Wildlife Area; Francis Peak, near  
**General Description:** Subxeric site  
**Min Elev. (m):** 709 **Max Elev. (m):** 709  
**Other Comments:** no other information on the specimen other than one was collected at the study site **Best Source of Info:**  
U96MAC01ABCA  
**Map UTM Zone UTM Easting UTM Northing Survey Site Name Notes # Dot ID #**  
72L07 12 527725 5584250 Twin Peaks UTM WL 527725 / 5584250 10 195  
**Source Code Author Publisher Year Title**  
U96MAC01ABCA Macdonald, I.D. Canadian Wildlife Service, Environment Canada, Prairie and 1996 Vascular Flora of Canadian  
Forces Base Suffield National Wildlife Area  
**Date Source Abstract Code Observer Occurrence Data**  
rare in SNWA; 12 plants; specimen collected at the study site has immature fruits, but also distinctive pubescence and the round-  
tipped, short leaflets.  
**Astragalus purshii** Pursh's milk vetch SRank: S2  
+++++

**Element Code:** PDFAB0F7A0 **Occurrence Code #:** 005 **Survey Date:** 1997-05-30  
**Last Observed:** 1997-05-30 **First Observed:** 1997-05-30 **Actual Mapping Precision (m):** 250 **Precision Code:** S  
**Directions:** S. Saskatchewan River, 6 km S of; Creek in Bull Spring Coulee, 1 km W of.  
**General Description:** Stipa community/Koel mac grassland; Art fri- Stipcom- koel mac - Bou gra - Agr smi - Sph coc - And sept - Lap pula - Phl hon -Ast mis - Gau coc - Caerex fil - Carex steno . 12 individuals  
**Min Elev. (m):** 770 **Max Elev. (m):** 770  
**Other Comments:** Transect coordinates (16-4-24-15-4) on AXYS sheet do not correspond with dot's UTM coordinates **Best Source of Info:** U97AXY03ABCA  
**Map UTM Zone UTM Easting UTM Northing Survey Site Name Notes # Dot ID #**  
72L08 12 540097 5579279 Bull Springs Coulee 17 3910  
**Source Code Author Publisher Year Title**  
U97AXY03ABCA AXYS Environmental Consulting Ltd. 1997 AEC Suffield Pipeline  
**Date Source Abstract Code Observer Occurrence Data**  
1997-05-30 U97AXY03ABCA Ann Smrecu, Roberta Yakimchuck 2 vegetative; 10 seed  
**Astragalus purshii** Pursh's milk vetch SRank: S2  
+++++

**Element Code:** PDFAB0F7A0 **Occurrence Code #:** 006 **Survey Date:** 1997-05-30  
**Last Observed:** 1997-05-30 **First Observed:** 1997-05-30 **Actual Mapping Precision (m):** 250 **Precision Code:** S  
**Directions:** Red Deer Lake; ~1.5km NE of.  
**General Description:** Dry grassland; Stipa comata-some bare patches with lichen- Carex fil - Phl hood. 1 individual (Ast pur)  
**Min Elev. (m):** 762 **Max Elev. (m):** 762  
**Slope:** 40.00 **Aspect:** w  
**Other Comments:** UTM coordinates for dot correspond with dot on aerial photos. Another population: 8-10-16-3-W4M, E542891 N5566854. **Best Source of Info:** U97AXY03ABCA  
**Map UTM Zone UTM Easting UTM Northing Survey Site Name Notes # Dot ID #**  
72L08 12 543125 5577100 Red Deer Lake SE 18-16-3 W4M 19 3914  
**Source Code Author Publisher Year Title**  
U97AXY03ABCA AXYS Environmental Consulting Ltd. 1997 AEC Suffield Pipeline  
**Date Source Abstract Code Observer Occurrence Data**  
1997-05-30 U97AXY03ABCA fruiting adult.  
**Astragalus purshii** Pursh's milk vetch SRank: S2  
+++++

**Element Code:** PDFAB0F7A0 **Occurrence Code #:** 007 **Survey Date:** 1985-00-00  
**Last Observed:** 1985-00-00 **First Observed:** 1985-00-00 **Actual Mapping Precision (m):** 50 **Precision Code:** S  
**Directions:** Onefour, 7.5 km S of; Lost River, 2 km NE of.  
**General Description:** sandy soil in heavily grazed grassland  
**Min Elev. (m):** 907 **Max Elev. (m):** 907 **Best Source of Info:** R86WER01ABCA  
**Map UTM Zone UTM Easting UTM Northing Survey Site Name Notes # Dot ID #**  
72E01 12 538200 5433600 Lost River 8 7  
**Source Code Author Publisher Year Title**  
R86WER01ABCA Wershler C. & C. Wallis 1986 Lost River Significant Features Assessment  
**Astragalus purshii** Pursh's milk vetch SRank: S2  
+++++

**Element Code:** PDFAB0F7A0 **Occurrence Code #:** 008 **Survey Date:** 1996-00-00  
**Last Observed:** 1996-00-00 **First Observed:** 1996-00-00 **Actual Mapping Precision (m):** 250 **Precision Code:** S  
**Directions:** Bain; ~7km NW of; Hwy 48; ~7km W of; Bare Creek; ~2km W of.  
**General Description:** 150 plants in 5m wide band. Uplands, S of Cypress Hills. RoW re-routed around population. Locally common. Scattered viable population.  
**Min Elev. (m):** 1074 **Max Elev. (m):** 1074 **Best Source of Info:** U96EXP01ABCA  
**Map UTM Zone UTM Easting UTM Northing Survey Site Name Notes # Dot ID #**  
72E08 12 546750 5464000 Bare Creek LS#59;Km:394.2/395.2;LLD:NW28 4-3-4 9 3962  
**Source Code Author Publisher Year Title**  
U96EXP01ABCA AXYS Environmental Consulting 1996 Express Pipeline Project  
**Astragalus purshii** Pursh's milk vetch SRank: S2  
+++++



**Element Code:** PDFAB0F7A0 **Occurrence Code #:** 009 **Survey Date:** 1996-00-00  
**Last Observed:** 1996-00-00 **First Observed:** 1996-00-00 **Actual Mapping Precision (m):** 250 **Precision Code:** S  
**Directions:** Cressday; ~4.75 km SW of; Hwy 48; ~3.5km W of.  
**General Description:** 26 total: 2 transplants; seed from 21 and 27 plants 60m W of RoW, 33 plants 100m E of RoW. Original location disturbed. Seed collected and reseeded. Locally common. Scattered populations.  
**Min Elev. (m):** 960 **Max Elev. (m):** 960  
**Other Comments:** Tshp/Rge coordinates don't match. Changed to SE 23-3-3-4 (LSD8). **Best Source of Info:** U96EXP01ABCA  
**Map UTM Zone UTM Easting UTM Northing Survey Site Name Notes # Dot ID #**  
72E01 12 550892 5452192 Cressday LS#61;km:406.4;LDD:NE 23 3-3-4 20 3963  
**Source Code Author Publisher Year Title**  
U96EXP01ABCA AXYS Environmental Consulting 1996 Express Pipeline Project  
**Astragalus purshii** Pursh's milk vetch SRank: S2  
+++++

**Element Code:** PDFAB0F7A0 **Occurrence Code #:** 010 **Survey Date:** 1996-00-00  
**Last Observed:** 1996-00-00 **First Observed:** 1996-00-00 **Actual Mapping Precision (m):** 250 **Precision Code:** S  
**Directions:** Cressday; ~7km SW of; Hwy 48; ~2.8km W of; Sage Creek; ~2.5 km N of.  
**General Description:** 17 total: 3 transplants; seed from 14. Uplands; S of Cypress Hills. Original location disturbed. Seed collected and reseeded.  
Plants scattered in distribution. Locally common. 36on RoW; 4 transplants; seed collected from 19. (comments..)  
**Min Elev. (m):** 937 **Max Elev. (m):** 937  
**Other Comments:** ..Plus 62 W of Row; 44 E of RoW. 25 on RoW: seed collected from 12 plants; 12 plants avoided. Plus 100 plants scattered E & W of RoW. 10 on RoW:2 transplants, 8 seed, 8 E of Row. Tshp/Rg coordinates don't match. Changed to SW 12 3-3-4. **Best Source of Info:** U96EXP01ABCA  
**Map UTM Zone UTM Easting UTM Northing Survey Site Name Notes # Dot ID #**  
72E01 12 551698 5448829 Sage Creek LS#61;km:409.8;LDD:SW 1 3-3-4/LS#62;km:410.3;SW 12 3-3-4/LS#62;km: 410.9;LLD:NW 1 3-3-4/LS#62;km: 411.3; LLDNW 1 3-3-4/LS#62;km: 411.4; LLDSW 1 3-3-4 21 3964  
**Source Code Author Publisher Year Title**  
U96EXP01ABCA AXYS Environmental Consulting 1996 Express Pipeline Project  
**Astragalus purshii** Pursh's milk vetch SRank: S2  
+++++

**Element Code:** PDFAB0F7A0 **Occurrence Code #:** 011 **Survey Date:** 1996-00-00  
**Last Observed:** 1996-00-00 **First Observed:** 1996-00-00 **Actual Mapping Precision (m):** 250 **Precision Code:** S  
**Directions:** Milk River Lake; ~4.5km NW of; Hwy 48; ~2.8 km W of; road to one-four; 1km S of.  
**General Description:** 7 on RoW, uplands; Sof Cypress Hills. Original location disturbed. Seed collected and reseeded. Plants scattered, common locally.  
**Min Elev. (m):** 869 **Max Elev. (m):** 869 **Best Source of Info:** U96EXP01ABCA  
**Map UTM Zone UTM Easting UTM Northing Survey Site Name Notes # Dot ID #**  
72E01 12 551906 5432881 Milk River Lake LS#65;km:425-432;LLD 6 1-2-4.Kp 425.9: 551926.7 to 551935.67 E; 5432995.61 to 5433044.76 N; NW 24-1-3-422 3965  
**Source Code Author Publisher Year Title**  
U96EXP01ABCA AXYS Environmental Consulting 1996 Express Pipeline Project  
**Astragalus purshii** Pursh's milk vetch SRank: S2  
+++++

**Element Code:** PDFAB0F7A0 **Occurrence Code #:** 012 **Survey Date:** 1996-00-00  
**Last Observed:** 1996-00-00 **First Observed:** 1996-00-00 **Actual Mapping Precision (m):** 250 **Precision Code:** S  
**Directions:** N end Milk River Lake; ~2km S of; Hwy 48; ~1.9km W of.  
**General Description:** Locally common. Seed collected from 1 plant. Uplands; S of Cypress Hills. Original location disturbed. Seed collected and reseeded. Plants scattered.  
**Min Elev. (m):** 884 **Max Elev. (m):** 884  
**Other Comments:** UTM:553415E;5428642N. **Best Source of Info:** U96EXP01ABCA  
**Map UTM Zone UTM Easting UTM Northing Survey Site Name Notes # Dot ID #**  
72E01 12 553415 5428643 Milk River Lake 19 3966  
**Source Code Author Publisher Year Title**  
U96EXP01ABCA AXYS Environmental Consulting 1996 Express Pipeline Project  
**Astragalus purshii** Pursh's milk vetch SRank: S2  
+++++

**Element Code:** PDFAB0F7A0 **Occurrence Code #:** 013 **Survey Date:** 1996-00-00  
**Last Observed:** 1996-00-00 **First Observed:** 1996-00-00 **Actual Mapping Precision (m):** 250 **Precision Code:** S  
**Directions:** Hwy 48; bridge over W arm of Milk River Lake; ~2.5 km SW of.  
**General Description:** Locally common. Seed collected from 1 plant. Uplands; S of Cypress Hills. Original location disturbed. Seed collected and reseeded.  
**Min Elev. (m):** 884 **Max Elev. (m):** 884  
**Other Comments:** UTM:552807E;552807N, township & range coordinates don't match. They should be NW 16-1-1-3-4, 1-12-1-3-4, 2-12-1-3-4. **Best Source of Info:** U96EXP01ABCA  
**Map UTM Zone UTM Easting UTM Northing Survey Site Name Notes # Dot ID #**  
72E01 12 552549 5429156 Milk River Lake NW 11- 6 1-2-4 23 3967  
**Source Code Author Publisher Year Title**  
U96EXP01ABCA AXYS Environmental Consulting 1996 Express Pipeline Project  
**Astragalus purshii** Pursh's milk vetch SRank: S2  
+++++

**Element Code:** PDFAB0F7A0 **Occurrence Code #:** 014 **Survey Date:** 1996-00-00  
**Last Observed:** 1996-00-00 **First Observed:** 1996-00-00 **Actual Mapping Precision (m):** 1000 **Precision Code:** M  
**Directions:** Milk River Lake, S end of, 1.25 km W of  
**General Description:** locally common. Seed collected from 1 plant. Uplands, south of Cypress Hills. Original location disturbed. Seed collected and reseeded.  
**Min Elev. (m):** 900 **Max Elev. (m):** 900 **Best Source of Info:** U96EXP01ABCA  
**Map UTM Zone UTM Easting UTM Northing Survey Site Name Notes # Dot ID #**  
72E01 12 554671 5427898 Milk River Lake SE 4-5-1-2-4, 555015.49E, 5427694.39 N- SW8- 6 1-2-4; 32 4068  
**Source Code Author Publisher Year Title**  
U96EXP01ABCA AXYS Environmental Consulting 1996 Express Pipeline Project  
**Astragalus purshii** Pursh's milk vetch SRank: S2  
+++++

**Element Code:** PDFAB0F7A0 **Occurrence Code #:** 015 **Survey Date:** 1996-00-00  
**Last Observed:** 1996-00-00 **First Observed:** 1996-00-00 **Actual Mapping Precision (m):** 1000 **Precision Code:** M  
**Directions:** Bain, 4.5 km NE of; Bare Creek, 3.25 km W of.  
**Min Elev. (m):** 1013 **Max Elev. (m):** 1013 **Best Source of Info:** U96EXP01ABCA  
**Map UTM Zone UTM Easting UTM Northing Survey Site Name Notes # Dot ID #**  
72E08 12 548300 5459300 Bain SW 10 4-3-4 19 4142  
**Source Code Author Publisher Year Title**  
U96EXP01ABCA AXYS Environmental Consulting 1996 Express Pipeline Project  
**Astragalus purshii** Pursh's milk vetch SRank: S2  
+++++

**Element Code:** PDFAB0F7A0 **Occurrence Code #:** 016 **Survey Date:** 1996-00-00  
**Last Observed:** 1996-00-00 **First Observed:** 1996-00-00 **Actual Mapping Precision (m):** 600 **Precision Code:** M  
**Directions:** Red Deer Lake, 7 km NW of northern tip of lake  
**General Description:** rolling-hilly, subxeric clayloam, in grassland of Needle-and-thread, Blue Grama, Prairie Selaginella, June Grass, Moss Phlox, lichens [communitySF-K2-A]  
**Min Elev. (m):** 762 **Max Elev. (m):** 762  
**Other Comments:** 1 plant along southern portion of corridor  
**Management Comments:** disturbance upslope by construction could affect this species **Best Source of Info:** U98FRY01ABCA  
**Map UTM Zone UTM Easting UTM Northing Survey Site Name Notes # Dot ID #**  
72L08 12 537000 5580725 Red Deer Lake NW 27-16-4-4 21 4248  
**Source Code Author Publisher Year Title**  
U98FRY01ABCA Fryer, Gina 1998 Memo from Gina Fryer to John Rintoul: rare plant locations for the Palliser Pipeline Project  
**Astragalus purshii** Pursh's milk vetch SRank: S2  
+++++

**Element Code:** PDFAB0F7A0 **Occurrence Code #:** 017 **Survey Date:** 1985-00-00  
**Last Observed:** 1985-00-00 **First Observed:** 1985-00-00 **Actual Mapping Precision (m):** 50 **Precision Code:** S  
**Directions:** Onefour, 7 km S of; Lost River, 2.5 km NE of.  
**General Description:** sandy soils in heavily grazed grassland  
**Min Elev. (m):** 907 **Max Elev. (m):** 907 **Best Source of Info:** R86WER01ABCA  
**Map UTM Zone UTM Easting UTM Northing Survey Site Name Notes # Dot ID #**  
72E01 12 539200 5433625 Lost River 7 6  
**Source Code Author Publisher Year Title**  
R86WER01ABCA Wershler C. & C. Wallis 1986 Lost River Significant Features Assessment  
**Astragalus purshii** Pursh's milk vetch SRank: S2  
+++++

**Element Code:** PDFAB0F7A0 **Occurrence Code #:** 018 **Survey Date:** 1999-08-16  
**Last Observed:** 1999-08-16 **First Observed:** 1999-06-02 **Actual Mapping Precision (m):** 100 **Precision Code:** S  
**Directions:** Bindloss, 5.5 km SW of; Hwy 555, 50 m E of.  
**General Description:** dry grassland community on 7 degree hillslope/ 122 deg. aspect; Stip com/ Bout gra/ Agro smi; some Arte fri,  
Opun poly, and Arte can  
**Min Elev. (m):** 528 **Max Elev. (m):** 610  
**Slope:** 7.00 **Aspect:** SE  
**Management Comments:** Stake boundary around area to be protected. **Best Source of Info:** U99GOL01ABCA  
**Map UTM Zone UTM Easting UTM Northing Survey Site Name Notes # Dot ID #**  
72L16 12 546225 5633500 Bindloss 06-10-22-03-W4M, Lat 51 51' 06.6" Lon 110 20' 26.9" 23 5324  
**Source Code Author Publisher Year Title**  
U99GOL01ABCA Golder Associates & Boss environmental consulting ltd. 1999 Alberta Ethane Gathering System (AEGS) Looping  
Project - East Leg Conservation and Reclamation Plan vol. 2 (Empress to Hanna) U99GOL02ABCA Golder Associates 1999  
Rare Native Plant Forms- Golder's survey along BP Amoco Alberta Ethane Gathering System Pipeline right of way  
**Date Source Abstract Code Observer Occurrence Data**  
1999-06-02 U99GOL02ABCA 1 vegetative  
1999-08-16 U99GOL01ABCA 1 individual sighted  
**Astragalus purshii** Pursh's milk vetch SRank: S2

**Atriplex canescens saltbush**

**Natural Region:** Northern Fescue Grassland, Mixedgrass, Dry Mixedgrass

**Habitat:** Wetland-Alkali

**Phenology:** flowers May to June

**Specific Search Strategies (if any):** highly visible at all times of year; may be some taxonomic problems; habitat includes alkali clay flats along badlands.

**Element Occurrences:**

**Element Code:** PDCHE04090 **Occurrence Code #:** 001 **Survey Date:** 1939-08-04  
**Last Observed:** 1939-08-04 **First Observed:** 1939-08-04 **Actual Mapping Precision (m):** 2500 **Precision Code:** M  
**Directions:** Fort Macleod, 4 km S of.  
**General Description:** alkaline flats; clay soil belt  
**Min Elev. (m):** 960 **Max Elev. (m):** 960 **Best Source of Info:** S39SSSUAABCA06  
**Specimen Source Code Collector Herbarium Accession # Date ID OK? Observation Detail**  
S39SSSUAABCA06 S.S.S. UA 7855 1939-08-04 Y female; fruits  
**Map UTM Zone UTM Easting UTM Northing Survey Site Name Notes # Dot ID #**  
82H11 12 325850 5505875 Fort Macleod 1 1368  
**Atriplex canescens** saltbush SRank: SU  
+++++

**Element Code:** PDCHE04090 **Occurrence Code #:** 002 **Survey Date:** 1977-08-24  
**Last Observed:** 1977-08-24 **First Observed:** 1977-08-24 **Actual Mapping Precision (m):** 1000 **Precision Code:** M  
**Directions:** Morrin Bridge, 2 km W of; Hwy 27.  
**General Description:** eroded bentonitic slopes along roadside  
**Min Elev. (m):** 760 **Max Elev. (m):** 760 **Best Source of Info:** S77HRAPMABCA04  
**Specimen Source Code Collector Herbarium Accession # Date ID OK? Observation Detail**  
S77HRAPMABCA04 Hrapko, J.L. & E.E. Beacham PM B77.32.4 1977-08-24 fruits  
**Map UTM Zone UTM Easting UTM Northing Survey Site Name Notes # Dot ID #**  
82P10 12 366575 5723850 Morrin Bridge Recreational Area 51 39/112 56 2 2294  
**Atriplex canescens** saltbush SRank: SU  
+++++

**Element Code:** PDCHE04090 **Occurrence Code #:** 003 **Survey Date:** 1995-07-18  
**Last Observed:** 1995-07-18 **First Observed:** 1995-06-03 **Actual Mapping Precision (m):** 250 **Precision Code:** S  
**Directions:** Sage Creek, approx. 6 km NE of where Cripple Creek enters; Cressday, approx. 4 km W of; road, south of; stock corrals, near; within Sage Creek ESA  
**General Description:** around east-west aligned saline flats, surrounded by prairie. Ephem. wetlands with standing water only late in season. Very dry ponded site in grazed pasture. Low species div. Soil cracks to 1+cm. On 95/07/18 3-4 cm water at surface.  
**Min Elev. (m):** 960 **Max Elev. (m):** 960  
**Other Comments:** round snail shells indicate temporal wetland status; In upland area immediately around temporal ponds. Found growing in disturbed soils. see hardcopy for more info about plant species.  
**Management Comments:** the entire area should be avoided taking into consideration drainage patterns **Best Source of Info:** B95WIL01ABCA  
**Map UTM Zone UTM Easting UTM Northing Survey Site Name Notes # Dot ID #**  
72E01 12 550900 5454400 Cressday in the vicinity of Sec NW 25/NE 26 - Tp3-Rg3-W4M 16 3928  
**Source Code Author Publisher Year Title**  
B95WIL01ABCA J. Williams Consulting & Axys Environmental Consulting Ltd Express Pipelines Ltd 1995 Rare Plant Surveys along the Proposed Express Pipeline Project  
**Date Source Abstract Code Observer Occurrence Data**  
1995-07-18 B95WIL01ABCA <5-5  
**Atriplex canescens** saltbush SRank: SU  
+++++

**Element Code:** PDCHE04090 **Occurrence Code #:** 004 **Survey Date:** 1996-00-00  
**Last Observed:** 1996-00-00 **First Observed:** 1996-00-00 **Actual Mapping Precision (m):** 600 **Precision Code:** M  
**Directions:** Bleriot Ferry Recreation Area, 2.5 km N of; Red Deer River, W side of, up large coulee  
**General Description:** ravine slope. easterly at 28 degrees. on subxeric gravellyloam, in erosional barrens of soil, Silvery Sagebrush, Slender Wheatgrass, Prickly Pear, Long-leaved Sagewort [community GP6-G]  
**Min Elev. (m):** 723 **Max Elev. (m):** 785  
**Slope:** 28.00 **Aspect:** E  
**Other Comments:** single shrub  
**Management Comments:** disturbance upslope by construction could affect this species **Best Source of Info:** U98FRY01ABCA  
**Map UTM Zone UTM Easting UTM Northing Survey Site Name Notes # Dot ID #**  
82P10 12 368050 5716600 Bleriot Ferry Provincial Recreation Area NW 21-30-21-4 5 4306  
**Source Code Author Publisher Year Title**  
U98FRY01ABCA Fryer, Gina 1998 Memo from Gina Fryer to John Rintoul: rare plant locations for the Palliser Pipeline Project  
**Atriplex canescens** saltbush SRank: SU  
+++++

**Element Code:** PDCHE04090 **Occurrence Code #:** 005 **Survey Date:** 1996-00-00  
**Last Observed:** 1996-00-00 **First Observed:** 1996-00-00 **Actual Mapping Precision (m):** 600 **Precision Code:** M  
**Directions:** Bleriot Ferry Recreation Area, 4 km N of; Red Deer River, W side of  
**General Description:** river valley slope base, on subxeric clayloam, in erosion barrens of soil, Sand Dropseed, Long-leaved sagewort, Winter Fat, Dragonwort [community GP7-0]  
**Min Elev. (m):** 701 **Max Elev. (m):** 701  
**Other Comments:** single shrub  
**Management Comments:** disturbance upslope by construction could affect this species **Best Source of Info:** U98FRY01ABCA  
**Map UTM Zone UTM Easting UTM Northing Survey Site Name Notes # Dot ID #**  
82P10 12 369700 5718150 Morrin Bridge Provincial Recreational Area NW 27-30-21-4 4 4247  
**Source Code Author Publisher Year Title**  
U98FRY01ABCA Fryer, Gina 1998 Memo from Gina Fryer to John Rintoul: rare plant locations for the Palliser Pipeline Project  
**Atriplex canescens** saltbush SRank: SU  
+++++

**Element Code:** PDCHE04090 **Occurrence Code #:** 006 **Survey Date:** 1991-08-22  
**Last Observed:** 1991-08-22 **First Observed:** 1991-08-22 **Actual Mapping Precision (m):** 2500 **Precision Code:** M  
**Directions:** Tilley, 5 km E of; Highway 1, 100 m S of.  
**General Description:** common; in very dry Fescue prairie with Artemisia spp., Selaginella densa  
**Min Elev. (m):** 747 **Max Elev. (m):** 747 **Size of Occurrence:** **Best Source of Info:** S91BRUDBONCA01  
**Specimen Source Code Collector Herbarium Accession # Date ID OK? Observation Detail**  
S91BRUDBONCA01 Brunton, D. F. and K. L. McIntosh DB none 1991-08-22 Y common  
**Map UTM Zone UTM Easting UTM Northing Survey Site Name Notes # Dot ID #**  
72L15 12 459000 5588900 Tilley 13 5830  
**Atriplex canescens** saltbush SRank: SU  
+++++

**Element Code:** PDCHE04090 **Occurrence Code #:** 007 **Survey Date:** 1977-09-24  
**Last Observed:** 1977-09-24 **First Observed:** 1977-09-24 **Actual Mapping Precision (m):** 1500 **Precision Code:** M  
**Directions:** Comrey, 3 km SE of; Junction of Hwy 887 and 502, 4.5 km SE of; Milk River Canyon, lip of.  
**General Description:** open, arid grassy lip of immense Badlands canyon with Opuntia, Artemesia, Gatierezia  
**Min Elev. (m):** 991 **Max Elev. (m):** 991 **Size of Occurrence:** **Best Source of Info:** S77BRUDBONCA02  
**Specimen Source Code Collector Herbarium Accession # Date ID OK? Observation Detail**  
S77BRUDBONCA02 Brunton, D. F. et al. DB none 1977-09-24 Y common  
**Map UTM Zone UTM Easting UTM Northing Survey Site Name Notes # Dot ID #**  
72E02 12 522000 5436750 Milk River Canyon 49 05' N, 110 42' W 59 5831  
**Atriplex canescens** saltbush SRank: SU

***Atriplex powellii* Powell's saltbush**

**Natural Region:** Northern Fescue Grassland, Mixedgrass, Dry Mixedgrass

**Habitat:** Wetland-Alkali

**Phenology:** flowers May to June

**Specific Search Strategies (if any):** highly visible at all times of year; may be some taxonomic problems; habitat includes alkali clay flats along badlands.

**Element Occurrences:**

**Element Code:** PDCHE041L0 **Occurrence Code #:** 001 **Survey Date:** 1990-06-22  
**Last Observed:** 1990-06-22 **First Observed:** 1987-09-22 **Actual Mapping Precision (m):** 250 **Precision Code:** S  
**Directions:** Redcliff, just S of ; South Saskatchewan River, 300m N of.  
**General Description:** on falt bentonitic slopes and hummocks of clay; Foremost formation, down near base of outcrops; plentiful with *H. nuttallii*, *Sarcobatus*, *Suaeda moquini*  
**Min Elev. (m):** 686 **Max Elev. (m):** 686 **Best Source of Info:** S90HUDNMONCA01  
**Specimen Source Code Collector Herbarium Accession # Date ID OK? Observation Detail**  
S87HUDNMONCA01 Hudson, J.H. NM 528772 1987-09-22  
S90HUDNMONCA01 Hudson, J.H. NM 553863 1990-06-22  
**Map UTM Zone UTM Easting UTM Northing Survey Site Name Notes # Dot ID #**  
72L02 12 514900 5544800 Redcliff LSD-11 5-13-6-W4M 9 175  
***Atriplex powellii* Powell's saltbush** SRank: S1  
+++++

**Element Code:** PDCHE041L0 **Occurrence Code #:** 002 **Survey Date:** 1967-09-01  
**Last Observed:** 1967-09-01 **First Observed:** 1967-09-01 **Actual Mapping Precision (m):** 1000 **Precision Code:** M  
**Directions:** Rosedale.  
**General Description:** slope of hill; clay soil  
**Min Elev. (m):** 686 **Max Elev. (m):** 686 **Best Source of Info:** S67BASUAABCA01  
**Specimen Source Code Collector Herbarium Accession # Date ID OK? Observation Detail**  
S67BASACONCA02 Bassett, I.J. & F.J. Beales AC none 1967-09-01  
S67BASUAABCA01 Bassett, I.J. & F.J. Beales UA 49355 1967-09-01 male and female flowers  
**Map UTM Zone UTM Easting UTM Northing Survey Site Name Notes # Dot ID #**  
82P07 12 386350 5697350 Rosedale 51 25/112 38 6 2285  
***Atriplex powellii* Powell's saltbush** SRank: S1  
+++++

**Element Code:** PDCHE041L0 **Occurrence Code #:** 003 **Survey Date:** 1967-09-01  
**Last Observed:** 1967-09-01 **First Observed:** 1967-09-01 **Actual Mapping Precision (m):** 1500 **Precision Code:** M  
**Directions:** Rosedale, 2.5 km NE of.  
**General Description:** edge of hillside, near base; stony clay soil  
**Min Elev. (m):** 762 **Max Elev. (m):** 762 **Best Source of Info:** S67BASUAABCA02  
**Specimen Source Code Collector Herbarium Accession # Date ID OK? Observation Detail**  
S67BASACONCA01 Bassett, I.J. & F.J. Beales AC none 1967-09-01  
S67BASUAABCA02 Bassett, I.J. & F.J. Beales UA 49356 1967-09-01 flowers  
S68BASACONCA01 Bassett, I.J. & C. Frankton AC none 1968-07-18 n=18  
**Map UTM Zone UTM Easting UTM Northing Survey Site Name Notes # Dot ID #**  
82P07 12 388825 5698150 Rosedale 7 2286  
***Atriplex powellii* Powell's saltbush** SRank: S1  
+++++

**Element Code:** PDCHE041L0 **Occurrence Code #:** 004 **Survey Date:** 1996-00-00  
**Last Observed:** 1996-00-00 **First Observed:** 1996-00-00 **Actual Mapping Precision (m):** 600 **Precision Code:** M  
**Directions:** Patricia, 13 km NNW of; Hutterite colony facilities, E of  
**General Description:** shallow depression, with subhygric-mesic clayloam, in drawdown meadow of Western Wheat Grass, Foxtail Barley, Kentucky bluegrass, Open soil, Prostrate Saltbush [community CF1-B]  
**Min Elev. (m):** 701 **Max Elev. (m):** 701  
**Other Comments:** 1 plant in 1X1m area, possibly more unrecorded  
**Management Comments:** disturbance to the alkaline barren slopes by construction could affect this species **Best Source of Info:** U98FRY01ABCA  
**Map UTM Zone UTM Easting UTM Northing Survey Site Name Notes # Dot ID #**  
72L13 12 448625 5629400 Patricia NW 27-21-13-4 12 4246  
**Source Code Author Publisher Year Title**  
U98FRY01ABCA Fryer, Gina 1998 Memo from Gina Fryer to John Rintoul: rare plant locations for the Palliser Pipeline Project  
***Atriplex powellii* Powell's saltbush** SRank: S1  
+++++

**Element Code:** PDCHE041L0    **Occurrence Code #:** 005    **Survey Date:** 1996-00-00  
**Last Observed:** 1996-00-00    **First Observed:** 1996-00-00    **Actual Mapping Precision (m):** 600    **Precision Code:** M  
**Directions:** Morrin Bridge Provincial Recreation Area, 6 km S of; Red Deer River, W side of  
**General Description:** river valley slope base, with subxeric clayloam, in erosion barrens of soil, Sand Dropseed, Prairie Sagewort, Winter Fat, Dragonwort; with Wing-fruited Saltbush [community GP7-0]  
**Min Elev. (m):** 701    **Max Elev. (m):** 701  
**Other Comments:** 3 plants in 1X3 m area  
**Management Comments:** disturbance to the alkaline barren slopes by construction could affect this species    **Best Source of Info:** U98FRY01ABCA  
**Map UTM Zone UTM Easting UTM Northing Survey Site Name Notes # Dot ID #**  
82P10 12 369700 5718150 Morrin Bridge Provincial Recreational Area NW 27-30-21-4 4 4247  
**Source Code Author Publisher Year Title**  
U98FRY01ABCA Fryer, Gina 1998 Memo from Gina Fryer to John Rintoul: rare plant locations for the Palliser Pipeline Project  
**Atriplex powellii** Powell's saltbush SRank: S1

***Atriplex truncata* saltbush**

**Natural Region:** Dry Mixedgrass

**Habitat:** Wetland-Alkali

**Phenology:** flowers in August

**Specific Search Strategies (if any):** occurs in sandy, gravelly ephemeral alkali wetlands--check the edges of wetlands.

**Element Occurrences:**

**Element Code:** PDCHE04230 **Occurrence Code #:** 002 **Survey Date:** 1969-08-10

**Last Observed:** 1969-08-10 **First Observed:** 1969-08-10 **Actual Mapping Precision (m):** 2500 **Precision Code:** M

**Directions:** Wild Horse, 11 km NW of, Hwy 48, near.

**General Description:** edge of waterpool, disturbed sandy gravelly soil

**Min Elev. (m):** 884 **Max Elev. (m):** 884 **Best Source of Info:** S69BASUAABCA02

**Specimen Source Code Collector Herbarium Accession # Date ID OK? Observation Detail**

S69BASUAABCA02 Bassett, I.J. & B. Baum UA 49340 1969-08-10 flowers; fruits; only two plants seen

**Map UTM Zone UTM Easting UTM Northing Survey Site Name Notes # Dot ID #**

72E01 12 554500 5438550 Sage Creek 12 11

***Atriplex truncata* saltbush** SRank: S1



***Bacopa rotundifolia* water hyssop**

**Natural Region:** Dry Mixedgrass

**Habitat:** Wetland

**Phenology:** flowers in late July and August

**Specific Search Strategies (if any):** search recently exundated slough bottoms of shallow marshes.

**Element Occurrences:**

**Element Code:** PDSCR06080 **Occurrence Code #:** 001 **Survey Date:** 1984-08-12

**Last Observed:** 1984-08-12 **First Observed:** 1984-08-12 **Actual Mapping Precision (m):** 150 **Precision Code:** S

**Directions:** Bow City, 9 km NE of; Hwy 36, 7.5 km W of.

**General Description:** shallow marsh, dries up intermittently; Eleocharis palustris-Limosella aquatica community

**Min Elev. (m):** 777 **Max Elev. (m):** 777 **Best Source of Info:** S84SANNNMONCA01

**Specimen Source Code Collector Herbarium Accession # Date ID OK? Observation Detail**

S84SANNNMONCA01 Sankowski, Tomasz NM 531216 1984-08-12

**Map UTM Zone UTM Easting UTM Northing Survey Site Name Notes # Dot ID #**

82108 12 419775 5592950 Bow City SW 3 Tp18 R16 and NW 34 Tp 17 R 16 W4M; 50 30/112 07 2 1419

***Bacopa rotundifolia* water hyssop** SRank: S1

***Bidens frondosa* common beggarticks**

**Natural Region:** Dry Mixedgrass

**Habitat:** Wetland-Springs

**Phenology:** late June-August

**Specific Search Strategies (if any):** sandy seepage areas in wooded coulees; search in wet wooded areas

**Element Occurrences:**

**Element Code:** PDAST180R0 **Occurrence Code #:** 001 **Survey Date:** 1995-00-00

**Last Observed:** 1995-00-00 **First Observed:** 1994-06-29 **Precision Code:** M

**Directions:** Canadian Forces Base Suffield National Wildlife Area; South Saskatchewan River, along shore and backshore seepage zones of the.

**General Description:** subhygric. shoreline; hygric barrens of Equisetum arvense, Rumex maitimus, Polygonum lapathifolium, Xanthium strumarium, Rorip sylvestris, Juncus tenuis, Ranunculus cymbalaria, Bidens frondosa, Beckmannia syzigachne, Eleocharis palustris

**Min Elev. (m):** 625 **Max Elev. (m):** 630

**Other Comments:** on western edge of its range **Best Source of Info:** U97CWS01ABCA

**Specimen Source Code Collector Herbarium Accession # Date ID OK? Observation Detail**

S94MACPMABCA09 Macdonald, I.D. PM B94.4.423 1994-06-29 Y

**Map UTM Zone UTM Easting UTM Northing Survey Site Name Notes # Dot ID #**

72L07 12 526500 5567000 Brush Flats UTM WL ca 526500 / 5567000 12 197

**Source Code Author Publisher Year Title**

U96MAC01ABCA Macdonald, I.D. Canadian Wildlife Service, Environment Canada, Prairie and 1996 Vascular Flora of Canadian Forces Base Suffield National Wildlife Area

U97CWS01ABCA Canadian Wildlife Service CWS 1997 Plant Database from Suffield Survey 1994-1995

**Date Source Abstract Code Observer Occurrence Data**

scarce in SNWA

***Bidens frondosa* common beggarticks** SRank: S1

+++++

**Element Code:** PDAST180R0 **Occurrence Code #:** 002 **Survey Date:** 1995-00-00

**Last Observed:** 1995-00-00 **First Observed:** 1994-07-08 **Precision Code:** S

**Directions:** Canadian Forces Base Suffield National Wildlife Area; South Saskatchewan River, along shore and backshore seepage zones of the.

**General Description:** subhygric meadow of Agropyron smithii, Iva axillaris, Xanthium strumarium, Hordeum jubatum, Rorippa sylvestris, Poa palustris, Rumex maritimus, Potentilla anserina, Plant maj, Helianthemum autumnale.

**Min Elev. (m):** 620 **Max Elev. (m):** 710

**Other Comments:** on western edge of its range **Best Source of Info:** U97CWS01ABCA

**Specimen Source Code Collector Herbarium Accession # Date ID OK? Observation Detail**

S94MACPMABCA10 Macdonald, I.D. PM B94.4.544 1994-07-08 Y

**Map UTM Zone UTM Easting UTM Northing Survey Site Name Notes # Dot ID #**

72L07 12 527200 5577200 Cottonwood Grove 50-20'55"N/110-37'00"W 13 198

**Source Code Author Publisher Year Title**

U96MAC01ABCA Macdonald, I.D. Canadian Wildlife Service, Environment Canada, Prairie and 1996 Vascular Flora of Canadian Forces Base Suffield National Wildlife Area

U97CWS01ABCA Canadian Wildlife Service CWS 1997 Plant Database from Suffield Survey 1994-1995

**Date Source Abstract Code Observer Occurrence Data**

scarce in SNWA

***Bidens frondosa* common beggarticks** SRank: S1

+++++

**Element Code:** PDAST180R0 **Occurrence Code #:** 003 **Survey Date:** 1995-00-00  
**Last Observed:** 1995-00-00 **First Observed:** 1994-08-29 **Precision Code:** S  
**Directions:** Canadian Forces Base Suffield National Wildlife Area; South Saskatchewan River, along shore and backshore seepage zones of the.  
**General Description:** subhygric meadow of Agropyron trachycaulum, Xanithium strumarium, Elymus canadensis, Poa compressa, Artemisia absinthium  
**Min Elev. (m):** 615 **Max Elev. (m):** 635  
**Other Comments:** on western edge of its range **Best Source of Info:** U97CWS01ABCA  
**Specimen Source Code Collector Herbarium Accession # Date ID OK? Observation Detail**  
 S94MACPMABCA11 Macdonald, I.D. PM B94.4.628 1994-08-29 Y  
**Map UTM Zone UTM Easting UTM Northing Survey Site Name Notes # Dot ID #**  
 72L07 12 528500 5579400 Twin Peaks UTM WL ca 528500 / 5579400; 50-22'05"N/110-35'55"W 14 199  
**Source Code Author Publisher Year Title**  
 U96MAC01ABCA Macdonald, I.D. Canadian Wildlife Service, Environment Canada, Prairie and 1996 Vascular Flora of Canadian Forces Base Suffield National Wildlife Area  
 U97CWS01ABCA Canadian Wildlife Service CWS 1997 Plant Database from Suffield Survey 1994-1995  
**Date Source Abstract Code Observer Occurrence Data**  
 scarce in SNWA  
**Bidens frondosa** common beggarticks SRank: S1  
 ++++++

**Element Code:** PDAST180R0 **Occurrence Code #:** 004 **Survey Date:** 1996-00-00  
**Last Observed:** 1996-00-00 **First Observed:** 1996-00-00 **Actual Mapping Precision (m):** 250 **Precision Code:** S  
**Directions:** Medicine Hat, 36 km W of  
**General Description:** 3 plants. In gravel along S bank of S. Sask. River, W of RoW, within 10 m buffer zone. Population avoided.  
**Min Elev. (m):** 671 **Max Elev. (m):** 671 **Best Source of Info:** U96EXP01ABCA  
**Map UTM Zone UTM Easting UTM Northing Survey Site Name Notes # Dot ID #**  
 72L02 12 500327 5540006 S.Sask. River NW 14-23 12-8-4; LS # 46, 301.2 km, LLD NW 23 12-8-4 19 3969  
**Source Code Author Publisher Year Title**  
 U96EXP01ABCA AXYS Environmental Consulting 1996 Express Pipeline Project  
**Bidens frondosa** common beggarticks SRank: S1  
 ++++++

**Element Code:** PDAST180R0 **Occurrence Code #:** 005 **Survey Date:** 1996-00-00  
**Last Observed:** 1996-00-00 **First Observed:** 1996-00-00 **Actual Mapping Precision (m):** 250 **Precision Code:** S  
**Directions:** Medicine Hat, 35 km W of Southern city limits; Rattlesnake Lake, 1.5 km NE of.  
**General Description:** 2 plants, wetland alluvial fan at Rattlesnake Coulee, off RoW. Protected by silt fencing.  
**Min Elev. (m):** 800 **Max Elev. (m):** 800 **Best Source of Info:** U96EXP01ABCA  
**Map UTM Zone UTM Easting UTM Northing Survey Site Name Notes # Dot ID #**  
 72E15 12 501637 5537887 Rattlesnake Lake NW 12-13 12-8-4; LS # 46, 304.1 km, 304.2 km 8 3970  
**Source Code Author Publisher Year Title**  
 U96EXP01ABCA AXYS Environmental Consulting 1996 Express Pipeline Project  
**Bidens frondosa** common beggarticks SRank: S1  
 ++++++

**Element Code:** PDAST180R0 **Occurrence Code #:** 006 **Survey Date:** 1996-00-00  
**Last Observed:** 1996-00-00 **First Observed:** 1996-00-00 **Actual Mapping Precision (m):** 600 **Precision Code:** M  
**Directions:** Patricia; 13 km N of; Hutterite Colony facilities, 700 m E of; Stream ravine basin  
**General Description:** ravine bottom stream and seepage, on subhygric loam, in marsh margin with standing water of Cattail, Common Tall Manna  
 Grass, Common Great Bulrush [community CF1-F]  
**Min Elev. (m):** 701 **Max Elev. (m):** 701  
**Other Comments:** locally abundant, with approx. 300 plants over a 20X40m area, extending beyond RoW  
**Management Comments:** disturbance by construction along the stream channel or upstream could affect this species **Best Source of Info:** U98FRY01ABCA  
**Map UTM Zone UTM Easting UTM Northing Survey Site Name Notes # Dot ID #**  
 72L13 12 448625 5629400 Patricia NW 27-21-13-4 12 4246  
**Source Code Author Publisher Year Title**  
 U98FRY01ABCA Fryer, Gina 1998 Memo from Gina Fryer to John Rintoul: rare plant locations for the Palliser Pipeline Project  
**Bidens frondosa** common beggarticks SRank: S1  
 ++++++

**Element Code:** PDAST180R0 **Occurrence Code #:** 007 **Survey Date:** 1954-08-24  
**Last Observed:** 1954-08-24 **First Observed:** 1954-08-24 **Actual Mapping Precision (m):** 2500 **Precision Code:** M  
**Directions:** Cecil, 5 km S of.  
**General Description:** flats  
**Min Elev. (m):** 724 **Max Elev. (m):** 724 **Best Source of Info:** S54MOSUAABCA11  
**Specimen Source Code Collector Herbarium Accession # Date ID OK? Observation Detail**  
S54MOSUAABCA11 Moss, E.H. UA 68422 1954-08-24 Y flowers  
**Map UTM Zone UTM Easting UTM Northing Survey Site Name Notes # Dot ID #**  
72L04 12 456000 5546000 Cecil 4 4472  
**Bidens frondosa** common beggarticks SRank: S1  
+++++

**Element Code:** PDAST180R0 **Occurrence Code #:** 008 **Survey Date:** 1990-00-00  
**Last Observed:** 1990-00-00 **First Observed:** 1990-00-00 **Actual Mapping Precision (m):** 250 **Precision Code:** S  
**Directions:** Medicine Hat, N of; Old Channel Lake; coulee springs; Sect. 29-Tp14-R5-W4M  
**General Description:** coulees along valley of S. Sask. River; moist woodland at edge of slightly saline springs  
**Min Elev. (m):** 640 **Max Elev. (m):**  
**Other Comments:** recommend protection of spring wetlands; no groundwater pumping for injection wells  
**Management Comments:** heavy cattle grazing in one spring; petroleum dev't on adjacent lands **Best Source of Info:**  
U90WAL01ABCA  
**Map UTM Zone UTM Easting UTM Northing Survey Site Name Notes # Dot ID #**  
72L02 12 525600 5561450 Old Channel Lake Sect. 29-Tp14-R5-W5M; mapped as polygon 44 6015  
**Source Code Author Publisher Year Title**  
U90WAL01ABCA Wallis, Cliff 1990 Reconnaissance Survey of Saline Wetlands and Springs in the Grassland-Parkland Region of  
Eastern Alberta  
**Date Source Abstract Code Observer Occurrence Data**  
U90WAL01ABCA C Wallis See unpubl. report  
**Bidens frondosa** common beggarticks SRank: S1  
+++++

**Element Code:** PDAST180R0 **Occurrence Code #:** 009 **Survey Date:** 1990-00-00  
**Last Observed:** 1990-00-00 **First Observed:** 1990-00-00 **Actual Mapping Precision (m):** 500 **Precision Code:** M  
**Directions:** Bindloss, west of; Dune Point Springs; N side of Red Deer River; Tp23-R3-4-W4M  
**General Description:** coulees with springs along river valley; edges of Acer negundo woodland  
**Min Elev. (m):** 610 **Max Elev. (m):** 610  
**Other Comments:** recommend continue to protect springs & groundwater sources; no groundwater pumping for injection wells  
**Management Comments:** current mgmt practice consistent with protectn, i.e., no cattle grazing, no groundwater withdrawal **Best**  
**Source of Info:** U90WAL01ABCA  
**Map UTM Zone UTM Easting UTM Northing Survey Site Name Notes # Dot ID #**  
72L16 12 543000 5643000 Bindloss 2 249  
**Source Code Author Publisher Year Title**  
U90WAL01ABCA Wallis, Cliff 1990 Reconnaissance Survey of Saline Wetlands and Springs in the Grassland-Parkland Region of  
Eastern Alberta  
**Date Source Abstract Code Observer Occurrence Data**  
1990-00-00 U90WAL01ABCA C Wallis see unpubl report in-house  
**Bidens frondosa** common beggarticks SRank: S1

**Boisduvalia glabella smooth boisduvalia**

**Natural Region:** Dry Mixedgrass

**Habitat:** Wetland-Sandy

**Phenology:** early July to August

**Specific Search Strategies (if any):** search edges of pools in dried out sandy stream channels and edges and bottoms of sandy ephemeral wetlands; plants are small and easily overlooked

**Element Occurrences:**

**Element Code:** PDONA01030 **Occurrence Code #:** 001 **Survey Date:** 1998-06-23

**Last Observed:** 1998-06-23 **First Observed:** 1989-08-15 **Precision Code:** S

Occurrence Type: annual

**Directions:** Milk River Natural Area; river, S of; entrance, 2nd valley E from; dugout in valley, S of; Ecological Reserve fence, just N of.

**General Description:** Dessicated stream channel on exundated soils; in a series of small ephemeral pools (10) along stream channel. At edges of pools on exposed mud.

**Min Elev. (m):** 990 **Max Elev. (m):** 990

**Management Comments:** Size of population appears tied to drought cycles rather than grazing by cattle. Population is being monitored yearly. **Best Source of Info:** PNDGOU01ABCA

**Specimen Source Code Collector Herbarium Accession # Date ID OK? Observation Detail**

S89WALPPABCA12 Wallis, C. PP 51 1989-08-15

**Map UTM Zone UTM Easting UTM Northing Survey Site Name Notes # Dot ID #**

72E02 12 518873 5430984 Milk River Natural Area LSD 8 10 21

**Source Code Author Publisher Year Title**

F96GOU01ABCA Gould, J 1996 Field notes

F97GOU01ABCA Gould, J. 1997 Field notes

U89WAL01ABCA Wallis, C. Alberta Forestry, Lands and Wildlife 1989 Flora and Special Features Survey of the Milk River Natural Area

U95EAS01ABCA Eastern Slopes Rangeland Seeds Ltd. 1995 A Five Year Summary of the Range Inventory and Select Species Monitoring on the Milk River Natural Area (1991-95)

**Date Source Abstract Code Observer Occurrence Data**

Gould 2,687 plants in 1991; 96 in 1992; 256 in 1993; unknown in 1994-95; 61 in 1996, 1139 in 1997, 119 in 1998, 79 in 1999.

**Boisduvalia glabella** smooth boisduvalia SRank: S2

+++++

**Element Code:** PDONA01030 **Occurrence Code #:** 002 **Survey Date:** 1991-07-02

**Last Observed:** 1991-07-02 **First Observed:** 1991-07-02 **Precision Code:** M

**Directions:** S of Seven Persons, Red Rock Coulee Natural Area

**General Description:** mixed grass prairie; well drained

**Min Elev. (m):** 985 **Max Elev. (m):** 985 **Best Source of Info:** S91JOHCFABCA06

**Specimen Source Code Collector Herbarium Accession # Date ID OK? Observation Detail**

S91JOHCFABCA06 Johnson, J.D. CF 930096 1991-07-02 Y

**Map UTM Zone UTM Easting UTM Northing Survey Site Name Notes # Dot ID #**

72E10 12 509073 5499781 Red Rock Coulee Natural Area 49 38/110 52 4 146

**Boisduvalia glabella** smooth boisduvalia SRank: S2

+++++

**Element Code:** PDONA01030 **Occurrence Code #:** 003 **Survey Date:** 1997-07-09

**Last Observed:** 1997-07-09 **First Observed:** 1997-07-09 **Actual Mapping Precision (m):** 250 **Precision Code:** S

**Directions:** S. Sask. River, 7 km S of; Creek in Bullsprings Coulee, 5.5 km W of.

**General Description:** 9 in wetland, 55 E off RoW in second wetland.

**Min Elev. (m):** 762 **Max Elev. (m):** 762 **Best Source of Info:** U97AXY03ABCA

**Map UTM Zone UTM Easting UTM Northing Survey Site Name Notes # Dot ID #**

72L08 12 536000 5582600 Bull Springs Coulee Lat 50 deg 23 min 78 sec, Long 110 deg 30 min 43 sec W - 15-33-16-4-W4M 18 3911

**Source Code Author Publisher Year Title**

U97AXY03ABCA AXYS Environmental Consulting Ltd. 1997 AEC Suffield Pipeline

**Date Source Abstract Code Observer Occurrence Data**

1997-07-09 U97AXY03ABCA no data available

**Boisduvalia glabella** smooth boisduvalia SRank: S2

+++++

**Element Code:** PDONA01030 **Occurrence Code #:** 004 **Survey Date:** 1996-00-00  
**Last Observed:** 1996-00-00 **First Observed:** 1996-00-00 **Actual Mapping Precision (m):** 250 **Precision Code:** S  
**Directions:** Seven Persons, 7.5 km NW of; Fitzgerald station, 2 km SW of.  
**General Description:** 20 plants. Cultivated ephemeral wetland. RoW narrowed. No seed mix applied. Found on muddy shoreline.  
**Min Elev. (m):** 754 **Max Elev. (m):** 754 **Best Source of Info:** U96EXP01ABCA  
**Map UTM Zone UTM Easting UTM Northing Survey Site Name Notes # Dot ID #**  
72E15 12 514695 5525030 Fitzgerald NW 12-5 -11-6-4, Km 323.2, LS# 49 9 3971  
**Source Code Author Publisher Year Title**  
U96EXP01ABCA AXYS Environmental Consulting 1996 Express Pipeline Project  
**Boisduvalia glabella** smooth boisduvalia SRank: S2  
+++++

**Element Code:** PDONA01030 **Occurrence Code #:** 005 **Survey Date:** 1996-00-00  
**Last Observed:** 1996-00-00 **First Observed:** 1996-00-00 **Actual Mapping Precision (m):** 250 **Precision Code:** S  
**Directions:** Seven persons, 10 km SE of; Fitzgerald, 5.5 km SE of.  
**General Description:** 2 on S side, 7 on N side. Alluvial fan in Robinson Coulee. RoW narrowed. No seed mix applied.  
**Min Elev. (m):** 770 **Max Elev. (m):** 770  
**Slope:** 0.00  
**Other Comments:** UTM's given as a range therefore include 516158.04E, 5522288.89N **Best Source of Info:** U96EXP01ABCA  
**Map UTM Zone UTM Easting UTM Northing Survey Site Name Notes # Dot ID #**  
72E15 12 516336 5521991 Fitzgerald NE 9-29- 10-6-4, Km 326.8 & Km 327.1, LS #49;/LS#005;km:327.1;LLD:NE 2910-6-4 10  
3972  
**Source Code Author Publisher Year Title**  
U96EXP01ABCA AXYS Environmental Consulting 1996 Express Pipeline Project  
**Boisduvalia glabella** smooth boisduvalia SRank: S2  
+++++

**Element Code:** PDONA01030 **Occurrence Code #:** 006 **Survey Date:** 1996-00-00  
**Last Observed:** 1996-00-00 **First Observed:** 1996-00-00 **Actual Mapping Precision (m):** 250 **Precision Code:** S  
**Directions:** Basin Station, 5 km NE of; Bare Creek, 2.5 km W of.  
**General Description:** Late season creek with exposed mud.  
**Min Elev. (m):** 1013 **Max Elev. (m):** 1013 **Best Source of Info:** U96EXP01ABCA  
**Map UTM Zone UTM Easting UTM Northing Survey Site Name Notes # Dot ID #**  
72E08 12 548400 5459925 Bare Creek SW 3-15 4-3-4, Km 398.3 & 398.7, LS # 60; 548578.12E, 5459616.13N., NW 10 4-3-4 10  
3973  
**Source Code Author Publisher Year Title**  
U96EXP01ABCA AXYS Environmental Consulting 1996 Express Pipeline Project  
**Boisduvalia glabella** smooth boisduvalia SRank: S2  
+++++

**Element Code:** PDONA01030 **Occurrence Code #:** 007 **Survey Date:** 1996-00-00  
**Last Observed:** 1996-00-00 **First Observed:** 1996-00-00 **Actual Mapping Precision (m):** 250 **Precision Code:** S  
**Directions:** Milk River Lake, 4 km NW of bridge over; road to One-Four, 1.5 km S of.  
**General Description:** Late season wetland with exposed mud. RoW narrowed. No seed mix applied. Cattle trampled wetland in  
Robinson Coulee.  
**Min Elev. (m):** 869 **Max Elev. (m):** 869  
**Other Comments:** UTM's given as a range therefore include UTM's: 551900.21E, 5432848.19 N; 551910.5E to 551935.67E &  
5432906.17N to 5433044.76. And 551773.44E,5432146.22N. **Best Source of Info:** U96EXP01ABCA  
**Map UTM Zone UTM Easting UTM Northing Survey Site Name Notes # Dot ID #**  
72E01 12 551890 5432792 Milk River Lake LS # 64, Km 426 & 426.9, LLD NW 12-24-1-3-4 & NW 5-13-1-3-4 - LS#64;km:  
426,426.9;LDD:SW 24 1-3-4,NW 13 1-3-4. 24 3974  
**Source Code Author Publisher Year Title**  
U96EXP01ABCA AXYS Environmental Consulting 1996 Express Pipeline Project  
**Boisduvalia glabella** smooth boisduvalia SRank: S2  
+++++

**Element Code:** PDONA01030 **Occurrence Code #:** 008 **Survey Date:** 1962-07-16  
**Last Observed:** 1962-07-16 **First Observed:** 1962-07-16 **Actual Mapping Precision (m):** 2500 **Precision Code:** M  
**Directions:** Cressday; ~2km SW of; Hwy 48; along.  
**General Description:** Margin of dried-out slough. Chromosome number of one plant of this population n=1511  
**Min Elev. (m):** 960 **Max Elev. (m):** 960 **Best Source of Info:** S62MOSACONCA02  
**Specimen Source Code Collector Herbarium Accession # Date ID OK? Observation Detail**  
S62MOSACONCA02 Mosquin, T. & L. Mosquin AC none 1962-07-16 n of one plant of this population = 1511  
**Map UTM Zone UTM Easting UTM Northing Survey Site Name Notes # Dot ID #**  
72E01 12 554500 5452950 Cressday 42 4219  
**Boisduvalia glabella** smooth boisduvalia SRank: S2  
+++++

**Element Code:** PDONA01030 **Occurrence Code #:** 009 **Survey Date:** 1953-08-15  
**Last Observed:** 1953-08-15 **First Observed:** 1953-08-15 **Actual Mapping Precision (m):** 2500 **Precision Code:** M  
**Directions:** Vale, 5.5 km W of.  
**General Description:** dry slough bottom  
**Min Elev. (m):** 777 **Max Elev. (m):** 777 **Best Source of Info:** S53MOSUAABCA42  
**Specimen Source Code Collector Herbarium Accession # Date ID OK? Observation Detail**  
S53MOSUAABCA42 Moss, E.H. UA 12942 1953-08-15 Y vegetative  
**Map UTM Zone UTM Easting UTM Northing Survey Site Name Notes # Dot ID #**  
72L01 12 537400 5563600 Vale 7 4471  
***Boisduvalia glabella*** smooth boisduvalia SRank: S2  
+++++

**Element Code:** PDONA01030 **Occurrence Code #:** 010 **Survey Date:** 1985-00-00  
**Last Observed:** 1985-00-00 **First Observed:** 1985-00-00 **Actual Mapping Precision (m):** 250 **Precision Code:** S  
**Directions:** Lost River and USA border, 5 km NE of.  
**General Description:** clay solonchic blow-outs  
**Min Elev. (m):** 884 **Max Elev. (m):** 884 **Best Source of Info:** R86WER01ABCA  
**Map UTM Zone UTM Easting UTM Northing Survey Site Name Notes # Dot ID #**  
72E01 12 546050 5428050 Lost River 44 4545  
**Source Code Author Publisher Year Title**  
R86WER01ABCA Wershler C. & C. Wallis 1986 Lost River Significant Features Assessment  
***Boisduvalia glabella*** smooth boisduvalia SRank: S2

**Bromus latiglumis** Canada brome

**Natural Region:** Northern Fescue Grassland

**Habitat:** Woodland

**Phenology:** headed out and most visible in August-September

**Specific Search Strategies (if any):** perhaps a species more of the Central and Foothills Parkland Natural Regions; lightly or ungrazed woodlands; also in low shrub/lush grassland

**Element Occurrences:**

**Element Code:** PMPOA151M0 **Occurrence Code #:** 001 **Survey Date:** 1992-08-12

**Last Observed:** 1992-08-12 **First Observed:** 1992-08-12 **Precision Code:** M

**Directions:** Kneehill M.D., Trochu, 14km NE of; Dry Island Buffalo Jump Provincial Park

**General Description:** aspen parkland, Red Deer River valley basin, dry meadow of Agropyron-Elaeagnus-Symphoricarpos-Poa-Stipa-Gaillardia; SW29

Tp34-R21-W4; 51N/112 57W; Map 82P/15 ca. 365057550

**Min Elev. (m):** 732 **Max Elev. (m):** 732 **Best Source of Info:** S92MACPMABCA01

**Specimen Source Code Collector Herbarium Accession # Date ID OK? Observation Detail**

S92MACPMABCA01 Macdonald, I.D. & M. Getty PM B93.1.53 1992-08-12 Y panicles (no leaves or roots)

**Map UTM Zone UTM Easting UTM Northing Survey Site Name Notes # Dot ID #**

82P15 12 366000 5756000 Dry Island Buffalo Jump Provincial Park 2 2297

**Bromus latiglumis** Canada brome SRank: S1

+++++

**Element Code:** PMPOA151M0 **Occurrence Code #:** 002 **Survey Date:** 1997-09-08

**Last Observed:** 1997-09-08 **First Observed:** 1997-09-08 **Actual Mapping Precision (m):** 250 **Precision Code:** S

**Directions:** Lees Lake, 2 km S of; underground gas pipeline, 250 m W of.

**General Description:** Aspen with occasional Balsam poplar-saskatoon berry-snowberry-prickly rose - Corn stol-Act rub-Phle pra-Elym can- Cala can-Gali bore- Trise cern- Meli sub

**Min Elev. (m):** 1372 **Max Elev. (m):** 1372

**Other Comments:** 11 (13) on RoW and access road, 3 (7) west of RoW, specimen collected **Best Source of Info:**

U97AXY02ABCA

**Map UTM Zone UTM Easting UTM Northing Survey Site Name Notes # Dot ID #**

82G09 11 699500 5488900 Lees Lake ESD 4B LSD Easting 13-32-6-2 W5M 32 3902

**Source Code Author Publisher Year Title**

U97AXY02ABCA Dana Bush Axys Environmental Consulting Ltd. 1997 Environmental Alignment Sheet- Burmis pipeline

**Date Source Abstract Code Observer Occurrence Data**

1997-08-07 U97AXY02ABCA 20 culms, 14 in fruit

**Bromus latiglumis** Canada brome SRank: S1

+++++

**Element Code:** PMPOA151M0 **Occurrence Code #:** 003 **Survey Date:** 1944-08-02

**Last Observed:** 1944-08-02 **First Observed:** 1944-08-02 **Actual Mapping Precision (m):** 500 **Precision Code:** M

**Directions:** Groat Ravine; near creek on side of; bridge; a few rods above.

**Min Elev. (m):** 648 **Max Elev. (m):** 648 **Best Source of Info:** S44TURUAABCA19

**Specimen Source Code Collector Herbarium Accession # Date ID OK? Observation Detail**

S44TURACONCA06 Turner, G.H. AC 55135 1944-08-02 Y

S44TURUAABCA19 Turner, G. H. UA 34418 1944-08-02 ?Y spikelets

**Map UTM Zone UTM Easting UTM Northing Survey Site Name Notes # Dot ID #**

83H12 12 331700 5935550 Edmonton 13 3356

**Bromus latiglumis** Canada brome SRank: S1



## ***Calylophus serrulatus* shrubby evening-primrose**

**Natural Region:** Northern Fescue Grassland, Foothills Fescue Grassland, Mixedgrass, Dry Mixedgrass

**Habitat:** Grassland-Sandy

**Phenology:** mid-June to late July

**Specific Search Strategies (if any):** difficult to pin down; occurs on a wide range of sites and probably should be more common than records indicate; occurs on eroding sandy or sandy-gravelly soils on level to rolling uplands and valley slopes. Quite visible when in flower; may be difficult to find at other seasons.

### **Element Occurrences:**

**Element Code:** PDONA02040 **Occurrence Code #:** 001 **Survey Date:** 1982-07-29

**Last Observed:** 1982-07-29 **First Observed:** 1982-07-29 **Precision Code:** M

**Directions:** Parkland

**General Description:** Dry S slope

**Min Elev. (m):** 708 **Max Elev. (m):** 708 **Aspect:** S **Best Source of Info:** S82ALLPPABCA07

**Specimen Source Code Collector Herbarium Accession # Date ID OK? Observation Detail**

S82ALLPPABCA07 Allen, L. & M. Jackson PP 708 1982-07-29

**Map UTM Zone UTM Easting UTM Northing Survey Site Name Notes # Dot ID #**

73D11 12 477650 5818550 Hardisty 2 315

**Date Source Abstract Code Observer Occurrence Data**

Rare-sandy prairie/dunes

*Calylophus serrulatus* shrubby evening-primrose SRank: S2

+++++

**Element Code:** PDONA02040 **Occurrence Code #:** 002 **Survey Date:** 1995-00-00

**Last Observed:** 1995-00-00 **First Observed:** 1977-00-00 **Precision Code:** M

**Directions:** Canadian Forces Base Suffield National Wildlife Area

**General Description:** from subxeric to xeric sites of dry prairie grasslands on slopes of rolling sandy ground moraine and sand hill landforms

**Min Elev. (m):** 678 **Max Elev. (m):** 678

**Other Comments:** Jaques (1977) also reported it here; at northwestern limit of its western range

**Management Comments:** threatened in this region by cultivation **Best Source of Info:** U96MAC01ABCA

**Map UTM Zone UTM Easting UTM Northing Survey Site Name Notes # Dot ID #**

72L09 12 540500 5607000 Middle Sand Hills UTM WM ca 540500 / 5607000 5 219

**Source Code Author Publisher Year Title**

U96MAC01ABCA Macdonald, I.D. Canadian Wildlife Service, Environment Canada, Prairie and 1996 Vascular Flora of Canadian Forces Base Suffield National Wildlife Area

**Date Source Abstract Code Observer Occurrence Data**

scarce in SNWA

*Calylophus serrulatus* shrubby evening-primrose SRank: S2

+++++

**Element Code:** PDONA02040 **Occurrence Code #:** 003 **Survey Date:** 1978-06-15

**Last Observed:** 1978-06-15 **First Observed:** 1978-06-15 **Precision Code:** M

**Directions:** Fabyan, about 2 mi. N of; Battle River & Hwy. 14, junction.

**General Description:** Prairie grassland; on exposed slope.

**Min Elev. (m):** 650 **Max Elev. (m):** 650

**Other Comments:** Det. by K. Tannas; specimen housed at E.S.R.C. herbarium. **Best Source of Info:** UNDTAN01ABCA

**Map UTM Zone UTM Easting UTM Northing Survey Site Name Notes # Dot ID #**

73D14 12 499900 5860650 Battle River 1 316

**Source Code Author Publisher Year Title**

UNDTAN01ABCA Tannas, K.E. Native Species Inventory Forms

**Date Source Abstract Code Observer Occurrence Data**

several sporadically occurring individuals; flowering

*Calylophus serrulatus* shrubby evening-primrose SRank: S2

+++++

**Element Code:** PDONA02040 **Occurrence Code #:** 004 **Survey Date:** 1997-06-24  
**Last Observed:** 1997-06-24 **First Observed:** 1997-06-24 **Actual Mapping Precision (m):** 100 **Precision Code:** S  
**Directions:** Lethbridge, 2 km NW of; Hardieville, 1.5 km WSW of; Alexander Wilderness Park.  
**General Description:** on dry NW slope; sandy soil; *Stipa* spp., *Calamovilfa longifolia*; *Carex filifolia*, *Plantago patagonica*,  
*Astragalus* spp.  
**Min Elev. (m):** 840 **Max Elev. (m):** 840 **Aspect:** NW **Best Source of Info:** U97ERN01ABCA  
**Map UTM Zone UTM Easting UTM Northing Survey Site Name Notes # Dot ID #**  
82H10 12 367050 5510750 Hardieville 3TM 83174.38 55111654.94 22 3793  
**Source Code Author Publisher Year Title**  
U97ERN01ABCA Ernst, Reg 1997 Rare Native Plant Survey Forms  
**Date Source Abstract Code Observer Occurrence Data**  
1997-06-25 U97ERN01ABCA Reg Ernst 1 vegetative, 4 flowering  
**Calylophus serrulatus** shrubby evening-primrose SRank: S2  
+++++

**Element Code:** PDONA02040 **Occurrence Code #:** 005 **Survey Date:** 1986-06-20  
**Last Observed:** 1986-06-20 **First Observed:** 1981-07-12 **Actual Mapping Precision (m):** 2500 **Precision Code:** M  
**Directions:** Mud Lake, 1 km W of.  
**General Description:** Fescue grassland. Open prairie.  
**Min Elev. (m):** 975 **Max Elev. (m):** 980 **Best Source of Info:** S86LAGALABCA01  
**Specimen Source Code Collector Herbarium Accession # Date ID OK? Observation Detail**  
S81MCIPMABCA09 Mclsaac, P. PM B86.37.23 1981-07-12 Y  
S82WILALABCA01 Willms, W. & R. Gschaid AL 5257 1982-07-14 Y blooming  
S86LAGALABCA01 La Groix, Robin AL none 1986-06-20 Y flowering  
**Map UTM Zone UTM Easting UTM Northing Survey Site Name Notes # Dot ID #**  
82H13 12 315000 5514250 Mud Lake 10 1390  
**Calylophus serrulatus** shrubby evening-primrose SRank: S2  
+++++

**Element Code:** PDONA02040 **Occurrence Code #:** 006 **Survey Date:** 1996-00-00  
**Last Observed:** 1996-00-00 **First Observed:** 1996-00-00 **Actual Mapping Precision (m):** 250 **Precision Code:** S  
**Directions:** Cabin Lake (the lake), 2 km SW of; Indian Creek, 100 m E of.  
**Min Elev. (m):** 716 **Max Elev. (m):** 716  
**Other Comments:** Twp/Rg. 1/4 section coord (SW) does not match with LSD (14). - Mapped with correct LSD. **Best Source of Info:** U96EXP01ABCA  
**Map UTM Zone UTM Easting UTM Northing Survey Site Name Notes # Dot ID #**  
72M03 12 485500 5652100 Indian Creek LS # 28; Km 183; LLD SW 4 24-9-4 3 4143  
**Source Code Author Publisher Year Title**  
U96EXP01ABCA AXYS Environmental Consulting 1996 Express Pipeline Project  
**Calylophus serrulatus** shrubby evening-primrose SRank: S2  
+++++

**Element Code:** PDONA02040 **Occurrence Code #:** 007 **Survey Date:** 1928-07-30  
**Last Observed:** 1928-07-30 **First Observed:** 1928-07-30 **Actual Mapping Precision (m):** 2500 **Precision Code:** M  
**Directions:** Fort Macleod.  
**General Description:** old stubble field  
**Min Elev. (m):** 945 **Max Elev. (m):** 945 **Best Source of Info:** S28DIXUAABCA03  
**Specimen Source Code Collector Herbarium Accession # Date ID OK? Observation Detail**  
S28DIXUAABCA03 Dixon, R.H. UA 13173 1928-07-30 Y flowers; fruits  
**Map UTM Zone UTM Easting UTM Northing Survey Site Name Notes # Dot ID #**  
82H11 12 327500 5510300 Fort Macleod 8 4444  
**Calylophus serrulatus** shrubby evening-primrose SRank: S2  
+++++

**Element Code:** PDONA02040 **Occurrence Code #:** 008 **Survey Date:** 1971-06-15  
**Last Observed:** 1971-06-15 **First Observed:** 1971-06-15 **Actual Mapping Precision (m):** 900 **Precision Code:** M  
**Directions:** Hwy 41 Crossing on South Saskatchewan River, 1.5 km NW of.  
**General Description:** dry, S-facing slope; in patch of *Juniperus horizontalis*  
**Min Elev. (m):** 716 **Max Elev. (m):** 716 **Aspect:** S **Best Source of Info:** S71SCOUAABCA36  
**Specimen Source Code Collector Herbarium Accession # Date ID OK? Observation Detail**  
S71SCOUAABCA36 Scott, P.J. UA 38689 1971-06-15 Y flowers  
**Map UTM Zone UTM Easting UTM Northing Survey Site Name Notes # Dot ID #**  
72L09 12 564850 5621250 South Saskatchewan River 37 4492  
**Calylophus serrulatus** shrubby evening-primrose SRank: S2  
+++++

**Element Code:** PDONA02040 **Occurrence Code #:** 009 **Survey Date:** 1976-07-12  
**Last Observed:** 1976-07-12 **First Observed:** 1976-07-12 **Actual Mapping Precision (m):** 800 **Precision Code:** M  
**Directions:** Empress, 5 km N of; Hamilton Hill.  
**General Description:** open grass  
**Min Elev. (m):** 632 **Max Elev. (m):** 632 **Best Source of Info:** S76KLAUAABCA10  
**Specimen Source Code Collector Herbarium Accession # Date ID OK? Observation Detail**  
S76KLAUAABCA10 Klar, Andrew UA 80781 1976-07-12 Y flowers; fruits  
**Map UTM Zone UTM Easting UTM Northing Survey Site Name Notes # Dot ID #**  
72L16 12 569000 5650000 Hamilton Hill 51 00/110 01 17 4500  
**Calylophus serrulatus** shrubby evening-primrose SRank: S2  
+++++

**Element Code:** PDONA02040 **Occurrence Code #:** 010 **Survey Date:** 1976-07-18  
**Last Observed:** 1976-07-18 **First Observed:** 1976-07-18 **Actual Mapping Precision (m):** 1800 **Precision Code:** M  
**Directions:** Lost River and Hwy 502 crossing.  
**General Description:** silt deposit in dried-up floodplain  
**Min Elev. (m):** 915 **Max Elev. (m):** 915 **Best Source of Info:** S76KLAUAABCA12  
**Specimen Source Code Collector Herbarium Accession # Date ID OK? Observation Detail**  
S76KLAUAABCA12 Klar, Andrew UA 80782 1976-07-18 Y buds, flowers  
**Map UTM Zone UTM Easting UTM Northing Survey Site Name Notes # Dot ID #**  
72E02 12 531623 5438309 Lost River 49 06N/110 34W 22 33  
**Calylophus serrulatus** shrubby evening-primrose SRank: S2  
+++++

**Element Code:** PDONA02040 **Occurrence Code #:** 011 **Survey Date:** 1985-00-00  
**Last Observed:** 1985-00-00 **First Observed:** 1985-00-00 **Actual Mapping Precision (m):** 50 **Precision Code:** S  
**Directions:** Lost River Valley, slope of; USA border, N of.  
**General Description:** sandy soil  
**Min Elev. (m):** 869 **Max Elev. (m):** 884 **Best Source of Info:** R86WER01ABCA  
**Map UTM Zone UTM Easting UTM Northing Survey Site Name Notes # Dot ID #**  
72E01 12 541350 5427775 Lost River 45 4546  
**Source Code Author Publisher Year Title**  
R86WER01ABCA Wershler C. & C. Wallis 1986 Lost River Significant Features Assessment  
**Calylophus serrulatus** shrubby evening-primrose SRank: S2  
+++++

**Element Code:** PDONA02040 **Occurrence Code #:** 012 **Survey Date:** 1985-00-00  
**Last Observed:** 1985-00-00 **First Observed:** 1985-00-00 **Actual Mapping Precision (m):** 50 **Precision Code:** S  
**Directions:** USA border, 8 km N of; Lost River Valley, E slope of.  
**General Description:** stabilized dunes  
**Min Elev. (m):** 861 **Max Elev. (m):** 899 **Best Source of Info:** R86WER01ABCA  
**Map UTM Zone UTM Easting UTM Northing Survey Site Name Notes # Dot ID #**  
72E02 12 535073 5435085 Lost River 20 31  
**Source Code Author Publisher Year Title**  
R86WER01ABCA Wershler C. & C. Wallis 1986 Lost River Significant Features Assessment  
**Calylophus serrulatus** shrubby evening-primrose SRank: S2  
+++++

**Element Code:** PDONA02040 **Occurrence Code #:** 013 **Survey Date:** 1999-08-17  
**Last Observed:** 1999-08-17 **First Observed:** 1999-08-17 **Actual Mapping Precision (m):** 100 **Precision Code:** S  
**Directions:** Highway 555, 16.5 km N of; Red Deer River, 12 km N of; Alkali Creek, 500 m E of.  
**General Description:** steep slope of a valley terrace in cobbly/sandy clay soils in a prairie shrubland; Rosa woo/Stip com-Koel  
mac-Ruhl cus; Arte fri, Sali mis, Gote sar; xeric; 20 deg. slope  
**Min Elev. (m):** 709 **Max Elev. (m):** 709 **Aspect:** NW  
**Management Comments:** Stake boundaries of areas to be protected. **Best Source of Info:** U99GOL01ABCA  
**Map UTM Zone UTM Easting UTM Northing Survey Site Name Notes # Dot ID #**  
72L15 12 530525 5644500 Highway 555 04-18-23-04-W4M, Lat 50 57.201' Lon 110 33.818' 5 5329  
**Source Code Author Publisher Year Title**  
U99GOL01ABCA Golder Associates & Boss environmental consulting ltd. 1999 Alberta Ethane Gathering System (AEGS) Looping  
Project - East Leg Conservation and Reclamation Plan vol. 2 (Empress to Hanna) U99GOL02ABCA Golder Associates 1999  
Rare Native Plant Forms- Golder's survey along BP Amoco Alberta Ethane Gathering System Pipeline right of way  
**Date Source Abstract Code Observer Occurrence Data**  
U99GOL02ABCA 50% flowering, 50% fruiting  
1999-08-17 U99GOL01ABCA 33 individuals sighted occurring on and off the ROW up to 21 m away  
**Calylophus serrulatus** shrubby evening-primrose SRank: S2

**Camissonia andina upland evening-primrose**

**Natural Region:** Dry Mixedgrass

**Habitat:** Grassland-Sandy

**Phenology:** late May-early June

**Specific Search Strategies (if any):** microtopography; around rims and in bottoms of seasonally moist slight depressions, tiny features within sand plain grassland

**Element Occurrences:**

**Element Code:** PDONA03010 **Occurrence Code #:** 001 **Survey Date:** 1999-06-08

**Last Observed:** 1999-06-08 **First Observed:** 1989-07-02 **Precision Code:** S

Occurrence Type: annual

**Directions:** Milk River Natural Area

**General Description:** Somewhat exposed sandy soil in moist swales on S-facing hillside, not in alkali flats or lowlands.

**Min Elev. (m):** 985 **Max Elev. (m):** 985 **Best Source of Info:** S89WALPPABCA11

**Specimen Source Code Collector Herbarium Accession # Date ID OK? Observation Detail**

S89WALPPABCA11 Wallis, C. PP 52 1989-07-02

**Map UTM Zone UTM Easting UTM Northing Survey Site Name Notes # Dot ID #**

72E02 12 517473 5431384 Milk River Natural Area LSD 12 12 23

**Source Code Author Publisher Year Title**

F97GOU01ABCA Gould, J. 1997 Field notes

**Date Source Abstract Code Observer Occurrence Data**

Habitat extremely scarce; approx. 100 plants 1999-06-08 J. Gould, D. Vujnovic 106 plants noted

**Camissonia andina** upland evening-primrose SRank: S1

+++++

**Element Code:** PDONA03010 **Occurrence Code #:** 002 **Survey Date:** 1985-05-28

**Last Observed:** 1985-05-28 **First Observed:** 1985-05-28 **Actual Mapping Precision (m):** 400 **Precision Code:** M

**Directions:** Onefour, 8 km S of; Lost River, 1.5 km NE of.

**General Description:** seasonally moist slight depression in grassland

**Min Elev. (m):** 906 **Max Elev. (m):** 906 **Best Source of Info:** S85WALUAABCA11

**Specimen Source Code Collector Herbarium Accession # Date ID OK? Observation Detail**

S85WALUAABCA11 Wallis, C. UA 098375 1985-05-28 Y [rare]; flowers, fruits

**Map UTM Zone UTM Easting UTM Northing Survey Site Name Notes # Dot ID #**

72E01 12 538625 5432975 Lost River 52 4553

**Source Code Author Publisher Year Title**

R86WER01ABCA Wershler C. & C. Wallis 1986 Lost River Significant Features Assessment

**Camissonia andina** upland evening-primrose SRank: S1

***Camissonia breviflora taraxia***

**Natural Region:** Northern Fescue Grassland, Dry Mixedgrass

**Habitat:** Wetland-Alkali

**Phenology:** flowers in July

**Specific Search Strategies (if any):** edge of ephemeral sandy alkali wetlands; may be worth checking out ungrazed ephemeral wetlands within cultivation. Not every dot in Moss (1983) can be attributed to collections noted in the ANHIC data file.

**Element Occurrences:**

**Element Code:** PDONA03060 **Occurrence Code #:** 001 **Survey Date:** 1946-07-27

**Last Observed:** 1946-07-27 **First Observed:** 1946-07-27 **Precision Code:** G

**Directions:** Etzikom, near

**General Description:** dry slough bottom

**Min Elev. (m):** 876 **Max Elev. (m):** 876

**Other Comments:** Det. by E.H Moss **Best Source of Info:** S46MOSUAABCA05

**Specimen Source Code Collector Herbarium Accession # Date ID OK? Observation Detail**

S46MOSUAABCA05 Moss, E.H. UA 13143 1946-07-27 [small yellow flowers; fruit]

**Map UTM Zone UTM Easting UTM Northing Survey Site Name Notes # Dot ID #**

72E06 12 492700 5480225 Etzikom 2 80

***Camissonia breviflora taraxia*** SRank: S1

## Carex hystericina porcupine sedge

**Natural Region:** Dry Mixedgrass

**Habitat:** Wetland-Springs

**Phenology:** heads out in July

**Specific Search Strategies (if any):** lightly or ungrazed springs in sandy coulee woodlands; also spring-fed beaver ponds on valley slopes in sandy terrain

### Element Occurrences:

**Element Code:** PMCYP036D0 **Occurrence Code #:** 001 **Survey Date:** 1974-09-07

**Last Observed:** 1974-09-07 **First Observed:** 1974-09-07 **Precision Code:** M

**General Description:** Wet soil in open roadside ditch.

**Min Elev. (m):** 730 **Max Elev. (m):** 730 **Best Source of Info:** S74PEGPMABCA02

**Specimen Source Code Collector Herbarium Accession # Date ID OK? Observation Detail**

S74PEGPMABCA02 Pegg, G.R. PM B88.1.1788 1974-09-07 Only one robust plant seen here to 70 cm tall, strongly caespitose, dispersing fruits.

**Map UTM Zone UTM Easting UTM Northing Survey Site Name Notes # Dot ID #**

83G10 11 658400 5938250 Fallis Lat/Long: 53 35' 114 36' 13 3137

**Carex hystericina** porcupine sedge SRank: S1

+++++

**Element Code:** PMCYP036D0 **Occurrence Code #:** 002 **Survey Date:** 1974-09-07

**Last Observed:** 1974-09-07 **First Observed:** 1974-09-07 **Precision Code:** S

**Directions:** Along railroad tracks.

**Min Elev. (m):** 730 **Max Elev. (m):** 730 **Best Source of Info:** S74PEGPMABCA03

**Specimen Source Code Collector Herbarium Accession # Date ID OK? Observation Detail**

S74PEGPMABCA03 Pegg, G.R. PM B88.1.1787 1974-09-07 1 plant; dispersing fruits.

**Map UTM Zone UTM Easting UTM Northing Survey Site Name Notes # Dot ID #**

83G09 11 667300 5936950 Wabamun Lat/Long: 53 34' 114 29' 4 3115

**Carex hystericina** porcupine sedge SRank: S1

+++++

**Element Code:** PMCYP036D0 **Occurrence Code #:** 003 **Survey Date:** 2000-09-08

**Last Observed:** 2000-09-08 **First Observed:** 2000-08-07 **Actual Mapping Precision (m):** 250 **Precision Code:** S

**Directions:** Crooked Lake, E side of channel between N & S sections of lake

**General Description:** wet, sandy, wind-exposed lake shore; stable comm, not developed (early successional plants on sand exposed by receding water level the previous season; Carex bebbii/Juncus bufonius/ Calamagrostis stricta/ Equisetum palustre/ Salix saplings

**Min Elev. (m):** 621 **Max Elev. (m):** 621

**Other Comments:** 2 specimens collected (UA Herbarium); ~20 individuals; Fruiting (shedding ripe seed in Sept); ite should be protected by approval of Special Places proposal; slides of habitat & diagnostic feature; site hygric - subhygric **Best Source of Info:** U00GRI01ABCA

**Map UTM Zone UTM Easting UTM Northing Survey Site Name Notes # Dot ID #**

83I13 12 337175 6089100 Crooked Lake Twp 68 Rge 24 W4M Sec 35 LSD 1 6 6324

**Source Code Author Publisher Year Title**

U00GRI01ABCA Griffiths, Graham C.D. & Deirdre E. Griffiths 2000 Rare Native Plant Survey Forms

**Carex hystericina** porcupine sedge SRank: S1

+++++

**Element Code:** PMCYP036D0 **Occurrence Code #:** 004 **Survey Date:** 2000-09-08

**Last Observed:** 2000-09-08 **First Observed:** 2000-08-07 **Actual Mapping Precision (m):** 250 **Precision Code:** S

**Directions:** Crooked Lake, SW side of; on Creek Cove Point

**General Description:** wet, sandy, wind-exposed lake shore; stable comm, not developed (early successional plants on sand exposed by receding water level the previous season; Carex bebbii/Juncus bufonius/ Calamagrostis stricta/ Equisetum palustre/ Salix saplings

**Min Elev. (m):** 621 **Max Elev. (m):** 621

**Other Comments:** 2 specimens collected (UA Herbarium); ~20 individuals; Fruiting (shedding ripe seed in Sept); ite should be protected by approval of Special Places proposal; slides of habitat & diagnostic feature; site hygric - subhygric **Best Source of Info:** U00GRI01ABCA

**Map UTM Zone UTM Easting UTM Northing Survey Site Name Notes # Dot ID #**

83I13 12 337475 6086200 Crooked Lake Twp 68 Rge 24 W4M Sec 24 LSD 5 7 6325

**Source Code Author Publisher Year Title**

U00GRI01ABCA Griffiths, Graham C.D. & Deirdre E. Griffiths 2000 Rare Native Plant Survey Forms

**Carex hystericina** porcupine sedge SRank: S1

**Element Code:** PMCYP036D0 **Occurrence Code #:** 005 **Survey Date:** 2000-09-08  
**Last Observed:** 2000-09-08 **First Observed:** 2000-08-07 **Actual Mapping Precision (m):** 250 **Precision Code:** S  
**Directions:** Crooked Lake

**General Description:** wet, sandy, wind-exposed lake shore; stable comm, not developed (early successional plants on sand exposed by receding water level the previous season; *Carex bebbii*/*Juncus bufonius*/ *Calamagrostis stricta*/ *Equisetum palustre*/ *Salix* saplings

**Min Elev. (m):** 621 **Max Elev. (m):** 621

**Other Comments:** 2 specimens collected (UA Herbarium); ~20 individuals; Fruiting (shedding ripe seed in Sept); ite should be protected by approval of Special Places proposal; slides of habitat & diagnostic feature; site hygic - subhygic **Best Source of Info:** U00GRI01ABCA

**Map UTM Zone UTM Easting UTM Northing Survey Site Name Notes # Dot ID #**

83I13 12 337175 6089100 Crooked Lake Twp 68 Rge 24 W4M Sec 35 LSD 1 6 6324

83I13 12 337475 6086200 Crooked Lake Twp 68 Rge 24 W4M Sec 24 LSD 5 7 6324

**Source Code Author Publisher Year Title**

U00GRI01ABCA Griffiths, Graham C.D. & Deirdre E. Griffiths 2000 Rare Native Plant Survey Forms

**Carex hystericina** porcupine sedge SRank: S1

**Carex nebrascensis** Nebraska sedge

**Natural Region:** Foothills Fescue Grassland, Mixedgrass, Dry Mixedgrass

**Habitat:** Wetland-Springs

**Phenology:** heads out in July

**Specific Search Strategies (if any):** visible and distinctive into September and October; lightly or ungrazed spring-fed creeks and sloughs where there is a semi-permanent water supply

**Element Occurrences:**

**Element Code:** PMCYP03940 **Occurrence Code #:** 001 **Survey Date:** 1988-07-08

**Last Observed:** 1988-07-08 **First Observed:** 1988-07-08 **Precision Code:** S

**Directions:** Warner; Twin River Valley Natural Area.

**General Description:** In and beside stream, in bottom of coulee, humus, isolation and cold air damage, floods may be expected, subhygric, cool soil temp, mod. well drainage, mod perviousness.

**Min Elev. (m):** 1105 **Max Elev. (m):** 1105

**Slope:** 1.00 **Aspect:** S **Best Source of Info:** F88WEE01ABCA

**Specimen Source Code Collector Herbarium Accession # Date ID OK? Observation Detail**

S88WEEPPABCA02 Weerstra, A. PP 003560 1988-07-08 Common

S88WEEPPABCA07 Weerstra, A. PP 587 1988-07-08

**Map UTM Zone UTM Easting UTM Northing Survey Site Name Notes # Dot ID #**

82H01 12 402250 5445500 Twin River Valley Natural Area Plot 26 3 913

**Source Code Author Publisher Year Title**

F88WEE01ABCA Weerstra, A. Twin River Field Notes

**Carex nebrascensis** Nebraska sedge SRank: S2

+++++

**Element Code:** PMCYP03940 **Occurrence Code #:** 002 **Survey Date:** 1988-05-28

**Last Observed:** 1988-05-28 **First Observed:** 1988-05-28 **Precision Code:** M

**Directions:** Milk River, N side of; Ross Ranch.

**General Description:** creek bank communities; imperfectly drained.

**Min Elev. (m):** 876 **Max Elev. (m):** 920 **Best Source of Info:** S88SCOCFABCA02

**Specimen Source Code Collector Herbarium Accession # Date ID OK? Observation Detail**

S88SCOCFABCA02 Scotter, G.W. CF 880791 1988-05-28 developing fruits

**Map UTM Zone UTM Easting UTM Northing Survey Site Name Notes # Dot ID #**

72E03 12 481823 5445785 Ross Ranch 2 37

**Source Code Author Publisher Year Title**

U95MAC01ABCA Macdonald Ian D. & Bonnie Smith COSEWIC 1995 Status Report on the Nebraska Sedge Carex nebrascensis in Canada

**Carex nebrascensis** Nebraska sedge SRank: S2

+++++

**Element Code:** PMCYP03940 **Occurrence Code #:** 003 **Survey Date:** 1993-09-25

**Last Observed:** 1993-09-25 **First Observed:** 1993-09-25 **Precision Code:** S

**Directions:** Aden, 16 km W of; Hwy 500, S of; Macdonald Creek

**General Description:** Mixed Grass Ecoregion: shallow valley in rolling prairie, shore of stream forming extensive pure colony with Typha latifolia; Site #16-Map46

**Min Elev. (m):** 1058 **Max Elev. (m):** 1058 **Size of Occurrence:** 0.31

**Other Comments:** Ref. Macdonald, I.D. & B. Smith, 1994. COSEWIC report on Nebraska sedge - Carex nebrascensis C. Dewey

**Best Source of Info:** S93MACUAABCA06

**Specimen Source Code Collector Herbarium Accession # Date ID OK? Observation Detail**

S93MACUAABCA06 Macdonald, Ian D. UA 100337 1993-09-25 Y inflorescences only; plants 110 cm tall, profusely fruiting; well-developed fruits

**Map UTM Zone UTM Easting UTM Northing Survey Site Name Notes # Dot ID #**

72E04 12 463074 5430359 Macdonald Creek 12 60

**Source Code Author Publisher Year Title**

U95MAC01ABCA Macdonald Ian D. & Bonnie Smith COSEWIC 1995 Status Report on the Nebraska Sedge Carex nebrascensis in Canada

**Carex nebrascensis** Nebraska sedge SRank: S2

+++++



**Element Code:** PMCYP03940 **Occurrence Code #:** 004 **Survey Date:** 1993-07-17  
**Last Observed:** 1993-07-17 **First Observed:** 1993-07-17 **Precision Code:** S  
**Directions:** Aden, 12 km W of; Hwy 500, N of; Black Creek Coulee, Southern tributary of  
**General Description:** mixed grass ecoregion: incised valley basin stream edge saturated marsh od *Carex nebrascensis*, *Mentha arvensis*, *Epilobium palustre*, *Calamagrostis stricta*; Site #17-Map4C  
**Min Elev. (m):** 998 **Max Elev. (m):** 1021 **Size of Occurrence:** 0.04 **Best Source of Info:** S93MACUAABCA05  
**Specimen Source Code Collector Herbarium Accession # Date ID OK? Observation Detail**  
S93MACUAABCA05 Macdonald, Ian D. UA 100336 1993-07-17 Y Nebraska sedge along 0.5 km of this valley; well-developed fruits  
**Map UTM Zone UTM Easting UTM Northing Survey Site Name Notes # Dot ID #**  
72E03 12 465524 5430909 Black Coulee 5 40  
**Source Code Author Publisher Year Title**  
U95MAC01ABCA Macdonald Ian D. & Bonnie Smith COSEWIC 1995 Status Report on the Nebraska Sedge *Carex nebrascensis* in Canada  
***Carex nebrascensis*** Nebraska sedge SRank: S2  
+++++

**Element Code:** PMCYP03940 **Occurrence Code #:** 005 **Survey Date:** 1993-07-08  
**Last Observed:** 1993-07-08 **First Observed:** 1993-07-08 **Precision Code:** S  
**Directions:** AB; Warner County; Hwy 500, S of Boundary Road extension to; Coutts, 18 km E of  
**General Description:** Mixed Grass Ecoregion: valley basin alternate flow channel very wet marsh of *Carex nebrascensis*, *Juncus balticus*, *Sonchus arvensis*  
**Min Elev. (m):** 1014 **Max Elev. (m):** 1014 **Size of Occurrence:** 0.26  
**Other Comments:** same ref: COSEWIC Nebraska sedge Site 3 **Best Source of Info:** S93MACUAABCA04  
**Specimen Source Code Collector Herbarium Accession # Date ID OK? Observation Detail**  
S93MACUAABCA04 Macdonald, Ian D. UA 100335 1993-07-08 Y developing fruits  
**Map UTM Zone UTM Easting UTM Northing Survey Site Name Notes # Dot ID #**  
72E04 12 447948 5428559 Police Creek 49 00/111 42 72E/4 VK448154280 13 61  
***Carex nebrascensis*** Nebraska sedge SRank: S2  
+++++

**Element Code:** PMCYP03940 **Occurrence Code #:** 006 **Survey Date:** 1993-06-05  
**Last Observed:** 1993-06-25 **First Observed:** 1993-05-26 **Precision Code:** S  
**Directions:** Aden, 19 km W of; USA border, N of; Deer Creek  
**General Description:** mixed grass ecoregion: incised valley floodplain stream edge, wet fringe meadow under *Populus balsamifera* subsp. *trichocarpa*. Site 11-Map 4b  
**Min Elev. (m):** 1170 **Max Elev. (m):** 1197 **Best Source of Info:** S93MACUAABCA03  
**Specimen Source Code Collector Herbarium Accession # Date ID OK? Observation Detail**  
S93MACUAABCA01 Macdonald, Ian D. UA 100332 1993-05-26 Y local concentrations, bases immersed in alluvial spring flood silts; spikelets in anthesis  
S93MACUAABCA03 Macdonald, Ian D. UA 100334 1993-06-05 Y flowers, male and female in anthesis or post-anthesis  
**Map UTM Zone UTM Easting UTM Northing Survey Site Name Notes # Dot ID #**  
72E04 12 458624 5427259 Deer Creek 14 62  
**Source Code Author Publisher Year Title**  
U95MAC01ABCA Macdonald Ian D. & Bonnie Smith COSEWIC 1995 Status Report on the Nebraska Sedge *Carex nebrascensis* in Canada  
***Carex nebrascensis*** Nebraska sedge SRank: S2  
+++++

**Element Code:** PMCYP03940 **Occurrence Code #:** 007 **Survey Date:** 1993-06-03  
**Last Observed:** 1993-06-03 **First Observed:** 1993-06-03 **Precision Code:** S  
**Directions:** Coutts, 16 km E of; Boundary Road, S of ; extension to Hwy 500  
**General Description:** Mixed grass ecoregion: broad shallow valley basin alkaline seepage wet fringe of marsh of *Typha latifolia* with *Juncus balticus*, *Carex lanuginosa*, *Triglochin maritima*, *Equisetum arvense*; Site 1 - Map 4a  
**Min Elev. (m):** 1005 **Max Elev. (m):** 1015 **Size of Occurrence:** 0.09 **Best Source of Info:** S93MACUAABCA02  
**Specimen Source Code Collector Herbarium Accession # Date ID OK? Observation Detail**  
S93MACUAABCA02 Macdonald, Ian D. UA 100333 1993-06-03 Y spikelets - late anthesis  
**Map UTM Zone UTM Easting UTM Northing Survey Site Name Notes # Dot ID #**  
72E04 12 446398 5428009 Police Creek 49 00N/111 44W 15 63  
**Source Code Author Publisher Year Title**  
U95MAC01ABCA Macdonald Ian D. & Bonnie Smith COSEWIC 1995 Status Report on the Nebraska Sedge *Carex nebrascensis* in Canada  
***Carex nebrascensis*** Nebraska sedge SRank: S2  
+++++

**Element Code:** PMCYP03940 **Occurrence Code #:** 008 **Survey Date:** 1992-07-23  
**Last Observed:** 1992-07-23 **First Observed:** 1992-07-23 **Precision Code:** S  
**Directions:** West Butte, NW of; Sweetgrass Hills, coulee off N slope of  
**General Description:** Mixed grassland; dry rolling prairie - coulee basin; moist seepage meadow of Carex-Epilobium-Eleocharis;  
Site #8 - Map 4b  
**Min Elev. (m):** 1127 **Max Elev. (m):** 1173 **Size of Occurrence:** 0.03 **Best Source of Info:** S92MACUAABCA01  
**Specimen Source Code Collector Herbarium Accession # Date ID OK? Observation Detail**  
S92MACUAABCA01 Macdonald, Ian D. UA none 1992-07-23 Y fruits  
**Map UTM Zone UTM Easting UTM Northing Survey Site Name Notes # Dot ID #**  
72E04 12 456149 5427983 Ramsay Coulee 49 00N/111 36W 16 64  
**Source Code Author Publisher Year Title**  
U95MAC01ABCA Macdonald Ian D. & Bonnie Smith COSEWIC 1995 Status Report on the Nebraska Sedge Carex nebrascensis in  
Canada  
**Carex nebrascensis** Nebraska sedge SRank: S2  
+++++

**Element Code:** PMCYP03940 **Occurrence Code #:** 009 **Survey Date:** 1993-07-08  
**Last Observed:** 1993-07-08 **First Observed:** 1993-06-03 **Precision Code:** S  
**Directions:** Hwy 500, S of; Police Creek  
**General Description:** gently rolling prairie terrain, alkali seepage  
**Min Elev. (m):** 1003 **Max Elev. (m):** 1021 **Size of Occurrence:** 0.12  
**Other Comments:** Site 2 - Map 4a  
**Management Comments:** site adjacent to close grazing management, but not threatened **Best Source of Info:**  
U95MAC01ABCA  
**Map UTM Zone UTM Easting UTM Northing Survey Site Name Notes # Dot ID #**  
72E04 12 446773 5428784 Police Creek 17 65  
**Source Code Author Publisher Year Title**  
U95MAC01ABCA Macdonald Ian D. & Bonnie Smith COSEWIC 1995 Status Report on the Nebraska Sedge Carex nebrascensis in  
Canada  
**Carex nebrascensis** Nebraska sedge SRank: S2  
+++++

**Element Code:** PMCYP03940 **Occurrence Code #:** 010 **Survey Date:** 1991-07-22  
**Last Observed:** 1991-07-22 **First Observed:** 1991-07-22 **Precision Code:** S  
**Directions:** Writing-on-Stone P.P., SW of; Van Cleeve Coulee, S of  
**General Description:** coulee basin meandering stream channel landform  
**Min Elev. (m):** 967 **Max Elev. (m):** 967  
**Other Comments:** Site 4 - Map 4a  
**Management Comments:** Its location relative to the other nearby sites would indicate hope for the discovery of further sites along  
the Milk Ri **Best Source of Info:** U95MAC01ABCA  
**Map UTM Zone UTM Easting UTM Northing Survey Site Name Notes # Dot ID #**  
72E04 12 447723 5434233 Van Cleeve Coulee 18 66  
**Source Code Author Publisher Year Title**  
U95MAC01ABCA Macdonald Ian D. & Bonnie Smith COSEWIC 1995 Status Report on the Nebraska Sedge Carex nebrascensis in  
Canada  
**Carex nebrascensis** Nebraska sedge SRank: S2  
+++++

**Element Code:** PMCYP03940 **Occurrence Code #:** 011 **Survey Date:** 1993-07-15  
**Last Observed:** 1993-07-15 **First Observed:** 1993-07-15 **Precision Code:** S  
**Directions:** US border, N of; Police Creek  
**General Description:** deeply incised coulee basin landform  
**Min Elev. (m):** 1052 **Max Elev. (m):** 1052  
**Other Comments:** Site 5 - Map 4a  
**Management Comments:** Site is somewhat isolated from adjacent grazing and is not threatened. **Best Source of Info:**  
U95MAC01ABCA  
**Map UTM Zone UTM Easting UTM Northing Survey Site Name Notes # Dot ID #**  
72E04 12 451424 5427784 Police Creek 19 67  
**Source Code Author Publisher Year Title**  
U95MAC01ABCA Macdonald Ian D. & Bonnie Smith COSEWIC 1995 Status Report on the Nebraska Sedge Carex nebrascensis in  
Canada  
**Carex nebrascensis** Nebraska sedge SRank: S2  
+++++

**Element Code:** PMCYP03940 **Occurrence Code #:** 012 **Survey Date:** 1993-05-25  
**Last Observed:** 1993-05-25 **First Observed:** 1988-00-00 **Precision Code:** S  
**Directions:** US border, just N of; Police Creek  
**General Description:** deeply incised and well developed coulee of the sloping sweetgrass north slopes landform  
**Min Elev. (m):** 1135 **Max Elev. (m):** 1135  
**Other Comments:** 500-1000 plants; Site 6 - Map4b  
**Management Comments:** Site is somewhat isolated from adjacent close grazing and is not threatened. **Best Source of Info:**  
U95MAC01ABCA  
Map UTM Zone UTM Easting UTM Northing Survey Site Name Notes # Dot ID #  
72E04 12 454599 5427134 Police Creek 20 68  
Source Code Author Publisher Year Title  
U95MAC01ABCA Macdonald Ian D. & Bonnie Smith COSEWIC 1995 Status Report on the Nebraska Sedge Carex nebrascensis in  
Canada  
**Carex nebrascensis** Nebraska sedge SRank: S2  
+++++

**Element Code:** PMCYP03940 **Occurrence Code #:** 013 **Survey Date:** 1993-09-25  
**Last Observed:** 1993-09-25 **First Observed:** 1992-10-01 **Precision Code:** S  
**Directions:** US border, N of; Police Creek, tributary, E  
**General Description:** incised valley and the coulee landforms; extensive alkali seepage  
**Min Elev. (m):** 1103 **Max Elev. (m):** 1143 **Size of Occurrence:** 0.13  
**Other Comments:** Site 7 - Map 4b  
**Management Comments:** Site is adjacent to moderate to locally intensive close grazing and local ranch buildings, but overall not  
threatened. **Best Source of Info:** U95MAC01ABCA  
Map UTM Zone UTM Easting UTM Northing Survey Site Name Notes # Dot ID #  
72E04 12 455074 5428083 Police Creek 21 69  
Source Code Author Publisher Year Title  
U95MAC01ABCA Macdonald Ian D. & Bonnie Smith COSEWIC 1995 Status Report on the Nebraska Sedge Carex nebrascensis in  
Canada  
**Carex nebrascensis** Nebraska sedge SRank: S2  
+++++

**Element Code:** PMCYP03940 **Occurrence Code #:** 014 **Survey Date:** 1993-07-15  
**Last Observed:** 1993-07-15 **First Observed:** 1993-07-15 **Precision Code:** S  
**Directions:** Boundary Road, N of; Ramsay Coulee, SW of  
**General Description:** On shore of a reservoir and presents poor examples of the flowing/standing water and stream/pond  
backshore communities.  
**Min Elev. (m):** 1135 **Max Elev. (m):** 1135 **Size of Occurrence:** 0.01  
**Other Comments:** Site 9 - Map 4b  
**Management Comments:** Site is not threatened from grazing and reservoir management. **Best Source of Info:**  
U95MAC01ABCA  
Map UTM Zone UTM Easting UTM Northing Survey Site Name Notes # Dot ID #  
72E04 12 455824 5428408 Ramsay Coulee 22 70  
Source Code Author Publisher Year Title  
U95MAC01ABCA Macdonald Ian D. & Bonnie Smith COSEWIC 1995 Status Report on the Nebraska Sedge Carex nebrascensis in  
Canada  
**Carex nebrascensis** Nebraska sedge SRank: S2  
+++++

**Element Code:** PMCYP03940 **Occurrence Code #:** 015 **Survey Date:** 1993-09-25  
**Last Observed:** 1993-09-25 **First Observed:** 1993-06-05 **Precision Code:** S  
**Directions:** Boundary Road; Ramsay Coulee, just SW of  
**General Description:** incised valley basin landforms, alkali seepage  
**Min Elev. (m):** 1112 **Max Elev. (m):** 1204 **Size of Occurrence:** 0.25  
**Other Comments:** Site 10 - Map 4b  
**Management Comments:** Site under sensitive, low to moderate intensity grazing management and the owners appear to be  
concerned to the well-be **Best Source of Info:** U95MAC01ABCA  
Map UTM Zone UTM Easting UTM Northing Survey Site Name Notes # Dot ID #  
72E04 12 457074 5428683 Ramsay Coulee 23 71  
Source Code Author Publisher Year Title  
U95MAC01ABCA Macdonald Ian D. & Bonnie Smith COSEWIC 1995 Status Report on the Nebraska Sedge Carex nebrascensis in  
Canada  
**Carex nebrascensis** Nebraska sedge SRank: S2  
+++++

**Element Code:** PMCYP03940 **Occurrence Code #:** 016 **Survey Date:** 1993-07-09  
**Last Observed:** 1993-07-09 **First Observed:** 1993-07-09 **Precision Code:** S  
**Directions:** Ramsay Coulee Creek  
**General Description:** broadly rolling prairies; alkali seepage  
**Min Elev. (m):** 1036 **Max Elev. (m):** 1051 **Size of Occurrence:** 0.01  
**Other Comments:** Site 12 - Map 4b  
**Management Comments:** Site has moderate close grazing impact. Its stands of sedge are poorly developed and widely-spaced.  
**Best Source of Info:** U95MAC01ABCA  
**Map UTM Zone UTM Easting UTM Northing Survey Site Name Notes # Dot ID #**  
72E04 12 459949 5431683 Ramsay Coulee Creek 24 72  
**Source Code Author Publisher Year Title**  
U95MAC01ABCA Macdonald Ian D. & Bonnie Smith COSEWIC 1995 Status Report on the Nebraska Sedge Carex nebrascensis in  
Canada  
**Carex nebrascensis** Nebraska sedge SRank: S2  
+++++

**Element Code:** PMCYP03940 **Occurrence Code #:** 017 **Survey Date:** 1993-07-17  
**Last Observed:** 1993-07-17 **First Observed:** 1993-07-17 **Precision Code:** S  
**Directions:** Dickinson Creek  
**General Description:** shallow and broad valley in the rolling prairies; alkali seepage  
**Min Elev. (m):** 1074 **Max Elev. (m):** 1074 **Size of Occurrence:** 0.01  
**Other Comments:** Site 13 - Map 4b  
**Management Comments:** Site adjacent to cropland and intensive grazing management. **Best Source of Info:** U95MAC01ABCA  
**Map UTM Zone UTM Easting UTM Northing Survey Site Name Notes # Dot ID #**  
72E04 12 461149 5430134 Dickinson Creek 25 73  
**Source Code Author Publisher Year Title**  
U95MAC01ABCA Macdonald Ian D. & Bonnie Smith COSEWIC 1995 Status Report on the Nebraska Sedge Carex nebrascensis in  
Canada  
**Carex nebrascensis** Nebraska sedge SRank: S2  
+++++

**Element Code:** PMCYP03940 **Occurrence Code #:** 018 **Survey Date:** 1993-09-25  
**Last Observed:** 1993-09-25 **First Observed:** 1993-09-25 **Precision Code:** S  
**Directions:** Deer Creek  
**General Description:** well-developed coulee basin  
**Min Elev. (m):** 975 **Max Elev. (m):** 975 **Size of Occurrence:** 0.01  
**Other Comments:** Site 14 - Map 4b  
**Management Comments:** Site is threatened due to intense use by cattle for shelter and watering. **Best Source of Info:**  
U95MAC01ABCA  
**Map UTM Zone UTM Easting UTM Northing Survey Site Name Notes # Dot ID #**  
72E04 12 462199 5433934 Deer Creek 26 74  
**Source Code Author Publisher Year Title**  
U95MAC01ABCA Macdonald Ian D. & Bonnie Smith COSEWIC 1995 Status Report on the Nebraska Sedge Carex nebrascensis in  
Canada  
**Carex nebrascensis** Nebraska sedge SRank: S2  
+++++

**Element Code:** PMCYP03940 **Occurrence Code #:** 019 **Survey Date:** 1992-10-02  
**Last Observed:** 1992-10-02 **First Observed:** 1992-06-23 **Precision Code:** S  
**Directions:** Macdonald Creek  
**General Description:** broadly rolling prairie landform  
**Min Elev. (m):** 1105 **Max Elev. (m):** 1105  
**Other Comments:** Site 15 - Map 4b **Best Source of Info:** U95MAC01ABCA  
**Map UTM Zone UTM Easting UTM Northing Survey Site Name Notes # Dot ID #**  
72E04 12 462324 5428934 Macdonald Creek 27 75  
**Source Code Author Publisher Year Title**  
U95MAC01ABCA Macdonald Ian D. & Bonnie Smith COSEWIC 1995 Status Report on the Nebraska Sedge Carex nebrascensis in  
Canada  
**Carex nebrascensis** Nebraska sedge SRank: S2  
+++++

**Element Code:** PMCYP03940 **Occurrence Code #:** 020 **Survey Date:** 1993-09-24  
**Last Observed:** 1993-09-24 **First Observed:** 1993-09-24 **Precision Code:** S  
**Directions:** Miners Coulee  
**General Description:** stream edge of coulee basin with a permanent stream channel  
**Min Elev. (m):** 991 **Max Elev. (m):** 991  
**Other Comments:** Site 18 - Map 4c  
**Management Comments:** Site is lightly grazed; not threatened. **Best Source of Info:** U95MAC01ABCA  
**Map UTM Zone UTM Easting UTM Northing Survey Site Name Notes # Dot ID #**  
72E03 12 471699 5431135 Miners Coulee 6 41  
**Source Code Author Publisher Year Title**  
U95MAC01ABCA Macdonald Ian D. & Bonnie Smith COSEWIC 1995 Status Report on the Nebraska Sedge Carex nebrascensis in  
Canada  
**Carex nebrascensis** Nebraska sedge SRank: S2  
+++++

**Element Code:** PMCYP03940 **Occurrence Code #:** 021 **Survey Date:** 1993-09-24  
**Last Observed:** 1993-09-24 **First Observed:** 1993-09-24 **Precision Code:** S  
**Directions:** Aden, NE of  
**General Description:** well-developed coulee with a permanent stream and well-developed basin landform features; alkali seepage  
**Min Elev. (m):** 1021 **Max Elev. (m):** 1030 **Size of Occurrence:** 0.01  
**Other Comments:** Site 20 - Map 4d  
**Management Comments:** Moderate mixed grazing management in the site, but sedge stands are not threatened. **Best Source of Info:** U95MAC01ABCA  
**Map UTM Zone UTM Easting UTM Northing Survey Site Name Notes # Dot ID #**  
72E03 12 478998 5430685 Aden 7 42  
**Source Code Author Publisher Year Title**  
U95MAC01ABCA Macdonald Ian D. & Bonnie Smith COSEWIC 1995 Status Report on the Nebraska Sedge Carex nebrascensis in  
Canada  
**Carex nebrascensis** Nebraska sedge SRank: S2  
+++++

**Element Code:** PMCYP03940 **Occurrence Code #:** 022 **Survey Date:** 1993-09-24  
**Last Observed:** 1993-09-24 **First Observed:** 1993-09-24 **Precision Code:** S  
**Directions:** Aden, NE of; Breed Creek  
**General Description:** well-developed coulee basin along sides of permanent stream  
**Min Elev. (m):** 1021 **Max Elev. (m):** 1030 **Size of Occurrence:** 0.01  
**Other Comments:** Site 21 - Map 4d  
**Management Comments:** Adjacent floodplain has been used for cattle for 50 yrs+, but the stands do not appear to be threatened.  
**Best Source of Info:** U95MAC01ABCA  
**Map UTM Zone UTM Easting UTM Northing Survey Site Name Notes # Dot ID #**  
72E03 12 479923 5433785 Breed Creek 8 43  
**Source Code Author Publisher Year Title**  
U95MAC01ABCA Macdonald Ian D. & Bonnie Smith COSEWIC 1995 Status Report on the Nebraska Sedge Carex nebrascensis in  
Canada  
**Carex nebrascensis** Nebraska sedge SRank: S2  
+++++

**Element Code:** PMCYP03940 **Occurrence Code #:** 023 **Survey Date:** 1993-09-23  
**Last Observed:** 1993-09-23 **First Observed:** 1993-06-04 **Precision Code:** S  
**Directions:** US border N of; Bear Creek  
**General Description:** well-developed incised valley basin in the drier portions; alkali seepage  
**Min Elev. (m):** 1067 **Max Elev. (m):** 1067 **Size of Occurrence:** 0.01  
**Other Comments:** Site 22 - Map 4e  
**Management Comments:** Light to moderate grazing, but stands are not immediately threatened. **Best Source of Info:** U95MAC01ABCA  
**Map UTM Zone UTM Easting UTM Northing Survey Site Name Notes # Dot ID #**  
72E03 12 486248 5429185 Bear Creek 9 44  
**Source Code Author Publisher Year Title**  
U95MAC01ABCA Macdonald Ian D. & Bonnie Smith COSEWIC 1995 Status Report on the Nebraska Sedge Carex nebrascensis in  
Canada  
**Carex nebrascensis** Nebraska sedge SRank: S2  
+++++

**Element Code:** PMCYP03940 **Occurrence Code #:** 024 **Survey Date:** 1993-09-23  
**Last Observed:** 1993-09-23 **First Observed:** 1993-09-23 **Precision Code:** S  
**Directions:** US border, N of; Bear Creek, E tributary  
**General Description:** well-developed incised valley basin in the drier portions; alkali seepage  
**Min Elev. (m):** 1074 **Max Elev. (m):** 1120 **Size of Occurrence:** 0.03  
**Other Comments:** Site 23 - Map 4e  
**Management Comments:** Close grazing is permitted in the area - but stands are not threatened **Best Source of Info:**  
U95MAC01ABCA

**Map UTM Zone UTM Easting UTM Northing Survey Site Name Notes # Dot ID #**

72E03 12 487548 5428510 Bear Creek 10 45

**Source Code Author Publisher Year Title**

U95MAC01ABCA Macdonald Ian D. & Bonnie Smith COSEWIC 1995 Status Report on the Nebraska Sedge Carex nebrascensis in Canada

**Carex nebrascensis** Nebraska sedge SRank: S2

+++++

**Element Code:** PMCYP03940 **Occurrence Code #:** 025 **Survey Date:** 1992-06-24  
**Last Observed:** 1992-06-24 **First Observed:** 1992-06-24 **Precision Code:** S

**Directions:** Bear Creek

**General Description:** relatively dry basin of a broad incised valley with moderate alkali seepage

**Min Elev. (m):** 1050 **Max Elev. (m):** 1050

**Other Comments:** Site 24 - Map 4e

**Management Comments:** Close grazing observed in area - but threat status could not be determined. **Best Source of Info:**

U95MAC01ABCA

**Map UTM Zone UTM Easting UTM Northing Survey Site Name Notes # Dot ID #**

72E03 12 487173 5430535 Bear Creek 11 46

**Source Code Author Publisher Year Title**

U95MAC01ABCA Macdonald Ian D. & Bonnie Smith COSEWIC 1995 Status Report on the Nebraska Sedge Carex nebrascensis in Canada

**Carex nebrascensis** Nebraska sedge SRank: S2

+++++

**Element Code:** PMCYP03940 **Occurrence Code #:** 026 **Survey Date:** 1988-08-08  
**Last Observed:** 1988-08-08 **First Observed:** 1988-08-08 **Precision Code:** S

**Directions:** North Milk River

**General Description:** probable habitats included flowing/standing water and stream/pond backshore communities

**Min Elev. (m):** 1143 **Max Elev. (m):** 1143

**Other Comments:** Site 26 - Map 4g

**Management Comments:** No info available whether current close grazing management may threaten site. **Best Source of Info:**

U95MAC01ABCA

**Map UTM Zone UTM Easting UTM Northing Survey Site Name Notes # Dot ID #**

82H01 12 400725 5445800 North Milk River 7 917

**Source Code Author Publisher Year Title**

U95MAC01ABCA Macdonald Ian D. & Bonnie Smith COSEWIC 1995 Status Report on the Nebraska Sedge Carex nebrascensis in Canada

**Carex nebrascensis** Nebraska sedge SRank: S2

**Carex retrorsa** turned sedge

**Natural Region:** Dry Mixedgrass

**Habitat:** Wetland-Springs

**Phenology:** heads out in July

**Specific Search Strategies (if any):** lightly or ungrazed springs in sandy coulee woodlands in the grassland region; a woodland species of N. Alberta; may occur in Northern Fescue Grassland in ungrazed or lightly grazed densely vegetated shallow wetlands, e.g. Hand Hills ER

**Element Occurrences:**

**Element Code:** PMCYP03BJ0 **Occurrence Code #:** 004 **Survey Date:** 1977-07-20  
**Last Observed:** 1977-07-20 **First Observed:** 1977-07-20 **Precision Code:** M  
**Directions:** Lac La Biche, 36 mi. ESE of; Wolf Lake, 2 mi. W of; Loon Lake.  
**Min Elev. (m):** 615 **Max Elev. (m):** 615  
**Other Comments:** Rev. by J.G. Packer, 1978. **Best Source of Info:** S77BIRUCABCA01  
**Specimen Source Code Collector Herbarium Accession # Date ID OK? Observation Detail**  
S77BIRUCABCA01 Bird, C.D. & K.E. Hinkes UC 05027 1977-07-20 [fruit]  
**Map UTM Zone UTM Easting UTM Northing Survey Site Name Notes # Dot ID #**  
73L11 12 496900 6063450 Wolf River Study Area 2; 54 43/111 03. 5 349  
**Carex retrorsa** turned sedge SRank: S2  
+++++

**Element Code:** PMCYP03BJ0 **Occurrence Code #:** 005 **Survey Date:** 1976-08-04  
**Last Observed:** 1976-08-04 **First Observed:** 1976-08-04 **Precision Code:** S  
**Directions:** North Saskatchewan River, on; Elk Point Campground.  
**General Description:** On low open ground along the river.  
**Min Elev. (m):** 533 **Max Elev. (m):** 533 **Best Source of Info:** S76WIEUCABCA01  
**Specimen Source Code Collector Herbarium Accession # Date ID OK? Observation Detail**  
S76WIEUCABCA01 Wiebe, K. UC 05026 1976-08-04 [fruit]  
**Map UTM Zone UTM Easting UTM Northing Survey Site Name Notes # Dot ID #**  
73E15 12 506600 5968050 Elk Point Campground 3 333  
**Carex retrorsa** turned sedge SRank: S2  
+++++

**Element Code:** PMCYP03BJ0 **Occurrence Code #:** 006 **Survey Date:** 1952-07-20  
**Last Observed:** 1952-07-20 **First Observed:** 1952-07-20 **Precision Code:** S  
**Directions:** Ma-Me-O Beach, just W of; Indian Reserve.  
**General Description:** On low, wet, sandy open ground.  
**Min Elev. (m):** 846 **Max Elev. (m):** 846  
**Other Comments:** U of A duplicate #36284 **Best Source of Info:** S52TURUCABCA01  
**Specimen Source Code Collector Herbarium Accession # Date ID OK? Observation Detail**  
S52TURACONCA01 Turner, George H. AC 368802 1952-07-20  
S52TURNMONCA01 Turner, G.H. NM 220142 1952-07-22  
S52TURUAABCA02 Turner, George H. UA 36284 1952-07-20 Y mature spikelets  
S52TURUCABCA01 Turner, G.H. UC 05029 1952-07-20 [fruit]  
**Map UTM Zone UTM Easting UTM Northing Survey Site Name Notes # Dot ID #**  
83A13 12 300950 5873200 Ma-Me-O Beach 4 2326  
**Carex retrorsa** turned sedge SRank: S2  
+++++

**Element Code:** PMCYP03BJ0 **Occurrence Code #:** 007 **Survey Date:** 1979-07-30  
**Last Observed:** 1979-07-30 **First Observed:** 1979-07-30 **Precision Code:** S  
**Directions:** Fort McMurray, approx. 34 mi. N of; Town Fort MacKay, just S of the; MacKay River Bridge, on the W side of the.  
**General Description:** In shallow backwater.  
**Min Elev. (m):** 240 **Max Elev. (m):** 240  
**Other Comments:** Det. by John Corbin. **Best Source of Info:** S79CORUCABCA08  
**Specimen Source Code Collector Herbarium Accession # Date ID OK? Observation Detail**  
S79CORUCABCA08 Corbin, J. & P. van Eck UC 42032 1979-07-30 [fruit]  
**Map UTM Zone UTM Easting UTM Northing Survey Site Name Notes # Dot ID #**  
74E04 12 461250 6336100 Fort MacKay 8 415  
**Carex retrorsa** turned sedge SRank: S2  
+++++

**Element Code:** PMCYP03BJ0 **Occurrence Code #:** 008 **Survey Date:** 1977-08-16  
**Last Observed:** 1977-08-16 **First Observed:** 1977-07-19 **Precision Code:** S  
**Directions:** Hutton, 1 mile west of  
**General Description:** willow/sedge habitat  
**Min Elev. (m):** 716 **Max Elev. (m):** 716 **Best Source of Info:** S77BRAUAABCA04  
**Specimen Source Code Collector Herbarium Accession # Date ID OK? Observation Detail**  
S77BRAUAABCA03 Bradley, C. & C. Wallis UA 74723 1977-07-19 Y developing spikelets  
S77BRAUAABCA04 Bradley, C. & C. Wallis UA 74710 1977-08-16 Y mature spikelets  
**Map UTM Zone UTM Easting UTM Northing Survey Site Name Notes # Dot ID #**  
72M04 12 432650 5652675 Hutton 2 256  
**Carex retrorsa** turned sedge SRank: S2  
+++++

**Element Code:** PMCYP03BJ0 **Occurrence Code #:** 009 **Survey Date:** 1989-08-18  
**Last Observed:** 1989-08-18 **First Observed:** 1989-08-18 **Precision Code:** M  
**Directions:** Kinuso, 11 km SE of, S of Hwy  
**General Description:** roadside ditch; poorly drained  
**Min Elev. (m):** 620 **Max Elev. (m):** 620 **Best Source of Info:** S89JOHUAABCA01  
**Specimen Source Code Collector Herbarium Accession # Date ID OK? Observation Detail**  
S89JOHUAABCA01 Johnson, J.D. UA 93936 1989-08-18 Y mature spikelets  
**Map UTM Zone UTM Easting UTM Northing Survey Site Name Notes # Dot ID #**  
83O06 11 607400 6125700 Kinuso 55 16/115 18 3 3612  
**Carex retrorsa** turned sedge SRank: S2  
+++++

**Element Code:** PMCYP03BJ0 **Occurrence Code #:** 010 **Survey Date:** 1921-08-05  
**Last Observed:** 1921-08-05 **First Observed:** 1921-08-05 **Precision Code:** M  
**Directions:** Edmonton; North Clover Bar, Glenbrook Farm  
**General Description:** along stream in wooded ravine on Glenbrook Farm  
**Min Elev. (m):** 648 **Max Elev. (m):** 648 **Best Source of Info:** S21MCCUAABCA01  
**Specimen Source Code Collector Herbarium Accession # Date ID OK? Observation Detail**  
S21MCCACONCA01 McCalla, W.C. AC 149489 1921-08-05  
S21MCCUAABCA01 McCalla, W.C. UA 36286 1921-08-05 Y mature spikelets  
**Map UTM Zone UTM Easting UTM Northing Survey Site Name Notes # Dot ID #**  
83H11 12 346500 5939575 Clover Bar 24 3341  
**Carex retrorsa** turned sedge SRank: S2  
+++++

**Element Code:** PMCYP03BJ0 **Occurrence Code #:** 011 **Survey Date:** 1943-08-20  
**Last Observed:** 1945-08-07 **First Observed:** 1939-08-19 **Precision Code:** M  
**Directions:** 1 mi. NE of Ft Saskatchewan; Ross Creek near its mouth  
**General Description:** shore; clay-silt bank of creek; beside water  
**Min Elev. (m):** 602 **Max Elev. (m):** 602 **Best Source of Info:** S43MOSUAABCA02  
**Specimen Source Code Collector Herbarium Accession # Date ID OK? Observation Detail**  
S39TURACONCA01 Turner, G.H. AC 368801 1939-09-09  
S39TURUAABCA02 Turner, G.H. UA 34743 1939-08-19 Y mature spikelets  
S41TURUAABCA04 Turner, G.H. UA 36285 1941-07-13 Y [mature perigynia]  
S43MCCUAABCA07 McCalla, W.C. UA 36287 1943-08-20 Y mature spikelets  
S43MOSUAABCA02 Moss, E.H. & W.C. McCalla UA 3803 1943-08-20 Y mature spikelets  
S45TURACONCA01 Turner, G.H. AC 368803 1945-08-07  
**Map UTM Zone UTM Easting UTM Northing Survey Site Name Notes # Dot ID #**  
83H11 12 355200 5955600 Ross Creek 11 3328  
**Carex retrorsa** turned sedge SRank: S2  
+++++



**Element Code:** PMCYP03BJ0 **Occurrence Code #:** 012 **Survey Date:** 1956-08-17  
**Last Observed:** 1956-08-17 **First Observed:** 1944-08-14 **Precision Code:** M  
**Directions:** Ft Saskatchewan, 1 mi. S. of  
**General Description:** In 2-3" of water in slough, among tall grasses, in tall Beckmannia.  
**Min Elev. (m):** 625 **Max Elev. (m):** 625  
**Other Comments:** Very tall plants with v. long, well-developed spikelets. (Those collected on Sept. 17 with dehiscing spikelets.)  
(S56TURUAABCA04) **Best Source of Info:** S56TURUAABCA04  
**Specimen Source Code Collector Herbarium Accession # Date ID OK? Observation Detail**  
S44TURUAABCA15 Turner, G.H. UA 34746 1944-08-14 Y mature spikelets  
S56TURACONCA03 Turner, G.H. AC 368804 1956-08-17 more than 100 culms in tuft  
S56TURUAABCA04 Turner, G.H. UA 34741 1956-08-17 Y "There were more than 100 culms in the clump, the only clump found on this farm." Turner further notes that "a month later 10 more large clumps were found near  
**Map UTM Zone UTM Easting UTM Northing Survey Site Name Notes # Dot ID #**  
83H11 12 355900 5952350 Fort Saskatchewan 14 3331  
**Carex retrorsa** turned sedge SRank: S2  
+++++

**Element Code:** PMCYP03BJ0 **Occurrence Code #:** 013 **Survey Date:** 1945-08-29  
**Last Observed:** 1945-08-29 **First Observed:** 1945-08-29 **Precision Code:** M  
**Directions:** Fort Saskatchewan, near jail water intake  
**General Description:** river shore  
**Min Elev. (m):** 602 **Max Elev. (m):** 602 **Best Source of Info:** S45TURUAABCA06  
**Specimen Source Code Collector Herbarium Accession # Date ID OK? Observation Detail**  
S45TURUAABCA06 Turner, G.H. UA 34745 1945-08-29 Y mature spikelets  
**Map UTM Zone UTM Easting UTM Northing Survey Site Name Notes # Dot ID #**  
83H11 12 350675 5951350 Fort Saskatchewan 25 3342  
**Carex retrorsa** turned sedge SRank: S2  
+++++

**Element Code:** PMCYP03BJ0 **Occurrence Code #:** 014 **Survey Date:** 1952-07-11  
**Last Observed:** 1952-07-11 **First Observed:** 1952-07-11 **Precision Code:** S  
**Directions:** Ma-Me-O Beach, just W of first bridge beyond, highway to Westrose; in road ditch  
**General Description:** in 6" water  
**Min Elev. (m):** 846 **Max Elev. (m):** 846 **Best Source of Info:** S52TURUAABCA01  
**Specimen Source Code Collector Herbarium Accession # Date ID OK? Observation Detail**  
S52TURUAABCA01 Turner, G.H. UA 34744 1952-07-11 Y mature spikelets  
**Map UTM Zone UTM Easting UTM Northing Survey Site Name Notes # Dot ID #**  
83A13 12 299850 5872100 Ma-Me-O Beach 6 2328  
**Carex retrorsa** turned sedge SRank: S2  
+++++

**Element Code:** PMCYP03BJ0 **Occurrence Code #:** 015 **Survey Date:** 1930-07-31  
**Last Observed:** 1930-07-31 **First Observed:** 1930-07-31 **Actual Mapping Precision (m):** 2500 **Precision Code:** M  
**Directions:** Peace River, Indian Graveyard  
**General Description:** slough margin  
**Min Elev. (m):** 230 **Max Elev. (m):** 230 **Best Source of Info:** S30RAUUAABCA03  
**Specimen Source Code Collector Herbarium Accession # Date ID OK? Observation Detail**  
S30RAUNMONCA01 Hugh M. Raup NM 26592 1930-07-31  
S30RAUNMONCA02 Hugh M. Raup NM 26593 1930-07-31  
S30RAUUAABCA03 Raup, Hugh M. UA 3806 1930-07-31 Y mature spikelets  
**Map UTM Zone UTM Easting UTM Northing Survey Site Name Notes # Dot ID #**  
84I12 12 335000 6511300 Garden Creek ca. 58 42 30/ 113 51 1 3678  
**Carex retrorsa** turned sedge SRank: S2  
+++++

**Element Code:** PMCYP03BJ0 **Occurrence Code #:** 016 **Survey Date:** 1957-07-03  
**Last Observed:** 1957-07-03 **First Observed:** 1957-07-03 **Precision Code:** M  
**Directions:** Glenevis  
**General Description:** moist soil  
**Min Elev. (m):** 732 **Max Elev. (m):** 732 **Best Source of Info:** S57PEGUAABCA03  
**Specimen Source Code Collector Herbarium Accession # Date ID OK? Observation Detail**  
S57PEGUAABCA03 Pegg, George UA 3805 1957-07-03 Y mature spikelets  
**Map UTM Zone UTM Easting UTM Northing Survey Site Name Notes # Dot ID #**  
83G15 11 664300 5962300 Glenevis 14 3161  
**Carex retrorsa** turned sedge SRank: S2  
+++++

**Element Code:** PMCYP03BJ0 **Occurrence Code #:** 017 **Survey Date:** 1945-07-19  
**Last Observed:** 1945-07-19 **First Observed:** 1945-07-19 **Precision Code:** M  
**Directions:** Seba; near lake shore  
**General Description:** lagoon (pool), now dry  
**Min Elev. (m):** 732 **Max Elev. (m):** 732 **Best Source of Info:** S45MOSUAABCA02  
**Specimen Source Code Collector Herbarium Accession # Date ID OK? Observation Detail**  
S45MOSUAABCA02 Moss, E.H. UA 3804 1945-07-19 Y developing spikelets  
**Map UTM Zone UTM Easting UTM Northing Survey Site Name Notes # Dot ID #**  
83G10 11 650150 5936450 Seba Beach 17 3140  
**Carex retrorsa** turned sedge SRank: S2  
+++++

**Element Code:** PMCYP03BJ0 **Occurrence Code #:** 018 **Survey Date:** 1941-07-15  
**Last Observed:** 1941-07-15 **First Observed:** 1941-07-15 **Precision Code:** M  
**Directions:** Lesser Slave Lake, Widewater  
**General Description:** low place in virgin spruce-poplar woods  
**Min Elev. (m):** 678 **Max Elev. (m):** 678 **Best Source of Info:** S41MOSUAABCA11  
**Specimen Source Code Collector Herbarium Accession # Date ID OK? Observation Detail**  
S41MOSNMNCA02 Moss, E.H. NM 25685 1941-07-15  
S41MOSUAABCA11 Moss, E.H. UA 3802 1941-07-15 Y mature spikelets  
**Map UTM Zone UTM Easting UTM Northing Survey Site Name Notes # Dot ID #**  
83O06 11 624600 6135750 Widewater 4 3613  
**Carex retrorsa** turned sedge SRank: S2  
+++++

**Element Code:** PMCYP03BJ0 **Occurrence Code #:** 019 **Survey Date:** 1989-07-27  
**Last Observed:** 1989-07-27 **First Observed:** 1989-07-27 **Actual Mapping Precision (m):** 1000 **Precision Code:** M  
**Directions:** Battle Lake, NE shore of.  
**Min Elev. (m):** 838 **Max Elev. (m):** 838 **Best Source of Info:** S89HRAPMABCA04  
**Specimen Source Code Collector Herbarium Accession # Date ID OK? Observation Detail**  
S89HRAPMABCA04 Hrapko, J.O., L.D. Laird & J.H. Doyle PM B89.24.4 1989-07-27 Y well-dev. spikes w reflex. perig; broad leaves  
**Map UTM Zone UTM Easting UTM Northing Survey Site Name Notes # Dot ID #**  
83B16 11 690000 5872100 Battle Lake 2-46 W5M; 52 58/114 10 1 2410  
**Carex retrorsa** turned sedge SRank: S2  
+++++

**Element Code:** PMCYP03BJ0 **Occurrence Code #:** 020 **Survey Date:** 1997-00-00  
**Last Observed:** 1997-00-00 **First Observed:** 1997-00-00 **Actual Mapping Precision (m):** 250 **Precision Code:** S  
**Directions:** Braaten, 20 km SE of; forestry trunk rd., on E side of, creek, along,  
**General Description:** swampy woods and we meadows, wet ditch or stream margin,  
**Min Elev. (m):** 716 **Max Elev. (m):** 716  
**Other Comments:** Possibly well off right-of-way, along road at stream crossing. Exact location unknown, as identified after field survey complete. **Best Source of Info:** M97SAE01ABCA  
**Map UTM Zone UTM Easting UTM Northing Survey Site Name Notes # Dot ID #**  
83L16 11 408600 6069000 Smoky River MLKP 250.5; NW 32-66-3 W6M 2 3849  
**Source Code Author Publisher Year Title**  
M97SAE01ABCA Singleton Associated Engineering & TERA Alliance Pipeline 1997 NEB Certificate Application - Volume VI - A Environmental Alignment sheets  
**Carex retrorsa** turned sedge SRank: S2  
+++++

**Element Code:** PMCYP03BJ0 **Occurrence Code #:** 021 **Survey Date:** 1999-07-29  
**Last Observed:** 1999-07-29 **First Observed:** 1999-07-29 **Actual Mapping Precision (m):** 250 **Precision Code:** S  
**Directions:** Mildred Lake (not city), 16.5 km WSW of; Mackay R., 500 m NW of.  
**General Description:** riparian site - some Popu bal and Sali beb, but primarily sedge/grass community immed. on banks. Assoc. spp.: Scir mic, Care ath, Ranu gme, Cicu mac, Glyc gra, Beck syz.  
**Min Elev. (m):** 400 **Max Elev. (m):** 400  
**Slope:** 0.00 **Aspect:** 0  
**Other Comments:** LSD given (28-93-23-W4M) did not match Utm's  
**Management Comments:** SAGD plant may affect pop. due to water drawdown. **Best Source of Info:** U99BUS02ABCA  
**Map UTM Zone UTM Easting UTM Northing Survey Site Name Notes # Dot ID #**  
74E04 12 447725 6318800 Mackay River 28-92-12-W4M 14 5465  
**Source Code Author Publisher Year Title**  
U99BUS02ABCA Bush, Dana 1999 Axy's Environmental Consulting Ltd.- Rare Native Plant Report Forms  
**Date Source Abstract Code Observer Occurrence Data**  
1999-07-29 U99BUS02ABCA Ruth Johnson approx. 100 individ. pop. extends approx. 50 m immed. along creek drainage, vegetative 6; reproductive 7  
**Carex retrorsa** turned sedge SRank: S2

**Carex parryana var parryana Parry's sedge**

**Natural Region:** Foothills Fescue Grassland, Mixedgrass, Dry Mixedgrass

**Habitat:** Wetland-Springs

**Phenology:** heads out in early June

**Specific Search Strategies (if any):** occurs along edges of springs or on hummocks within spring/seepage areas--seek out small areas of exposed mineral soil; visible through August, distinctive but sometimes difficult to see amongst the graminoid vegetation in which it occurs.

**Element Occurrences:**

**Element Code:** PMCYP03A35 **Occurrence Code #:** 002

Identification OK?: **Survey Date:** 1981-06-07

**Last Observed:** 1981-06-07 **First Observed:** 1981-06-07 **Precision Code:** S

**Directions:** Mirror, 2 mi SE of; Barritt Farm.

**General Description:** aspen parkland, pasture land

**Min Elev. (m):** 786 **Max Elev. (m):** 786 **Best Source of Info:** S81BIRUCABCA01

**Specimen Source Code Collector Herbarium Accession # Date ID OK? Observation Detail**

S81BIRUCABCA01 Bird, C. & A.H. Marsh UC none 1981-06-07

**Map UTM Zone UTM Easting UTM Northing Survey Site Name Notes # Dot ID #**

83A06 12 359200 5812050 Mirror Lat/Long: 52 20/113 04. Legals do not agree with site description. 2 2314

**Carex parryana var parryana** Parry's sedge SRank: S1S2

+++++

**Element Code:** PMCYP03A35 **Occurrence Code #:** 004

Identification OK?: **Survey Date:** 1945-06-19

**Last Observed:** 1945-06-19 **First Observed:** 1945-06-19 **Precision Code:** M

**Directions:** Bow River Valley; Banff, 12 mi W of; Pilot Mt, near.

**General Description:** forested alluvial flats

**Min Elev. (m):** 1220 **Max Elev. (m):** 1400 **Best Source of Info:** S45PORNMONCA43

**Specimen Source Code Collector Herbarium Accession # Date ID OK? Observation Detail**

S45PORNMONCA43 Porsild & Breitung NM 481306 1945-06-19

**Map UTM Zone UTM Easting UTM Northing Survey Site Name Notes # Dot ID #**

82O04 11 584750 5674700 Massive 114 2032

**Carex parryana var parryana** Parry's sedge SRank: S1S2

+++++

**Element Code:** PMCYP03A35 **Occurrence Code #:** 005 **Survey Date:** 1960-07-15

**Last Observed:** 1960-07-15 **First Observed:** 1960-07-15 **Actual Mapping Precision (m):** 2500 **Precision Code:** M

**Directions:** Jasper Lake, S shore of.

**General Description:** wet depression behind dune area, upper edge of spring flood

**Min Elev. (m):** 1005 **Max Elev. (m):** 1005 **Best Source of Info:** S60PORNMONCA05

**Specimen Source Code Collector Herbarium Accession # Date ID OK? Observation Detail**

S60PORNMONCA05 Porsild, A.E. NM 266091 1690-07-15

S60PORUAABCA05 Porsild, A.E. UA 100259 1960-07-15 Y ripe spikes

**Map UTM Zone UTM Easting UTM Northing Survey Site Name Notes # Dot ID #**

83E01 11 430000 5880900 Jasper Lake 39 2920

**Carex parryana var parryana** Parry's sedge SRank: S1S2

+++++

**Element Code:** PMCYP03A35 **Occurrence Code #:** 006 **Survey Date:** 1983-07-15

**Last Observed:** 1983-07-15 **First Observed:** 1983-06-16 **Actual Mapping Precision (m):** 250 **Precision Code:** S

**Directions:** David Lake, N of.

**General Description:** wet grassland-calcareous

**Min Elev. (m):** 662 **Max Elev. (m):** 662 **Best Source of Info:** S83FEHPMABCA03

**Specimen Source Code Collector Herbarium Accession # Date ID OK? Observation Detail**

S83FEHAUABCA01 Fehr, A. and T. S. Bakshi AU 83-0522 1983-07-15 Y

S83FEHPMABCA03 Fehr, A. PM B86.17.57 1983-07-15 Y spikelets present

S83FEHPPABCA03 Fehr, A. PP 1975 1983-06-16 Uncommon

**Map UTM Zone UTM Easting UTM Northing Survey Site Name Notes # Dot ID #**

73D10 12 525850 5826000 David Lake Veg plot AF83042 28 295

**Source Code Author Publisher Year Title**

R84FEH01ABCA Fehr, A.W. Alberta Energy and Natural Resources 1984 Wainwright Study Area: A Biophysical Inventory

**Carex parryana var parryana** Parry's sedge SRank: S1S2

+++++

**Element Code:** PMCYP03A35 **Occurrence Code #:** 007 **Survey Date:** 1945-07-22  
**Last Observed:** 1945-07-22 **First Observed:** 1944-07-15 **Precision Code:** M  
**Directions:** Calgary; King George School, N of  
**General Description:** Low meadow beside a little stream in valley.  
**Min Elev. (m):** 1075 **Max Elev. (m):** 1075 **Best Source of Info:** S45XXXUCABCA01  
**Specimen Source Code Collector Herbarium Accession # Date ID OK? Observation Detail**  
S44TURUAABCA14 Turner, G.H. UA 34826 1944-07-15 Y flowers  
S45MCCACONCA01 McCalla, W. C. AC 149494 1945-07-16  
S45MCCUAABCA04 McCalla, W.C. UA 36151 1945-07-16 Y flowers  
S45MCCUAABCA05 McCalla, W.C. UA 36150 1945-07-22 Y flowers  
S45XXXUCABCA01 Unknown UC none 1945-07-16  
**Map UTM Zone UTM Easting UTM Northing Survey Site Name Notes # Dot ID #**  
82O01 11 704450 5662150 Calgary 21 1870  
**Carex parryana var parryana** Parry's sedge SRank: S1S2  
+++++

**Element Code:** PMCYP03A35 **Occurrence Code #:** 008 **Survey Date:** 1970-07-07  
**Last Observed:** 1970-07-07 **First Observed:** 1970-07-07 **Actual Mapping Precision (m):** 1000 **Precision Code:** M  
**Directions:** Banff NP, just outside of; North Saskatchewan River, N side of.  
**General Description:**  
**Min Elev. (m):** 1400 **Max Elev. (m):** 1400 **Best Source of Info:** S70HRAPMABCA16  
**Specimen Source Code Collector Herbarium Accession # Date ID OK? Observation Detail**  
S70HRAPMABCA16 Hrapko, J.O. & T. C. Wyn-Evans PM B70.31.100 1970-07-07 Y spikelets; excellent rhizomal development  
**Map UTM Zone UTM Easting UTM Northing Survey Site Name Notes # Dot ID #**  
83C02 11 523150 5761000 Owen Creek 52 00/116 40 1 2446  
**Carex parryana var parryana** Parry's sedge SRank: S1S2  
+++++

**Element Code:** PMCYP03A35 **Occurrence Code #:** 009 **Survey Date:** 1970-06-10  
**Last Observed:** 1970-06-10 **First Observed:** 1970-06-10 **Actual Mapping Precision (m):** 1800 **Precision Code:** M  
**Directions:** Hilda, 12 km SW of; Schuler, 10 km NW of.  
**General Description:** grassland  
**Min Elev. (m):** 790 **Max Elev. (m):** 790 **Best Source of Info:** S70HRAPMABCA10  
**Specimen Source Code Collector Herbarium Accession # Date ID OK? Observation Detail**  
S70HRAPMABCA10 Hrapko, J.O. & T. C. Wyn-Evans PM B70.19.30 1970-06-10 Y spikelets present  
**Map UTM Zone UTM Easting UTM Northing Survey Site Name Notes # Dot ID #**  
72L08 12 559150 5585150 Schuler 50 25/110 10 11 214  
**Carex parryana var parryana** Parry's sedge SRank: S1S2  
+++++

**Element Code:** PMCYP03A35 **Occurrence Code #:** 010 **Survey Date:** 1976-09-09  
**Last Observed:** 1976-09-09 **First Observed:** 1976-08-18 **Actual Mapping Precision (m):** 1600 **Precision Code:** M  
**Directions:** Jasper N.P.; Talbot Lake, 1.5 km NW of; Jasper Lake, W shore of.  
**General Description:** edge of pothole; low meadows and marshes  
**Min Elev. (m):** 1005 **Max Elev. (m):** 1005 **Best Source of Info:** S76SHAJPABCA02  
**Specimen Source Code Collector Herbarium Accession # Date ID OK? Observation Detail**  
S76SHAJPABCA02 Sharp, D.D. JP none 1976-08-18 Y fruits  
S76SHAJPABCA03 Sharp, D.D. JP none 1976-09-09 Y fruits  
**Map UTM Zone UTM Easting UTM Northing Survey Site Name Notes # Dot ID #**  
83E01 11 431000 5883700 Jasper Lake Lat/Long: 53 06/118 01 43 2924  
**Carex parryana var parryana** Parry's sedge SRank: S1S2  
+++++

**Element Code:** PMCYP03A35 **Occurrence Code #:** 011 **Survey Date:** 1990-00-00  
**Last Observed:** 1990-00-00 **First Observed:** 1990-00-00 **Actual Mapping Precision (m):** 1000 **Precision Code:** M  
**Directions:** Empress Springs, ca. 5 km NW of Empress; N side of Red Deer River; Sect. 21 & 22-Tp23-R1-W4M  
**General Description:** valley springs, diverse, slightly to moderately saline; locally dominant on mounds  
**Min Elev. (m):** 594 **Max Elev. (m):**  
**Other Comments:** recommend protection of springs & groundwater sources; no groundwater pumping for injection wells s/b allowed **Best Source of Info:** U90WAL01ABCA  
**Map UTM Zone UTM Easting UTM Northing Survey Site Name Notes # Dot ID #**  
72L16 12 565000 5647350 Empress Sect. 21 & 22-Tp23-R1-W4M 31 5996  
**Source Code Author Publisher Year Title**  
U90WAL01ABCA Wallis, Cliff 1990 Reconnaissance Survey of Saline Wetlands and Springs in the Grassland-Parkland Region of Eastern Alberta  
**Date Source Abstract Code Observer Occurrence Data**  
U90WAL01ABCA C Wallis See unpubl report  
**Carex parryana var parryana** Parry's sedge SRank: S1S2

**Element Code:** PMCYP03A35 **Occurrence Code #:** 012 **Survey Date:** 1990-00-00  
**Last Observed:** 1990-00-00 **First Observed:** 1990-00-00 **Actual Mapping Precision (m):** 250 **Precision Code:** S  
**Directions:** Chauvin, 8 km SE of; Reflex Lake [Salt Lake]; Tps 42 & 43-R1-W4M  
**General Description:** vegetation of permanent, moder. saline springs along shore; on hummocks  
**Min Elev. (m):** 600 **Max Elev. (m):** 600  
**Other Comments:** recommend: protectn of wetland basin, no groundwater pumping, explore purchase of critical lands, fencing & grazing mgmt; confine recreatn development to existing lease  
**Management Comments:** problems with adj. cottage dev't, OHVs, cattle grazing; active gas & oil wells on adj. lands **Best**  
**Source of Info:** U90WAL01ABCA  
**Map UTM Zone UTM Easting UTM Northing Survey Site Name Notes # Dot ID #**  
73D09 12 565600 5835300 Reflex Lake Polygon 15 4598  
**Source Code Author Publisher Year Title**  
U90WAL01ABCA Wallis, Cliff 1990 Reconnaissance Survey of Saline Wetlands and Springs in the Grassland-Parkland Region of Eastern Alberta  
**Date Source Abstract Code Observer Occurrence Data**  
U90WAL01ABCA C Wallis See unpubl report in-house  
**Carex parryana var parryana** Parry's sedge SRank: S1S2  
+++++

**Element Code:** PMCYP03A35 **Occurrence Code #:** 013 **Survey Date:** 1990-00-00  
**Last Observed:** 1990-00-00 **First Observed:** 1990-00-00 **Actual Mapping Precision (m):** 500 **Precision Code:** M  
**Directions:** Bindloss, W of; Dune Point Springs; N side of Red Deer River; Tp23-R3-4-W4M  
**General Description:** extensive valley springs, moder. saline, in coulee along river; on hummocks in wettest part of springs  
**Min Elev. (m):** 610 **Max Elev. (m):** 610  
**Management Comments:** current mgmt practice consistent with protectn, i.e., no grazing, no groundwater withdrawal **Best**  
**Source of Info:** U90WAL01ABCA  
**Map UTM Zone UTM Easting UTM Northing Survey Site Name Notes # Dot ID #**  
72L16 12 543000 5643000 Bindloss 2 249  
**Source Code Author Publisher Year Title**  
U90WAL01ABCA Wallis, Cliff 1990 Reconnaissance Survey of Saline Wetlands and Springs in the Grassland-Parkland Region of Eastern Alberta  
**Date Source Abstract Code Observer Occurrence Data**  
1990-00-00 U90WAL01ABCA C Wallis  
**Carex parryana var parryana** Parry's sedge SRank: S1S2  
+++++

**Element Code:** PMCYP03A35 **Occurrence Code #:** 014 **Survey Date:** 1990-00-00  
**Last Observed:** 1990-00-00 **First Observed:** 1990-00-00 **Actual Mapping Precision (m):** 250 **Precision Code:** S  
**Directions:** Wainwright, S of & N of Metiskow ; David Lake; Tps 41, 42-R5-W4M  
**General Description:** wet saline & subsaline meadows; along subsaline higher edges and hummocks  
**Min Elev. (m):** 665 **Max Elev. (m):** 665  
**Other Comments:** recommend protect entire wetland basin with suff. setback; reduce grazing pressure on meadows W of lake  
**Management Comments:** ecological reserve **Best Source of Info:** U90WAL01ABCA  
**Map UTM Zone UTM Easting UTM Northing Survey Site Name Notes # Dot ID #**  
73D10 12 526500 5826250 David Lake 38 305  
**Source Code Author Publisher Year Title**  
U90WAL01ABCA Wallis, Cliff 1990 Reconnaissance Survey of Saline Wetlands and Springs in the Grassland-Parkland Region of Eastern Alberta  
**Date Source Abstract Code Observer Occurrence Data**  
1990-00-00 U90WAL01ABCA C Wallis See unpubl report in-house  
**Carex parryana var parryana** Parry's sedge SRank: S1S2  
+++++

**Element Code:** PMCYP03A35 **Occurrence Code #:** 015 **Survey Date:** 2000-06-17  
**Last Observed:** 2000-06-17 **First Observed:** 2000-06-17 **Actual Mapping Precision (m):** 50 **Precision Code:** S  
**Directions:** Kootenay Plains; Siffleur Falls staging area and parking lot, close to; 100 m or so along trail towards Falls  
**General Description:** relatively saline area (but dry) close to trail; flattish plateau of Juniper/grassland with scattered clumps of spruce; with Pyrr uni & Plant eri  
**Min Elev. (m):** 1347 **Max Elev. (m):** 1347  
**Other Comments:** specimen coll.by PJC - data to be entered  
**Management Comments:** susceptible to eradication if trail abused **Best Source of Info:** F00COT01ABCA  
**Map UTM Zone UTM Easting UTM Northing Survey Site Name Notes # Dot ID #**  
83C01 11 540553 5766542 Kootenay Plains GPS reading 52 03 00 116 24 35 33 6120  
**Source Code Author Publisher Year Title**  
F00COT01ABCA P. J. Cotterill 2000 Field Notes for 2000  
**Date Source Abstract Code Observer Occurrence Data**  
2000-06-17 F00COT01ABCA P. Cotterill + Botany AB # 3 members Only 1 or 2 plants seen; prob. atypical habitat tho' saline  
**Carex parryana var parryana** Parry's sedge SRank: S1S2

**Element Code:** PMCYP03A35 **Occurrence Code #:** 016 **Survey Date:** 2000-06-17  
**Last Observed:** 2000-06-17 **First Observed:** 2000-06-17 **Actual Mapping Precision (m):** 250 **Precision Code:** S  
**Directions:** Kootenay Plains; Siffleur Falls staging area, S of; floodplain of N. Sask. River; turn S before crossing bridge and walk S along top of river escarpment to first vegetated muddy flat (W shore); also cross bridge to first mud-flat on E shore  
**General Description:** calcareous mud flats with scattered small willows, e.g. *S. athabascensis*, *planifolia*, *occas*. *S. melanopsis*-various sedges, e.g. *C. bicolor?*, *C. microglochin*, *C. maritima*, *C. franklinii*, *C. scirpoidea*, *Kobresia myosuroides*, *Pedicularis latifolia*, *Antennaria pulchra*  
**Min Elev. (m):** 1311 **Max Elev. (m):** 1311 **Slope:** 0.00  
**Other Comments:** specimen coll. data to be added  
**Management Comments:** Subject to flooding (natural, upstream of dam) **Best Source of Info:** F00COT01ABCA  
**Map UTM Zone UTM Easting UTM Northing Survey Site Name Notes # Dot ID #**  
83C01 11 540675 5765700 Kootenay Plains - N. Sask. River 35 6121  
**Source Code Author Publisher Year Title**  
F00COT01ABCA P. J. Cotterill 2000 Field Notes for 2000  
**Date Source Abstract Code Observer Occurrence Data**  
2000-06-17 F00COT01ABCA P Cotterill Several scattered plants  
**Carex parryana var parryana** Parry's sedge SRank: S1S2

**Castilleja cusickii yellow paintbrush**

**Natural Region:** Foothills Fescue Grassland

**Habitat:** Grassland

**Phenology:** flowers late May to June

**Specific Search Strategies (if any):** still visible in late August; search in slight depressions on the Milk River Ridge and lush swales in the foothills.

**Element Occurrences:**

**Element Code:** PDSCR0D0Q0 **Occurrence Code #:** 001 **Survey Date:** 1994-06-29

**Last Observed:** 1994-06-29 **First Observed:** 1994-06-29 **Precision Code:** S

**Directions:** Creek, E of

**General Description:** Narrow finger of grassland

**Min Elev. (m):** 1475 **Max Elev. (m):** 1475 **Aspect:** W **Best Source of Info:** M94DOW01ABCA

**Map UTM Zone UTM Easting UTM Northing Survey Site Name Notes # Dot ID #**

82G16 11 698650 5538700 Whaleback - Upper Bob Creek 6 880

**Source Code Author Publisher Year Title**

M94DOW01ABCA Downing, D. & E. Karpuk 1994 Upper Bob Creek Ecological Reserve: physical land classification range inventory sample sites.

**Date Source Abstract Code Observer Occurrence Data**

Prolific

**Castilleja cusickii** yellow paintbrush SRank: S2S3

+++++

**Element Code:** PDSCR0D0Q0 **Occurrence Code #:** 002 **Survey Date:** 1994-06-29

**Last Observed:** 1994-06-29 **First Observed:** 1994-06-29 **Precision Code:** S

**Directions:** Creek, E of , section,S end of

**Min Elev. (m):** 1450 **Max Elev. (m):** 1450 **Best Source of Info:** M94DOW01ABCA

**Map UTM Zone UTM Easting UTM Northing Survey Site Name Notes # Dot ID #**

82G16 11 698200 5537900 Upper Bob Creek -Whaleback 7 881

**Castilleja cusickii** yellow paintbrush SRank: S2S3

+++++

**Element Code:** PDSCR0D0Q0 **Occurrence Code #:** 003 **Survey Date:** 1986-07-00

**Last Observed:** 1986-07-00 **First Observed:** 1986-07-14 **Precision Code:** S

**Directions:** Boat launch parking lot, from; moist meadow area, SE into; road, within 15m of

**General Description:** Moist area, subsurface moisture, dense & tall veget., dom by native forbs - assoc plants Gali.boreale, Rosa sp., Oxy.campestris, Hedy.alpinum, Cam.rotundifolia &Cast.miniata

**Min Elev. (m):** 1378 **Max Elev. (m):** 1378 **Size of Occurrence:** 1.00 **Best Source of Info:** B86WAL01ABCA

**Map UTM Zone UTM Easting UTM Northing Survey Site Name Notes # Dot ID #**

82H03 12 320400 5430800 Police Outpost Provincial Park 5 945

**Source Code Author Publisher Year Title**

B86WAL01ABCA Wallis, Clifford et al Alberta Forestry Lands & Wildlife 203p 1986 Pilot rare plant monitoring program in the Oldman Regional Plan area of southwestern Alberta

I86WAL07ABCA Wallis, C. 1986

**Date Source Abstract Code Observer Occurrence Data**

Only one individual(B86WAL01ABCA)

**Castilleja cusickii** yellow paintbrush SRank: S2S3

+++++

**Element Code:** PDSCR0D0Q0 **Occurrence Code #:** 004 **Survey Date:** 1986-07-20  
**Last Observed:** 1986-07-20 **First Observed:** 1985-08-00 **Precision Code:** S  
**Directions:** Paine Lake, SE sluice gate, approx. 1km SE of at E end of large slough.  
**General Description:** Moist, slightly elevated, lush veg. dominated by timothy, brome & a variety of native forbs; assoc. plants inc. Perid.gairdneri, Potentilla spp., Cam.rotundifolia & Ach.millefolium.  
**Min Elev. (m):** 1370 **Max Elev. (m):** 1370  
**Slope:** 0.00 **Size of Occurrence:** 1.00 **Best Source of Info:** B86WAL01ABCA  
**Map UTM Zone UTM Easting UTM Northing Survey Site Name Notes # Dot ID #**  
82H04 12 308400 5441400 Paine Lake 49 06/113 37 69 1031  
**Source Code Author Publisher Year Title**  
B86WAL01ABCA Wallis, Clifford et al Alberta Forestry Lands & Wildlife 203p 1986 Pilot rare plant monitoring program in the Oldman Regional Plan area of southwestern Alberta  
185BRA02ABCA Bradley, C. 1985  
**Date Source Abstract Code Observer Occurrence Data**  
12 plants - not found in other wetland and grasslands in area; loosely grouped in 1m by 5m area.(B86WAL01ABCA)  
**Castilleja cusickii** yellow paintbrush SRank: S2S3  
+++++

**Element Code:** PDSCR0D0Q0 **Occurrence Code #:** 005 **Survey Date:** 1972-06-05  
**Last Observed:** 1972-06-05 **First Observed:** 1972-06-05 **Precision Code:** M  
**Directions:** Hwy 6, N side of; viewpoint, about. 2 km E from  
**General Description:** small patch of grassland  
**Min Elev. (m):** 1555 **Max Elev. (m):** 1555 **Best Source of Info:** S72KUCUAABCA05  
**Specimen Source Code Collector Herbarium Accession # Date ID OK? Observation Detail**  
S72KUCUAABCA05 Kuchar, P.K. UA 46128 1972-06-05 [flowers]  
**Map UTM Zone UTM Easting UTM Northing Survey Site Name Notes # Dot ID #**  
82H04 12 298150 5438300 Chief Mountain Highway 49 04/113 44 157 1096  
**Source Code Author Publisher Year Title**  
B86WAL01ABCA Wallis, Clifford et al Alberta Forestry Lands & Wildlife 203p 1986 Pilot rare plant monitoring program in the Oldman Regional Plan area of southwestern Alberta  
**Castilleja cusickii** yellow paintbrush SRank: S2S3  
+++++

**Element Code:** PDSCR0D0Q0 **Occurrence Code #:** 006 **Survey Date:** 1953-07-23  
**Last Observed:** 1953-07-23 **First Observed:** 1953-07-11 **Precision Code:** G  
**Directions:** Chief Mountain Hwy  
**General Description:** open meadow; fescue grassland  
**Min Elev. (m):** 1520 **Max Elev. (m):** 1520  
**Other Comments:** Det. by M. Ownbey **Best Source of Info:** S53BREUAABCA10  
**Specimen Source Code Collector Herbarium Accession # Date ID OK? Observation Detail**  
S53BREUAABCA10 Breitung, A.J. UA 15375 1953-07-23 frequent; [flowers]  
S53BREUAABCA11 Breitung, A.J. UA 15376 1953-07-11 frequent  
**Map UTM Zone UTM Easting UTM Northing Survey Site Name Notes # Dot ID #**  
82H04 12 300100 5437450 Lookout Butte 41 1013  
**Source Code Author Publisher Year Title**  
B86WAL01ABCA Wallis, Clifford et al Alberta Forestry Lands & Wildlife 203p 1986 Pilot rare plant monitoring program in the Oldman Regional Plan area of southwestern Alberta  
**Castilleja cusickii** yellow paintbrush SRank: S2S3  
+++++

**Element Code:** PDSCR0D0Q0 **Occurrence Code #:** 007 **Survey Date:** 1941-05-18  
**Last Observed:** 1941-05-18 **First Observed:** 1941-05-18 **Precision Code:** G  
**Directions:** Leavitt, near  
**General Description:** prairie  
**Min Elev. (m):** 1250 **Max Elev. (m):** 1250  
**Other Comments:** Det. by E.H. Moss as C. ? lutea Helle or C. ? spetentrionalis Lindley; annot. to C. cusickii Greenm. by J.G. Packer **Best Source of Info:** S41MOSUAABCA01  
**Specimen Source Code Collector Herbarium Accession # Date ID OK? Observation Detail**  
S41MOSUAABCA01 Moss, E.H. UA 15383 1941-05-18 [flowers]  
**Map UTM Zone UTM Easting UTM Northing Survey Site Name Notes # Dot ID #**  
82H03 12 320950 5449750 Leavitt 8 948  
**Source Code Author Publisher Year Title**  
B86WAL01ABCA Wallis, Clifford et al Alberta Forestry Lands & Wildlife 203p 1986 Pilot rare plant monitoring program in the Oldman Regional Plan area of southwestern Alberta  
**Castilleja cusickii** yellow paintbrush SRank: S2S3  
+++++



**Element Code:** PDSCR0D0Q0 **Occurrence Code #:** 008 **Survey Date:** 1989-00-00  
**Last Observed:** 1989-00-00 **First Observed:** 1989-00-00 **Precision Code:** S  
**General Description:** Moist drainage W of springs along the N boundary fence.  
**Min Elev. (m):** 1385 **Max Elev. (m):** 1385  
**Other Comments:** Area rich with rare species.  
**Management Comments:** Limiting factors can be past grazing and cultivation (timothy and brome), little natural habitat. **Best Source of Info:** B89WAL01ABCA

**Map UTM Zone UTM Easting UTM Northing Survey Site Name Notes # Dot ID #**

82H03 12 318800 5430850 Outpost Wetlands Natural Area Site G on map. 13 953

**Source Code Author Publisher Year Title**

B89WAL01ABCA Wallis, Clifford Alberta Forestry, Lands & Wildlife 24p 1989 Flora and Special Features Survey of the Outpost Wetlands Natural Area

**Date Source Abstract Code Observer Occurrence Data**

Flowers in mid-June, tree plants.

**Castilleja cusickii** yellow paintbrush SRank: S2S3

+++++

**Element Code:** PDSCR0D0Q0 **Occurrence Code #:** 009 **Survey Date:** 1988-00-00

**Last Observed:** 1988-00-00 **First Observed:** 1986-00-00 **Precision Code:** S

**General Description:** Moraine Blanket type (one case of Veneer) range, open meadows , strong shrub component, assoc. plants: Poa pratensis, Festuca idahoensis, Phleum pratense, Senecio integerrimus.

**Min Elev. (m):** 1524 **Max Elev. (m):** 1524

**Management Comments:** Grazed, logging is going on. **Best Source of Info:** B89EAS01ABCA

**Map UTM Zone UTM Easting UTM Northing Survey Site Name Notes # Dot ID #**

82H04 12 306200 5432000 Poll Haven Community Pasture LSD 13 89 1047

**Source Code Author Publisher Year Title**

B89EAS01ABCA Eastern Slopes Rangeland Consultants Alberta Forestry, Lands & Wildlife 1989 Survey of Rare, Uncommon and Disjunct Vascular Plants of the Poll Haven Community Pasture Grazing Lease 33957

**Castilleja cusickii** yellow paintbrush SRank: S2S3

+++++

**Element Code:** PDSCR0D0Q0 **Occurrence Code #:** 010 **Survey Date:** 1988-00-00

**Last Observed:** 1988-00-00 **First Observed:** 1986-00-00 **Precision Code:** S

**General Description:** Moraine Blanket type (one case of Veneer) range, open meadows , strong shrub component, Festuca idahoensis, Phleum pratense, Senecio integerrimus.

**Min Elev. (m):** 1555 **Max Elev. (m):** 1555

**Management Comments:** Grazed, logging is going on. **Best Source of Info:** B89EAS01ABCA

**Map UTM Zone UTM Easting UTM Northing Survey Site Name Notes # Dot ID #**

82H04 12 308650 5430650 Poll Haven Community

Pasture

LSD 2 101 1056

**Source Code Author Publisher Year Title**

B89EAS01ABCA Eastern Slopes Rangeland Consultants Alberta Forestry, Lands & Wildlife 1989 Survey of Rare, Uncommon and Disjunct Vascular Plants of the Poll Haven Community Pasture Grazing Lease 33957

**Castilleja cusickii** yellow paintbrush SRank: S2S3

+++++

**Element Code:** PDSCR0D0Q0 **Occurrence Code #:** 011 **Survey Date:** 1988-00-00

**Last Observed:** 1988-00-00 **First Observed:** 1986-00-00 **Precision Code:** S

**General Description:** Moraine Blanket type (one case of Veneer) range, open meadows , strong shrub component, Festuca idahoensis, Phleum pratense, Senecio integerrimus.

**Min Elev. (m):** 1463 **Max Elev. (m):** 1463

**Management Comments:** Grazed, logging is going on. **Best Source of Info:** B89EAS01ABCA

**Map UTM Zone UTM Easting UTM Northing Survey Site Name Notes # Dot ID #**

82H04 12 311100 5431350 Poll Haven Community Pasture LSD 12 102 1057

**Source Code Author Publisher Year Title**

B89EAS01ABCA Eastern Slopes Rangeland Consultants Alberta Forestry, Lands & Wildlife 1989 Survey of Rare, Uncommon and Disjunct Vascular Plants of the Poll Haven Community Pasture Grazing Lease 33957

**Castilleja cusickii** yellow paintbrush SRank: S2S3

+++++

**Element Code:** PDSCR0D0Q0 **Occurrence Code #:** 012 **Survey Date:** 1988-00-00  
**Last Observed:** 1988-00-00 **First Observed:** 1986-00-00 **Precision Code:** S  
**General Description:** Moraine Blanket type (one case of Veneer) range, open meadows , strong shrub component, Festuca idahoensis, Phleum pratense, Senecio integerrimus.  
**Min Elev. (m):** 1463 **Max Elev. (m):** 1463  
**Management Comments:** Grazed, logging is going on. **Best Source of Info:** B89EAS01ABCA  
**Map UTM Zone UTM Easting UTM Northing Survey Site Name Notes # Dot ID #**  
82H04 12 310350 5431000 Poll Haven Community Pasture LSD 07 103 1058  
**Source Code Author Publisher Year Title**  
B89EAS01ABCA Eastern Slopes Rangeland Consultants Alberta Forestry, Lands & Wildlife 1989 Survey of Rare, Uncommon and Disjunct Vascular Plants of the Poll Haven Community Pasture Grazing Lease 33957  
**Castilleja cusickii** yellow paintbrush SRank: S2S3  
+++++

**Element Code:** PDSCR0D0Q0 **Occurrence Code #:** 013 **Survey Date:** 1988-00-00  
**Last Observed:** 1988-00-00 **First Observed:** 1986-00-00 **Precision Code:** S  
**General Description:** Moraine Blanket type (one case of Veneer) range, open meadows , strong shrub component, Festuca idahoensis, Phleum pratense, Senecio integerrimus.  
**Min Elev. (m):** 1524 **Max Elev. (m):** 1524  
**Management Comments:** Grazed, logging is going on. **Best Source of Info:** B89EAS01ABCA  
**Map UTM Zone UTM Easting UTM Northing Survey Site Name Notes # Dot ID #**  
82H04 12 309550 5431070 Poll Haven Community Pasture LSD 5 104 1059  
**Source Code Author Publisher Year Title**  
B89EAS01ABCA Eastern Slopes Rangeland Consultants Alberta Forestry, Lands & Wildlife 1989 Survey of Rare, Uncommon and Disjunct Vascular Plants of the Poll Haven Community Pasture Grazing Lease 33957  
**Castilleja cusickii** yellow paintbrush SRank: S2S3  
+++++

**Element Code:** PDSCR0D0Q0 **Occurrence Code #:** 014 **Survey Date:** 1988-00-00  
**Last Observed:** 1988-00-00 **First Observed:** 1986-00-00 **Precision Code:** S  
**General Description:** Moraine Blanket type (one case of Veneer) range, open meadows , strong shrub component, Festuca idahoensis, Phleum pratense, Senecio integerrimus.  
**Min Elev. (m):** 1585 **Max Elev. (m):** 1585  
**Management Comments:** Grazed, logging is going on. **Best Source of Info:** B89EAS01ABCA  
**Map UTM Zone UTM Easting UTM Northing Survey Site Name Notes # Dot ID #**  
82H04 12 309550 5431850 Poll Haven Community Pasture LSD 13 105 1060  
**Source Code Author Publisher Year Title**  
B89EAS01ABCA Eastern Slopes Rangeland Consultants Alberta Forestry, Lands & Wildlife 1989 Survey of Rare, Uncommon and Disjunct Vascular Plants of the Poll Haven Community Pasture Grazing Lease 33957  
**Castilleja cusickii** yellow paintbrush SRank: S2S3  
+++++

**Element Code:** PDSCR0D0Q0 **Occurrence Code #:** 015 **Survey Date:** 1992-05-31  
**Last Observed:** 1991-05-31 **First Observed:** 1966-06-11 **Actual Mapping Precision (m):** 2500 **Precision Code:** M  
**Directions:** Whiskey Gap  
**General Description:** Rough fescue grasslands; occurring in association with Geranium viscosissimum  
**Min Elev. (m):** 1400 **Max Elev. (m):** 1400  
**Other Comments:** C. septentrionalis revised to C. cusickii - J. G. Packer 1978 **Best Source of Info:** S92SOMCFABCA04  
**Specimen Source Code Collector Herbarium Accession # Date ID OK? Observation Detail**  
S66DEVUCABCA01 de Vries, B.D. UC 22982 1966-06-11  
S92SOMCFABCA04 Sommerfeldt, B. CF 860181 1992-05-31 Y  
**Map UTM Zone UTM Easting UTM Northing Survey Site Name Notes # Dot ID #**  
82H03 12 351850 5432500 Whiskey Gap 20 960  
**Source Code Author Publisher Year Title**  
B86WAL01ABCA Wallis, Clifford et al Alberta Forestry Lands & Wildlife 203p 1986 Pilot rare plant monitoring program in the Oldman Regional Plan area of southwestern Alberta  
**Castilleja cusickii** yellow paintbrush SRank: S2S3  
+++++

**Element Code:** PDSCR0D0Q0 **Occurrence Code #:** 016 **Survey Date:** 1982-06-17  
**Last Observed:** 1982-06-17 **First Observed:** 1982-06-17 **Precision Code:** S  
**Directions:** Highway 6, along; road to Hill Spring, 5km north of  
**General Description:** Low, wet, grassy ditches and adjacent embankments by roadside.  
**Min Elev. (m):** 1340 **Max Elev. (m):** 1340 **Best Source of Info:** S82CHIUCABCA01  
**Specimen Source Code Collector Herbarium Accession # Date ID OK? Observation Detail**  
S82CHIUCABCA01 Chinnappa, C.C., Luc Brouillet, B.G. Warner & E. Simons UC 45021 1982-06-17 Y blooming  
**Map UTM Zone UTM Easting UTM Northing Survey Site Name Notes # Dot ID #**  
82H05 12 288550 5471700 Indianfarm Creek 2 1330  
**Source Code Author Publisher Year Title**  
B86WAL01ABCA Wallis, Clifford et al Alberta Forestry Lands & Wildlife 203p 1986 Pilot rare plant monitoring program in the  
Oldman Regional Plan area of southwestern Alberta  
**Castilleja cusickii** yellow paintbrush SRank: S2S3  
+++++

**Element Code:** PDSCR0D0Q0 **Occurrence Code #:** 017 **Survey Date:** 1971-06-10  
**Last Observed:** 1971-06-10 **First Observed:** 1971-06-10 **Precision Code:** G  
**Directions:** Mountain View & Leavitt, between  
**General Description:** moist; grassy side of road  
**Min Elev. (m):** 1325 **Max Elev. (m):** 1325  
**Other Comments:** Det. N. Holmgren 1971 **Best Source of Info:** S71KUIULABCA10  
**Specimen Source Code Collector Herbarium Accession # Date ID OK? Observation Detail**  
S71KUIULABCA10 Kuijt, J. & D.R. Dobbins UL none 1971-06-10 [90%]  
**Map UTM Zone UTM Easting UTM Northing Survey Site Name Notes # Dot ID #**  
82H04 12 312900 5444950 Mountain View 153 1095  
**Castilleja cusickii** yellow paintbrush SRank: S2S3  
+++++

**Element Code:** PDSCR0D0Q0 **Occurrence Code #:** 018 **Survey Date:** 1969-06-15  
**Last Observed:** 1969-06-15 **First Observed:** 1969-06-15 **Precision Code:** S  
**Directions:** Park entrance  
**General Description:** dry SW slope  
**Min Elev. (m):** 1273 **Max Elev. (m):** 1273 **Aspect:** SW  
**Other Comments:** Det. J. Kuijt **Best Source of Info:** S69BLAULABCA06  
**Specimen Source Code Collector Herbarium Accession # Date ID OK? Observation Detail**  
S69BLAULABCA06 Blais, W. UL none 1969-06-15 [90%]  
**Map UTM Zone UTM Easting UTM Northing Survey Site Name Notes # Dot ID #**  
82H04 12 292550 5443850 Park Entrance 49 07/113 51 143 1087  
**Castilleja cusickii** yellow paintbrush SRank: S2S3  
+++++

**Element Code:** PDSCR0D0Q0 **Occurrence Code #:** 022 **Survey Date:** 1986-05-24  
**Last Observed:** 1986-05-24 **First Observed:** 1986-05-24 **Precision Code:** M  
**Directions:** Whiskey Gap, Sommerfeldt Ranch  
**General Description:** Rough fescue grassland  
**Min Elev. (m):** 1280 **Max Elev. (m):** 1400 **Best Source of Info:** S86SOMCFABCA01  
**Specimen Source Code Collector Herbarium Accession # Date ID OK? Observation Detail**  
S86SOMCFABCA01 Sommerfeldt, B. CF 860181 1986-05-24 [flowers]  
**Map UTM Zone UTM Easting UTM Northing Survey Site Name Notes # Dot ID #**  
82H03 12 352650 5431700 Whiskey Gap 49 01 30/113 01 21 961  
**Castilleja cusickii** yellow paintbrush SRank: S2S3  
+++++

**Element Code:** PDSCR0D0Q0 **Occurrence Code #:** 023 **Survey Date:** 1966-09-18  
**Last Observed:** 1966-09-18 **First Observed:** 1966-09-18 **Precision Code:** M  
**Directions:** One mile north of Cochrane on a north sloping hill  
**Min Elev. (m):** 1220 **Max Elev. (m):** 1220 **Aspect:** N **Best Source of Info:** S66SCHUCABCA01  
**Specimen Source Code Collector Herbarium Accession # Date ID OK? Observation Detail**  
S66SCHUCABCA01 Schreiber, A. UC 22984 1966-09-18  
**Map UTM Zone UTM Easting UTM Northing Survey Site Name Notes # Dot ID #**  
82O01 11 677750 5675700 Cochrane 7 1858  
**Castilleja cusickii** yellow paintbrush SRank: S2S3  
+++++

**Element Code:** PDSCR0D0Q0 **Occurrence Code #:** 025 **Survey Date:** 1975-07-07  
**Last Observed:** 1975-07-07 **First Observed:** 1975-07-07 **Precision Code:** M  
**Directions:** Monarch; North East Slopes, above river bottom.  
**Min Elev. (m):** 914 **Max Elev. (m):** 914 **Aspect:** NE **Best Source of Info:** S75KUIULABCA01  
**Specimen Source Code Collector Herbarium Accession # Date ID OK? Observation Detail**  
S75KUIULABCA01 Kujit, J. UL none 1975-07-07  
**Map UTM Zone UTM Easting UTM Northing Survey Site Name Notes # Dot ID #**  
82H14 12 346550 5517050 Monarch 1 1391  
**Castilleja cusickii** yellow paintbrush SRank: S2S3  
+++++

**Element Code:** PDSCR0D0Q0 **Occurrence Code #:** 026 **Survey Date:** 1944-07-21  
**Last Observed:** 1944-07-21 **First Observed:** 1944-07-21 **Precision Code:** M  
**Directions:** Banff National Park; Mt. Aberdun, S of; Paradise Valley.  
**Min Elev. (m):** 1996 **Max Elev. (m):** 1996 **Best Source of Info:** S44SANUCABCA01  
**Specimen Source Code Collector Herbarium Accession # Date ID OK? Observation Detail**  
S44SANUCABCA01 Sanson, N. UC none 1944-07-21 [bloom]  
**Map UTM Zone UTM Easting UTM Northing Survey Site Name Notes # Dot ID #**  
82N08 11 553150 5690050 Paradise Valley 99 1786  
**Castilleja cusickii** yellow paintbrush SRank: S2S3  
+++++

**Element Code:** PDSCR0D0Q0 **Occurrence Code #:** 027 **Survey Date:** 1915-06-07  
**Last Observed:** 1915-06-07 **First Observed:** 1915-06-07 **Precision Code:** M  
**Directions:** Calgary, S of; Midnapore.  
**Min Elev. (m):** 1044 **Max Elev. (m):** 1044  
**Other Comments:** Det. by B.M. Hallworth, January 1980. **Best Source of Info:** S15SANUCABCA02  
**Specimen Source Code Collector Herbarium Accession # Date ID OK? Observation Detail**  
S15SANUCABCA02 Sanson, N. UC none 1915-06-07 [bloom]  
**Map UTM Zone UTM Easting UTM Northing Survey Site Name Notes # Dot ID #**  
82J16 11 705850 5644300 Midnapore 15 1709  
**Castilleja cusickii** yellow paintbrush SRank: S2S3  
+++++

**Element Code:** PDSCR0D0Q0 **Occurrence Code #:** 028 **Survey Date:** 1995-07-19  
**Last Observed:** 1995-07-19 **First Observed:** 1994-06-17 **Precision Code:** S  
**Directions:** Waterton Lakes National Park; Wishbone Trail, Y camp meadow  
**General Description:** Foothills Parkland; Poa spp. - Bromis inermis - Phleum pratense community; subxeric, rapidly drained  
Regosolic Brown  
**Min Elev. (m):** 1280 **Max Elev. (m):** 1290  
**Slope:** 5.00 **Aspect:** W **Size of Occurrence:** 1.00 **Best Source of Info:** PNDACH01ABCA  
**Specimen Source Code Collector Herbarium Accession # Date ID OK? Observation Detail**  
S94ACHWLABCA07 Achuff, P. WL none 1994-06-17  
**Map UTM Zone UTM Easting UTM Northing Survey Site Name Notes # Dot ID #**  
82H04 12 292400 5440875 Lower Waterton Lake Site PA 4016.1 527 1295  
**Castilleja cusickii** yellow paintbrush SRank: S2S3  
+++++

**Element Code:** PDSCR0D0Q0 **Occurrence Code #:** 029 **Survey Date:** 1995-05-27  
**Last Observed:** 1995-05-27 **First Observed:** 1995-05-27 **Actual Mapping Precision (m):** 1500 **Precision Code:** M  
**Directions:** Del Bonita, 26 km W of; Hwy 501, along  
**General Description:** growing on moist native grassland; Dodecatheon conjugens/Zizia aptera/grasses and sedges  
**Min Elev. (m):** 1280 **Max Elev. (m):** 1280 **Size of Occurrence:** **Best Source of Info:** S95DOLULABCA01  
**Specimen Source Code Collector Herbarium Accession # Date ID OK? Observation Detail**  
S95DOLULABCA01 Dolman, Teresa UL none 1995-05-27  
**Map UTM Zone UTM Easting UTM Northing Survey Site Name Notes # Dot ID #**  
82H03 12 344200 5432600 Rolph Creek 49 01N 113 08W 46 6349  
**Castilleja cusickii** yellow paintbrush SRank: S2S3

## **Castilleja lutescens stiff yellow paintbrush**

**Natural Region:** Northern Fescue Grassland, Foothills Fescue Grassland, Mixedgrass

**Habitat:** Grassland

**Phenology:** flowers in June in grassland regions

**Specific Search Strategies (if any):** moist swales; may occur on slightly sandier sites in the grassland region

### **Element Occurrences:**

**Element Code:** PDSCR0D1Y0 **Occurrence Code #:** 001 **Survey Date:** 1985-08-14  
**Last Observed:** 1985-08-14 **First Observed:** 1985-08-14 **Actual Mapping Precision (m):** 400 **Precision Code:** M  
**Directions:** Cardinal Divide, at.

**General Description:** subalpine meadows with patches of Picea forest; growing on moist grassy stony-gravelly soil at base of Picea trees, in association with Zigadenus elegans, Phylodoce glanduliflora, etc; abundant

**Min Elev. (m):** 1981 **Max Elev. (m):** 1981 **Best Source of Info:** S85GRUUAABCA01

**Specimen Source Code Collector Herbarium Accession # Date ID OK? Observation Detail**

S85GRUUAABCA01 Gruezo, W.S.M. UA 91541 1985-08-14 abundant, common

**Map UTM Zone UTM Easting UTM Northing Survey Site Name Notes # Dot ID #**

83C14 11 483400 5860400 Cardinal Divide 90 2700

**Castilleja lutescens** stiff yellow paintbrush SRank: S2S3

+++++

**Element Code:** PDSCR0D1Y0 **Occurrence Code #:** 002 **Survey Date:** 1977-06-15  
**Last Observed:** 1977-06-15 **First Observed:** 1976-07-21 **Actual Mapping Precision (m):** 1000 **Precision Code:** M  
**Directions:** Jasper N.P.; Jasper and Talbot Lakes, between.

**General Description:** grassland margine in dunes and marsh-damp

**Min Elev. (m):** 1005 **Max Elev. (m):** 1005 **Best Source of Info:** S77SHAUABCA01

**Specimen Source Code Collector Herbarium Accession # Date ID OK? Observation Detail**

S76SHAUABCA05 Sharp, D.D. UA 83896 1976-07-21

S77SHAUABCA01 Sharp, D.D. UA 83898 1977-06-15

**Map UTM Zone UTM Easting UTM Northing Survey Site Name Notes # Dot ID #**

83E01 11 432000 5882450 Jasper Lake 18 2900

**Castilleja lutescens** stiff yellow paintbrush SRank: S2S3

+++++

**Element Code:** PDSCR0D1Y0 **Occurrence Code #:** 003 **Survey Date:** 1979-07-17  
**Last Observed:** 1979-07-17 **First Observed:** 1979-07-17 **Actual Mapping Precision (m):** 250 **Precision Code:** S  
**Directions:** Fort Macleod, ~2.5 km NE of; Macleod Island.

**General Description:** island cut; Populus angustifolia-P. balsamifera riparian woodland; assoc. spp.: Rosa acicularia, Bromus inermis, Poa interior

**Min Elev. (m):** 945 **Max Elev. (m):** 945 **Best Source of Info:** S79BRAUAABCA09

**Specimen Source Code Collector Herbarium Accession # Date ID OK? Observation Detail**

S79BRAUAABCA09 Bradley, C., C. Wallis UA 84308 1979-07-17

**Map UTM Zone UTM Easting UTM Northing Survey Site Name Notes # Dot ID #**

82H11 12 328100 5513150 Macleod Island 9 6042

**Castilleja lutescens** stiff yellow paintbrush SRank: S2S3

+++++

**Element Code:** PDSCR0D1Y0 **Occurrence Code #:** 004 **Survey Date:** 1979-06-28  
**Last Observed:** 1979-06-28 **First Observed:** 1979-06-28 **Actual Mapping Precision (m):** 250 **Precision Code:** S  
**Directions:** Dyson Creek, 2 km E of; Green Mountain, S foot of.

**General Description:** narrow band of old-growth spruce on stream alluvium; spp.: spruce, subalpine fir, Ribes lacustre, Lonicera involucrata, Equisetum arvense, mosses, 65% cover

**Min Elev. (m):** 1585 **Max Elev. (m):** 1585

**Slope:** 10.00 **Best Source of Info:** S79MCCUAABCA01

**Specimen Source Code Collector Herbarium Accession # Date ID OK? Observation Detail**

S79MCCUAABCA01 McCallum, B., J. Corbin UA 90117 1979-06-28

**Map UTM Zone UTM Easting UTM Northing Survey Site Name Notes # Dot ID #**

82J10 11 667800 5609500 Green Mountain 47 6043

**Castilleja lutescens** stiff yellow paintbrush SRank: S2S3

+++++

**Element Code:** PDSCR0D1Y0 **Occurrence Code #:** 005 **Survey Date:** 1974-07-25  
**Last Observed:** 1974-07-25 **First Observed:** 1974-06-28 **Actual Mapping Precision (m):** 1500 **Precision Code:** M  
**Directions:** Police Outpost P.P., at. (6-1-26-W4)  
**General Description:** fescue grassland near aspen groves  
**Min Elev. (m):** 1370 **Max Elev. (m):** 1370 **Best Source of Info:** S74SHAUAABCA05  
**Specimen Source Code Collector Herbarium Accession # Date ID OK? Observation Detail**  
S74DANUCABCA14 Danielson, Barbara & S. Crack UC 23007 1974-07-25 common  
S74SHAUAABCA05 Shaw, K. UA 75606 1974-07-25  
S74SHAUAABCA06 Shaw, K. UA 75605 1974-06-28  
**Map UTM Zone UTM Easting UTM Northing Survey Site Name Notes # Dot ID #**  
82H03 12 319950 5430950 Police Outpost Provincial Park 19 959  
**Castilleja lutescens** stiff yellow paintbrush SRank: S2S3  
+++++

**Element Code:** PDSCR0D1Y0 **Occurrence Code #:** 006 **Survey Date:** 1940-06-17  
**Last Observed:** 1940-06-17 **First Observed:** 1940-06-17 **Actual Mapping Precision (m):** 2500 **Precision Code:** M  
**Directions:** Marna Lake, 4 km NE of; Castle River, 2 km S of.  
**General Description:** prairie slope of ridge  
**Min Elev. (m):** 1310 **Max Elev. (m):** 1310 **Best Source of Info:** S40SSSUAABCA09  
**Specimen Source Code Collector Herbarium Accession # Date ID OK? Observation Detail**  
S40SSSUAABCA09 S.S. Survey UA 15387 1940-06-17  
**Map UTM Zone UTM Easting UTM Northing Survey Site Name Notes # Dot ID #**  
82G08 11 712400 5483400 West Castle 98 742  
**Castilleja lutescens** stiff yellow paintbrush SRank: S2S3  
+++++

**Element Code:** PDSCR0D1Y0 **Occurrence Code #:** 007 **Survey Date:** 1978-07-12  
**Last Observed:** 1978-07-12 **First Observed:** 1978-07-12 **Actual Mapping Precision (m):** 250 **Precision Code:** S  
**Directions:** Cripple Creek, drainage area  
**General Description:** upland meadow in creek drainage; gentle SE slope  
**Min Elev. (m):** 1555 **Max Elev. (m):** 1555 **Aspect:** SE  
**Other Comments:** Id by John Corbin; 11UTL888325 **Best Source of Info:** S78JAQUCABCA05  
**Specimen Source Code Collector Herbarium Accession # Date ID OK? Observation Detail**  
S78JAQUCABCA05 Jaques, Dennis UC 44438 1978-07-12  
**Map UTM Zone UTM Easting UTM Northing Survey Site Name Notes # Dot ID #**  
82H13 12 288600 5532400 Cripple Creek 11 UTL 886324; Map sheet 82H13 6 1386  
**Castilleja lutescens** stiff yellow paintbrush SRank: S2S3  
+++++

**Element Code:** PDSCR0D1Y0 **Occurrence Code #:** 008 **Survey Date:** 1970-06-03  
**Last Observed:** 1970-06-03 **First Observed:** 1970-06-03 **Actual Mapping Precision (m):** 2500 **Precision Code:** M  
**Directions:** Hand Hills; Little Fish Lake, N of  
**General Description:** grassland, undisturbed for 3 years  
**Min Elev. (m):** 885 **Max Elev. (m):** 952  
**Other Comments:** Annt. by J.G. Packer to C. lutescens 1978 **Best Source of Info:** S70WEUCABCA03  
**Specimen Source Code Collector Herbarium Accession # Date ID OK? Observation Detail**  
S70WEUCABCA03 Owen, R.A. UC 23002 1970-06-03  
**Map UTM Zone UTM Easting UTM Northing Survey Site Name Notes # Dot ID #**  
82P08 12 411925 5697400 Hand Hills S25 R17 T28 W4 15 6344  
**Castilleja lutescens** stiff yellow paintbrush SRank: S2S3  
+++++

**Element Code:** PDSCR0D1Y0 **Occurrence Code #:** 009 **Survey Date:** 1961-06-20  
**Last Observed:** 1961-06-20 **First Observed:** 1961-06-20 **Actual Mapping Precision (m):** 1500 **Precision Code:** M  
**Directions:** Langdon, ~5km N of; Weed Lake; Hwy 797, along  
**General Description:** moist roadside  
**Min Elev. (m):** 1006 **Max Elev. (m):** 1006  
**Other Comments:** Revd by J.G. Packer Nov 1978 to C. lutescens **Best Source of Info:** S61CARUCABCA07  
**Specimen Source Code Collector Herbarium Accession # Date ID OK? Observation Detail**  
S61CARUCABCA07 Carefoot, J. R. UC 23003 1961-06-20  
**Map UTM Zone UTM Easting UTM Northing Survey Site Name Notes # Dot ID #**  
82P04 12 312000 5654775 Weed Lake 7 6346  
**Castilleja lutescens** stiff yellow paintbrush SRank: S2S3  
+++++

**Element Code:** PDSCR0D1Y0 **Occurrence Code #:** 010 **Survey Date:** 1959-07-03  
**Last Observed:** 1959-07-03 **First Observed:** 1959-07-03 **Actual Mapping Precision (m):** 2500 **Precision Code:** M  
**Directions:** Spray Lakes Reservoir, S of; Spray Lakes Road; Mud Lake, near  
**General Description:** spruce-pine stand  
**Min Elev. (m):** 1850 **Max Elev. (m):** 1850 **Size of Occurrence:** **Best Source of Info:** S59OGIUCABCA05  
**Specimen Source Code Collector Herbarium Accession # Date ID OK? Observation Detail**  
S59OGIUCABCA05 Oglivie, R.T. UC 23143 1959-07-03  
**Map UTM Zone UTM Easting UTM Northing Survey Site Name Notes # Dot ID #**  
82J14 11 619250 5628100 Mud Lake 31 5246  
**Castilleja lutescens** stiff yellow paintbrush SRank: S2S3  
+++++

**Element Code:** PDSCR0D1Y0 **Occurrence Code #:** 011 **Survey Date:** 1975-07-07  
**Last Observed:** 1975-07-07 **First Observed:** 1975-07-07 **Precision Code:** M  
**Directions:** Monarch  
**General Description:** NE facing slopes above river  
**Min Elev. (m):** 914 **Max Elev. (m):** 914 **Aspect:** NE **Size of Occurrence:** **Best Source of Info:** S75KUIULABCA02  
**Specimen Source Code Collector Herbarium Accession # Date ID OK? Observation Detail**  
S75KUIULABCA02 Kuijt, J. UL none 1975-07-07  
**Map UTM Zone UTM Easting UTM Northing Survey Site Name Notes # Dot ID #**  
82H14 12 346550 5517050 Monarch 1 1391  
**Castilleja lutescens** stiff yellow paintbrush SRank: S2S3  
+++++

**Element Code:** PDSCR0D1Y0 **Occurrence Code #:** 012 **Survey Date:** 1969-06-30  
**Last Observed:** 1969-06-30 **First Observed:** 1969-06-30 **Actual Mapping Precision (m):** 250 **Precision Code:** S  
**Directions:** Interpretive Bldg. Hill  
**General Description:** damp SE grassy slope; yellow  
**Min Elev. (m):** 1340 **Max Elev. (m):** 1340 **Aspect:** SE **Size of Occurrence:** **Best Source of Info:** S69BLAULABCA36  
**Specimen Source Code Collector Herbarium Accession # Date ID OK? Observation Detail**  
S69BLAULABCA36 Blais, W. & J. Nagy UL none 1969-06-30 yellow  
**Map UTM Zone UTM Easting UTM Northing Survey Site Name Notes # Dot ID #**  
82H04 12 287550 5438000 Interpretive parking lot 134 1078  
**Castilleja lutescens** stiff yellow paintbrush SRank: S2S3  
+++++

**Element Code:** PDSCR0D1Y0 **Occurrence Code #:** 013 **Survey Date:** 1969-06-03  
**Last Observed:** 1969-06-03 **First Observed:** 1969-06-03 **Actual Mapping Precision (m):** 250 **Precision Code:** S  
**Directions:** Bellevue Hill  
**General Description:** open shale crest  
**Min Elev. (m):** 1829 **Max Elev. (m):** 1829  
**Other Comments:** pale yellow **Best Source of Info:** S69NAGULABCA56  
**Specimen Source Code Collector Herbarium Accession # Date ID OK? Observation Detail**  
S69NAGULABCA56 Nagy, J. & W. Blais UL none 1969-06-03 pale yellow  
**Map UTM Zone UTM Easting UTM Northing Survey Site Name Notes # Dot ID #**  
82H04 12 288000 5443400 Bellevue Hill 49 06/113 55 241 1152  
**Castilleja lutescens** stiff yellow paintbrush SRank: S2S3  
+++++

**Element Code:** PDSCR0D1Y0 **Occurrence Code #:** 014 **Survey Date:** 1969-08-08  
**Last Observed:** 1969-08-08 **First Observed:** 1969-06-02 **Actual Mapping Precision (m):** 1000 **Precision Code:** M  
**Directions:** Bellevue Hill  
**General Description:** open grassy S slope; shale  
**Min Elev. (m):** 1432 **Max Elev. (m):** 1463 **Aspect:** S  
**Other Comments:** pale yellow **Best Source of Info:** S69NAGULABCA58  
**Specimen Source Code Collector Herbarium Accession # Date ID OK? Observation Detail**  
S69NAGULABCA57 Nagy, J. & W. Blais UL none 1969-06-02 pale yellow  
S69NAGULABCA58 Nagy, J. UL none 1969-08-08  
**Map UTM Zone UTM Easting UTM Northing Survey Site Name Notes # Dot ID #**  
82H04 12 287600 5442650 Bellevue Hill 49 06/113 55 216 1137  
**Castilleja lutescens** stiff yellow paintbrush SRank: S2S3  
+++++

**Element Code:** PDSCR0D1Y0 **Occurrence Code #:** 015 **Survey Date:** 1969-06-23  
**Last Observed:** 1969-06-23 **First Observed:** 1969-06-23 **Actual Mapping Precision (m):** 250 **Precision Code:** S  
**Directions:** Red Rock, 1.6 km NW of  
**General Description:** damp, grassy SW slope  
**Min Elev. (m):** 1676 **Max Elev. (m):** 1676 **Aspect:** SW  
**Other Comments:** yellow **Best Source of Info:** S69BLAULABCA37  
**Specimen Source Code Collector Herbarium Accession # Date ID OK? Observation Detail**  
S69BLAULABCA37 Blais, W. & J. Nagy UL none 1969-06-23 yellow  
**Map UTM Zone UTM Easting UTM Northing Survey Site Name Notes # Dot ID #**  
82G01 11 716000 5447450 Red Rock Canyon 49 08/114 02 141 569  
**Castilleja lutescens** stiff yellow paintbrush SRank: S2S3  
+++++

**Element Code:** PDSCR0D1Y0 **Occurrence Code #:** 016 **Survey Date:** 1969-07-31  
**Last Observed:** 1969-07-31 **First Observed:** 1969-07-31 **Actual Mapping Precision (m):** 250 **Precision Code:** S  
**Directions:** Ruby Lake, SE watershed  
**General Description:** non-flowing (quit flowing in last week)  
**Min Elev. (m):** 2072 **Max Elev. (m):** 2072  
**Other Comments:** green-yellow **Best Source of Info:** S69NAGULABCA55  
**Specimen Source Code Collector Herbarium Accession # Date ID OK? Observation Detail**  
S69NAGULABCA55 Nagy, J. & W. Blais UL none 1969-07-31 green - yellow  
**Map UTM Zone UTM Easting UTM Northing Survey Site Name Notes # Dot ID #**  
82G01 11 717600 5441750 Ruby Lake 49 05 / 114 01 134 565  
**Castilleja lutescens** stiff yellow paintbrush SRank: S2S3  
+++++

**Element Code:** PDSCR0D1Y0 **Occurrence Code #:** 017 **Survey Date:** 1967-07-23  
**Last Observed:** 1967-07-23 **First Observed:** 1967-07-23 **Actual Mapping Precision (m):** 250 **Precision Code:** S  
**Directions:** Banff National Park; Tunnel Mountain, SE side of  
**General Description:** dark, dry soil in open woods; various grasses and stands of *P. contorta* nearby  
**Min Elev. (m):** 1524 **Max Elev. (m):** 1524 **Aspect:** SE **Size of Occurrence:** **Best Source of Info:** S67VISUCABCA01  
**Specimen Source Code Collector Herbarium Accession # Date ID OK? Observation Detail**  
S67VISUCABCA01 Visser, S. UC 23006 1967-07-23  
**Map UTM Zone UTM Easting UTM Northing Survey Site Name Notes # Dot ID #**  
82O04 11 601400 5669850 Tunnel Mountain 97 2018  
**Castilleja lutescens** stiff yellow paintbrush SRank: S2S3  
+++++

**Element Code:** PDSCR0D1Y0 **Occurrence Code #:** 018 **Survey Date:** 1987-08-03  
**Last Observed:** 1987-08-03 **First Observed:** 1987-08-03 **Actual Mapping Precision (m):** 500 **Precision Code:** M  
**Directions:** Mount Allen, SE slope of; Centennial Trail  
**General Description:** alpine meadow, SE slope, thin top soil and gravel  
**Min Elev. (m):** 2530 **Max Elev. (m):** 2530 **Aspect:** SE **Size of Occurrence:** **Best Source of Info:** S87PODUCABCA01  
**Specimen Source Code Collector Herbarium Accession # Date ID OK? Observation Detail**  
S87PODUCABCA01 Podrasky, Yan UC 49620 1987-08-03  
**Map UTM Zone UTM Easting UTM Northing Survey Site Name Notes # Dot ID #**  
82J14 11 625800 5645500 Mount Allen 74 6364  
**Castilleja lutescens** stiff yellow paintbrush SRank: S2S3  
+++++

**Element Code:** PDSCR0D1Y0 **Occurrence Code #:** 019 **Survey Date:** 1966-10-08  
**Last Observed:** 1966-10-08 **First Observed:** 1966-10-08 **Actual Mapping Precision (m):** 1000 **Precision Code:** M  
**Directions:** High River, 4.8 km SW of  
**General Description:** at edge of dry pastureland  
**Min Elev. (m):** 1060 **Max Elev. (m):** 1080 **Size of Occurrence:** **Best Source of Info:** S66GETUCABCA01  
**Specimen Source Code Collector Herbarium Accession # Date ID OK? Observation Detail**  
S66GETUCABCA01 Getty, I. UC 23009 1966-10-08  
**Map UTM Zone UTM Easting UTM Northing Survey Site Name Notes # Dot ID #**  
82I12 12 291650 5604050 High River 12 6365  
**Castilleja lutescens** stiff yellow paintbrush SRank: S2S3  
+++++



**Element Code:** PDSCR0D1Y0 **Occurrence Code #:** 020 **Survey Date:** 1981-06-20  
**Last Observed:** 1981-06-20 **First Observed:** 1965-07-01 **Actual Mapping Precision (m):** 2500 **Precision Code:** M  
**Directions:** Calgary, NW of; Nose Hill  
**General Description:** prairie, S-facing slope; grassy sloped area  
**Min Elev. (m):** 1160 **Max Elev. (m):** 1225 **Aspect:** S **Size of Occurrence:** **Best Source of Info:** S81STEUCABCA02  
**Specimen Source Code Collector Herbarium Accession # Date ID OK? Observation Detail**  
S65BIRUCABCA08 Bird, Ann L. UC 23001 1965-07-01  
S71DARUCABCA01 D'Arej, W.G. UC 23008 1971-07-02 flowers pure yellow  
S81STEUCABCA02 Stewart, Elaine UC 37690 1981-06-20  
**Map UTM Zone UTM Easting UTM Northing Survey Site Name Notes # Dot ID #**  
82O01 11 702000 5666675 Calgary - Nosehill 29 1878  
**Castilleja lutescens** stiff yellow paintbrush SRank: S2S3  
+++++

**Element Code:** PDSCR0D1Y0 **Occurrence Code #:** 022 **Survey Date:** 1971-06-10  
**Last Observed:** 1971-06-10 **First Observed:** 1971-06-10 **Actual Mapping Precision (m):** 250 **Precision Code:** S  
**Directions:** Blakiston Creek Bridge, just N of  
**General Description:** gravelly roadside  
**Min Elev. (m):** 1310 **Max Elev. (m):** 1370 **Size of Occurrence:** **Best Source of Info:** S71KUIULABCA42  
**Specimen Source Code Collector Herbarium Accession # Date ID OK? Observation Detail**  
S71KUIULABCA42 Kuijit & D.R. Dobbins UL none 1971-06-10  
**Map UTM Zone UTM Easting UTM Northing Survey Site Name Notes # Dot ID #**  
82H04 12 289600 5439850 Blakiston Creek 49 05/113 53 193 1123  
**Castilleja lutescens** stiff yellow paintbrush SRank: S2S3  
+++++

**Element Code:** PDSCR0D1Y0 **Occurrence Code #:** 023 **Survey Date:** 1972-07-09  
**Last Observed:** 1972-07-09 **First Observed:** 1972-07-09 **Actual Mapping Precision (m):** 1500 **Precision Code:** M  
**Directions:** Bellevue, 0.5 mi W of; Frank Slide, S edge of  
**General Description:** rocky soil in edge of slide  
**Min Elev. (m):** 1280 **Max Elev. (m):** 1310 **Size of Occurrence:** **Best Source of Info:** S72SHAULABCA08  
**Specimen Source Code Collector Herbarium Accession # Date ID OK? Observation Detail**  
S72SHAULABCA08 Sharp, W.H. UL none 1972-07-09  
**Map UTM Zone UTM Easting UTM Northing Survey Site Name Notes # Dot ID #**  
82G09 11 688600 5496500 Frank Slide 4 823  
**Castilleja lutescens** stiff yellow paintbrush SRank: S2S3  
+++++

**Element Code:** PDSCR0D1Y0 **Occurrence Code #:** 024 **Survey Date:** 1964-06-30  
**Last Observed:** 1964-06-30 **First Observed:** 1964-06-30 **Actual Mapping Precision (m):** 250 **Precision Code:** S  
**Directions:** Waterton Lakes N.P.; Hwy 5 and Red Rock Canyon Roads junction, 400 m N of  
**General Description:** on open dry prairie  
**Min Elev. (m):** 1310 **Max Elev. (m):** 1310  
**Other Comments:** occasional **Best Source of Info:** S64DEVUCABCA32  
**Specimen Source Code Collector Herbarium Accession # Date ID OK? Observation Detail**  
S64DEVUCABCA32 de Vries, B. UC 23146 1964-06-30 occasional  
**Map UTM Zone UTM Easting UTM Northing Survey Site Name Notes # Dot ID #**  
82H04 12 289925 5440250 Blakiston Creek 18 991  
**Castilleja lutescens** stiff yellow paintbrush SRank: S2S3

**Castilleja sessiliflora** downy paintbrush

**Natural Region:** Dry Mixedgrass

**Habitat:** Sand Dunes

**Phenology:** flowers in early June

**Specific Search Strategies (if any):** in lush parts of the dunes but on very small patches of level eroding gravelly sands

**Element Occurrences:**

**Element Code:** PDSCR0D300 **Occurrence Code #:** 001 **Survey Date:** 1985-06-09  
**Last Observed:** 1985-06-09 **First Observed:** 1979-07-06 **Actual Mapping Precision (m):** 50 **Precision Code:** S  
**Directions:** USA border, 8 km N of; Lost River Valley, E slope of.  
**General Description:** alluvial sand; xeric mixed prairie; stabilized dunes  
**Min Elev. (m):** 861 **Max Elev. (m):** 899 **Best Source of Info:** S85WALUAABCA01  
**Specimen Source Code Collector Herbarium Accession # Date ID OK? Observation Detail**  
S79STGULABCA02 STG UL none 1979-07-06 fruiting  
S85WALUAABCA01 Wallis, C. UA 098407 1985-06-09 Y Uncommon, rare in overall area; flowers  
**Map UTM Zone UTM Easting UTM Northing Survey Site Name Notes # Dot ID #**  
72E02 12 535073 5435085 Lost River 20 31  
**Source Code Author Publisher Year Title**  
I85WAL01ABCA Wallis, C. 1985  
I85WAL02ABCA Wallis, C. 1985  
R86WER01ABCA Wershler C. & C. Wallis 1986 Lost River Significant Features Assessment  
**Castilleja sessiliflora** downy paintbrush SRank: S1

***Cerastium brachypodum***

**Natural Region:** Dry Mixedgrass

**Habitat:** Wetland-Sandy

**Phenology:** flowers in late May and early June

**Specific Search Strategies (if any):** search for small ephemeral wetlands in sand plains; occurs in bottoms and around rims of very small depressions

**Element Occurrences:**

None recorded in ANHIC database but is known from Redcliff and Pakowki Lake areas.

**Chenopodium desiccatum** goosefoot

**Natural Region:** Mixedgrass, Dry Mixedgrass

**Habitat:** Sand Dunes

**Phenology:** flowers in late July

**Specific Search Strategies (if any):** visible in August and early September; taxonomic difficulties; active dunes; occasional in sandy, gravelly soil of alkali wetlands and other types of disturbed areas

**Element Occurrences:**

**Element Code:** PDCHE090H0 **Occurrence Code #:** 001 **Survey Date:** 1989-07-14  
**Last Observed:** 1989-07-14 **First Observed:** 1989-07-14 **Precision Code:** M  
**Directions:** Bow City, about 10 km W of; Hwy 539, off.  
**General Description:** Stipa comata grassland; on undisturbed soil in saline depression.  
**Min Elev. (m):** 800 **Max Elev. (m):** 800  
**Other Comments:** Det. by K. Tannas; specimen housed in E.S.R.C. herbarium. **Best Source of Info:** UNDTAN01ABCA  
**Map UTM Zone UTM Easting UTM Northing Survey Site Name Notes # Dot ID #**  
82I08 12 404350 5586800 Bow City 1 1418  
**Source Code Author Publisher Year Title**  
UNDTAN01ABCA Tannas, K.E. Native Species Inventory Forms  
**Date Source Abstract Code Observer Occurrence Data**  
several sporadically occurring individuals; plants were small, leaves relatively thick and flushy, these have separated it from  
Chenopodium pratericola (note that Scoggan lumps the two)  
**Chenopodium desiccatum** goosefoot SRank: S1S2  
+++++

**Element Code:** PDCHE090H0 **Occurrence Code #:** 002 **Survey Date:** 1970-08-12  
**Last Observed:** 1970-08-12 **First Observed:** 1970-08-12 **Actual Mapping Precision (m):** 2500 **Precision Code:** M  
**Directions:** Orion, 5 mi. S of; Pakowki sand dunes.  
**General Description:** Open sand.  
**Min Elev. (m):** 876 **Max Elev. (m):** 876  
**Other Comments:** Id. by DAO Taxonomy Personnel. **Best Source of Info:** S70SMOALABCA02  
**Specimen Source Code Collector Herbarium Accession # Date ID OK? Observation Detail**  
S70SMOALABCA02 Smoliak, S., R. Gschlad & T.D. Allen AL 2556 1970-08-12 blooming  
**Map UTM Zone UTM Easting UTM Northing Survey Site Name Notes # Dot ID #**  
72E07 12 512223 5469883 Pakowki Sand Dunes Lat/Long:49 23/110 50 4 85  
**Chenopodium desiccatum** goosefoot SRank: S1S2  
+++++

**Element Code:** PDCHE090H0 **Occurrence Code #:** 003 **Survey Date:** 1914-08-01  
**Last Observed:** 1914-08-01 **First Observed:** 1914-08-01 **Actual Mapping Precision (m):** 2500 **Precision Code:** M  
**Directions:** Medicine Hat; Seven Persons Coulee; Medicine Hat College, 1 km NE of.  
**General Description:** coulee  
**Min Elev. (m):** 655 **Max Elev. (m):** 655 **Best Source of Info:** S14FYLAONCA01  
**Specimen Source Code Collector Herbarium Accession # Date ID OK? Observation Detail**  
S14FYLAONCA01 Fyles, F. AC 141527 1914-08-01  
**Map UTM Zone UTM Easting UTM Northing Survey Site Name Notes # Dot ID #**  
72L02 12 523450 5541000 Medicine Hat 13 3825  
**Chenopodium desiccatum** goosefoot SRank: S1S2  
+++++

**Element Code:** PDCHE090H0 **Occurrence Code #:** 004 **Survey Date:** 1977-09-01  
**Last Observed:** 1977-09-01 **First Observed:** 1977-09-01 **Actual Mapping Precision (m):** 1500 **Precision Code:** M  
**Directions:** Orion, 6 km E of.  
**General Description:** scattered to rare in disturbed areas  
**Min Elev. (m):** 930 **Max Elev. (m):** 930 **Best Source of Info:** S77CROACONCA01  
**Specimen Source Code Collector Herbarium Accession # Date ID OK? Observation Detail**  
S77CROACONCA01 Crompton, C.W. AC 163922 1977-09-01 scattered to rare  
**Map UTM Zone UTM Easting UTM Northing Survey Site Name Notes # Dot ID #**  
72E07 12 516873 5477782 Orion 16 3827  
**Chenopodium desiccatum** goosefoot SRank: S1S2  
+++++

**Element Code:** PDCHE090H0 **Occurrence Code #:** 005 **Survey Date:** 1969-09-10  
**Last Observed:** 1969-09-10 **First Observed:** 1969-09-10 **Actual Mapping Precision (m):** 2500 **Precision Code:** M  
**Directions:** Wild Horse, 11 km N of; Sage Creek  
**General Description:** edge of water pool - sandy gravelly soil; only one plant  
**Min Elev. (m):** 869 **Max Elev. (m):** 869 **Best Source of Info:** S69BASACONCA02  
**Specimen Source Code Collector Herbarium Accession # Date ID OK? Observation Detail**  
S69BASACONCA02 Bassett, I.J. & B.R. Baum AC 141529 1969-09-10 only 1 plant seen  
**Map UTM Zone UTM Easting UTM Northing Survey Site Name Notes # Dot ID #**  
72E01 12 557325 5439525 Sage Creek 15 3830  
**Chenopodium desiccatum** goosefoot SRank: S1S2  
+++++

**Element Code:** PDCHE090H0 **Occurrence Code #:** 006 **Survey Date:** 1950-07-21  
**Last Observed:** 1950-07-21 **First Observed:** 1950-07-21 **Actual Mapping Precision (m):** 2000 **Precision Code:** M  
**Directions:** Redcliff, SW of; South Saskatchewan River, bank of.  
**General Description:** arid gravelly bank of valley, in Opuntia-short grass prairie  
**Min Elev. (m):** 670 **Max Elev. (m):** 670 **Best Source of Info:** S50DORACONCA11  
**Specimen Source Code Collector Herbarium Accession # Date ID OK? Observation Detail**  
S50DORACONCA11 Dore, W. G. & A.J. Breitung AC 134764 1950-07-21  
S50DORACONCA12 Dore, W.G. & A.J. Breitung AC 136725 1949-08-22 sticky annual; petals white; calyx and stamen red.  
**Map UTM Zone UTM Easting UTM Northing Survey Site Name Notes # Dot ID #**  
72L02 12 513550 5545050 Redcliff 14 3831  
**Chenopodium desiccatum** goosefoot SRank: S1S2

***Chenopodium incanum* goosefoot**

**Natural Region:** Mixedgrass, Dry Mixedgrass

**Habitat:** Grassland-Sandy

**Phenology:** flowers in late July, early August

**Specific Search Strategies (if any):** not all dots in Moss are recorded in ANHIC EOs; taxonomic problems; in addition to eroding sands, occurs on shorelines

**Element Occurrences:**

**Element Code:** PDCHE090T0 **Occurrence Code #:** 001 **Survey Date:** 1999-08-15

**Last Observed:** 1999-08-15 **First Observed:** 1999-08-15 **Actual Mapping Precision (m):** 50 **Precision Code:** S

**Directions:** Cypress Hills P.P.; Eagle Butte, 4 km NE of; Fly Lake, 3.5 km S of.

**General Description:** stock pond area, along shore; with *Alopecurus aequalis*, *Carex* sp.; hygric

**Min Elev. (m):** 1355 **Max Elev. (m):** 1355

**Slope:** 10.00 **Aspect:** SW

**Other Comments:** Slope less than 10%. Specimen has been collected, collector number 0011. **Best Source of Info:** U99BRA01ABCA

**Map UTM Zone UTM Easting UTM Northing Survey Site Name Notes # Dot ID #**

72E09 12 544700 5495950 Eagle Butte 6-8-3 W4M 64 5512

**Source Code Author Publisher Year Title**

U99BRA01ABCA Bradley, C., R. Ernst, D. Dickinson & L. Fitch 1999 Rare Plant Survey Forms

**Date Source Abstract Code Observer Occurrence Data**

1999-08-15 U99BRA01ABCA Reg Ernst less than 20 plants

***Chenopodium incanum* goosefoot** SRank: S1

***Chenopodium subglabrum* smooth narrow-leaved goosefoot**

**Natural Region:** Mixedgrass, Dry Mixedgrass

**Habitat:** Sand Dunes

**Phenology:** flowers in July and early August

**Specific Search Strategies (if any):** begin search at edge of active dune and work outwards always staying within an area where there are patches of eroding sand; distinctive species

**Element Occurrences:**

**Element Code:** PDCHE091G0 **Occurrence Code #:** 001 **Survey Date:** 1986-07-20

**Last Observed:** 1986-07-20 **First Observed:** 1986-07-20 **Precision Code:** M

**Directions:** Orion, SW of.

**General Description:** Sand on N facing slope of active dune

**Min Elev. (m):** 880 **Max Elev. (m):** 880 **Aspect:** N **Best Source of Info:** S86HRAPMABCA01

**Specimen Source Code Collector Herbarium Accession # Date ID OK? Observation Detail**

S86HRAPMABCA01 Hrapko, J. & Parker, M. PM B86.140.15 1986-07-20 Flowers, developing fruits

**Map UTM Zone UTM Easting UTM Northing Survey Site Name Notes # Dot ID #**

72E07 12 509873 5471783 Pakowki Sand Dunes Lat/Long: 49 24/110 52 2 83

**Date Source Abstract Code Observer Occurrence Data**

rare

***Chenopodium subglabrum* smooth narrow-leaved goosefoot** SRank: S1

+++++

**Element Code:** PDCHE091G0 **Occurrence Code #:** 002 **Survey Date:** 1987-08-04

**Last Observed:** 1987-08-04 **First Observed:** 1987-08-04 **Precision Code:** M

**Directions:** Coronado

**Min Elev. (m):** 678 **Max Elev. (m):** 678 **Best Source of Info:** S87NELPPABCA03

**Specimen Source Code Collector Herbarium Accession # Date ID OK? Observation Detail**

S87NELPPABCA03 Nelson PP 788 1987-08-04

**Map UTM Zone UTM Easting UTM Northing Survey Site Name Notes # Dot ID #**

72L16 12 541650 5633700 Cavendish S 1/2 7 3 250

***Chenopodium subglabrum* smooth narrow-leaved goosefoot** SRank: S1

+++++

**Element Code:** PDCHE091G0 **Occurrence Code #:** 003 **Survey Date:** 1988-07-20

**Last Observed:** 1988-07-20 **First Observed:** 1986-07-00 **Precision Code:** M

**Directions:** Turin Dunes

**General Description:** Sand dunes

**Min Elev. (m):** 785 **Max Elev. (m):** 785 **Best Source of Info:** S88ALLPPABCA01

**Specimen Source Code Collector Herbarium Accession # Date ID OK? Observation Detail**

S88ALLPPABCA01 Allen, L & MacDonald, C PP 46 1988-07-20

**Map UTM Zone UTM Easting UTM Northing Survey Site Name Notes # Dot ID #**

82H15 12 388700 5526000 Turin 2 1399

**Source Code Author Publisher Year Title**

I86WAL06ABCA Wallis, C. 1986

***Chenopodium subglabrum* smooth narrow-leaved goosefoot** SRank: S1

+++++

**Element Code:** PDCHE091G0 **Occurrence Code #:** 004 **Survey Date:** 1985-08-28

**Last Observed:** 1985-08-28 **First Observed:** 1985-08-28 **Actual Mapping Precision (m):** 50 **Precision Code:** S

**Directions:** USA border, 8 km N of; Lost River Valley, E slope of.

**General Description:** stabilized sand dunes

**Min Elev. (m):** 861 **Max Elev. (m):** 899 **Best Source of Info:** S85WALUAABCA02

**Specimen Source Code Collector Herbarium Accession # Date ID OK? Observation Detail**

S85WALUAABCA02 Wallis, C. UA 098378 1985-08-28 Y rare; fruits

**Map UTM Zone UTM Easting UTM Northing Survey Site Name Notes # Dot ID #**

72E02 12 535073 5435085 Lost River 20 31

**Source Code Author Publisher Year Title**

R86WERO1ABCA Wershler C. & C. Wallis 1986 Lost River Significant Features Assessment

***Chenopodium subglabrum* smooth narrow-leaved goosefoot** SRank: S1

**Chenopodium watsonii** Watson's goosefoot

**Natural Region:** Dry Mixedgrass

**Habitat:** Slopes-Badlands

**Phenology:** flowers in August

**Specific Search Strategies (if any):** unknown

**Element Occurrences:**

**Element Code:** PDCHE091K0 **Occurrence Code #:** 003 **Survey Date:** 1967-09-01  
**Last Observed:** 1967-09-01 **First Observed:** 1967-09-01 **Actual Mapping Precision (m):** 2500 **Precision Code:** M  
**Directions:** Sunnynook, 13.5 km W of; Bullpound Creek Crossing, 1 km W of.  
**General Description:** low land; dry clay soil; only a few plants.  
**Min Elev. (m):** 800 **Max Elev. (m):** 800 **Best Source of Info:** S67BASACONCA03  
**Specimen Source Code Collector Herbarium Accession # Date ID OK? Observation Detail**  
S67BASACONCA03 Bassett, I.J. AC none 1967-09-01 only a few plants seen  
**Map UTM Zone UTM Easting UTM Northing Survey Site Name Notes # Dot ID #**  
72M05 12 440000 5683400 Bullpound Creek 1 3833  
**Chenopodium watsonii** Watson's goosefoot SRank: S1  
+++++

**Element Code:** PDCHE091K0 **Occurrence Code #:** 004 **Survey Date:** 1951-08-13  
**Last Observed:** 1951-08-13 **First Observed:** 1951-08-13 **Actual Mapping Precision (m):** 2500 **Precision Code:** M  
**Directions:** Walsh.  
**General Description:** base of eroded slope, coulee  
**Min Elev. (m):** 745 **Max Elev. (m):** 745 **Best Source of Info:** S51MOSUAABCA22  
**Specimen Source Code Collector Herbarium Accession # Date ID OK? Observation Detail**  
S51MOSUAABCA22 Moss, E.H. UA 7894 1951-08-13 Y fruits  
**Map UTM Zone UTM Easting UTM Northing Survey Site Name Notes # Dot ID #**  
72E16 12 568300 5532400 Walsh 50 07/110 04 6 4464  
**Chenopodium watsonii** Watson's goosefoot SRank: S1



**Coreopsis tinctoria common tickseed**

**Natural Region:** Mixedgrass, Dry Mixedgrass

**Habitat:** Wetland

**Phenology:** flowers mid-July to August

**Specific Search Strategies (if any):** wetland edges, both sandy and alkali where there is mineral soil; also on human-caused disturbances; showy and unmistakable where it occurs

**Element Occurrences:**

**Element Code:** PDAST2L0V0 **Occurrence Code #:** 001 **Survey Date:** 1995-08-24  
**Last Observed:** 1995-08-24 **First Observed:** 1995-08-24 **Precision Code:** S  
**Directions:** Alberta; Elkwater, ca. 15 km SSW of; Cypress Hills plateau, SW side of; Michel Reservoir, southern end of.  
**General Description:** Hygric alkaline sandy clay loam of coulee basin creek bottom, with downdrained wetland grassland of  
Hordeum jubatum -Deschampsia cespitosa - Bechmannia syzigachne - Mentha arve...  
**Min Elev. (m):** 1106 **Max Elev. (m):** 1106 **Size of Occurrence:** **Best Source of Info:** S95MACUAABCA01  
**Specimen Source Code Collector Herbarium Accession # Date ID OK? Observation Detail**  
S95MACUAABCA01 Macdonald, I.D. UA none 1995-08-24  
**Map UTM Zone UTM Easting UTM Northing Survey Site Name Notes # Dot ID #**  
72E09 12 545874 5486081 Michel Reservoir Site 28; 49 31/110 22; LSD 8 20 116  
**Coreopsis tinctoria** common tickseed SRank: S2  
+++++

**Element Code:** PDAST2L0V0 **Occurrence Code #:** 002 **Survey Date:** 1938-07-12  
**Last Observed:** 1938-07-12 **First Observed:** 1938-07-12 **Actual Mapping Precision (m):** 2500 **Precision Code:** M  
**Directions:** Brooks.  
**General Description:** Roadside slough.  
**Min Elev. (m):** 754 **Max Elev. (m):** 754 **Best Source of Info:** S38SEXALABCA04  
**Specimen Source Code Collector Herbarium Accession # Date ID OK? Observation Detail**  
S38SEXALABCA04 Sexsmith J.J. AL 1133 1938-07-12 Y blooming  
S38SEXALABCA07 Sexsmith J.J. AL 5016 1938-07-12 Y blooming  
**Map UTM Zone UTM Easting UTM Northing Survey Site Name Notes # Dot ID #**  
72L12 12 436300 5602425 Brooks 5 236  
**Coreopsis tinctoria** common tickseed SRank: S2  
+++++

**Element Code:** PDAST2L0V0 **Occurrence Code #:** 003 **Survey Date:** 1974-07-24  
**Last Observed:** 1974-07-24 **First Observed:** 1974-07-24 **Actual Mapping Precision (m):** 800 **Precision Code:** M  
**Directions:** Brooks, 4.5 km SE of; Alberta Horticultural Station.  
**General Description:** Growing on roadside amongst other weedy species.  
**Min Elev. (m):** 754 **Max Elev. (m):** 754 **Best Source of Info:** S74LEGUCABCA01  
**Specimen Source Code Collector Herbarium Accession # Date ID OK? Observation Detail**  
S74LEGUCABCA01 Legge, R.L. UC 37750 1974-07-24 Y  
**Map UTM Zone UTM Easting UTM Northing Survey Site Name Notes # Dot ID #**  
72L12 12 440150 5599750 Provincial Horticultural Station - Brooks 6 237  
**Coreopsis tinctoria** common tickseed SRank: S2  
+++++

**Element Code:** PDAST2L0V0 **Occurrence Code #:** 004 **Survey Date:** 1947-08-03  
**Last Observed:** 1947-08-03 **First Observed:** 1914-07-31 **Actual Mapping Precision (m):** 1000 **Precision Code:** M  
**Directions:** Medicine Hat; Police Point.  
**General Description:** near stream  
**Min Elev. (m):** 670 **Max Elev. (m):** 670 **Best Source of Info:** S14FYLACONCA02  
**Specimen Source Code Collector Herbarium Accession # Date ID OK? Observation Detail**  
S14FYLACONCA02 Fyles, F. AC 357145 1914-07-31  
S47TURNMONCA02 Turner, G.H. NM 106855 1947-08-03  
**Map UTM Zone UTM Easting UTM Northing Survey Site Name Notes # Dot ID #**  
72L02 12 525800 5543150 Medicine Hat Lat/Long: 50 03/110 38 2 169  
**Coreopsis tinctoria** common tickseed SRank: S2  
+++++

**Element Code:** PDAST2L0V0 **Occurrence Code #:** 005 **Survey Date:** 1952-08-09  
**Last Observed:** 1952-08-09 **First Observed:** 1895-08-10 **Actual Mapping Precision (m):** 1000 **Precision Code:** M  
**Directions:** Roytal, 6 km W of, Seven Persons Coulee.  
**General Description:** flats of the creek  
**Min Elev. (m):** 693 **Max Elev. (m):** 693 **Best Source of Info:** S52BOIACONCA06  
**Specimen Source Code Collector Herbarium Accession # Date ID OK? Observation Detail**  
S52BOIACONCA06 Boivin, Bernard & J.F. Alex AC 141990 1952-08-09  
S95MACNMONCA43 Macoun NM 106856 1895-08-10  
**Map UTM Zone UTM Easting UTM Northing Survey Site Name Notes # Dot ID #**  
72E15 12 519675 5536900 Seven Persons Creek 6 162  
**Coreopsis tinctoria** common tickseed SRank: S2  
+++++

**Element Code:** PDAST2L0V0 **Occurrence Code #:** 006 **Survey Date:** 1973-07-22  
**Last Observed:** 1973-07-22 **First Observed:** 1973-07-22 **Actual Mapping Precision (m):** 2500 **Precision Code:** M  
**Directions:** Buffalo Road; ~1.9 km E of, Twin Peaks; ~750 m W of Northern peak of.  
**General Description:** on a trail way along the road to Council Bluff  
**Min Elev. (m):** 640 **Max Elev. (m):** 640 **Best Source of Info:** S73JOHPMABCA04  
**Specimen Source Code Collector Herbarium Accession # Date ID OK? Observation Detail**  
S73JOHPMABCA04 Johnson, Hope PM B73.69.51 1973-07-22 Y  
**Map UTM Zone UTM Easting UTM Northing Survey Site Name Notes # Dot ID #**  
72L07 12 524275 5581100 CFB Suffield-Twin Peaks 50-23N/110-39W 27 4313  
**Coreopsis tinctoria** common tickseed SRank: S2  
+++++

**Element Code:** PDAST2L0V0 **Occurrence Code #:** 007 **Survey Date:** 1994-07-14  
**Last Observed:** 1994-07-14 **First Observed:** 1994-07-14 **Actual Mapping Precision (m):** 50 **Precision Code:** S  
**Directions:** Twin Peaks; ~3.9 km SSW of S. peak of; South Sask. River, 2.9 km W of.  
**General Description:** wetland 115, Deschampsia cespitosa - Hordeum jubatum - Carex douglasii community  
**Min Elev. (m):** 700 **Max Elev. (m):** 700 **Best Source of Info:** U97CWS01ABCA  
**Specimen Source Code Collector Herbarium Accession # Date ID OK? Observation Detail**  
S94GENPMABCA02 Gentle, Garry PM B94.11.394 1994-07-14 Y  
**Map UTM Zone UTM Easting UTM Northing Survey Site Name Notes # Dot ID #**  
72L07 12 524400 5577000 CFB Suffield 524400/5577000;50-20'40"N/110-39'25"W 28 4326  
**Source Code Author Publisher Year Title**  
R97MAC01ABCA Macdonald, I.D. Canadian Wildlife Service, Environment Canada, Prairie and 1997 Vascular Flora of Canadian Forces Base Suffield National Wildlife Area  
U97CWS01ABCA Canadian Wildlife Service CWS 1997 Plant Database from Suffield Survey 1994-1995  
**Coreopsis tinctoria** common tickseed SRank: S2  
+++++

**Element Code:** PDAST2L0V0 **Occurrence Code #:** 008 **Survey Date:** 1995-07-18  
**Last Observed:** 1995-07-18 **First Observed:** 1995-07-18 **Actual Mapping Precision (m):** 250 **Precision Code:** S  
**Directions:** Twin Peaks; ~2.9 km SSW of S. peak of; S. Saskatchewan River; ~3 km W of.  
**General Description:** sandy clay loam in seasonally moist depression on moraine plain with subhygric meadow of Coreopsis tinctoria - Descurainia pinnata - Artem. lidoviciana - Poa palustris - Hordeum jubatum  
**Min Elev. (m):** 695 **Max Elev. (m):** 695 **Best Source of Info:** U97CWS01ABCA  
**Specimen Source Code Collector Herbarium Accession # Date ID OK? Observation Detail**  
S95MACPMABCA12 Macdonald, I.D. PM B95.9.25 1995-07-18 Y  
**Map UTM Zone UTM Easting UTM Northing Survey Site Name Notes # Dot ID #**  
72L07 12 522850 5578075 CFB Suffield 50-21'23"N/110-41'25"W; 29 4327  
**Source Code Author Publisher Year Title**  
U97CWS01ABCA Canadian Wildlife Service CWS 1997 Plant Database from Suffield Survey 1994-1995  
**Coreopsis tinctoria** common tickseed SRank: S2  
+++++

**Element Code:** PDAST2L0V0    **Occurrence Code #:** 009    **Survey Date:** 1999-07-27  
**Last Observed:** 1999-07-27    **First Observed:** 1999-07-27    **Actual Mapping Precision (m):** 100    **Precision Code:** S  
**Directions:** Lethbridge, city of; SW corner of Sportsplex Arena property, E side of College Drive.  
**General Description:** vacant city lot; semi-moist, with ground squirrel burrows; mix of introduced & native spp  
**Slope:** 0.00  
**Other Comments:** May be mown before flowering  
**Management Comments:** Area likely will be developed; probably owned by Lethbridge Community College    **Best Source of Info:** U99COR01ABCA  
**Map UTM Zone UTM Easting UTM Northing Survey Site Name Notes # Dot ID #**  
82H10 12 369550 5502850 Lethbridge 30 5278  
**Source Code Author Publisher Year Title**  
U99COR01ABCA Corbiere, Adrian 1999 Rare Plant Survey Form  
**Date Source Abstract Code Observer Occurrence Data**  
1999-07-27 U99COR01ABCA A. Corbiere 6 individuals,; 90% flowering  
**Coreopsis tinctoria** common tickseed SRank: S2  
+++++

**Element Code:** PDAST2L0V0    **Occurrence Code #:** 010    **Survey Date:** 1999-08-13  
**Last Observed:** 1999-08-13    **First Observed:** 1999-08-13    **Actual Mapping Precision (m):** 200    **Precision Code:** S  
**Directions:** Lethbridge, city of; Exhibition Grounds gates; N of, near 34 St. S & N Parkside Drive.  
**General Description:** vacant city lot, with mix of introduced & native spp. Associated species: Het vill, Tar off, Rum sp., Ave fat  
**Min Elev. (m):** 920    **Max Elev. (m):** 920  
**Slope:** 0.00  
**Management Comments:** Area will be developed. Suggest plants be transplanted and/or seed harvested.    **Best Source of Info:** U99COR01ABCA  
**Map UTM Zone UTM Easting UTM Northing Survey Site Name Notes # Dot ID #**  
82H10 12 370900 5505750 Lethbridge 31 5195  
**Source Code Author Publisher Year Title**  
U99COR01ABCA Corbiere, Adrian 1999 Rare Plant Survey Form  
**Date Source Abstract Code Observer Occurrence Data**  
1999-08-13 U99COR01ABCA A. Corbiere, L. Hutchinson Over 100 individuals, 100% flowering  
**Coreopsis tinctoria** common tickseed SRank: S2

***Crepis occidentalis* small-flowered hawk's-beard**

**Natural Region:** Northern Fescue Grassland, Mixedgrass, Dry Mixedgrass

**Habitat:** Grassland-Sandy

**Phenology:** flowers late May to early June

**Specific Search Strategies (if any):** wide area searches in sandy grasslands; tends to be sparsely distributed over large areas; occurs on upper slopes and level uplands

**Element Occurrences:**

**Element Code:** PDAST2R0E0 **Occurrence Code #:** 001 **Survey Date:** 1952-08-13  
**Last Observed:** 1952-08-13 **First Observed:** 1952-08-13 **Precision Code:** M  
**Directions:** Mount Dungarvan; Crete sud-ouest, vers 1850m  
**General Description:** Pente schisteuse a exposition meridionale  
**Min Elev. (m):** 1850 **Max Elev. (m):** 1850 **Aspect:** SW **Best Source of Info:** S52BOIUABCA01  
**Specimen Source Code Collector Herbarium Accession # Date ID OK? Observation Detail**  
S52BOIACONCA01 Boivin, B. AC 141982 1952-08-13 GWD  
S52BOIUABCA01 Boivin, B. & J.F. Alex UA 72851 1952-08-13 Y fruit  
**Map UTM Zone UTM Easting UTM Northing Survey Site Name Notes # Dot ID #**  
82H04 12 282550 5447450 Mount Dungarvan 158 1097  
***Crepis occidentalis* small-flowered hawk's-beard SRank:** S2  
+++++

**Element Code:** PDAST2R0E0 **Occurrence Code #:** 002 **Survey Date:** 1986-07-07  
**Last Observed:** 1986-07-07 **First Observed:** 1986-07-07 **Precision Code:** M  
**General Description:** coulee slope, moist Festuca- Danthonia community with abundant forbs; assoc. with Carex Microptera, Juncus confusus & Bromus carinatus.  
**Min Elev. (m):** 1235 **Max Elev. (m):** 1235 **Aspect:** E **Best Source of Info:** B86WAL01ABCA  
**Map UTM Zone UTM Easting UTM Northing Survey Site Name Notes # Dot ID #**  
72E04 12 457224 5427783 Sweetgrass Hills LAT/LONG: 49 00' 111 35' 4 52  
**Source Code Author Publisher Year Title**  
B86WAL01ABCA Wallis, Clifford et al Alberta Forestry Lands & Wildlife 203p 1986 Pilot rare plant monitoring program in the Oldman Regional Plan area of southwestern Alberta  
**Date Source Abstract Code Observer Occurrence Data**  
several plants found  
***Crepis occidentalis* small-flowered hawk's-beard SRank:** S2  
+++++

**Element Code:** PDAST2R0E0 **Occurrence Code #:** 003 **Survey Date:** 1986-07-07  
**Last Observed:** 1986-07-07 **First Observed:** 1986-07-07 **Precision Code:** M  
**General Description:** Mixed grassland at edge of coulee.  
**Min Elev. (m):** 1029 **Max Elev. (m):** 1029 **Aspect:** N **Best Source of Info:** B86WAL01ABCA  
**Map UTM Zone UTM Easting UTM Northing Survey Site Name Notes # Dot ID #**  
72E03 12 465724 5430784 Macdonald Creek Lat/Long: 49 02' 111 28' 1 36  
**Source Code Author Publisher Year Title**  
B86WAL01ABCA Wallis, Clifford et al Alberta Forestry Lands & Wildlife 203p 1986 Pilot rare plant monitoring program in the Oldman Regional Plan area of southwestern Alberta  
**Date Source Abstract Code Observer Occurrence Data**  
Several plants found, but no others along several hundred metres of coulee.  
***Crepis occidentalis* small-flowered hawk's-beard SRank:** S2  
+++++

**Element Code:** PDAST2R0E0 **Occurrence Code #:** 004 **Survey Date:** 1990-05-14  
**Last Observed:** 1990-05-14 **First Observed:** 1988-00-00 **Precision Code:** M  
**Directions:** North side of Milk River, AB.  
**General Description:** Short grass prairie, well drained.  
**Min Elev. (m):** 900 **Max Elev. (m):** 920 **Best Source of Info:** S88SCOCFABCA01  
**Specimen Source Code Collector Herbarium Accession # Date ID OK? Observation Detail**  
S88SCOCFABCA01 Scotter, G.W. CF 880815 1988-00-00 Flowers, fruits  
**Map UTM Zone UTM Easting UTM Northing Survey Site Name Notes # Dot ID #**  
72E03 12 481823 5445785 Ross Ranch 2 37  
**Date Source Abstract Code Observer Occurrence Data**  
Flowers, fruits.  
***Crepis occidentalis* small-flowered hawk's-beard SRank:** S2  
+++++

**Element Code:** PDAST2R0E0 **Occurrence Code #:** 005 **Survey Date:** 1990-02-19  
**Last Observed:** 1990-02-19 **First Observed:** 1976-00-00 **Precision Code:** S  
**Directions:** Police coulee.  
**General Description:** Coulee grassland.  
**Min Elev. (m):** 900 **Max Elev. (m):** 900 **Best Source of Info:** S76WERUAABCA01  
**Specimen Source Code Collector Herbarium Accession # Date ID OK? Observation Detail**  
S76WERUAABCA01 Wershier, C. UA 75244 1976-05-00 Y [flowers]  
**Map UTM Zone UTM Easting UTM Northing Survey Site Name Notes # Dot ID #**  
72E04 12 453374 5435633 Writing-on-stone Provincial Park 6 54  
**Date Source Abstract Code Observer Occurrence Data**  
Flowers + fruits.  
**Crepis occidentalis** small-flowered hawk's-beard SRank: S2  
+++++

**Element Code:** PDAST2R0E0 **Occurrence Code #:** 006 **Survey Date:** 1990-02-16  
**Last Observed:** 1990-02-16 **First Observed:** 1964-00-00 **Precision Code:** M  
**Directions:** Writing-on-Stone Provincial Park  
**General Description:** Uncommon on heavy textured soils at base of S facing slope and among sandstone formations.  
**Min Elev. (m):** 880 **Max Elev. (m):** 900 **Aspect:** S **Best Source of Info:** S64DEVUCABCA08  
**Specimen Source Code Collector Herbarium Accession # Date ID OK? Observation Detail**  
S64DEVUCABCA08 de Vries, B. UC 27025 1964-00-00  
**Map UTM Zone UTM Easting UTM Northing Survey Site Name Notes # Dot ID #**  
72E04 12 454074 5436383 Writing-on-Stone Provincial Park 49-05N/111-37W 7 55  
**Date Source Abstract Code Observer Occurrence Data**  
50% in bloom.  
**Crepis occidentalis** small-flowered hawk's-beard SRank: S2  
+++++

**Element Code:** PDAST2R0E0 **Occurrence Code #:** 007 **Survey Date:** 1990-02-19  
**Last Observed:** 1990-02-19 **First Observed:** 1979-00-00 **Precision Code:** M  
**Directions:** Sage Creek, Facing East.  
**General Description:** Eroding badland slope.  
**Min Elev. (m):** 914 **Max Elev. (m):** 914 **Aspect:** E **Best Source of Info:** S79WALUAABCA02  
**Specimen Source Code Collector Herbarium Accession # Date ID OK? Observation Detail**  
S79WALUAABCA02 Wallis, C. UA 84601 1979-00-00 Fruits  
**Map UTM Zone UTM Easting UTM Northing Survey Site Name Notes # Dot ID #**  
72E01 12 546100 5452300 Sage Creek E 20-3-3 W4M 1 4503  
**Date Source Abstract Code Observer Occurrence Data**  
Fruits  
**Crepis occidentalis** small-flowered hawk's-beard SRank: S2  
+++++

**Element Code:** PDAST2R0E0 **Occurrence Code #:** 008 **Survey Date:** 1966-06-11  
**Last Observed:** 1966-06-11 **First Observed:** 1966-06-11 **Precision Code:** M  
**Directions:** Milk River Valley; Pendant d'Oreille.  
**General Description:** Locally on dry slope.  
**Min Elev. (m):** 884 **Max Elev. (m):** 914 **Best Source of Info:** S66DEVPMABCA02  
**Specimen Source Code Collector Herbarium Accession # Date ID OK? Observation Detail**  
S66DEVPMABCA02 de Vries, B.D. PM B68.4.107 1966-06-11  
S66DEVUCABCA09 de Vries, B.D. UC 27024 1966-00-00 Scattered; [just past full bloom]; uncommon  
**Map UTM Zone UTM Easting UTM Northing Survey Site Name Notes # Dot ID #**  
72E02 12 509773 5449484 Pendant d'oreille Lat/Long: 49 12' 110 52' 7 18  
**Date Source Abstract Code Observer Occurrence Data**  
Flowers  
**Crepis occidentalis** small-flowered hawk's-beard SRank: S2  
+++++

**Element Code:** PDAST2R0E0 **Occurrence Code #:** 009 **Survey Date:** 1989-06-15  
**Last Observed:** 1989-06-15 **First Observed:** 1989-06-15 **Precision Code:** S  
**Directions:** Milk River NA

**General Description:** Slight solonchic depressions in very short sandy grassland  
**Min Elev. (m):** 972 **Max Elev. (m):** 972 **Best Source of Info:** S89WALPPABCA05  
**Specimen Source Code Collector Herbarium Accession # Date ID OK? Observation Detail**  
S89WALPPABCA05 Wallis, C. PP 759 1989-06-15

**Map UTM Zone UTM Easting UTM Northing Survey Site Name Notes # Dot ID #**  
72E02 12 523373 5427384 Milk River Natural Area 11 22

**Date Source Abstract Code Observer Occurrence Data**

Scattered plants totaling several 100s in this area  
**Crepis occidentalis** small-flowered hawk's-beard SRank: S2  
+++++

**Element Code:** PDAST2R0E0 **Occurrence Code #:** 010 **Survey Date:** 1985-06-09  
**Last Observed:** 1985-06-09 **First Observed:** 1985-06-09 **Actual Mapping Precision (m):** 50 **Precision Code:** S  
**Directions:** Onefour, 14 km S of; Lost River, 2 km W of; USA border, 1.5 km N of.

**General Description:** sandy slope  
**Min Elev. (m):** 869 **Max Elev. (m):** 876 **Aspect:** SW **Best Source of Info:** S85WALUAABCA04  
**Specimen Source Code Collector Herbarium Accession # Date ID OK? Observation Detail**  
S85WALUAABCA04 Wallis, C. UA 098428 1985-06-09 Y fruits, developing

**Map UTM Zone UTM Easting UTM Northing Survey Site Name Notes # Dot ID #**  
72E01 12 538300 5428650 Lost River 9 8

**Source Code Author Publisher Year Title**

U86WERO1ABCA Wershler, C.R. Prepared for AB Forestry, Lands and Wildlife 1986 Lost River: Mountain Plover Study.  
**Crepis occidentalis** small-flowered hawk's-beard SRank: S2  
+++++

**Element Code:** PDAST2R0E0 **Occurrence Code #:** 011 **Survey Date:** 1997-05-25  
**Last Observed:** 1997-05-25 **First Observed:** 1997-05-25 **Actual Mapping Precision (m):** 100 **Precision Code:** S  
**Directions:** Lethbridge; Oldman River Valley, E slopes of; Six Mile Coulee, 1 km N of.

**General Description:** south side of ridgetop, near top; Stipa, Bouteloua, Koeleria, Eurotia, Penstemon  
**Min Elev. (m):** 830 **Max Elev. (m):** 830 **Aspect:** S

**Other Comments:** Several location between Six Mile Coulee and Dog run area; also west side at Bull Trail Park. **Best Source of Info:** U97ERN01ABCA

**Map UTM Zone UTM Easting UTM Northing Survey Site Name Notes # Dot ID #**  
82H10 12 367550 5503500 Lethbridge 3TM 83648.11 5505255.48; 83776.12 550 4956.70 20 3791

**Source Code Author Publisher Year Title**

U97ERN01ABCA Ernst, Reg 1997 Rare Native Plant Survey Forms  
**Date Source Abstract Code Observer Occurrence Data**  
1997-05-25 U97ERN01ABCA Reg Ernst several populations; too numerous to count  
**Crepis occidentalis** small-flowered hawk's-beard SRank: S2  
+++++

**Element Code:** PDAST2R0E0 **Occurrence Code #:** 012 **Survey Date:** 1996-00-00  
**Last Observed:** 1996-00-00 **First Observed:** 1996-00-00 **Actual Mapping Precision (m):** 250 **Precision Code:** S  
**Directions:** Suffield, 32.5 km SE of; S.Sask. River, 4.25 km N of.

**General Description:** Population no longer exists. 1 plant found.  
**Min Elev. (m):** 792 **Max Elev. (m):** 792 **Best Source of Info:** U96EXP01ABCA

**Map UTM Zone UTM Easting UTM Northing Survey Site Name Notes # Dot ID #**  
72L03 12 495800 5546750 S. Sask. River NE15- 8 13-8-4, LS # 44, Km 293.5 7 3975

**Source Code Author Publisher Year Title**

U96EXP01ABCA AXYS Environmental Consulting 1996 Express Pipeline Project  
**Crepis occidentalis** small-flowered hawk's-beard SRank: S2  
+++++

**Element Code:** PDAST2R0E0 **Occurrence Code #:** 013 **Survey Date:** 1985-00-00  
**Last Observed:** 1985-00-00 **First Observed:** 1985-00-00 **Actual Mapping Precision (m):** 50 **Precision Code:** S  
**Directions:** Lost River Valley and USA border, at.

**General Description:** eroded kame slope  
**Min Elev. (m):** 846 **Max Elev. (m):** 876 **Best Source of Info:** R86WERO1ABCA  
**Map UTM Zone UTM Easting UTM Northing Survey Site Name Notes # Dot ID #**

72E01 12 541350 5427775 Lost River 45 4546

**Source Code Author Publisher Year Title**

R86WERO1ABCA Wershler C. & C. Wallis 1986 Lost River Significant Features Assessment  
**Crepis occidentalis** small-flowered hawk's-beard SRank: S2  
+++++

**Element Code:** PDAST2R0E0 **Occurrence Code #:** 014 **Survey Date:** 1985-00-00  
**Last Observed:** 1985-00-00 **First Observed:** 1985-00-00 **Actual Mapping Precision (m):** 50 **Precision Code:** S  
**Directions:** Lost River Valley, rim of; USA border, 1.8 km N of.  
**General Description:** sandy upland grassland  
**Min Elev. (m):** 846 **Max Elev. (m):** 869 **Best Source of Info:** R86WER01ABCA  
**Map UTM Zone UTM Easting UTM Northing Survey Site Name Notes # Dot ID #**  
72E01 12 540000 5428550 Lost River 48 4549  
**Source Code Author Publisher Year Title**  
R86WER01ABCA Wershler C. & C. Wallis 1986 Lost River Significant Features Assessment  
**Crepis occidentalis** small-flowered hawk's-beard SRank: S2  
+++++

**Element Code:** PDAST2R0E0 **Occurrence Code #:** 015 **Survey Date:** 1985-00-00  
**Last Observed:** 1985-00-00 **First Observed:** 1985-00-00 **Actual Mapping Precision (m):** 50 **Precision Code:** S  
**Directions:** Lost River Valley, W rim of, 2.7 km N of.  
**General Description:** sandy upland grassland  
**Min Elev. (m):** 861 **Max Elev. (m):** 884 **Best Source of Info:** R86WER01ABCA  
**Map UTM Zone UTM Easting UTM Northing Survey Site Name Notes # Dot ID #**  
72E01 12 539900 5429950 Lost River 50 4551  
**Source Code Author Publisher Year Title**  
R86WER01ABCA Wershler C. & C. Wallis 1986 Lost River Significant Features Assessment  
**Date Source Abstract Code Observer Occurrence Data**  
R86WER01ABCA C. Wershler & C. Wallis dense stand  
**Crepis occidentalis** small-flowered hawk's-beard SRank: S2  
+++++

**Element Code:** PDAST2R0E0 **Occurrence Code #:** 016 **Survey Date:** 1990-06-19  
**Last Observed:** 1990-06-19 **First Observed:** 1990-06-19 **Actual Mapping Precision (m):** 100 **Precision Code:** S  
**Directions:** Eagle Nest, south end of NA  
**General Description:** in eroding soil in "badlands" **Best Source of Info:** N90WAL02ABCA  
**Map UTM Zone UTM Easting UTM Northing Survey Site Name Notes # Dot ID #**  
72E09 12 546800 5491800 Eagle Nest 60 5074  
**Source Code Author Publisher Year Title**  
N90WAL02ABCA Wallis, Cliff Alberta Forestry, Lands and Wildlife 1990 Reconnaissance Special Feature Assessment SE28 and  
NE21-7-3-W4  
**Date Source Abstract Code Observer Occurrence Data**  
1990-06-19 N90WAL02ABCA Cliff Wallis 30 plants  
**Crepis occidentalis** small-flowered hawk's-beard SRank: S2

***Cryptantha minima* small cryptanthe**

**Natural Region:** Mixedgrass, Dry Mixedgrass

**Habitat:** Sand Dunes

**Phenology:** flowers in July

**Specific Search Strategies (if any):** important to have a clear understanding of differences between *Cryptantha fendleri* and *minima*. Search in actively eroding sand, concentrating on sand dunes and valley slopes in sand dune regions. Has been reported for wetland edge.

**Element Occurrences:**

**Element Code:** PDBOR0A1Y0 **Occurrence Code #:** 001 **Survey Date:** 1973-07-22

**Last Observed:** 1973-07-22 **First Observed:** 1973-07-22 **Precision Code:** M

**Directions:** Medicine Hat, 14 mi N of; near S. boundary of DRES, Suffield Military Reserve; Bull pen area on S. Sask. River.

**Min Elev. (m):** 650 **Max Elev. (m):** 650 **Best Source of Info:** U97CWS01ABCA

**Specimen Source Code Collector Herbarium Accession # Date ID OK? Observation Detail**

S73JOHPMABCA01 Johnson, H. PM B73.69.68 1973-07-22 Fruits

**Map UTM Zone UTM Easting UTM Northing Survey Site Name Notes # Dot ID #**

72L02 12 527600 5562550 Old Channel Lake 1 168

**Source Code Author Publisher Year Title**

U97CWS01ABCA Canadian Wildlife Service CWS 1997 Plant Database from Suffield Survey 1994-1995

**Date Source Abstract Code Observer Occurrence Data**

Fruits

*Cryptantha minima* small cryptanthe SRank: S1

+++++

**Element Code:** PDBOR0A1Y0 **Occurrence Code #:** 002 **Survey Date:** 1995-00-00

**Last Observed:** 1995-00-00 **First Observed:** 1994-07-07 **Precision Code:** S

**Directions:** Canadian Forces Base Suffield National Wildlife Area; Mule Deer Road, along

**General Description:** disturbed sandy site in vicinity of reservoir pond - with *Chenopodium pratericola*, *Axyris amaranthoides*, *Polygonum arenastrum*

**Min Elev. (m):** 625 **Max Elev. (m):** 686 **Best Source of Info:** U97CWS01ABCA

**Specimen Source Code Collector Herbarium Accession # Date ID OK? Observation Detail**

S94MACPMABCA07 Macdonald, I.D. PM B94.4.527 1994-07-07 Y

**Map UTM Zone UTM Easting UTM Northing Survey Site Name Notes # Dot ID #**

72L08 12 536150 5590850 South Saskatchewan River UTM WL 536150 / 5590850 2 205

**Source Code Author Publisher Year Title**

U96MAC01ABCA Macdonald, I.D. Canadian Wildlife Service, Environment Canada, Prairie and 1996 Vascular Flora of Canadian Forces Base Suffield National Wildlife Area

U97CWS01ABCA Canadian Wildlife Service CWS 1997 Plant Database from Suffield Survey 1994-1995

*Cryptantha minima* small cryptanthe SRank: S1

+++++

**Element Code:** PDBOR0A1Y0 **Occurrence Code #:** 003 **Survey Date:** 1894-06-00

**Last Observed:** 1894-06-00 **First Observed:** 1894-06-00 **Actual Mapping Precision (m):** 2500 **Precision Code:** M

**Directions:** Medicine Hat.

**Min Elev. (m):** 670 **Max Elev. (m):** 670 **Best Source of Info:** S94MACACONCA01

**Specimen Source Code Collector Herbarium Accession # Date ID OK? Observation Detail**

S94MACACONCA01 Macoun, John AC none 1894-06-00

**Map UTM Zone UTM Easting UTM Northing Survey Site Name Notes # Dot ID #**

72L02 12 523400 5542850 Medicine Hat 15 3843

*Cryptantha minima* small cryptanthe SRank: S1

+++++



**Element Code:** PDBOR0A1Y0 **Occurrence Code #:** 004 **Survey Date:** 1996-07-26  
**Last Observed:** 1996-07-26 **First Observed:** 1996-07-26 **Actual Mapping Precision (m):** 100 **Precision Code:** S  
**Directions:** Empress, grain elevators, between.  
**General Description:** amongst weeds between two grain elevators, between tracks.  
**Min Elev. (m):** 602 **Max Elev. (m):** 602 **Best Source of Info:** U97SMI01ABCA  
**Map UTM Zone UTM Easting UTM Northing Survey Site Name Notes # Dot ID #**  
72L16 12 569150 5645575 Empress 19 4860  
**Source Code Author Publisher Year Title**  
U97SMI01ABCA Smith, Bonnie COSEWIC 1997 Status Report on Species at Risk in Canada -Tiny Cryptantha (Cryptantha minima)  
**Date Source Abstract Code Observer Occurrence Data**  
1996-07-26 U97SMI01ABCA Bonnie Smith 10-12 specimens in fruit  
**Cryptantha minima** small cryptantha SRank: S1  
+++++

**Element Code:** PDBOR0A1Y0 **Occurrence Code #:** 005 **Survey Date:** 1998-07-03  
**Last Observed:** 1998-07-03 **First Observed:** 1998-07-03 **Actual Mapping Precision (m):** 250 **Precision Code:** S  
**Directions:** Old Channel Lake, 2 km ENE of; South Saskatchewan River, 0.7 km E of.  
**General Description:** sandhills; steep eroding slope; xeric; on cattle trail in active sand  
**Min Elev. (m):** 665 **Max Elev. (m):** 665 **Aspect:** N  
**Management Comments:** May be eliminated by pipeline construction. **Best Source of Info:** U98BUS01ABCA  
**Map UTM Zone UTM Easting UTM Northing Survey Site Name Notes # Dot ID #**  
72L02 12 528850 5564300 South Saskatchewan River LSD12-02-15-5- W4M 39 5058  
**Source Code Author Publisher Year Title**  
U98BUS01ABCA Bush, C. Dana 1998 Rare Native Plant Survey Forms  
**Date Source Abstract Code Observer Occurrence Data**  
1998-07-03 U98BUS01ABCA Dana Bush one plant  
**Cryptantha minima** small cryptantha SRank: S1  
+++++

**Element Code:** PDBOR0A1Y0 **Occurrence Code #:** 006 **Survey Date:** 1999-08-15  
**Last Observed:** 1999-08-15 **First Observed:** 1999-08-15 **Actual Mapping Precision (m):** 20 **Precision Code:** S  
**Directions:** Cypress Hills P.P.; Fly Lake, 3.5 km S of; Eagle Butte, 2.5 km NE of.  
**General Description:** along shore of stock pond; hygic  
**Min Elev. (m):** 1340 **Max Elev. (m):** 1340  
**Slope:** 10.00 **Aspect:** SW  
**Other Comments:** Specimen has been collected by R. Ernst; collector number 012. **Best Source of Info:** U99BRA01ABCA  
**Map UTM Zone UTM Easting UTM Northing Survey Site Name Notes # Dot ID #**  
72E09 12 544700 5495950 Eagle Butte 6-8-3 W4M 64 5512  
**Source Code Author Publisher Year Title**  
U99BRA01ABCA Bradley, C., R. Ernst, D. Dickinson & L. Fitch 1999 Rare Plant Survey Forms  
**Date Source Abstract Code Observer Occurrence Data**  
1999-08-15 U99BRA01ABCA R. Ernst less than 20 plants; V6 vegetative; R6 reproductive  
**Cryptantha minima** small cryptantha SRank: S1

**Cuscuta gronovii common dodder**

**Natural Region:** Mixedgrass, Dry Mixedgrass

**Habitat:** Shrubland

**Phenology:** flowers in July

**Specific Search Strategies (if any):** wide area searches in sagebrush and buckbrush communities; visible into late summer; has been reported in other regions on shorelines

**Element Occurrences:**

**Element Code:** PDCUS010T0 **Occurrence Code #:** 001 **Survey Date:** 1976-07-15  
**Last Observed:** 1976-07-15 **First Observed:** 1976-07-15 **Precision Code:** M  
**Directions:** Medicine Hat, approx. 25 mi. N of; South Saskatchewan River, on the.  
**General Description:** As a parasite on skeletonweed (Lygodesmia) in Artemisia cana community; on sandy uplands near the river breaks.  
**Min Elev. (m):** 655 **Max Elev. (m):** 655  
**Other Comments:** ID by John Corbin **Best Source of Info:** S76CORUCABCA03  
**Specimen Source Code Collector Herbarium Accession # Date ID OK? Observation Detail**  
S76CORUCABCA03 Corbin, J. & D. Jacques UC 42816 1976-07-15 Y Occasional  
**Map UTM Zone UTM Easting UTM Northing Survey Site Name Notes # Dot ID #**  
72L07 12 528350 5587000 Drowning Ford 50 26/110 35. 2 187  
**Cuscuta gronovii** common dodder SRank: S1  
+++++

**Element Code:** PDCUS010T0 **Occurrence Code #:** 002 **Survey Date:** 1990-08-24  
**Last Observed:** 1990-08-24 **First Observed:** 1990-08-24 **Precision Code:** M  
**Directions:** Bow & Oldman River, confluence of, about 2 mi. NW of.  
**General Description:** Growing on Solidago missouriensis; other species: Oryzopsis hymenoides/Calmamoviifa longifolia/Opuntia polyacantha, Sporobolus cryptandrus.  
**Min Elev. (m):** 754 **Max Elev. (m):** 754  
**Other Comments:** ID by K. Tannas. **Best Source of Info:** UNDTAN01ABCA  
**Map UTM Zone UTM Easting UTM Northing Survey Site Name Notes # Dot ID #**  
72E13 12 447150 5531750 The Grand Forks 4 151  
**Source Code Author Publisher Year Title**  
UNDTAN01ABCA Tannas, K.E. Native Species Inventory Forms  
**Date Source Abstract Code Observer Occurrence Data**  
4-5 "bunches"; flowering  
**Cuscuta gronovii** common dodder SRank: S1  
+++++

**Element Code:** PDCUS010T0 **Occurrence Code #:** 004 **Survey Date:** 1994-07-07  
**Last Observed:** 1994-07-07 **First Observed:** 1994-07-07 **Actual Mapping Precision (m):** 100 **Precision Code:** S  
**Directions:** Mouth of Bull Springs Coulee; ~7 km NW of; S Saskatchewan River; ~200 m N of.  
**General Description:** disturbed sandy ground in vicinity of reservoir pond, with Chenopodium pratericola, Axyris amaranthoides, Polygonum arenastrum (parasitic on Polygonum convolvulus and Axyris amaranthoides).  
**Min Elev. (m):** 625 **Max Elev. (m):** 625 **Best Source of Info:** U97CWS01ABCA  
**Specimen Source Code Collector Herbarium Accession # Date ID OK? Observation Detail**  
S94MACPMABCA15 Macdonald, I.D. PM B94.4.529 1994-07-07 Y  
**Map UTM Zone UTM Easting UTM Northing Survey Site Name Notes # Dot ID #**  
72L08 12 536525 5589900 CFB Suffield 50-27'40N/110-29'15"W 25 4331  
**Source Code Author Publisher Year Title**  
U97CWS01ABCA Canadian Wildlife Service CWS 1997 Plant Database from Suffield Survey 1994-1995  
**Cuscuta gronovii** common dodder SRank: S1

**Cyperus schweinitzii sand nut-grass**

**Natural Region:** Dry Mixedgrass

**Habitat:** Sand Dunes

**Phenology:** heads out in late June

**Specific Search Strategies (if any):** visible into late summer; on coarse sands in active portion of dune

**Element Occurrences:**

**Element Code:** PMCYP06360 **Occurrence Code #:** 001 **Survey Date:** 1992-07-29

**Last Observed:** 1992-07-29 **First Observed:** 1983-07-26 **Precision Code:** M

**Directions:** Wainwright Dunes Ecological Reserve.

**General Description:** Well drained, south side of sand dunes.

**Min Elev. (m):** 685 **Max Elev. (m):** 685 **Best Source of Info:** S92JOHCFABCA03

**Specimen Source Code Collector Herbarium Accession # Date ID OK? Observation Detail**

S83FEHAUABCA02 Fehr, A. and T. S. Bakshi AU 83-0521 1983-06-23 Y

S83FEHPPABCA06 Fehr, A. & S. Carbonneau PP 621 1983-07-26

S92JOHCFABCA03 Johnson, J.D. CF 930287 1992-07-29 Y

**Map UTM Zone UTM Easting UTM Northing Survey Site Name Notes # Dot ID #**

73D10 12 526400 5827450 David Lake 4 271

**Cyperus schweinitzii** sand nut-grass SRank: S2

+++++

**Element Code:** PMCYP06360 **Occurrence Code #:** 002 **Survey Date:** 1999-06-29

**Last Observed:** 1999-06-29 **First Observed:** 1986-07-19 **Actual Mapping Precision (m):** 100 **Precision Code:** S

**Directions:** Orion, 7.5 km SW of.

**General Description:** protected interdune area; scattered throughout dune system although primarily in active portions with 50-70% vegetation cover with *Stipa comata*, *Rumex venosus*, *Koeleria macrantha*, *Oryzopsis hymenoides*

**Min Elev. (m):** 880 **Max Elev. (m):** 880

**Management Comments:** no known threats or management concerns **Best Source of Info:** S86HRAPMABCA06

**Specimen Source Code Collector Herbarium Accession # Date ID OK? Observation Detail**

S86HRAPMABCA06 Hrapko, J.O. & M. E. Parker PM B86.139.11 1986-07-19 fruits

S87DICAUAABCA01 Dickinson, R. B. and J. O. Hrapko AU 87-1543 1987-04-26 Y

**Map UTM Zone UTM Easting UTM Northing Survey Site Name Notes # Dot ID #**

72E07 12 509500 5471550 Pakowki Lake polygon 45 5271

**Source Code Author Publisher Year Title**

F99GOU01ABCA Gould, Joyce 1999 Field Notes (the site is described)

**Date Source Abstract Code Observer Occurrence Data**

1999-06-29 J. Gould and P. Cotterill hundreds of plants noted throughout dune complex, just starting to flower this date

**Cyperus schweinitzii** sand nut-grass SRank: S2

+++++

**Element Code:** PMCYP06360 **Occurrence Code #:** 003 **Survey Date:** 1987-04-25

**Last Observed:** 1987-04-25 **First Observed:** 1976-07-23 **Actual Mapping Precision (m):** 2500 **Precision Code:** M

**Directions:** Orion, 5 mi SSW of.

**General Description:** on sparsely vegetated dune; dominated by *Koeleria macrantha* & *Calamovilfa longifolia*

**Min Elev. (m):** 876 **Max Elev. (m):** 876 **Best Source of Info:** S87HRAPMABCA01

**Specimen Source Code Collector Herbarium Accession # Date ID OK? Observation Detail**

S76KLAUAABCA14 Klar, Andrew UA 81132 1976-07-23 Y spikelets

S87HRAPMABCA01 Hrapko, J.O., & R. B. Dickinson PM B87.13.4 1987-04-25 last years plants

**Map UTM Zone UTM Easting UTM Northing Survey Site Name Notes # Dot ID #**

72E07 12 512223 5469883 Pakowki Sand Dunes Lat/Long:49 23/110 50 4 85

**Cyperus schweinitzii** sand nut-grass SRank: S2

+++++

**Element Code:** PMCYP06360 **Occurrence Code #:** 004 **Survey Date:** 1983-06-23

**Last Observed:** 1983-06-23 **First Observed:** 1983-06-23 **Precision Code:** M

**Directions:** Hughenden, 16 km NE of; David Lake

**General Description:** active sandy blowout

**Min Elev. (m):** 610 **Max Elev. (m):** 680 **Best Source of Info:** S83FEHPMABCA01

**Specimen Source Code Collector Herbarium Accession # Date ID OK? Observation Detail**

S83FEHPMABCA01 Fehr, A. & S. Charbonneau PM B86.17.75 1983-06-23 remains of last years plants(includes panicle)

**Map UTM Zone UTM Easting UTM Northing Survey Site Name Notes # Dot ID #**

73D10 12 522600 5825600 Wainwright Dunes E.R. Lat/Long: 52 35/110 40 5 272

**Cyperus schweinitzii** sand nut-grass SRank: S2

+++++

**Element Code:** PMCYP06360 **Occurrence Code #:** 005 **Survey Date:** 1983-07-00  
**Last Observed:** 1983-07-00 **First Observed:** 1983-05-00 **Precision Code:** S  
**Directions:** Wainwright Study Area  
**General Description:** Active blowout.  
**Min Elev. (m):** 685 **Max Elev. (m):** 685  
**Slope:** 45.00 **Aspect:** SW **Best Source of Info:** R84FEH01ABCA  
**Specimen Source Code Collector Herbarium Accession # Date ID OK? Observation Detail**  
S83FEHPPABCA07 Fehr, A. & S. Carbonneau PP 619 1983-06-23  
**Map UTM Zone UTM Easting UTM Northing Survey Site Name Notes # Dot ID #**  
73D10 12 523000 5827750 Wallaby Lake Vegetation plot AF83017 7 274  
**Source Code Author Publisher Year Title**  
R84FEH01ABCA Fehr, A.W. Alberta Energy and Natural Resources 1984 Wainwright Study Area: A Biophysical Inventory  
**Cyperus schweinitzii** sand nut-grass SRank: S2  
+++++

**Element Code:** PMCYP06360 **Occurrence Code #:** 006 **Survey Date:** 1983-07-17  
**Last Observed:** 1983-07-17 **First Observed:** 1983-05-00 **Precision Code:** S  
**Directions:** Wainwright; David Lake Area  
**General Description:** Blowout in grassland  
**Min Elev. (m):** 678 **Max Elev. (m):** 678 **Best Source of Info:** R84FEH01ABCA  
**Specimen Source Code Collector Herbarium Accession # Date ID OK? Observation Detail**  
S83FEHPPABCA05 Fehr, A. PP 620 1983-07-17  
**Map UTM Zone UTM Easting UTM Northing Survey Site Name Notes # Dot ID #**  
73D10 12 524600 5828550 David Lake Veg. plot AF 83007 35 302  
**Source Code Author Publisher Year Title**  
R84FEH01ABCA Fehr, A.W. Alberta Energy and Natural Resources 1984 Wainwright Study Area: A Biophysical Inventory  
**Date Source Abstract Code Observer Occurrence Data**  
Rare-dry sandy soil & dunes  
**Cyperus schweinitzii** sand nut-grass SRank: S2  
+++++

**Element Code:** PMCYP06360 **Occurrence Code #:** 007 **Survey Date:** 1995-07-21  
**Last Observed:** 1995-07-21 **First Observed:** 1995-07-21 **Actual Mapping Precision (m):** 250 **Precision Code:** S  
**Directions:** Canadian Forces Base Suffield National Wildlife Area; South Saskatchewan River, along the; Trumpeter Trail, about 1.5 km south of the eastern end of; E-facing long slope, at the base of; river level, 6 m above the normal  
**General Description:** gently undulating, glacial fluvial terrace, hummocky aeolian sand, semiopen sandy ground, sparse litter layer, assoc. plants: Stipa com., Calamovilfa long. Agropyron dasy. Sporob. cry...  
**Min Elev. (m):** 648 **Max Elev. (m):** 648 **Aspect:** E **Size of Occurrence:** 5.00  
**Other Comments:** the second known station for this species in Alberta, marks the northwestern limit of its range, next-nearest - well to the SW of Cypress Hills. [Two UTM's - one population]  
**Management Comments:** has not been grazed by cattle for 18 yrs. efforts being made to maintain prot. from livestock, will monitor in future **Best Source of Info:** U96MAC01ABCA  
**Specimen Source Code Collector Herbarium Accession # Date ID OK? Observation Detail**  
S95TROPMA01 Trotter, G. PM B95.10.11 1995-07-13 Y spikelets present  
S95TROPMA02 Trotter, G. PM B95.10.12 1995-07-21 Y spikelets present  
**Map UTM Zone UTM Easting UTM Northing Survey Site Name Notes # Dot ID #**  
72L07 12 526800 5575050 Cottonwood Grove UTM WL 526783 / 5574990 and UTM WL 526832 / 5575110 7 192  
**Source Code Author Publisher Year Title**  
U96MAC01ABCA Macdonald, I.D. Canadian Wildlife Service, Environment Canada, Prairie and 1996 Vascular Flora of Canadian Forces Base Suffield National Wildlife Area  
**Date Source Abstract Code Observer Occurrence Data**  
rare in SNWA, large pop, area 200m X 250 m, forming a semi-closed tall meadow with the nutgrass being the most notable species  
**Cyperus schweinitzii** sand nut-grass SRank: S2  
+++++

**Element Code:** PMCYP06360 **Occurrence Code #:** 008 **Survey Date:** 1993-08-00  
**Last Observed:** 1993-08-00 **First Observed:** 1993-08-00 **Actual Mapping Precision (m):** 500 **Precision Code:** M  
**Directions:** Amisk, 4 km SE of; Hughenden Lake, 1.5 km N of.  
**General Description:** well-drained open sand/blowouts; assoc. with Juniperus communis, Heterotheca villosa and Carex siccata  
**Min Elev. (m):** 710 **Max Elev. (m):** 710  
**Other Comments:** Specimen has been collected by Cheryl Bradley. **Best Source of Info:** U99WIL02ABCA  
**Map UTM Zone UTM Easting UTM Northing Survey Site Name Notes # Dot ID #**  
73D11 12 499500 5821000 Hughenden Lake SW19-41-7 W4M 6 5075  
**Source Code Author Publisher Year Title**  
U99WIL02ABCA Wilkinson, Kathleen 1999 Letter from K. Wilkinson to John Rintoul - at March 3, 1999  
**Date Source Abstract Code Observer Occurrence Data**  
1993-08-00 U99WIL02ABCA Cheryl Bradley more than 150 plants, healthy and fruiting  
**Cyperus schweinitzii** sand nut-grass SRank: S2

**Cyperus squarrosus awned nut-grass**

**Natural Region:** Dry Mixedgrass

**Habitat:** Wetland-Sandy

**Phenology:** heads out in late July/August

**Specific Search Strategies (if any):** search slough margins where uncultivated and ungrazed.

**Element Occurrences:**

**Element Code:** PMCYP064B0 **Occurrence Code #:** 001 **Survey Date:** 1953-08-14

**Last Observed:** 1953-08-14 **First Observed:** 1953-08-14 **Actual Mapping Precision (m):** 2500 **Precision Code:** M

**Directions:** Seven Persons, 4.5 km NE of; Hwy 3, on W side of.

**General Description:** margin of slough

**Min Elev. (m):** 747 **Max Elev. (m):** 747 **Best Source of Info:** S53MOSUAABCA41

**Specimen Source Code Collector Herbarium Accession # Date ID OK? Observation Detail**

S53MOSUAABCA41 Moss, E.H. UA 35749 1953-08-14 Y spikelets

**Map UTM Zone UTM Easting UTM Northing Survey Site Name Notes # Dot ID #**

72E15 12 509125 5528600 Seven Persons 27 4470

**Cyperus squarrosus** awned nut-grass SRank: S1

**Downingia laeta downingia**

**Natural Region:** Mixedgrass, Dry Mixedgrass

**Habitat:** Wetland-Sandy

**Phenology:** flowers mid-June to mid-July

**Specific Search Strategies (if any):** visible into August; basins of sandy wetlands that have been exundated.

**Element Occurrences:**

**Element Code:** PDCAM06080 **Occurrence Code #:** 001 **Survey Date:** 1952-08-28

**Last Observed:** 1952-08-28 **First Observed:** 1952-08-28 **Precision Code:** M

**Directions:** Foremost, 2 mi S of.

**General Description:** Roadside ditch, near slough

**Min Elev. (m):** 914 **Max Elev. (m):** 914 **Best Source of Info:** S52MOSUAABCA06

**Specimen Source Code Collector Herbarium Accession # Date ID OK? Observation Detail**

S52MOSUAABCA06 Moss, E.H. UA 16350 1952-08-28 Flowers

**Map UTM Zone UTM Easting UTM Northing Survey Site Name Notes # Dot ID #**

72E06 12 468550 5475800 Foremost 1 79

**Downingia laeta** downingia SRank: S1S2

+++++

**Element Code:** PDCAM06080 **Occurrence Code #:** 002 **Survey Date:** 1979-07-31

**Last Observed:** 1979-07-31 **First Observed:** 1979-07-31 **Precision Code:** S

**Directions:** Near centre of quarter.

**General Description:** Lake bottom normally submerged, now water receded and area exposed in a mud flat.

**Min Elev. (m):** 968 **Max Elev. (m):** 968 **Best Source of Info:** S79SKOALABCA01

**Specimen Source Code Collector Herbarium Accession # Date ID OK? Observation Detail**

S79SKOALABCA01 Skoglund AL 5160 1979-07-31

S79SKOULABCA01 Skoglund UL none 1979-07-31

**Map UTM Zone UTM Easting UTM Northing Survey Site Name Notes # Dot ID #**

82H14 12 353250 5536450 Keho Lake 2 1392

**Downingia laeta** downingia SRank: S1S2

+++++

**Element Code:** PDCAM06080 **Occurrence Code #:** 003 **Survey Date:** 1978-07-10

**Last Observed:** 1978-07-10 **First Observed:** 1978-07-10 **Precision Code:** S

**Directions:** Lethbridge, S of; St. Mary's River & Pothole Creek, near confluence of.

**General Description:** Oxbow slough

**Min Elev. (m):** 860 **Max Elev. (m):** 860 **Best Source of Info:** S78KUIULABCA03

**Specimen Source Code Collector Herbarium Accession # Date ID OK? Observation Detail**

S78KUIULABCA03 Kuijt, J. & D. Coxson UL none 1978-07-10

**Map UTM Zone UTM Easting UTM Northing Survey Site Name Notes # Dot ID #**

82H10 12 367800 5491650 Lethbridge 5 1356

**Downingia laeta** downingia SRank: S1S2

+++++

**Element Code:** PDCAM06080 **Occurrence Code #:** 004 **Survey Date:** 1989-07-15

**Last Observed:** 1989-07-15 **First Observed:** 1989-07-15 **Precision Code:** M

**Directions:** Kinbrook Island Provincial park

**General Description:** Shoreline; level depression

**Min Elev. (m):** 768 **Max Elev. (m):** 768

**Other Comments:** Additional specimen housed at East Slope Rangeland Consultants herbarium (private collection) Det K. Tannas (UNDTAN01ABCA).

**Management Comments:** A more complete study of the area should be undertaken, as little time was spent there. **Best Source of Info:** S89TANPPABCA01

**Specimen Source Code Collector Herbarium Accession # Date ID OK? Observation Detail**

S89TANPPABCA01 Tannas, KE & CA PP 751 1989-07-15 Rare

**Map UTM Zone UTM Easting UTM Northing Survey Site Name Notes # Dot ID #**

72L05 12 435400 5588750 Kinbrook Island Provincial Park 1 183

**Source Code Author Publisher Year Title**

UNDTAN01ABCA Tannas, K.E. Native Species Inventory Forms

**Date Source Abstract Code Observer Occurrence Data**

a few sporadically occurring individuals, flowering(UNDTAN01ABCA)

**Downingia laeta** downingia SRank: S1S2

**Element Code:** PDCAM06080 **Occurrence Code #:** 005 **Survey Date:** 1996-00-00  
**Last Observed:** 1996-00-00 **First Observed:** 1996-00-00 **Actual Mapping Precision (m):** 250 **Precision Code:** S  
**Directions:** Hwy 48; 2.7km W of; Rd to Onefour; 150m S of.  
**General Description:** 10 plants on RoW. At least 20 more off RoW. Wetland in Robinson's Coulee. Special construction techniques used to protect wetland. Populations avoided on either side of RoW.  
**Min Elev. (m):** 876 **Max Elev. (m):** 876 **Aspect:** N  
**Other Comments:** UTM:516327.14-516159.94E;5522005.96-5522284.28N **Best Source of Info:** U96EXP01ABCA  
**Map UTM Zone UTM Easting UTM Northing Survey Site Name Notes # Dot ID #**  
72E15 12 516336 5521991 Fitzgerald NE 9-29- 10-6-4, Km 326.8 & Km 327.1, LS #49;/LS#005;km:327.1;LLD:NE 2910-6-4 10 3972  
**Source Code Author Publisher Year Title**  
U96EXP01ABCA AXYS Environmental Consulting 1996 Express Pipeline Project  
**Downingia laeta** downingia SRank: S1S2  
+++++

**Element Code:** PDCAM06080 **Occurrence Code #:** 006 **Survey Date:** 1986-06-11  
**Last Observed:** 1986-06-11 **First Observed:** 1986-06-11 **Actual Mapping Precision (m):** 2500 **Precision Code:** M  
**Directions:** Near NE shore of Pakowki Lake; SW of Orion.  
**General Description:** with *Plagiobothrys scouleri* in moist grass-dominated area below low dam  
**Min Elev. (m):** 880 **Max Elev. (m):** 880 **Best Source of Info:** S86HRAPMABCA13  
**Specimen Source Code Collector Herbarium Accession # Date ID OK? Observation Detail**  
S86HRAPMABCA13 Hrapko, J.O., Richards, W.M., Dickinson, R.B. PM B86.127.67 1986-06-11 Y  
**Map UTM Zone UTM Easting UTM Northing Survey Site Name Notes # Dot ID #**  
72E07 12 509873 5471783 Pakowki Sand Dunes Lat/Long: 49 24/110 52 2 83  
**Downingia laeta** downingia SRank: S1S2  
+++++

**Element Code:** PDCAM06080 **Occurrence Code #:** 007 **Survey Date:** 1999-08-09  
**Last Observed:** 1999-08-09 **First Observed:** 1999-08-09 **Actual Mapping Precision (m):** 250 **Precision Code:** S  
**Directions:** SW of Beaver Mines (hamlet); along SH 774; Beaver Mines Lake, 4.5 km due N of; N side of road.  
**General Description:** roadside ditch, where cattle herded through; wet; with *Beck syz*, *Junc buf*, *Eleocharis* sp. *Plag sco*, *Trif pra*  
**Min Elev. (m):** 1435 **Max Elev. (m):** 1435  
**Slope:** 0.00  
**Other Comments:** Slide taken  
**Management Comments:** Cattle present - cannot be protected. **Best Source of Info:** U99COR01ABCA  
**Map UTM Zone UTM Easting UTM Northing Survey Site Name Notes # Dot ID #**  
82G08 11 696650 5477350 Beaver Mines Lake 29 5200  
**Source Code Author Publisher Year Title**  
U99COR01ABCA Corbiere, Adrian 1999 Rare Plant Survey Form  
**Date Source Abstract Code Observer Occurrence Data**  
1999-08-09 U99COR01ABCA A. Corbiere, B. Sharp, L. Hutchinson 100's of plants; 90% adults; 50% flowering  
**Downingia laeta** downingia SRank: S1S2

***Draba reptans* whitlow-grass**

**Natural Region:** Foothills Fescue Grassland, Mixedgrass, Dry Mixedgrass

**Habitat:** Slopes-Sandy

**Phenology:** late April to May

**Specific Search Strategies (if any):** search sandy/gravelly bare patches on slopes and adjacent valley bottoms; detectable well after the flowering season but very sparse populations means some hands and knees searching

**Element Occurrences:**

**Element Code:** PDBRA11270 **Occurrence Code #:** 001 **Survey Date:** 1986-07-14  
**Last Observed:** 1986-07-14 **First Observed:** 1986-07-14 **Actual Mapping Precision (m):** 250 **Precision Code:** S  
**General Description:** alluvial plain; little vegetative cover, associated with *Stipa comata*-*Agropyron dasystachyum*-*Poa* spp.  
**Min Elev. (m):** 1080 **Max Elev. (m):** 1080 **Size of Occurrence:** 1.00  
**Management Comments:** Near location of proposed dam. **Best Source of Info:** B86WAL01ABCA  
**Map UTM Zone UTM Easting UTM Northing Survey Site Name Notes # Dot ID #**  
82H01 12 402400 5444300 Milk River 2 912  
**Source Code Author Publisher Year Title**  
B86WAL01ABCA Wallis, Clifford et al Alberta Forestry Lands & Wildlife 203p 1986 Pilot rare plant monitoring program in the Oldman Regional Plan area of southwestern Alberta  
I86WAL04ABCA Wallis, C. 1986  
I86WAL05ABCA Wallis, C. 1986  
U99WIL02ABCA Wilkinson, Kathleen 1999 Letter from K. Wilkinson to John Rintoul - at March 3, 1999  
**Date Source Abstract Code Observer Occurrence Data**  
Solitary plant(B86WAL01ABCA)  
***Draba reptans* whitlow-grass** SRank: S1  
+++++

**Element Code:** PDBRA11270 **Occurrence Code #:** 002 **Survey Date:** 1934-04-22  
**Last Observed:** 1934-04-22 **First Observed:** 1934-04-22 **Precision Code:** G  
**General Description:** gravelly ground, garden  
**Min Elev. (m):** 950 **Max Elev. (m):** 950  
**Other Comments:** Cultivated. **Best Source of Info:** S34DIXUAABCA01  
**Specimen Source Code Collector Herbarium Accession # Date ID OK? Observation Detail**  
S34DIXUAABCA01 Dixon, R.H. UA 9780 1934-04-22 [flowers, fruits]  
S41DIXACONCA01 Dixon, R.H. AC none 1941-05-04  
**Map UTM Zone UTM Easting UTM Northing Survey Site Name Notes # Dot ID #**  
82H11 12 327000 5511000 Fort MacLeod 2 1369  
***Draba reptans* whitlow-grass** SRank: S1  
+++++

**Element Code:** PDBRA11270 **Occurrence Code #:** 004 **Survey Date:** 1986-07-05  
**Last Observed:** 1986-07-05 **First Observed:** 1986-07-05 **Precision Code:** M  
**Directions:** Turin, 10 km S of; go along trail between sec 8&9, through gate & S until first blowout 3 m E of trail, site is just W of trail.  
**General Description:** Grassland on dry sandy or gravelly soil, often where disturbed or eroding.  
**Min Elev. (m):** 853 **Max Elev. (m):** 875 **Best Source of Info:** B86WAL01ABCA  
**Map UTM Zone UTM Easting UTM Northing Survey Site Name Notes # Dot ID #**  
82H15 12 388250 5526600 Turin Dunes 1 1398  
**Source Code Author Publisher Year Title**  
B86WAL01ABCA Wallis, Clifford et al Alberta Forestry Lands & Wildlife 203p 1986 Pilot rare plant monitoring program in the Oldman Regional Plan area of southwestern Alberta  
***Draba reptans* whitlow-grass** SRank: S1  
+++++

**Element Code:** PDBRA11270 **Occurrence Code #:** 005 **Survey Date:** 1987-04-19  
**Last Observed:** 1987-04-19 **First Observed:** 1987-04-19 **Precision Code:** M  
**Directions:** Lethbridge.  
**General Description:** Valley bottom grassland, well drained.  
**Min Elev. (m):** 850 **Max Elev. (m):** 900 **Best Source of Info:** S87HALCFABCA01  
**Specimen Source Code Collector Herbarium Accession # Date ID OK? Observation Detail**  
S87HALCFABCA01 Hall, E. CF 870128 1987-04-19 Flowers, developing fruits  
**Map UTM Zone UTM Easting UTM Northing Survey Site Name Notes # Dot ID #**  
82H10 12 368500 5502500 Six Miles Coulee 2 1353  
***Draba reptans* whitlow-grass** SRank: S1



**Element Code:** PDBRA11270 **Occurrence Code #:** 006 **Survey Date:** 1995-06-23  
**Last Observed:** 1995-06-23 **First Observed:** 1995-06-23 **Actual Mapping Precision (m):** 100 **Precision Code:** S  
**Directions:** Canadian Forces Base Suffield National Wildlife Area; Linstead Flats, about 5 km E of (from *Hamilolobis virgata* 001)  
**General Description:** subxeric sites; prairie grassland on a gently rolling sandy ground moraine plain; in association with  
*Hamilolobis virgata* [EO001 -in an area of 15 X 25 m](prov. rare); very rare  
**Min Elev. (m):** 715 **Max Elev. (m):** 715  
**Management Comments:** threatened from cultivation of sandy soil areas & by stabilization of loose sand by denser vegetation  
cover. **Best Source of Info:** S95MACPMABCA03  
**Specimen Source Code Collector Herbarium Accession # Date ID OK? Observation Detail**  
S95MACPMABCA03 Macdonald, I.D. PM B95.9.5 1995-06-23 Y remains of fruits; very rare  
**Map UTM Zone UTM Easting UTM Northing Survey Site Name Notes # Dot ID #**  
72L09 12 539000 5597000 Middle Sand Hills UTM WL 539000 / 5597000; 50 31 28/110 26 15 2 216  
**Source Code Author Publisher Year Title**  
U96MAC01ABCA Macdonald, I.D. Canadian Wildlife Service, Environment Canada, Prairie and 1996 Vascular Flora of Canadian  
Forces Base Suffield National Wildlife Area  
**Date Source Abstract Code Observer Occurrence Data**  
rare in SNWA  
***Draba reptans*** whitlow-grass SRank: S1

***Elatine triandra* waterwort**

**Natural Region:** Mixedgrass, Dry Mixedgrass

**Habitat:** Wetland

**Phenology:** detectable from early June on

**Specific Search Strategies (if any):** shallow ephemeral wetlands, perhaps sandy; search in open water rooted in bottom

**Element Occurrences:**

**Element Code:** PDELTO2090 **Occurrence Code #:** 001 **Survey Date:** 1973-06-02

**Last Observed:** 1973-06-02 **First Observed:** 1973-06-02 **Precision Code:** S

**Directions:** Long Lake Provincial Park

**General Description:** Flat lakeshore; sedges & cattails; density & distribution may change somewhat with lake level; organic soil

**Min Elev. (m):** 617 **Max Elev. (m):** 617 **Best Source of Info:** R73FRI02ABCA

**Map UTM Zone UTM Easting UTM Northing Survey Site Name Notes # Dot ID #**

83107 12 386600 6031200 Long Lake Provincial Park Map 1 reference #49 1 3390

**Source Code Author Publisher Year Title**

M73FRI01ABCA Friesen, R.D. & S. Schaafsma 1973 Long Lake Ecological Survey 1973 Maps

R73FRI01ABCA Friesen, R.D. & S. Schaafsma 1973 An Ecological Study of Long Lake Provincial Park vol. 1

R73FRI02ABCA Friesen, R.D. & S. Schaafsma 1973 An Ecological Study of Long Lake Provincial Park vol. 2

R92PAT01ABCA Patriquin, D.L. and R.A. Ellis 1992 An Assessment of the Significant Features of the Amisk Valley

**Date Source Abstract Code Observer Occurrence Data**

25-50% coverage; ht 3"

***Elatine triandra* waterwort** SRank: S1

+++++

**Element Code:** PDELTO2090 **Occurrence Code #:** 002 **Survey Date:** 1973-08-13

**Last Observed:** 1992-00-00 **First Observed:** 1973-08-13 **Precision Code:** S

**Directions:** Long Lake Provincial Park

**General Description:** Flat sedge marsh; submerged to wet organic soil; Largest marsh in the park.

**Min Elev. (m):** 655 **Max Elev. (m):** 655 **Best Source of Info:** R73FRI02ABCA

**Map UTM Zone UTM Easting UTM Northing Survey Site Name Notes # Dot ID #**

83107 12 386250 6035850 Long Lake Provincial Park Map 1 reference #280 2 3391

**Source Code Author Publisher Year Title**

M73FRI01ABCA Friesen, R.D. & S. Schaafsma 1973 Long Lake Ecological Survey 1973 Maps

R73FRI01ABCA Friesen, R.D. & S. Schaafsma 1973 An Ecological Study of Long Lake Provincial Park vol. 1

R73FRI02ABCA Friesen, R.D. & S. Schaafsma 1973 An Ecological Study of Long Lake Provincial Park vol. 2

R92PAT01ABCA Patriquin, D.L. and R.A. Ellis 1992 An Assessment of the Significant Features of the Amisk Valley

**Date Source Abstract Code Observer Occurrence Data**

0-1" tall; 25-50% coverage

***Elatine triandra* waterwort** SRank: S1

+++++

**Element Code:** PDELTO2090 **Occurrence Code #:** 003 **Survey Date:** 1997-07-09

**Last Observed:** 1997-07-09 **First Observed:** 1997-07-09 **Actual Mapping Precision (m):** 250 **Precision Code:** S

**Directions:** Sculer, 13 km NW of; Hwy 41, 8.5 km W of.

**General Description:** Wetland within mixed grass-prairie area. Polygonum coccineum- Alopecurus aequalis--Carex retrorsa-

Eleocharis palustris, also present Oxalis , Lila sci

**Min Elev. (m):** 808 **Max Elev. (m):** 808

**Other Comments:** Wetland appears to be a catch basin for seasonal run-off.

**Management Comments:** Livestock grazing; the population is not in the area of a proposed pipeline. Population is not threatened.

**Best Source of Info:** U97AXY03ABCA

**Map UTM Zone UTM Easting UTM Northing Survey Site Name Notes # Dot ID #**

72L08 12 555100 5585100 White Rock Coulee Lat 50 deg 24 min 98 sec, Long 110 deg 13 min 22 s W - 6-9-17-2-W4M 15 3908

**Source Code Author Publisher Year Title**

U97AXY03ABCA AXYS Environmental Consulting Ltd. 1997 AEC Suffield Pipeline

**Date Source Abstract Code Observer Occurrence Data**

1997-07-09 U97AXY03ABCA Kathy Tannas vegetative; adults; flowers and fruits

1997-07-29 U97AXY03ABCA Kathy Tannas 493 individuals, vegetative; adults; flowering; fruiting

***Elatine triandra* waterwort** SRank: S1

***Eleocharis engelmannii* Engelmann's spike-rush  
= *E. ovata***

**Natural Region:** Mixedgrass

**Habitat:** Wetland

**Phenology:** heads out in late July

**Specific Search Strategies (if any):** not all dots in Moss are in the ANHIC database. Taxonomic difficulties.

**Element Occurrences:**

**Element Code:** PMCYP090M0 **Occurrence Code #:** 001 **Survey Date:** 1990-08-11

**Last Observed:** 1990-08-11 **First Observed:** 1990-08-11 **Precision Code:** S

**Directions:** Canmore Flats Natural Area

**General Description:** Closed depression in braided bar of Bow River. Carex-Eleocharis dominated

**Min Elev. (m):** 1310 **Max Elev. (m):** 1310 **Best Source of Info:** S90TIMPPABCA07

**Specimen Source Code Collector Herbarium Accession # Date ID OK? Observation Detail**

S90TIMPPABCA07 Timoney, K. PP 622 1990-08-11 Rare

**Map UTM Zone UTM Easting UTM Northing Survey Site Name Notes # Dot ID #**

82O03 11 619000 5657000 Canmore Flats Natural Area Photo: K09P11; LSD 4 56 1934

***Eleocharis engelmannii* Engelmann's spike-rush SRank:** S1?

**Ellisia nyctelea waterpod**

**Natural Region:** Northern Fescue Grassland, Foothills Fescue Grassland, Mixedgrass, Dry Mixedgrass

**Habitat:** Slopes-Sandy

**Phenology:** flowers in June

**Specific Search Strategies (if any):** search in on sandy slopes, especially in buckbrush; responds favorably to fire; most often on open disturbed ground both along stream beds and on slopes; evanescent and not very visible after flowering

**Element Occurrences:**

**Element Code:** PDHYD02010 **Occurrence Code #:** 001 **Survey Date:** 1939-07-02

**Last Observed:** 1939-07-02 **First Observed:** 1930-06-15 **Precision Code:** G

**Directions:** Macleod; hillside

**General Description:** rich soil

**Min Elev. (m):** 950 **Max Elev. (m):** 950

**Other Comments:** U of A duplicate; accepted Moss's I.D. **Best Source of Info:** S30DIXUCABCA01

**Specimen Source Code Collector Herbarium Accession # Date ID OK? Observation Detail**

S30DIXUAABCA03 Dixon, R.H. UA 14710 1930-06-15 Y [flowers, fruits]

S30DIXUCABCA01 Dixon, R.H. UC 21991 1930-06-15 Y fruiting

S39DIXUCABCA01 Dixon, R.H. UC 21991 1939-07-02 Y fruiting

**Map UTM Zone UTM Easting UTM Northing Survey Site Name Notes # Dot ID #**

82H11 12 327000 5511000 Fort MacLeod 2 1369

**Ellisia nyctelea** waterpod SRank: S2

+++++

**Element Code:** PDHYD02010 **Occurrence Code #:** 002 **Survey Date:** 1941-06-30

**Last Observed:** 1941-06-30 **First Observed:** 1941-06-30 **Precision Code:** M

**Directions:** Handhills district; Fish Lake, W end of

**General Description:** sandy soil, old creek bed

**Min Elev. (m):** 900 **Max Elev. (m):** 900 **Best Source of Info:** S41BRIUAABCA01

**Specimen Source Code Collector Herbarium Accession # Date ID OK? Observation Detail**

S41BRIACONCA01 Brinkman, A.H. AC none 1941-06-30

S41BRIUAABCA01 Brinkman, A.H. UA 63349 1941-06-30 Y fruits

**Map UTM Zone UTM Easting UTM Northing Survey Site Name Notes # Dot ID #**

82P08 12 412000 5694100 Little Fish Lake 6 2290

**Ellisia nyctelea** waterpod SRank: S2

+++++

**Element Code:** PDHYD02010 **Occurrence Code #:** 003 **Survey Date:** 1951-05-25

**Last Observed:** 1951-05-25 **First Observed:** 1951-05-25 **Precision Code:** M

**Directions:** Lethbridge, Vet. Res. Station.

**General Description:** waste ground in river valley.

**Min Elev. (m):** 870 **Max Elev. (m):** 870 **Best Source of Info:** S51SEXUAABCA01

**Specimen Source Code Collector Herbarium Accession # Date ID OK? Observation Detail**

S51SEXALABCA01 Sexsmith, J.J. AL 4706 1951-05-25 Y

S51SEXUAABCA01 Sexsmith, J.J. UA 14711 1951-05-25 Y buds, one flower

**Map UTM Zone UTM Easting UTM Northing Survey Site Name Notes # Dot ID #**

82H10 12 357000 5509000 Lethbridge Research Station 12 1363

**Ellisia nyctelea** waterpod SRank: S2

+++++

**Element Code:** PDHYD02010 **Occurrence Code #:** 004 **Survey Date:** 1949-06-04  
**Last Observed:** 1949-06-04 **First Observed:** 1945-06-23 **Precision Code:** M  
**Directions:** Calgary, NW of; Nose Hill  
**General Description:** bottom of shallow ravine; among low shrubs, heavily shaded by *Symphoricarpos occidentalis*.  
**Min Elev. (m):** 1226 **Max Elev. (m):** 1226  
**Other Comments:** [same location as collns 8682, 8682a and 9621] **Best Source of Info:** S49MCCUAABCA03  
**Specimen Source Code Collector Herbarium Accession # Date ID OK? Observation Detail**  
S45MCCUAABCA11 McCalla, W. C. UA 63911 1945-06-23 Y [flowers]  
S45MCCUAABCA12 McCalla, W. C. UA 63911 1945-07-23 Y [fruits]  
S45MCCUCABCA01 McCalla, W.C. UC 21990 1945-07-23 Y  
S45MCCUCABCA02 McCalla, W.C. UC 21990 1945-07-23 Y  
S47MCCUAABCA02 McCalla, W.C. UA 63912 1947-06-11 Y flowers, predominantly  
S49MCCUAABCA03 McCalla, W.C. UA 63909 1949-06-04 Y flowers, developing fruits  
**Map UTM Zone UTM Easting UTM Northing Survey Site Name Notes # Dot ID #**  
82O01 11 702000 5666675 Calgary - Nosehill 29 1878  
***Ellisia nyctelea*** waterpod SRank: S2  
+++++

**Element Code:** PDHYD02010 **Occurrence Code #:** 005 **Survey Date:** 1985-05-26  
**Last Observed:** 1985-05-26 **First Observed:** 1985-05-26 **Actual Mapping Precision (m):** 2500 **Precision Code:** M  
**Directions:** Dry Island - Buffalo Jump P.P.  
**General Description:** Locally common in loose, sandy bone-laden soil at foot of escarpment with *Descurainia sophia*.  
**Min Elev. (m):** 732 **Max Elev. (m):** 732 **Best Source of Info:** S85POSUCABCA01  
**Specimen Source Code Collector Herbarium Accession # Date ID OK? Observation Detail**  
S85POSUCABCA01 Posey, J. B. UC 50171 1985-05-26 Y  
**Map UTM Zone UTM Easting UTM Northing Survey Site Name Notes # Dot ID #**  
82P15 12 366000 5756000 Dry Island Buffalo Jump Provincial Park 2 2297  
***Ellisia nyctelea*** waterpod SRank: S2  
+++++

**Element Code:** PDHYD02010 **Occurrence Code #:** 006 **Survey Date:** 1975-07-02  
**Last Observed:** 1975-07-02 **First Observed:** 1968-06-20 **Actual Mapping Precision (m):** 1500 **Precision Code:** M  
**Directions:** Agriculture Canada - Stavelly Sub-Station.  
**General Description:** In plots and along nursery east fence; cultivated soil and disturbed ground  
**Min Elev. (m):** 1372 **Max Elev. (m):** 1372 **Best Source of Info:** S75BOHALABCA03  
**Specimen Source Code Collector Herbarium Accession # Date ID OK? Observation Detail**  
S68ALLALABCA09 Allen, T. D. AL 2227 1968-06-20 Y  
S75BOHALABCA03 Bohus, G. AL 3240 1975-07-02 Y  
**Map UTM Zone UTM Easting UTM Northing Survey Site Name Notes # Dot ID #**  
82I04 12 294325 5563350 Oxley Creek 1 1410  
***Ellisia nyctelea*** waterpod SRank: S2  
+++++

**Element Code:** PDHYD02010 **Occurrence Code #:** 007 **Survey Date:** 1962-05-24  
**Last Observed:** 1962-05-24 **First Observed:** 1962-05-24 **Actual Mapping Precision (m):** 2500 **Precision Code:** M  
**Directions:** Warner, 5 mi. N of.  
**General Description:** Moist, saline meadow.  
**Min Elev. (m):** 960 **Max Elev. (m):** 960 **Best Source of Info:** S62SEXALABCA02  
**Specimen Source Code Collector Herbarium Accession # Date ID OK? Observation Detail**  
S62SEXACONCA01 Sexsmith, J.J. AC none 1962-05-24  
S62SEXALABCA02 Sexsmith, J.J. AL none 1962-05-24 Y  
**Map UTM Zone UTM Easting UTM Northing Survey Site Name Notes # Dot ID #**  
82H08 12 412900 5467650 Warner 1 1347  
***Ellisia nyctelea*** waterpod SRank: S2  
+++++

**Element Code:** PDHYD02010 **Occurrence Code #:** 008 **Survey Date:** 1958-06-27  
**Last Observed:** 1958-06-27 **First Observed:** 1958-06-27 **Actual Mapping Precision (m):** 300 **Precision Code:** M  
**Directions:** Writing-on-Stone Provincial Park  
**General Description:** Fruticetum sur les platieres de la riviere de Lait.  
**Min Elev. (m):** 915 **Max Elev. (m):** 915 **Best Source of Info:** S58BOIACONCA04  
**Specimen Source Code Collector Herbarium Accession # Date ID OK? Observation Detail**  
S58BOIACONCA04 Boivin, B & J.-M. Perron AC 129108 1958-06-27  
**Map UTM Zone UTM Easting UTM Northing Survey Site Name Notes # Dot ID #**  
72E04 12 454074 5436383 Writing-on-Stone Provincial Park 49-05N/111-37W 7 55  
***Ellisia nyctelea*** waterpod SRank: S2  
+++++

**Element Code:** PDHYD02010 **Occurrence Code #:** 009 **Survey Date:** 1999-06-04  
**Last Observed:** 1999-06-04 **First Observed:** 1999-06-04 **Actual Mapping Precision (m):** 500 **Precision Code:** M  
**Directions:** Lethbridge; Oldman River Valley; Mountainview Cemetary, 500 m W of; Lethbridge Golf and Country Club, 200 m E of.  
**General Description:** Symph occ, Poa prat shrubland on lower slope of coulee; Thlac arv and Brass spp. also present; mesic  
**Min Elev. (m):** 870 **Max Elev. (m):** 890  
**Slope:** 10.00 **Aspect:** SW  
**Other Comments:** specimen was collected and to be housed at the U of A Herbarium **Best Source of Info:** U99SHA01ABCA  
**Map UTM Zone UTM Easting UTM Northing Survey Site Name Notes # Dot ID #**  
82H10 12 367500 5503850 Lethbridge 1 1352  
**Source Code Author Publisher Year Title**  
U99SHA01ABCA Sharp, Bill, Reg Ernst and Cheryl Bradley 1999 Rare Native Plant Report Form  
**Date Source Abstract Code Observer Occurrence Data**  
1999-06-04 U99SHA01ABCA Bill Sharp, Reg Ernst, and Cheryl Bradley < 25 plants in 100 m squared; V6 R6  
**Ellisia nyctelea** waterpod SRank: S2  
+++++

**Element Code:** PDHYD02010 **Occurrence Code #:** 010 **Survey Date:** 1999-07-16  
**Last Observed:** 1999-07-16 **First Observed:** 1999-07-16 **Actual Mapping Precision (m):** 25 **Precision Code:** S  
**Directions:** Cypress Hills P.P.; Ressor Lake, N side of.  
**General Description:** in Crat dou(?)/Hera lan-Urti gra-Viol can shrub (5 m tall) thicket, along shallow drainage at mid-slope; mesic well drained  
**Min Elev. (m):** 1250 **Max Elev. (m):** 1250  
**Slope:** 19.00 **Aspect:** S **Size of Occurrence:** 0.04  
**Other Comments:** Specimen has been collected, collection number WM0001; PLOT CB9001  
**Management Comments:** livestock grazing, recreation; some invasive by non-native species (Arct min); difficult for livestock to access **Best Source of Info:** U99BRA01ABCA  
**Map UTM Zone UTM Easting UTM Northing Survey Site Name Notes # Dot ID #**  
72E09 12 564725 5501750 Ressor Lake 67 5516  
**Source Code Author Publisher Year Title**  
U99BRA01ABCA Bradley, C., R. Ernst, D. Dickinson & L. Fitch 1999 Rare Plant Survey Forms  
**Date Source Abstract Code Observer Occurrence Data**  
1999-07-16 U99BRA01ABCA Wynne Miles & Cheryl Bradley only 1 plant found in 400 m2 plot; V6 vegetative; R10 reproductive  
**Ellisia nyctelea** waterpod SRank: S2  
+++++

**Element Code:** PDHYD02010 **Occurrence Code #:** 011 **Survey Date:** 1999-07-16  
**Last Observed:** 1999-07-16 **First Observed:** 1999-07-16 **Actual Mapping Precision (m):** 25 **Precision Code:** S  
**Directions:** Cypress Hills P.P.; Ressor Lake, 3 km E of; Battle Creek, N side of.  
**General Description:** Crat ou/Urti gra-Hier lan-Viol can shrub (5-6 m tall) thicket on S-facing slope above creek; mesic well drained  
**Min Elev. (m):** 1225 **Max Elev. (m):** 1225  
**Slope:** 12.00 **Aspect:** S  
**Other Comments:** PLOT CB9002  
**Management Comments:** livestock grazing and recreation **Best Source of Info:** U99BRA01ABCA  
**Map UTM Zone UTM Easting UTM Northing Survey Site Name Notes # Dot ID #**  
72E09 12 568500 5501350 Battle Creek 70 5519  
**Source Code Author Publisher Year Title**  
U99BRA01ABCA Bradley, C., R. Ernst, D. Dickinson & L. Fitch 1999 Rare Plant Survey Forms  
**Date Source Abstract Code Observer Occurrence Data**  
1999-07-16 U99BRA01ABCA Chery Bradley & Wynne Miles 11 plants in 400 m2 plot; V6 vegetative; R10 vegetative  
**Ellisia nyctelea** waterpod SRank: S2

***Elodea bifoliata***

**Natural Region:** Foothills Fescue Grassland, Mixedgrass, Dry Mixedgrass

**Habitat:** Wetland

**Phenology:** visible from May onwards; most well-developed in August

**Specific Search Strategies (if any):** clear quiet waters where the water is quite shallow (less than 20 cm deep) and where the substrate is coarse (gravelys)

**Element Occurrences:**

**Element Code:** PMHYD03010 **Occurrence Code #:** 001 **Survey Date:** 1973-08-16

**Last Observed:** 1973-08-16 **First Observed:** 1973-08-16 **Precision Code:** M

**Directions:** Calgary; Inglewood Bird Sanctuary, at.

**General Description:** In lagoon.

**Min Elev. (m):** 1020 **Max Elev. (m):** 1020 **Best Source of Info:** S73PINUCABCA01

**Specimen Source Code Collector Herbarium Accession # Date ID OK? Observation Detail**

S73PINUCABCA01 Pinel, H.W. UC 01683 1973-08-16

**Map UTM Zone UTM Easting UTM Northing Survey Site Name Notes # Dot ID #**

82O01 11 709800 5656700 Iglewood Bird Sanctuary 23 1872

***Elodea bifoliata*** SRank: S1

+++++

**Element Code:** PMHYD03010 **Occurrence Code #:** 002 **Survey Date:** 1955-09-04

**Last Observed:** 1955-09-04 **First Observed:** 1955-09-04 **Precision Code:** M

**Directions:** Vauxhall, E of; Hays. W of; large lake, entrance to

**General Description:** entrance to large lake; slow moving water; Hays - 50 06/111 48; Vauxhall - 50 04/112 09

**Min Elev. (m):** 769 **Max Elev. (m):** 769 **Best Source of Info:** S55MOSUAABCA05

**Specimen Source Code Collector Herbarium Accession # Date ID OK? Observation Detail**

S55MOSUAABCA05 Moss, E.H. UA 1028 1955-09-04 Y vegetative

**Map UTM Zone UTM Easting UTM Northing Survey Site Name Notes # Dot ID #**

72L04 12 433625 5549850 Hays 3 182

***Elodea bifoliata*** SRank: S1

+++++

**Element Code:** PMHYD03010 **Occurrence Code #:** 003 **Survey Date:** 1979-06-00

**Last Observed:** 1979-06-00 **First Observed:** 1958-07-13 **Precision Code:** M

**Directions:** Onoway, 5 km E of; Matchayaw Lake (Devil's Lake); Sturgeon River Valley

**General Description:** plants on sand bottom; 53 43N/114 07W

**Min Elev. (m):** 685 **Max Elev. (m):** 701 **Best Source of Info:** S79ALLUAABCA01

**Specimen Source Code Collector Herbarium Accession # Date ID OK? Observation Detail**

S58PEGPMABCA02 Pegg, George R. PM B88.1.905 1958-07-13 Y flower bud? probably male

S58PEGUAABCA01 Pegg, George UA 1029 1958-07-13 Y flower buds

S76GORUAABCA01 Gorham, P.R. UA 56338 1976-07-25 Y

S76GORUAABCA02 Gorham, P.R. UA 56342 1976-07-25

S76GORUAABCA03 Gorham, P.R. UA 56339 1976-07-25 flowers, bud - female

S79ALLUAABCA01 Allen, Dale UA 81598 1979-06-00 Y vegetative

**Map UTM Zone UTM Easting UTM Northing Survey Site Name Notes # Dot ID #**

83G09 11 691175 5955800 Matchayaw Lake 12 3123

***Elodea bifoliata*** SRank: S1

+++++

**Element Code:** PMHYD03010 **Occurrence Code #:** 004 **Survey Date:** 1958-08-18

**Last Observed:** 1958-08-18 **First Observed:** 1958-08-18 **Precision Code:** M

**Directions:** Onoway, NW of; Sturgeon River

**Min Elev. (m):** 716 **Max Elev. (m):** 731 **Best Source of Info:** S58PEGUAABCA02

**Specimen Source Code Collector Herbarium Accession # Date ID OK? Observation Detail**

S58PEGPMABCA03 Pegg, George R. PM B88.1.908 1958-08-18 Y flower bud? - probably female

S58PEGUAABCA02 Pegg, George UA 1030 1958-08-18 Y flower

**Map UTM Zone UTM Easting UTM Northing Survey Site Name Notes # Dot ID #**

83G09 11 679500 5958000 Sturgeon River 13 3124

***Elodea bifoliata*** SRank: S1

+++++

**Element Code:** PMHYD03010 **Occurrence Code #:** 005 **Survey Date:** 1979-05-09  
**Last Observed:** 1979-05-09 **First Observed:** 1976-05-21 **Precision Code:** M  
**Directions:** Wabamun Lake  
**General Description:** on marl sediment adjacent to thermal discharge from Wabamun generating station; 1.5-4.5 m deep; with Potamogeton pectinatus, P. richardsonii, P. zosteriformes, Myriophyllum exalbescens  
**Min Elev. (m):** 728 **Max Elev. (m):** 728 **Best Source of Info:** S79HAAUAABCA01  
**Specimen Source Code Collector Herbarium Accession # Date ID OK? Observation Detail**  
S76HAAUAABCA01 Haag, R. UA 81575 1976-05-21 Y buds - flowers male  
S79HAAUAABCA01 Haag, R. UA 81572 1979-05-09 Y vegetative  
**Map UTM Zone UTM Easting UTM Northing Survey Site Name Notes # Dot ID #**  
83G09 11 666950 5936500 Point Alison 14 3125  
**Elodea bifoliata** SRank: S1  
+++++

**Element Code:** PMHYD03010 **Occurrence Code #:** 006 **Survey Date:** 1971-06-29  
**Last Observed:** 1971-06-29 **First Observed:** 1971-06-29 **Precision Code:** M  
**Directions:** Isle Lake, W end of  
**Min Elev. (m):** 730 **Max Elev. (m):** 730 **Best Source of Info:** S71ALLUAABCA01  
**Specimen Source Code Collector Herbarium Accession # Date ID OK? Observation Detail**  
S71ALLUAABCA01 Allen, E. Dale UA 50640 1971-06-29 Y vegetative  
**Map UTM Zone UTM Easting UTM Northing Survey Site Name Notes # Dot ID #**  
83G10 11 644000 5941000 Isle Lake 18 3141  
**Elodea bifoliata** SRank: S1  
+++++

**Element Code:** PMHYD03010 **Occurrence Code #:** 007 **Survey Date:** 2000-09-14  
**Last Observed:** 2000-09-14 **First Observed:** 2000-09-14 **Actual Mapping Precision (m):** 150 **Precision Code:** S  
**Directions:** Calgary; Fairview area, E of ; Bow River, W side of; Cominco Lands  
**General Description:** shallow water/exposed shore occurs in the north-central portion of the property W of Deerfoot Trail at the western end of the canal  
**Min Elev. (m):** 1010 **Max Elev. (m):** 1020  
**Other Comments:** several hundred plants NAD27 707915E 5651927N; specimen collected; plants appear to be localized here due to the gravelly-silt substrate and relatively gentle slope compared to other parts of the canal; **Best Source of Info:** U00WAL04ABCA  
**Map UTM Zone UTM Easting UTM Northing Survey Site Name Notes # Dot ID #**  
82J16 11 707915 5651927 Calgary 23 6305  
**Source Code Author Publisher Year Title**  
U00WAL04ABCA Wallis, C. Cottonwood Consultants Ltd., Calgary 2000 Rare Plant Survey, Cominco Lands, Calgary  
**Elodea bifoliata** SRank: S1



***Elymus virginicus* Virginia wild rye**

**Natural Region:** Northern Fescue Grassland, Foothills Fescue Grassland, Dry Mixedgrass

**Habitat:** Woodland-Sandy

**Phenology:** heads out in July

**Specific Search Strategies (if any):** most visible late July and August; extensive searches in suitable sandy/gravelly woodlands; while there have been records from riparian woodlands; sandy woodlands in coulees seem to be the most reliable habitat in which to find this species

**Element Occurrences:**

**Element Code:** PMPOA2H0M0 **Occurrence Code #:** 001 **Survey Date:** 1979-08-13  
**Last Observed:** 1979-08-13 **First Observed:** 1979-08-13 **Precision Code:** S  
**Directions:** Bow River, approximately 1 km upstream of Carseland Dam on North side of Bow River  
**General Description:** alluvial flat-mesic-balsam poplar-tall shrub-riparian woodland; Associated spp. *Poa palustris*, *Agropyron caninum*, *Aster laevis*  
**Min Elev. (m):** 907 **Max Elev. (m):** 907 **Best Source of Info:** S79BRAUAABCA06  
**Specimen Source Code Collector Herbarium Accession # Date ID OK? Observation Detail**  
S79BRAUAABCA06 Bradley, C. UA 84155 1979-08-13 Y spikelets  
**Map UTM Zone UTM Easting UTM Northing Survey Site Name Notes # Dot ID #**  
82L14 12 326550 5633200 Carseland 2 1427  
***Elymus virginicus* Virginia wild rye** SRank: S1  
+++++

**Element Code:** PMPOA2H0M0 **Occurrence Code #:** 002 **Survey Date:** 1977-08-19  
**Last Observed:** 1977-08-19 **First Observed:** 1977-08-19 **Precision Code:** M  
**Directions:** Cavendish, 8 miles north of  
**General Description:** manitoba maple woodland  
**Min Elev. (m):** 617 **Max Elev. (m):** 617 **Best Source of Info:** S77BRAUAABCA05  
**Specimen Source Code Collector Herbarium Accession # Date ID OK? Observation Detail**  
S77BRAUAABCA05 Bradley, C. & C. Wallis UA 75365 1977-08-19 Y remains of spikelets  
**Map UTM Zone UTM Easting UTM Northing Survey Site Name Notes # Dot ID #**  
72L16 12 538875 5642475 Cavendish 6 253  
***Elymus virginicus* Virginia wild rye** SRank: S1  
+++++

**Element Code:** PMPOA2H0M0 **Occurrence Code #:** 003 **Survey Date:** 1974-08-13  
**Last Observed:** 1974-08-13 **First Observed:** 1974-08-13 **Precision Code:** M  
**Directions:** Crowsnest Pass, near the summit of  
**General Description:** on bedrock; in IP, wS/Vaccinium community. Assoc. spp. include *Vaccinium scoparium*, *Aster conspicuus*, *Thalictrum occidentale*  
**Min Elev. (m):** 1585 **Max Elev. (m):** 1585  
**Slope:** 5.00 **Aspect:** E **Best Source of Info:** S74REIUAABCA03  
**Specimen Source Code Collector Herbarium Accession # Date ID OK? Observation Detail**  
S74REIUAABCA03 Reid, Calder, Pollock UA 76038 1974-08-13 Y Rare; spikelets  
**Map UTM Zone UTM Easting UTM Northing Survey Site Name Notes # Dot ID #**  
82G10 11 668000 5500800 Crowsnest Ridge 49 39/114 40 30 868  
***Elymus virginicus* Virginia wild rye** SRank: S1  
+++++

**Element Code:** PMPOA2H0M0 **Occurrence Code #:** 004 **Survey Date:** 1977-08-18  
**Last Observed:** 1977-08-18 **First Observed:** 1977-08-18 **Precision Code:** M  
**Directions:** Patricia, 11 miles north of  
**General Description:** in coulee; aspen woodland  
**Min Elev. (m):** 640 **Max Elev. (m):** 640 **Best Source of Info:** S77WALUAABCA01  
**Specimen Source Code Collector Herbarium Accession # Date ID OK? Observation Detail**  
S77WALUAABCA01 Wallis, C. UA 75366 1977-08-18 Y remains of spikelet  
**Map UTM Zone UTM Easting UTM Northing Survey Site Name Notes # Dot ID #**  
72L13 12 451000 5634000 Red Deer River 6 245  
**Date Source Abstract Code Observer Occurrence Data**  
remains of spikelet  
***Elymus virginicus* Virginia wild rye** SRank: S1  
+++++

**Element Code:** PMPOA2H0M0 **Occurrence Code #:** 005 **Survey Date:** 1976-07-18  
**Last Observed:** 1976-07-18 **First Observed:** 1976-07-18 **Precision Code:** M  
**Directions:** Writing-on-Stone Provincial Park  
**General Description:** near and under trees  
**Min Elev. (m):** 915 **Max Elev. (m):** 915  
**Other Comments:** identified by S. Smoliak and R. Gschaid; verified by M. Barkworth **Best Source of Info:** S76GSCALABCA01  
**Specimen Source Code Collector Herbarium Accession # Date ID OK? Observation Detail**  
S76GSCALABCA01 Gschaid family AL 3441 1976-07-18 Y headed  
**Map UTM Zone UTM Easting UTM Northing Survey Site Name Notes # Dot ID #**  
72E04 12 454074 5436383 Writing-on-Stone Provincial Park 49-05N/111-37W 7 55  
**Elymus virginicus** Virginia wild rye SRank: S1  
+++++

**Element Code:** PMPOA2H0M0 **Occurrence Code #:** 008 **Survey Date:** 1990-00-00  
**Last Observed:** 1990-00-00 **First Observed:** 1990-00-00 **Actual Mapping Precision (m):** 250 **Precision Code:** S  
**Directions:** Medicine Hat, N of; Old Channel Lake; coulee springs; Sect. 29-Tp14-R5-W4M  
**General Description:** coulees along valley of S. Sask. R.; moist woodland at edge of slightly saline springs  
**Min Elev. (m):** 640 **Max Elev. (m):**  
**Other Comments:** recommend protection of spring wetlands; no groundwater pumping for injection wells  
**Management Comments:** heavy cattle grazing at one spring; petroleum dev't on adjacent lands **Best Source of Info:**  
U90WAL01ABCA  
**Map UTM Zone UTM Easting UTM Northing Survey Site Name Notes # Dot ID #**  
72L02 12 525600 5561450 Old Channel Lake Sect. 29-Tp14-R5-W5M; mapped as polygon 44 6015  
**Source Code Author Publisher Year Title**  
U90WAL01ABCA Wallis, Cliff 1990 Reconnaissance Survey of Saline Wetlands and Springs in the Grassland-Parkland Region of  
Eastern Alberta  
**Date Source Abstract Code Observer Occurrence Data**  
U90WAL01ABCA C Wallis See unpubl. report  
**Elymus virginicus** Virginia wild rye SRank: S1  
+++++

**Element Code:** PMPOA2H0M0 **Occurrence Code #:** 009 **Survey Date:** 1990-00-00  
**Last Observed:** 1990-00-00 **First Observed:** 1990-00-00 **Actual Mapping Precision (m):** 500 **Precision Code:** M  
**Directions:** Bindloss, W of; Dune Point Springs; N side of Red Deer River; Tp23-R3-4-W4M  
**General Description:** coulees with springs, along river valley; abundant in Acer negundo woodland  
**Min Elev. (m):** 610 **Max Elev. (m):** 610  
**Other Comments:** recommend continue to protect springs & groundwater sources; no groundwater pumping close to basin  
**Management Comments:** current mgmt practice consistent with protection of springs, i.e. no cattle grazing or groundwater  
withdrawal **Best Source of Info:** U90WAL01ABCA  
**Map UTM Zone UTM Easting UTM Northing Survey Site Name Notes # Dot ID #**  
72L16 12 543000 5643000 Bindloss 2 249  
**Source Code Author Publisher Year Title**  
U90WAL01ABCA Wallis, Cliff 1990 Reconnaissance Survey of Saline Wetlands and Springs in the Grassland-Parkland Region of  
Eastern Alberta  
**Date Source Abstract Code Observer Occurrence Data**  
1990-00-00 U90WAL01ABCA C Wallis See unpubl report in-house  
**Elymus virginicus** Virginia wild rye SRank: S1

**Erigeron radicans dwarf fleabane**

**Natural Region:** Foothills Fescue Grassland, Mixedgrass, Dry Mixedgrass

**Habitat:** Grassland-Sandy

**Phenology:** flowers late May to early June in grassland regions

**Specific Search Strategies (if any):** sandstone gravel pavement and eroding gravels along valley rims, both north and south-facing aspects; easily detectable and quite often in significant patches

**Element Occurrences:**

**Element Code:** PDAST3M3L0 **Occurrence Code #:** 001 **Survey Date:** 1974-07-19  
**Last Observed:** 1974-07-19 **First Observed:** 1974-07-19 **Precision Code:** S  
**Directions:** Rocky Mountain House, W of; Strachan R. between N.Ram and N.Saska. Rivers; Nordegg, SW of; Ram Mountain Lookout, below tower  
**General Description:** Scree slope  
**Min Elev. (m):** 1980 **Max Elev. (m):** 1980  
**Other Comments:** Specimen det. by G.W.Douglas **Best Source of Info:** R75JOH01ABCA  
**Specimen Source Code Collector Herbarium Accession # Date ID OK? Observation Detail**  
S74DUMUAABCA04 Dumais, M.G. UA 72685 1974-07-19 [flowers]  
**Map UTM Zone UTM Easting UTM Northing Survey Site Name Notes # Dot ID #**  
83B05 11 583900 5800000 Ram Mountain Lookout Site 4 (see attached copy of Fig.11, Map in R75JOH01ABCA. 6 2351  
**Source Code Author Publisher Year Title**  
B86VAL01ABCA Wallis, Clifford et al Alberta Forestry Lands & Wildlife 203p 1986 Pilot rare plant monitoring program in the Oldman Regional Plan area of southwestern Alberta  
R75JOH01ABCA Johnson, John Derek Master's thesis University of Calgary 1975 An evaluation of the summer range of bighorn sheep (*Ovis canadensis canadensis* Shaw) on Ram Mountain, Alberta  
**Date Source Abstract Code Observer Occurrence Data**  
[flowers](S74DUMUAABCA04)  
**Erigeron radicans** dwarf fleabane SRank: S2  
+++++

**Element Code:** PDAST3M3L0 **Occurrence Code #:** 002 **Survey Date:** 1993-07-10  
**Last Observed:** 1993-07-10 **First Observed:** 1971-07-12 **Precision Code:** S  
**Directions:** Ram Mountain Lookout  
**General Description:** Alpine, sloping meadows w/ widely scatt. White Spruce, giving way to talus slopes; on or around timberline.  
**Min Elev. (m):** 1076 **Max Elev. (m):** 2160  
**Other Comments:** Observation were made in areas B, containing sites 1, 2, 3, 5, 10 & 11 of D.Johnson's map, Fig. 11, p. 39. (F93SMI01ABCA0 **Best Source of Info:** R75JOH01ABCA  
**Specimen Source Code Collector Herbarium Accession # Date ID OK? Observation Detail**  
S71BIRUCABCA02 Bird, C.D. UC 27430 1971-07-12 [flowers]  
S74JOHUCABCA03 Johnson, J.D. UC 27429 1974-07-03 [flowers]  
**Map UTM Zone UTM Easting UTM Northing Survey Site Name Notes # Dot ID #**  
83B05 11 582750 5800900 Ram Mountain Lookout 52 21N/115 47W 7 2352  
**Source Code Author Publisher Year Title**  
F93SMI01ABCA Smith, Darrell and Lorna Allen 1993 Species list - alpine meadows - Ram Mountain; field notes from July 10, 1993 field trip R75JOH01ABCA Johnson, John Derek Master's thesis University of Calgary 1975 An evaluation of the summer range of bighorn sheep (*Ovis canadensis canadensis* Shaw) on Ram Mountain, Alberta  
**Date Source Abstract Code Observer Occurrence Data**  
[flowers](S71BIRUCABCA02; S74JOHUCABCA03)  
**Erigeron radicans** dwarf fleabane SRank: S2  
+++++

**Element Code:** PDAST3M3L0 **Occurrence Code #:** 003 **Survey Date:** 1957-08-21  
**Last Observed:** 1957-08-21 **First Observed:** 1957-08-21 **Precision Code:** S  
**Directions:** Shunda Mountain; Nordegg; N of  
**General Description:** summit & upper slopes; rare on alpine scree  
**Min Elev. (m):** 2040 **Max Elev. (m):** 2040  
**Other Comments:** Det. by J.G.Packer, stetted by G.W.Douglas **Best Source of Info:** S57PORNMONCA01  
**Specimen Source Code Collector Herbarium Accession # Date ID OK? Observation Detail**  
S57PORNMONCA01 Porsild, A.E. NM 290434 1957-08-21 GWD Rare  
**Map UTM Zone UTM Easting UTM Northing Survey Site Name Notes # Dot ID #**  
83C09 11 559300 5820300 Shunda Mountain 52 32/116 08. Site A910 6 2531  
**Date Source Abstract Code Observer Occurrence Data**  
Rare  
**Erigeron radicans** dwarf fleabane SRank: S2

**Element Code:** PDAST3M3L0 **Occurrence Code #:** 004 **Survey Date:** 1979-06-05  
**Last Observed:** 1979-06-05 **First Observed:** 1979-06-05 **Precision Code:** S  
**Directions:** Black Mtn., W Facing Ridge  
**General Description:** Grassland in Limber Pine - Douglas Fir woods  
**Min Elev. (m):** 1524 **Max Elev. (m):** 1524 **Aspect:** W  
**Other Comments:** Det. by C. Wallis **Best Source of Info:** S79WALUAABCA01  
**Specimen Source Code Collector Herbarium Accession # Date ID OK? Observation Detail**  
S79WALUAABCA01 Wallis, C. UA 84662 1979-06-05 [flowers]  
**Map UTM Zone UTM Easting UTM Northing Survey Site Name Notes # Dot ID #**  
82G16 11 702550 5537500 Black Mountain 16 889  
**Source Code Author Publisher Year Title**  
B86WAL01ABCA Wallis, Clifford et al Alberta Forestry Lands & Wildlife 203p 1986 Pilot rare plant monitoring program in the  
Oldman Regional Plan area of southwestern Alberta  
**Date Source Abstract Code Observer Occurrence Data**  
[flowers]  
**Erigeron radicans** dwarf fleabane SRank: S2  
+++++

**Element Code:** PDAST3M3L0 **Occurrence Code #:** 005 **Survey Date:** 1997-07-15  
**Last Observed:** 1997-07-15 **First Observed:** 1981-07-02 **Actual Mapping Precision (m):** 100 **Precision Code:** S  
**Directions:** Prospect Creek above; Cheviot Mt., below.  
**General Description:** Dry alpine fell-field with Astragalus vexilliflexus, Hedysarum alpinum, Erigeron spp.  
**Min Elev. (m):** 2080 **Max Elev. (m):** 2080 **Aspect:** SW  
**Other Comments:** ID of Dinwoodie photo confirmed by J. Gould, 1997-07-22. **Best Source of Info:** PNDDIN01ABCA  
**Specimen Source Code Collector Herbarium Accession # Date ID OK? Observation Detail**  
S81PACUAABCA01 Packer, J.G. UA 90417 1981-07-02  
**Map UTM Zone UTM Easting UTM Northing Survey Site Name Notes # Dot ID #**  
83C14 11 476075 5863900 Prospect Creek 3 2657  
**Source Code Author Publisher Year Title**  
UNDDIN01ABCA Dinwoodie, Allison 1997  
**Date Source Abstract Code Observer Occurrence Data**  
chromosome number 2N=36 1997-07-15 UNDDIN01ABCA Allison Dinwoodie 3 individuals all flowering  
**Erigeron radicans** dwarf fleabane SRank: S2  
+++++

**Element Code:** PDAST3M3L0 **Occurrence Code #:** 006 **Survey Date:** 1976-07-08  
**Last Observed:** 1976-07-08 **First Observed:** 1968-07-07 **Precision Code:** S  
**Directions:** Cadomin; 52 56 117 22  
**General Description:** growing in vicinity of E. pallens; dry, slope on open stony, alpine ridge  
**Min Elev. (m):** 2010 **Max Elev. (m):** 2010  
**Other Comments:** Det. by George Pegg; duplicate sheet exists #B88.1.1827  
**Management Comments:** [Close to boundary of NA] **Best Source of Info:** S68PEGPMABCA02  
**Specimen Source Code Collector Herbarium Accession # Date ID OK? Observation Detail**  
S68PEGPMABCA02 Pegg, G. PM B71.3.15 1968-07-07  
S71PACUAABCA05 Packer, J.G. UA 91131 1971-07-15 [flowers, fruits]  
S76MORUAABCA03 Mortimer, P. UA 75219 1976-07-08 Rare and not seen elsewhere; [flowers]  
**Map UTM Zone UTM Easting UTM Northing Survey Site Name Notes # Dot ID #**  
83C14 11 475100 5864150 Prospect Creek 47 2675  
**Date Source Abstract Code Observer Occurrence Data**  
Rare and not seen elsewhere.[flowers](S76MORUAABCA03); [flowers, fruits](S71PACUAABCA05)  
**Erigeron radicans** dwarf fleabane SRank: S2  
+++++

**Element Code:** PDAST3M3L0 **Occurrence Code #:** 007 **Survey Date:** 1971-07-24  
**Last Observed:** 1971-07-24 **First Observed:** 1971-07-24 **Precision Code:** S  
**Directions:** Waterton Lakes N.P.; Sofa Mountain, small cirque in middle of north face.  
**General Description:** rocky valley floor  
**Min Elev. (m):** 1890 **Max Elev. (m):** 1890  
**Other Comments:** Det Job Kuijt - E. ochroleucus; annot. by Cronquist, March 78 - E. radicans. "very characteristic" **Best**  
**Source of Info:** S71KUIULABCA17  
**Specimen Source Code Collector Herbarium Accession # Date ID OK? Observation Detail**  
S71KUIULABCA17 Kuijt, J. & M. Gadd UL none 1971-07-24  
**Map UTM Zone UTM Easting UTM Northing Survey Site Name Notes # Dot ID #**  
82H04 12 295900 5435200 Sofa Mountain 49 02/114 48 35 1007  
**Erigeron radicans** dwarf fleabane SRank: S2  
+++++

**Element Code:** PDAST3M3L0 **Occurrence Code #:** 008 **Survey Date:** 1990-05-27  
**Last Observed:** 1990-05-27 **First Observed:** 1987-05-30 **Precision Code:** M  
**Directions:** Whiskey Gap, Sommerfeldt Ranch.  
**General Description:** dry hilltop; rough fescue grassland  
**Min Elev. (m):** 1280 **Max Elev. (m):** 1400  
**Other Comments:** Det. by J.D. Johnson; verif. by C.W.Compton, 1989, with note: "This matches our material from the Cypress Hills, Sask." **Best Source of Info:** S90SOMUAABCA01

**Specimen Source Code Collector Herbarium Accession # Date ID OK? Observation Detail**

S87SOMCFABCA01 Sommerfeldt, B. CF 880114 1987-05-30 [flowers]

S90SOMUAABCA01 Sommerfeldt, B. UA 094486 1990-05-27 Y flowers

**Map UTM Zone UTM Easting UTM Northing Survey Site Name Notes # Dot ID #**

82H03 12 352650 5431700 Whiskey Gap 49 01 30/113 01 21 961

**Date Source Abstract Code Observer Occurrence Data**

[flowers]

**Erigeron radicans** dwarf fleabane SRank: S2

+++++

**Element Code:** PDAST3M3L0 **Occurrence Code #:** 009 **Survey Date:** 1985-00-00  
**Last Observed:** 1985-00-00 **First Observed:** 1985-00-00 **Actual Mapping Precision (m):** 50 **Precision Code:** S

**Directions:** Onefour, 8 km S of; Lost River, 1.5 km NE of.

**General Description:** seasonally moist slight depression in sandy grassland

**Min Elev. (m):** 906 **Max Elev. (m):** 9063 **Best Source of Info:** R86WER01ABCA

**Map UTM Zone UTM Easting UTM Northing Survey Site Name Notes # Dot ID #**

72E01 12 538625 5432975 Lost River 52 4553

**Source Code Author Publisher Year Title**

R86WER01ABCA Wershler C. & C. Wallis 1986 Lost River Significant Features Assessment

**Erigeron radicans** dwarf fleabane SRank: S2

+++++

**Element Code:** PDAST3M3L0 **Occurrence Code #:** 010 **Survey Date:** 1998-10-00  
**Last Observed:** 1998-10-00 **First Observed:** 1998-07-31 **Actual Mapping Precision (m):** 10 **Precision Code:** S

**Directions:** Moose Dome Creek, Ridges above.

**General Description:** fine-textured shattered limestone exposures; level or shallow slopes; with *Dryas octopetala* community with *Carex rupestris* and/or *Kobresia myosuroides*; exposed rock varied between 40-75% of ground surface

**Min Elev. (m):** 1920 **Max Elev. (m):** 2225

**Other Comments:** 10 populations along ridges E and W of Moose Dome Creek, each has 100 to 700 plants. 3 specimens are collected and will be housed at UofC herbarium.

**Management Comments:** well site development, recreation area development **Best Source of Info:** U98LAN01ABCA

**Map UTM Zone UTM Easting UTM Northing Survey Site Name Notes # Dot ID #**

82J15 11 653975 5643375 Moose Dome Creek Multi-polygon 3 5000

**Source Code Author Publisher Year Title**

U98LAN01ABCA Lancaster, Jane 1998 Rare Native Plant Survey Form

**Erigeron radicans** dwarf fleabane SRank: S2

+++++

**Element Code:** PDAST3M3L0 **Occurrence Code #:** 011 **Survey Date:** 1999-06-07  
**Last Observed:** 1999-06-07 **First Observed:** 1999-05-27 **Actual Mapping Precision (m):** 25 **Precision Code:** S

**Directions:** Cypress Hills P.P.; Ressor Lake, ridges N of; top of.

**General Description:** gravelly ridges with sparsely vegetated on cobble surface

**Min Elev. (m):** 1350 **Max Elev. (m):** 1380

**Other Comments:** Specimens collected, collection numbers RE0004 & RE0006. For detailed habitat information look at EO Data table, and for location at digital Cypress Hills file.

**Management Comments:** grazing/recreation **Best Source of Info:** U99BRA01ABCA

**Map UTM Zone UTM Easting UTM Northing Survey Site Name Notes # Dot ID #**

72E09 12 564750 5502450 Ressor Lake 78 5527

**Source Code Author Publisher Year Title**

U99BRA01ABCA Bradley, C., R. Ernst, D. Dickinson & L. Fitch 1999 Rare Plant Survey Forms

**Date Source Abstract Code Observer Occurrence Data**

1999-05-27 U99BRA01ABCA Reg Ernst less than 1000 plants in 2000 m2; gravelly (NW through NE) facing ridge; *Potentilla fruticosa*, *Erigeron compositus*, *Phlox hoodii* (*Lomatium* cous also present); V6 vegetative; R6 reproductive; aspect NW-N-NE; slope <20%; moisture subxeric

1999-05-28 U99BRA01ABCA Reg Ernst more than 500 plants in 400 m2; high W & N facing gravelly ridge; sparsely vegetated on cobbled surface; *Potentilla fruticosa*, *Carex* sp., *Phlox hoodii*, *Oxytropis sericea*, *Anemone* sp.; V6 vegetative; R6 reproductive; aspect W & N; slope <20%; mixture subxeric; UTM 12 565 350/5502 150 and 565 250/5502 100

1999-06-07 U99BRA01ABCA Reg Ernst less than 50 plants in 25 m2; gravelly/cobbled NW facing ridge; *Potentilla fruticosa*, *Erigeron compositus*, *Senecio cana*, *Carex* sp., very limited competition from other species; V6 vegetative; R8 reproductive; aspect NW; slope <30%; moisture xeric

**Erigeron radicans** dwarf fleabane SRank: S2

**Eriogonum cernuum nodding umbrella-plant**

**Natural Region:** Dry Mixedgrass

**Habitat:** Sand Dunes; Slopes-Sandy

**Phenology:** flowers mid-July to August

**Specific Search Strategies (if any):** search along edges of active dunes and on eroding sands on slopes, especially near valley rims; detectable earlier in the year from previous year's flower stalk and distinctive rosette

**Element Occurrences:**

**Element Code:** PDPGN08110 **Occurrence Code #:** 001 **Survey Date:** 1980-09-18

**Last Observed:** 1980-09-18 **First Observed:** 1959-08-27 **Precision Code:** M

**Directions:** Milk River

**General Description:** Sandstone 'hoodoos', rapidly drained. A talus of sand between sandstone outcrops. With Astragalus kentrophyta, Calamovilfa longifolia, Artemisia caudata

**Min Elev. (m):** 910 **Max Elev. (m):** 910 **Best Source of Info:** S80JOHCFABCA06

**Specimen Source Code Collector Herbarium Accession # Date ID OK? Observation Detail**

S59HUDACONCA01 Hudson, T.H. AC 109912 1959-08-27 rare

S80JOHCFABCA06 Johnson, J.D. CF 802145 1980-09-18 Flowers

**Map UTM Zone UTM Easting UTM Northing Survey Site Name Notes # Dot ID #**

72E04 12 454074 5436383 Writing-on-Stone Provincial Park 49-05N/111-37W 7 55

**Eriogonum cernuum** nodding umbrella-plant SRank: S2

+++++

**Element Code:** PDPGN08110 **Occurrence Code #:** 002 **Survey Date:** 1989-07-22

**Last Observed:** 1989-07-22 **First Observed:** 1989-07-22 **Precision Code:** S

**Directions:** Milk River Natural Area

**General Description:** Exposed sandy soil at edge of badlands along Comrey sandstone

**Min Elev. (m):** 950 **Max Elev. (m):** 950 **Best Source of Info:** S89WALPPABCA15

**Specimen Source Code Collector Herbarium Accession # Date ID OK? Observation Detail**

S89WALPPABCA15 Wallis, C. PP 3435 1989-07-22 About 100 plants

**Map UTM Zone UTM Easting UTM Northing Survey Site Name Notes # Dot ID #**

72E02 12 523273 5430684 Milk River Natural Area LSD 2 16 27

**Eriogonum cernuum** nodding umbrella-plant SRank: S2

+++++

**Element Code:** PDPGN08110 **Occurrence Code #:** 003 **Survey Date:** 1994-00-00

**Last Observed:** 1995-00-00 **First Observed:** 1994-00-00 **Precision Code:** S

**Directions:** Canadian Forces Base Suffield National Wildlife Area; South Saskatchewan River valley, upper slope of; Bull Pen, about 1.5 km west of

**General Description:** gravelly sites

**Min Elev. (m):** 663 **Max Elev. (m):** 663 **Best Source of Info:** U96MAC01ABCA

**Map UTM Zone UTM Easting UTM Northing Survey Site Name Notes # Dot ID #**

72L07 12 524100 5566700 Brush Flats UTM WL ca 524100 / 5566700 3 188

**Source Code Author Publisher Year Title**

U96MAC01ABCA Macdonald, I.D. Canadian Wildlife Service, Environment Canada, Prairie and 1996 Vascular Flora of Canadian Forces Base Suffield National Wildlife Area

**Date Source Abstract Code Observer Occurrence Data**

rare in SNWA, numerous plants

**Eriogonum cernuum** nodding umbrella-plant SRank: S2

+++++

**Element Code:** PDPGN08110 **Occurrence Code #:** 004 **Survey Date:** 1977-08-21

**Last Observed:** 1977-08-21 **First Observed:** 1977-08-21 **Precision Code:** M

**Directions:** Empress, 7 mi S of

**General Description:** active sand dune

**Min Elev. (m):** 709 **Max Elev. (m):** 709 **Best Source of Info:** S77BRAUAABCA06

**Specimen Source Code Collector Herbarium Accession # Date ID OK? Observation Detail**

S77BRAUAABCA06 Bradley, C. & C. Wallis UA 75682 1977-08-21 Y flowers

**Map UTM Zone UTM Easting UTM Northing Survey Site Name Notes # Dot ID #**

72L16 12 566525 5633600 South Saskatchewan River SE 10-22-1 W4M 7 254

**Eriogonum cernuum** nodding umbrella-plant SRank: S2

+++++

**Element Code:** PDPGN08110 **Occurrence Code #:** 005 **Survey Date:** 1990-07-25  
**Last Observed:** 1990-07-25 **First Observed:** 1990-07-25 **Actual Mapping Precision (m):** 1200 **Precision Code:** M  
**Directions:** Red Deer River and Little Sandhill Creek junction, 1000 m SE of.  
**General Description:** Dry badlands, badlands trail; 52 plants in population.  
**Min Elev. (m):** 647 **Max Elev. (m):** 647 **Best Source of Info:** S90HERUCABCA01  
**Specimen Source Code Collector Herbarium Accession # Date ID OK? Observation Detail**  
S90HERUCABCA01 Hermann, Karen UC 49464 1997-07-25 Y blooming  
**Map UTM Zone UTM Easting UTM Northing Survey Site Name Notes # Dot ID #**  
72L13 12 464450 5623150 Deadlodge Canyon NE 6-21-11 W4. 3 242  
**Eriogonum cernuum** nodding umbrella-plant SRank: S2  
+++++

**Element Code:** PDPGN08110 **Occurrence Code #:** 006 **Survey Date:** 1974-09-22  
**Last Observed:** 1974-09-22 **First Observed:** 1974-09-22 **Actual Mapping Precision (m):** 500 **Precision Code:** M  
**Directions:** CFB Suffield; ~15km NE of NE corner of; bridge over S Saskatchewan River on Hwy 41; ~350m S of.  
**General Description:** Dry loose silt in and around castellated (having battlements like a castle) Belly River outcrops.  
**Min Elev. (m):** 610 **Max Elev. (m):** 610 **Best Source of Info:** S74HUDACONCA02  
**Specimen Source Code Collector Herbarium Accession # Date ID OK? Observation Detail**  
S74HUDACONCA02 Hudson, J.H. AC 355633 1974-09-22 occasional clumps  
**Map UTM Zone UTM Easting UTM Northing Survey Site Name Notes # Dot ID #**  
72L09 12 565750 5619800 S Saskatchewan River about NW1/4 27-20-1-W4th. 22 4151  
**Eriogonum cernuum** nodding umbrella-plant SRank: S2  
+++++

**Element Code:** PDPGN08110 **Occurrence Code #:** 007 **Survey Date:** 1985-00-00  
**Last Observed:** 1985-00-00 **First Observed:** 1985-00-00 **Actual Mapping Precision (m):** 50 **Precision Code:** S  
**Directions:** Lost River, 1.5 km W of; USA border, at.  
**General Description:** sandy soil  
**Min Elev. (m):** 861 **Max Elev. (m):** 861 **Best Source of Info:** R86WER01ABCA  
**Map UTM Zone UTM Easting UTM Northing Survey Site Name Notes # Dot ID #**  
72E01 12 539525 5427275 Lost River 38 4185  
**Source Code Author Publisher Year Title**  
R86WER01ABCA Wershler C. & C. Wallis 1986 Lost River Significant Features Assessment  
**Eriogonum cernuum** nodding umbrella-plant SRank: S2  
+++++

**Element Code:** PDPGN08110 **Occurrence Code #:** 008 **Survey Date:** 1985-00-00  
**Last Observed:** 1985-00-00 **First Observed:** 1985-00-00 **Actual Mapping Precision (m):** 50 **Precision Code:** S  
**Directions:** Lost River, 300 m W of; USA border, 300 m N of.  
**General Description:** sandy soil  
**Min Elev. (m):** 869 **Max Elev. (m):** 869 **Best Source of Info:** R86WER01ABCA  
**Map UTM Zone UTM Easting UTM Northing Survey Site Name Notes # Dot ID #**  
72E01 12 540250 5427600 Lost River 47 4548  
**Source Code Author Publisher Year Title**  
R86WER01ABCA Wershler C. & C. Wallis 1986 Lost River Significant Features Assessment  
**Eriogonum cernuum** nodding umbrella-plant SRank: S2  
+++++

**Element Code:** PDPGN08110 **Occurrence Code #:** 009 **Survey Date:** 1985-00-00  
**Last Observed:** 1985-00-00 **First Observed:** 1985-00-00 **Actual Mapping Precision (m):** 50 **Precision Code:** S  
**Directions:** Lost River, 2 km W of; USA border, 1.5 km N of.  
**General Description:** sandy soil  
**Min Elev. (m):** 869 **Max Elev. (m):** 876 **Best Source of Info:** R86WER01ABCA  
**Map UTM Zone UTM Easting UTM Northing Survey Site Name Notes # Dot ID #**  
72E01 12 538300 5428650 Lost River 9 8  
**Source Code Author Publisher Year Title**  
R86WER01ABCA Wershler C. & C. Wallis 1986 Lost River Significant Features Assessment  
**Eriogonum cernuum** nodding umbrella-plant SRank: S2  
+++++

**Element Code:** PDPGN08110 **Occurrence Code #:** 010 **Survey Date:** 1985-00-00  
**Last Observed:** 1985-00-00 **First Observed:** 1985-00-00 **Actual Mapping Precision (m):** 50 **Precision Code:** S  
**Directions:** Lost River Valley, W rim of; USA border, 1.3 km N of.  
**General Description:** sandstone outcrops  
**Min Elev. (m):** 846 **Max Elev. (m):** 869 **Best Source of Info:** R86WER01ABCA  
**Map UTM Zone UTM Easting UTM Northing Survey Site Name Notes # Dot ID #**  
72E01 12 540000 5428550 Lost River 48 4549  
**Source Code Author Publisher Year Title**  
R86WER01ABCA Wershler C. & C. Wallis 1986 Lost River Significant Features Assessment  
**Eriogonum cernuum** nodding umbrella-plant SRank: S2  
+++++

**Element Code:** PDPGN08110 **Occurrence Code #:** 011 **Survey Date:** 1985-00-00  
**Last Observed:** 1985-00-00 **First Observed:** 1985-00-00 **Actual Mapping Precision (m):** 50 **Precision Code:** S  
**Directions:** Lost River, E side of; USA border, 2.5 km N of.  
**General Description:** sandy soil on edge of coulee  
**Min Elev. (m):** 838 **Max Elev. (m):** 899 **Best Source of Info:** R86WER01ABCA  
**Map UTM Zone UTM Easting UTM Northing Survey Site Name Notes # Dot ID #**  
72E01 12 540375 5429600 Lost River 53 4554  
**Source Code Author Publisher Year Title**  
R86WER01ABCA Wershler C. & C. Wallis 1986 Lost River Significant Features Assessment  
**Eriogonum cernuum** nodding umbrella-plant SRank: S2  
+++++

**Element Code:** PDPGN08110 **Occurrence Code #:** 012 **Survey Date:** 1985-00-00  
**Last Observed:** 1985-00-00 **First Observed:** 1985-00-00 **Actual Mapping Precision (m):** 50 **Precision Code:** S  
**Directions:** Lost River Valley, E slope and bottom of; USA border, 8 km N of.  
**General Description:** stabilized valley and upland dunes  
**Min Elev. (m):** 861 **Max Elev. (m):** 907 **Best Source of Info:** R86WER01ABCA  
**Map UTM Zone UTM Easting UTM Northing Survey Site Name Notes # Dot ID #**  
72E02 12 535073 5435085 Lost River 20 31  
**Source Code Author Publisher Year Title**  
R86WER01ABCA Wershler C. & C. Wallis 1986 Lost River Significant Features Assessment  
**Eriogonum cernuum** nodding umbrella-plant SRank: S2  
+++++

**Element Code:** PDPGN08110 **Occurrence Code #:** 013 **Survey Date:** 1985-00-00  
**Last Observed:** 1985-00-00 **First Observed:** 1985-00-00 **Actual Mapping Precision (m):** 50 **Precision Code:** S  
**Directions:** Lost River Valley, E rim of; USA border, 7.5 km N of.  
**General Description:** active blowout  
**Min Elev. (m):** 899 **Max Elev. (m):** 899 **Best Source of Info:** R86WER01ABCA  
**Map UTM Zone UTM Easting UTM Northing Survey Site Name Notes # Dot ID #**  
72E02 12 536048 5434735 Lost River 33 4555  
**Source Code Author Publisher Year Title**  
R86WER01ABCA Wershler C. & C. Wallis 1986 Lost River Significant Features Assessment  
**Eriogonum cernuum** nodding umbrella-plant SRank: S2



***Festuca occidentalis* western fescue**

**Natural Region:** Foothills Fescue Grassland

**Habitat:**

**Phenology:** heads out in late June

**Specific Search Strategies (if any):** not all dots in Moss are recorded as EOs in ANHIC; needs further investigation to see if these have been revised

**Element Occurrences:**

**Element Code:** PMPOA2V0M0 **Occurrence Code #:** 001 **Survey Date:** 1986-00-00  
**Last Observed:** 1986-00-00 **First Observed:** 1986-00-00 **Precision Code:** S  
**General Description:** Dry alluvial fan; with *Poa stenantha* and *Viola glabella*.  
**Min Elev. (m):** 1554 **Max Elev. (m):** 1554 **Aspect:** SW **Best Source of Info:** U93ALL01ABCA  
**Map UTM Zone UTM Easting UTM Northing Survey Site Name Notes # Dot ID #**  
82G01 11 701750 5456900 South Castle Study site 28 59 524  
**Source Code Author Publisher Year Title**  
U93ALL01ABCA Allen, Lorna Natural & Protected Areas 1993 Southcastle Rare Plants Survey  
***Festuca occidentalis* western fescue** SRank: S1  
+++++

**Element Code:** PMPOA2V0M0 **Occurrence Code #:** 002 **Survey Date:** 1986-00-00  
**Last Observed:** 1986-00-00 **First Observed:** 1986-06-24 **Precision Code:** S  
**General Description:** Dry; with *Carex raynoldsii*  
**Min Elev. (m):** 1554 **Max Elev. (m):** 1554 **Aspect:** W **Best Source of Info:** U93ALL01ABCA  
**Specimen Source Code Collector Herbarium Accession # Date ID OK? Observation Detail**  
S86ALLPPABCA09 Allen, L. & V. Loewen PP 18 1986-06-24  
**Map UTM Zone UTM Easting UTM Northing Survey Site Name Notes # Dot ID #**  
82G01 11 701700 5456550 South Castle Study site 29 62 525  
**Source Code Author Publisher Year Title**  
U93ALL01ABCA Allen, Lorna Natural & Protected Areas 1993 Southcastle Rare Plants Survey  
***Festuca occidentalis* western fescue** SRank: S1  
+++++

**Element Code:** PMPOA2V0M0 **Occurrence Code #:** 003 **Survey Date:** 1986-00-00  
**Last Observed:** 1986-00-00 **First Observed:** 1986-00-00 **Precision Code:** S  
**General Description:** Gravelly, scoured creek with balsam poplar - adjacent meadow and Pinus stand  
**Min Elev. (m):** 1556 **Max Elev. (m):** 1556 **Best Source of Info:** U93ALL01ABCA  
**Map UTM Zone UTM Easting UTM Northing Survey Site Name Notes # Dot ID #**  
82G01 11 704150 5454750 South Castle Study site 34 71 528  
**Source Code Author Publisher Year Title**  
U93ALL01ABCA Allen, Lorna Natural & Protected Areas 1993 Southcastle Rare Plants Survey  
***Festuca occidentalis* western fescue** SRank: S1  
+++++

**Element Code:** PMPOA2V0M0 **Occurrence Code #:** 004 **Survey Date:** 1953-08-11  
**Last Observed:** 1953-08-11 **First Observed:** 1953-08-11 **Precision Code:** M  
**Directions:** BERTHA LAKE  
**General Description:** ROCKY SHORE OF LAKE  
**Min Elev. (m):** 1830 **Max Elev. (m):** 1830  
**Other Comments:** DET. BY A.J. BREITUNG; ANNOT BY B. BOIVIN, 1971 AS VAR. OCCIDENTALIS; LAT/LONG DO NOT AGREE WITH POSITION OF LAKE **Best Source of Info:** S53BREUAABCA36  
**Specimen Source Code Collector Herbarium Accession # Date ID OK? Observation Detail**  
S53BREUAABCA36 Breitung, A.J. UA 1904 1953-08-11 [spikelets]  
**Map UTM Zone UTM Easting UTM Northing Survey Site Name Notes # Dot ID #**  
82H04 12 284500 5434150 Bertha Lake 49 02/113 56 188 1119  
***Festuca occidentalis* western fescue** SRank: S1  
+++++

**Element Code:** PMPOA2V0M0 **Occurrence Code #:** 005 **Survey Date:** 1997-06-23  
**Last Observed:** 1997-06-23 **First Observed:** 1997-06-23 **Actual Mapping Precision (m):** 250 **Precision Code:** S  
**Directions:** Hastings Ridge; ~6.25km W of.; junction of Coat Creek and Lynx Creek.  
**General Description:** Lichen ground cover; logging trail on one side and conifer forest on other. A second pop. W in conifer forest near Lynx Creek.  
Plant com.:Fest. occ; Cala rub; Phel pra; Elym gla; Trif rep; Ranu unc; Frag vir; Pans con; Sere paup; Anph mar.  
**Min Elev. (m):** 1371 **Max Elev. (m):** 1371  
**Slope:** 5.00 **Aspect:** W  
**Other Comments:** 200+ individuals. Also present Botr lun, Botr dus. **Best Source of Info:** U97TAN02ABCA  
**Map UTM Zone UTM Easting UTM Northing Survey Site Name Notes # Dot ID #**  
82G08 11 681549 5485417 Lynx Creek 49-29.79N;114-29.59W 66 3926  
**Source Code Author Publisher Year Title**  
U97TAN02ABCA Tannas, K & E 1997 Shell - Crowsnest pass pipeline survey - Rare Native Plant Survey Form  
**Date Source Abstract Code Observer Occurrence Data**  
1997-06-23 U97TAN02ABCA vegetative; flowering  
**Festuca occidentalis** western fescue SRank: S1  
+++++

**Element Code:** PMPOA2V0M0 **Occurrence Code #:** 006 **Survey Date:** 1997-07-18  
**Last Observed:** 1997-07-18 **First Observed:** 1997-07-18 **Actual Mapping Precision (m):** 250 **Precision Code:** S  
**Directions:** Carbondale River; ~2.5km W of; Lynx Creek; along; road; S of.  
**General Description:** 12 on RoW. Continuous on and off RoW.  
**Min Elev. (m):** 1554 **Max Elev. (m):** 1554 **Best Source of Info:** U97AXY04ABCA  
**Map UTM Zone UTM Easting UTM Northing Survey Site Name Notes # Dot ID #**  
82G08 11 685483 5481989 Lynx Creek 49-27.85N;114-26.41W/49-27.83N;114-26.18W/49-27.77N;114-25.94W. 75 3941  
**Source Code Author Publisher Year Title**  
U97AXY04ABCA AXYS Environmental Consulting Ltd. 1997 Crowsnest Pipeline - CP 378  
**Festuca occidentalis** western fescue SRank: S1  
+++++

**Element Code:** PMPOA2V0M0 **Occurrence Code #:** 007 **Survey Date:** 1997-07-18  
**Last Observed:** 1997-07-18 **First Observed:** 1997-07-18 **Actual Mapping Precision (m):** 250 **Precision Code:** S  
**Directions:** Carbondale River; ~4km W of; Lynx Creek; along; road; along.  
**General Description:** 6 on RoW, 100 off RoW closer to road.  
**Min Elev. (m):** 1432 **Max Elev. (m):** 1432 **Best Source of Info:** U97AXY04ABCA  
**Map UTM Zone UTM Easting UTM Northing Survey Site Name Notes # Dot ID #**  
82G08 11 684176 5482370 Lynx Creek 49-28.08N;114-27.48W - 49-32.0N;114-30.48W - 49-32.0N;114-30.48W 76 3942  
**Source Code Author Publisher Year Title**  
U97AXY04ABCA AXYS Environmental Consulting Ltd. 1997 Crowsnest Pipeline - CP 378  
**Festuca occidentalis** western fescue SRank: S1

***Fraxinus pennsylvanica* green ash**

**Natural Region:** Dry Mixedgrass

**Habitat:** Woodland

**Phenology:** leaf out in May

**Specific Search Strategies (if any):** unsure if this species is introduced/non-native

**Element Occurrences:**

**Element Code:** PDOLE040D0 **Occurrence Code #:** 001 **Survey Date:** 1970-07-02

**Last Observed:** 1970-07-02 **First Observed:** 1970-07-02 **Actual Mapping Precision (m):** 500 **Precision Code:** M

**Directions:** South Saskatchewan River, W side of; Police Point

**General Description:** treed terrace bounded on 3 sides by river; *P. deltooides*, *acuminata*

**Min Elev. (m):** 663 **Max Elev. (m):** 663 **Size of Occurrence:** **Best Source of Info:** S70HCXULABCA03

**Specimen Source Code Collector Herbarium Accession # Date ID OK? Observation Detail**

S70HCXULABCA03 H.C. UL none 1970-07-02

**Map UTM Zone UTM Easting UTM Northing Survey Site Name Notes # Dot ID #**

72L02 12 525800 5543150 Medicine Hat Lat/Long: 50 03/110 38 2 169

***Fraxinus pennsylvanica* green ash SRank:** S1

***Gentiana fremontii***

**Natural Region:** Foothills Fescue Grassland

**Habitat:** Wetland-Springs

**Phenology:** flowers late May

**Specific Search Strategies (if any):** may not occur outside of Aspen Parkland but there appear to be dots in Moss (not in ANHIC data) that would fall within fescue grassland; occurs on small hummocks in seepages or along the edges of seepages; often requires hands and knees parting of the grass; flower stalks are detectable into August

**Element Occurrences:**

**Element Code:** PDGEN060Y0 **Occurrence Code #:** 001 **Survey Date:** 1989-05-27

**Last Observed:** 1989-05-27 **First Observed:** 1989-05-27 **Precision Code:** M

**Directions:** Penhold.

**General Description:** Slough margin, imperfectly drained.

**Min Elev. (m):** 900 **Max Elev. (m):** 900 **Best Source of Info:** S89HARCFABCA01

**Specimen Source Code Collector Herbarium Accession # Date ID OK? Observation Detail**

S89HARCFABCA01 Haris, H. CF 900089 1989-05-27

**Map UTM Zone UTM Easting UTM Northing Survey Site Name Notes # Dot ID #**

83A04 12 302750 5779750 Fleming Slough 1 2303

**Gentiana fremontii** SRank: S2S3

+++++

**Element Code:** PDGEN060Y0 **Occurrence Code #:** 002 **Survey Date:** 1980-00-00

**Last Observed:** 1980-00-00 **First Observed:** 1980-00-00 **Precision Code:** M

**Directions:** Cremona, 3 mi. E & 3 mi. S of.

**General Description:** Along stream with wetland sedges and grasses (i.e. *Carex aquatilis*).

**Min Elev. (m):** 1166 **Max Elev. (m):** 1166

**Other Comments:** ID by K. Tannas. AB material of *G. aquatica* referable to *G. fremontii* (WJ Crins to ajg)

**Management Comments:** This area is one of the few well managed pastures in the Cremona area. Protection shouldn't be necessary. **Best Source of Info:** UNDTAN01ABCA

**Map UTM Zone UTM Easting UTM Northing Survey Site Name Notes # Dot ID #**

82O09 11 679000 5708400 Cremona 2 2203

**Source Code Author Publisher Year Title**

UNDTAN01ABCA Tannas, K.E. Native Species Inventory Forms

**Date Source Abstract Code Observer Occurrence Data**

these specimens are separated from *G. prostrata* by the following: to 4 cm tall, corolla <10mm long, ovary sessile, capsule included within calyx, leaves very conspicuously white margined; several plants; flowering

**Gentiana fremontii** SRank: S2S3

+++++

**Element Code:** PDGEN060Y0 **Occurrence Code #:** 003 **Survey Date:** 1990-00-00

**Last Observed:** 1990-00-00 **First Observed:** 1986-06-14 **Precision Code:** S

**Directions:** Wainwright, S of; David Lake area

**General Description:** hummocks in moist meadows along lake dominated by *Antennaria*

**Min Elev. (m):** 665 **Max Elev. (m):** 665 **Best Source of Info:** S86WALUAABCA06

**Specimen Source Code Collector Herbarium Accession # Date ID OK? Observation Detail**

S86WALUAABCA06 Wallis, C. UA 098392 1986-06-14 Y flowers

**Map UTM Zone UTM Easting UTM Northing Survey Site Name Notes # Dot ID #**

73D10 12 526500 5826250 David Lake 38 305

**Source Code Author Publisher Year Title**

U90WAL01ABCA Wallis, Cliff 1990 Reconnaissance Survey of Saline Wetlands and Springs in the Grassland-Parkland Region of Eastern Alberta

**Date Source Abstract Code Observer Occurrence Data**

1990-00-00 U90WAL01ABCA C Wallis along subsaline higher edges & on hummocks

**Gentiana fremontii** SRank: S2S3

+++++

**Element Code:** PDGEN060Y0 **Occurrence Code #:** 004 **Survey Date:** 1997-00-00  
**Last Observed:** 1997-00-00 **First Observed:** 1997-00-00 **Actual Mapping Precision (m):** 600 **Precision Code:** M  
**Directions:** Penhold; 23 km E of; along Hwy 42 on S side of.  
**General Description:** near creek, slight slope, good moisture  
**Min Elev. (m):** 945 **Max Elev. (m):** 945  
**Other Comments:** specimen collected; AB material of *G. aquatica* referable to *G. fremontii* (WJ Crins to ajg) **Best Source of Info:** U97HAR01ABCA

**Map UTM Zone UTM Easting UTM Northing Survey Site Name Notes # Dot ID #**

83A04 12 325750 5777800 Penhold TWP:36,RGE:25,W:4,Section:29 3 4345

**Source Code Author Publisher Year Title**

U97HAR01ABCA Harris, Helen 1997 Rare Native Plant Survey Form

*Gentiana fremontii* SRank: S2S3

+++++

**Element Code:** PDGEN060Y0 **Occurrence Code #:** 005 **Survey Date:** 1990-07-07  
**Last Observed:** 1990-07-07 **First Observed:** 1990-07-07 **Actual Mapping Precision (m):** 100 **Precision Code:** S  
**Directions:** Seebe, ~2.5 km NW of; Yamnuska N.A.  
**General Description:** in the calcareous wetland; associated with sedges, butterworts and small wood anemone  
**Min Elev. (m):** 1340 **Max Elev. (m):** 1340  
**Other Comments:** Identified by Cliff Wallis. **Best Source of Info:** R90WIL01ABCA

**Map UTM Zone UTM Easting UTM Northing Survey Site Name Notes # Dot ID #**

82O03 11 634400 5664325 Yamnuska Natural Area 8-25-8 W5M 40 5015

**Source Code Author Publisher Year Title**

R90WIL01ABCA Wilkinson, Kathleen Environmental Management Associates 1990 Rare Plant Survey of Proposed Four Seasons

Resort Area (8-25-8 W5)

U99WIL01ABCA Wilkinson, Kathleen 1999 Letter from K. Wilkinson to Lorna Allen

U99WIL02ABCA Wilkinson, Kathleen 1999 Letter from K. Wilkinson to John Rintoul - at March 3, 1999

**Date Source Abstract Code Observer Occurrence Data**

1990-07-00 R90WIL01ABCA Cliff Wallis occurs very infrequently (<10 plants seen)

*Gentiana fremontii* SRank: S2S3

+++++

**Element Code:** PDGEN060Y0 **Occurrence Code #:** 019 **Survey Date:** 1961-05-25  
**Last Observed:** 1961-05-25 **First Observed:** 1961-05-25 **Actual Mapping Precision (m):** 2500 **Precision Code:** M  
**Directions:** Big Hill Springs Prov. Park, 750 m N of; Big Hill Creek, just W of.  
**General Description:** low wet grassy meadow

**Min Elev. (m):** 1204 **Max Elev. (m):** 1204 **Size of Occurrence:** **Best Source of Info:** S61CARUCABCA06

**Specimen Source Code Collector Herbarium Accession # Date ID OK? Observation Detail**

S61CARUCABCA06 Carefoot, J. R. UC 21535 1961-05-25 Y immature-no flw. buds

**Map UTM Zone UTM Easting UTM Northing Survey Site Name Notes # Dot ID #**

82O08 11 682550 5681400 Big Hill Creek 3 5447

*Gentiana fremontii* SRank: S2S3

+++++

**Element Code:** PDGEN060Y0 **Occurrence Code #:** 020 **Survey Date:** 1974-05-23  
**Last Observed:** 1974-05-23 **First Observed:** 1974-05-23 **Actual Mapping Precision (m):** 2500 **Precision Code:** M  
**Directions:** Wildcat Hills; Irwin Hill, 1.5 km NE of.  
**General Description:** moist, beside spring flow, grass; Field No. 8

**Min Elev. (m):** 1219 **Max Elev. (m):** 1219 **Size of Occurrence:** **Best Source of Info:** S74DANUCABCA13

**Specimen Source Code Collector Herbarium Accession # Date ID OK? Observation Detail**

S74DANUCABCA13 Danielson, Barbara & S. Crack UC 21536 1974-05-23 Y immature

**Map UTM Zone UTM Easting UTM Northing Survey Site Name Notes # Dot ID #**

82O07 11 664575 5681400 Irwin Hill 51 18' N, 114 39' W, 33-26--5-W5M 2 5448

*Gentiana fremontii* SRank: S2S3

+++++

**Element Code:** PDGEN060Y0 **Occurrence Code #:** 021 **Survey Date:** 1971-05-23  
**Last Observed:** 1971-05-23 **First Observed:** 1971-05-23 **Actual Mapping Precision (m):** 2500 **Precision Code:** M  
**Directions:** Mitford, 4.25 km NW of; Wildcat Hills, 2.5 km E of, Forestry Trunk Road, along.  
**General Description:** grassy, grazed area at foot of S-facing hill

**Min Elev. (m):** 1128 **Max Elev. (m):** 1128 **Size of Occurrence:** **Best Source of Info:** S71WHIUCABCA02

**Specimen Source Code Collector Herbarium Accession # Date ID OK? Observation Detail**

S71WHIUCABCA02 Whitehorn, J. K. UC 21534 1971-05-23 Y immature flower buds

**Map UTM Zone UTM Easting UTM Northing Survey Site Name Notes # Dot ID #**

82O02 11 669100 5679850 Wildcat Hills 14 5449

*Gentiana fremontii* SRank: S2S3

+++++

**Element Code:** PDGEN060Y0 **Occurrence Code #:** 023 **Survey Date:** 1990-00-00  
**Last Observed:** 1990-00-00 **First Observed:** 1990-00-00 **Actual Mapping Precision (m):** 250 **Precision Code:** S  
**Directions:** Chauvin, 8 km SE of; Reflex Lake; Tps 42 & 43-R1-W4M  
**General Description:** forb-rich meadows associated with permanent, moder. saline springs; open water of springs with Junc bal, Lemn min, Ranu cir  
**Min Elev. (m):** 600 **Max Elev. (m):** 600  
**Other Comments:** recommend: protectn of wetland basin, no groundwater pumping, explore purchase of critical lands, fencing & grazing mgmt, confine rec. dev't to existing lease  
**Management Comments:** problems with recreat. cottage dev't, ATV use, cattle grazing; gas & oil wells on adjacent lands **Best**  
**Source of Info:** U90WAL01ABCA  
**Map UTM Zone UTM Easting UTM Northing Survey Site Name Notes # Dot ID #**  
73D09 12 565600 5835300 Reflex Lake Polygon 15 4598  
**Source Code Author Publisher Year Title**  
U90WAL01ABCA Wallis, Cliff 1990 Reconnaissance Survey of Saline Wetlands and Springs in the Grassland-Parkland Region of Eastern Alberta  
**Date Source Abstract Code Observer Occurrence Data**  
U90WAL01ABCA C Wallis See unpubl report in-house  
**Gentiana fremontii** SRank: S2S3

**Gratiola neglecta clammy hedge-hyssop**

**Natural Region:** Northern Fescue Grassland, Foothills Fescue Grassland, Mixedgrass

**Habitat:** Wetland

**Phenology:** flowers mid-June to July

**Specific Search Strategies (if any):** detectable into September; search exundated shores or bottoms of sloughs

**Element Occurrences:**

**Element Code:** PDSCR0R070 **Occurrence Code #:** 001 **Survey Date:** 1956-06-13  
**Last Observed:** 1956-06-13 **First Observed:** 1956-06-13 **Actual Mapping Precision (m):** 2500 **Precision Code:** M  
**Directions:** Vermilion, 10 mi N of.  
**General Description:** edge of small flash pond. **Best Source of Info:** S56BIRUAABCA02  
**Specimen Source Code Collector Herbarium Accession # Date ID OK? Observation Detail**  
S56BIRUAABCA02 Bird, C.D. AC 154340 1956-06-13  
**Map UTM Zone UTM Easting UTM Northing Survey Site Name Notes # Dot ID #**  
73E07 12 508700 5927300 3 6065  
**Gratiola neglecta** clammy hedge-hyssop SRank: S2S3  
+++++

**Element Code:** PDSCR0R070 **Occurrence Code #:** 002 **Survey Date:** 1926-07-13  
**Last Observed:** 1926-07-13 **First Observed:** 1926-07-13 **Actual Mapping Precision (m):** 8000 **Precision Code:** G  
**Directions:** Castor, S of.  
**General Description:** small roadside slough **Best Source of Info:** S26BRIACONCA03  
**Specimen Source Code Collector Herbarium Accession # Date ID OK? Observation Detail**  
S26BRIACONCA03 Brinkman, A.H. AC 124969 1926-07-13  
S26BRIACONCA04 Brinkman, A.H. AC 429634 1926-07-13  
S26BRIACONCA05 Brinkman, A.H. NM none 1926-07-13  
**Map UTM Zone UTM Easting UTM Northing Survey Site Name Notes # Dot ID #**  
73D04 12 437800 5777750 2 6066  
**Gratiola neglecta** clammy hedge-hyssop SRank: S2S3  
+++++

**Element Code:** PDSCR0R070 **Occurrence Code #:** 003 **Survey Date:** 1951-08-22  
**Last Observed:** 1951-08-22 **First Observed:** 1951-08-22 **Actual Mapping Precision (m):** 2500 **Precision Code:** M  
**Directions:** Granum, E of.  
**General Description:** slough border. **Best Source of Info:** S51MOSACONCA13  
**Specimen Source Code Collector Herbarium Accession # Date ID OK? Observation Detail**  
S51MOSACONCA13 Moss, E.H. AC 429638 1951-08-22  
**Map UTM Zone UTM Easting UTM Northing Survey Site Name Notes # Dot ID #**  
82H14 12 324700 5527300 9 6067  
**Gratiola neglecta** clammy hedge-hyssop SRank: S2S3  
+++++

**Element Code:** PDSCR0R070 **Occurrence Code #:** 004 **Survey Date:** 1951-08-20  
**Last Observed:** 1951-08-20 **First Observed:** 1951-08-20 **Actual Mapping Precision (m):** 2500 **Precision Code:** M  
**Directions:** Cardston, N of.  
**General Description:** moist depression nearly dry pond. **Best Source of Info:** S51MOSACONCA14  
**Specimen Source Code Collector Herbarium Accession # Date ID OK? Observation Detail**  
S51MOSACONCA14 Moss, E.H. AC 429639 1951-08-20  
**Map UTM Zone UTM Easting UTM Northing Survey Site Name Notes # Dot ID #**  
82H03 12 332800 5455000 45 6068  
**Gratiola neglecta** clammy hedge-hyssop SRank: S2S3  
+++++

**Element Code:** PDSCR0R070 **Occurrence Code #:** 005 **Survey Date:** 1944-07-22  
**Last Observed:** 1944-07-22 **First Observed:** 1933-06-24 **Actual Mapping Precision (m):** 1500 **Precision Code:** M  
**Directions:** Ft Saskatchewan.  
**General Description:** wet slough margin.  
**Min Elev. (m):** 625 **Max Elev. (m):** 625 **Best Source of Info:** S44TURUCABCA06  
**Specimen Source Code Collector Herbarium Accession # Date ID OK? Observation Detail**  
S33TURACONCA01 Turner, G. H. AC 429631 1933-06-24  
S33TURACONCA02 Turner, G. H. AC 429636 1933-06-25  
S40TURACONCA03 Turner, G.H. AC 429641 1940-06-29  
S44TURACONCA07 Turner, G. H. AC 429633 1944-07-22  
S44TURACONCA08 Turner, G. H. AC 429635 1944-07-21  
S44TURUCABCA06 Turner, G.H. UC 23220 1944-07-22 Y flowering and fruiting  
S44TURULABCA04 Turner, G. H. UL 1944-07-22 Y fruiting, some flowering  
**Map UTM Zone UTM Easting UTM Northing Survey Site Name Notes # Dot ID #**  
83H11 12 354400 5951800 Fort Saskatchewan 49 6069  
**Date Source Abstract Code Observer Occurrence Data**  
1944-07-22 Turner, G.H. flowering and fruiting  
1978-07-20 Webster, T. fruiting, some flowering  
**Gratiola neglecta** clammy hedge-hyssop SRank: S2S3  
+++++

**Element Code:** PDSCR0R070 **Occurrence Code #:** 006 **Survey Date:** 1935-07-18  
**Last Observed:** 1935-07-18 **First Observed:** 1935-07-18 **Actual Mapping Precision (m):** 1000 **Precision Code:** M  
**Directions:** Camrose, 12 mi NE of; Lake de May.  
**General Description:** muddy ground. **Best Source of Info:** S35TURACONCA01  
**Specimen Source Code Collector Herbarium Accession # Date ID OK? Observation Detail**  
S35TURACONCA01 Turner, G. H. AC 429637 1935-07-18  
**Map UTM Zone UTM Easting UTM Northing Survey Site Name Notes # Dot ID #**  
83H02 12 386300 5887000 DeMay Lake 5 6070  
**Gratiola neglecta** clammy hedge-hyssop SRank: S2S3  
+++++

**Element Code:** PDSCR0R070 **Occurrence Code #:** 007 **Survey Date:** 1951-08-25  
**Last Observed:** 1951-08-25 **First Observed:** 1951-08-25 **Actual Mapping Precision (m):** 1000 **Precision Code:** M  
**Directions:** Langdon.  
**General Description:** slough edge.  
**Min Elev. (m):** 1005 **Max Elev. (m):** 1005 **Best Source of Info:** S51SEXALABCA04  
**Specimen Source Code Collector Herbarium Accession # Date ID OK? Observation Detail**  
S51SEXALABCA04 Sexsmith, J.J. AL 4842 1951-08-25 Y  
**Map UTM Zone UTM Easting UTM Northing Survey Site Name Notes # Dot ID #**  
82I13 12 312000 5650100 Langdon 6 6071  
**Gratiola neglecta** clammy hedge-hyssop SRank: S2S3  
+++++

**Element Code:** PDSCR0R070 **Occurrence Code #:** 008 **Survey Date:** 1953-07-07  
**Last Observed:** 1953-07-07 **First Observed:** 1953-07-07 **Actual Mapping Precision (m):** 8000 **Precision Code:** G  
**Directions:** Hanna, S of; Sullivan L, E of. (changed to N of Hanna as Sullivan Lake is north).  
**General Description:** dry slough bottom **Best Source of Info:** S53MOSNMONCA13  
**Specimen Source Code Collector Herbarium Accession # Date ID OK? Observation Detail**  
S53MOSNMONCA13 Moss, E. H. NM 231395 1953-07-07  
**Map UTM Zone UTM Easting UTM Northing Survey Site Name Notes # Dot ID #**  
72M13 12 442000 5758000 1 6072  
**Gratiola neglecta** clammy hedge-hyssop SRank: S2S3



**Halimolobos virgata halimolobos**

**Natural Region:** Mixedgrass, Dry Mixedgrass

**Habitat:** Grassland-Sandy

**Phenology:** flowers in May and early June

**Specific Search Strategies (if any):** sandy or sandy alkaline grassland, perhaps occasionally on gravelly sands; not all dots in Moss are represented by these EOs

**Element Occurrences:**

**Element Code:** PDBRA1A040 **Occurrence Code #:** 001 **Survey Date:** 1995-06-23  
**Last Observed:** 1995-06-23 **First Observed:** 1995-06-23 **Actual Mapping Precision (m):** 250 **Precision Code:** S  
**Directions:** Canadian Forces Base Suffield National Wildlife Area; Linstead Flats, about 5 km east of.  
**General Description:** Xeric site, located at a single station in a gently rolling sand plain prairie grassland; in association with *Draba reptans*.

**Min Elev. (m):** 724 **Max Elev. (m):** 724 **Size of Occurrence:** 0.04

**Other Comments:** apparently this is the first record for this species from Alberta for 50 years **Best Source of Info:** S95MACPMABCA04

**Specimen Source Code Collector Herbarium Accession # Date ID OK? Observation Detail**

S95MACPMABCA04 Macdonald, I.D. PM B95.9.6 1995-06-23 Y fruits only; very locally occasional

**Map UTM Zone UTM Easting UTM Northing Survey Site Name Notes # Dot ID #**

72L09 12 539000 5597000 Middle Sand Hills UTM WL 539000 / 5597000; 50 31 28/110 26 15 2 216

**Source Code Author Publisher Year Title**

U96MAC01ABCA Macdonald, I.D. Canadian Wildlife Service, Environment Canada, Prairie and 1996 Vascular Flora of Canadian Forces Base Suffield National Wildlife Area

**Date Source Abstract Code Observer Occurrence Data**

rare in Alberta and in SNWA, about 20 plants over an area of 15x25 m.

**Halimolobos virgata** halimolobos SRank: S1

+++++

**Element Code:** PDBRA1A040 **Occurrence Code #:** 002 **Survey Date:** 1978-05-16

**Last Observed:** 1978-05-16 **First Observed:** 1978-05-16 **Actual Mapping Precision (m):** 250 **Precision Code:** S

**Directions:** CFB Suffield; ~16km NE of NE corner of; S. Saskatchewan River; ~500m NE of Hwy 41 bridge over.

**General Description:** sagebrush covered silt flat just above river level, E of bridge, N side of river. Colonies good-sized but spottily distributed with *Arabis retrofracta*; *Allium textile*; *Lappula redowskii*.

**Min Elev. (m):** 594 **Max Elev. (m):** 594 **Best Source of Info:** S78HUDACONCA01

**Specimen Source Code Collector Herbarium Accession # Date ID OK? Observation Detail**

S78HUDACONCA01 Hudson, J.H. AC 335977 1978-05-16 colonies good sized but spottily distributed.

**Map UTM Zone UTM Easting UTM Northing Survey Site Name Notes # Dot ID #**

72L09 12 566400 5620450 Sandy Point LSD 2 in 34-20-1 W4M. 23 4127

**Halimolobos virgata** halimolobos SRank: S1

**Heliotropium curassavicum spatulate-leaved heliotrope**

**Natural Region:** Northern Fescue Grassland, Mixedgrass, Dry Mixedgrass

**Habitat:** Wetland-Alkali

**Phenology:** flowering late June to July

**Specific Search Strategies (if any):** alkali wetlands, especially larger lake basins; easiest to detect when waters have receded and search shallows or mud-flats

**Element Occurrences:**

**Element Code:** PDBOR0J080 **Occurrence Code #:** 001 **Survey Date:** 1980-07-17  
**Last Observed:** 1980-06-19 **First Observed:** 1978-06-14 **Precision Code:** M  
**Directions:** Hanna, approx. 28 mi, ESE of; Scottfield off Highway 9, 3 mi SW of; Plover Lake, S shore of  
**General Description:** growing on dry lake bed in association with *Hordeum jubatum*. Saline flat  
**Min Elev. (m):** 739 **Max Elev. (m):** 760  
**Other Comments:** Slide #F783.001; F783.002 **Best Source of Info:** S80SADUCABCA01  
**Specimen Source Code Collector Herbarium Accession # Date ID OK? Observation Detail**  
S80SADPMABCA01 Sadler, T. PM B80.16.2 1980-07-17 Y  
S80SADUCABCA01 Sadler, Tom UC 42834 1980-06-19 Y extremely abundant; blooming  
**Map UTM Zone UTM Easting UTM Northing Survey Site Name Notes # Dot ID #**  
72M06 12 473100 5703650 Plover Lake 51-30N/111-25W 1 257  
**Source Code Author Publisher Year Title**  
I78MUS02ABCA Mussell, Dave 1978  
I78XXX04ABCA 1978  
**Date Source Abstract Code Observer Occurrence Data**  
blooming, extremely abundant(S80SADUCABCA01)  
**Heliotropium curassavicum** spatulate-leaved heliotrope SRank: S1  
+++++

**Element Code:** PDBOR0J080 **Occurrence Code #:** 002 **Survey Date:** 1982-07-14  
**Last Observed:** 1982-07-14 **First Observed:** 1982-07-14 **Actual Mapping Precision (m):** 2500 **Precision Code:** M  
**Directions:** Purple Springs, 2 km S of.  
**General Description:** Cropland; moist lowland.  
**Min Elev. (m):** 815 **Max Elev. (m):** 815 **Best Source of Info:** S82SHAALABCA01  
**Specimen Source Code Collector Herbarium Accession # Date ID OK? Observation Detail**  
S82SHAALABCA01 Shaw, Blair AL 5261 1982-07-14 Y blooming  
**Map UTM Zone UTM Easting UTM Northing Survey Site Name Notes # Dot ID #**  
72E13 12 436000 5516675 Purple Springs 7 153  
**Heliotropium curassavicum** spatulate-leaved heliotrope SRank: S1  
+++++

**Element Code:** PDBOR0J080 **Occurrence Code #:** 003 **Survey Date:** 1986-06-11  
**Last Observed:** 1986-06-11 **First Observed:** 1986-06-11 **Actual Mapping Precision (m):** 2500 **Precision Code:** M  
**Directions:** Pakowki Lake; SW of Orion; NE shore of.  
**General Description:** on sandy, muddy prairie slough at edge of intermittent lake  
**Min Elev. (m):** 880 **Max Elev. (m):** 880 **Best Source of Info:** S86HRAPMABCA11  
**Specimen Source Code Collector Herbarium Accession # Date ID OK? Observation Detail**  
S86HRAPMABCA11 Hrapko, J.O., Richards, W.M., Dickinson, R.B. PM B86.127.18 1986-06-11 Y  
**Map UTM Zone UTM Easting UTM Northing Survey Site Name Notes # Dot ID #**  
72E07 12 509873 5471783 Pakowki Sand Dunes Lat/Long: 49 24/110 52 2 83  
**Heliotropium curassavicum** spatulate-leaved heliotrope SRank: S1  
+++++

**Element Code:** PDBOR0J080 **Occurrence Code #:** 004 **Survey Date:** 1998-07-11  
**Last Observed:** 1998-07-11 **First Observed:** 1998-07-11 **Actual Mapping Precision (m):** 100 **Precision Code:** S  
**Directions:** Many Island Lake, saline flats on E shore of ephemeral lake, just W of silt dune.  
**General Description:** moist saline flats at waters edge, open with *Sporobolus cryptandrus* and *Puccinellia distans*  
**Other Comments:** Water levels just starting to come up after a very dry spring. **Best Source of Info:** S98ALLPPABCA01  
**Specimen Source Code Collector Herbarium Accession # Date ID OK? Observation Detail**  
S98ALLPPABCA01 Allen, Lorna PP 3566 1998-07-11 Y scattered  
**Map UTM Zone UTM Easting UTM Northing Survey Site Name Notes # Dot ID #**  
72L01 12 564300 5553125 Many Island Lake LSD 10 32-13-1 W4M 8 5016  
**Date Source Abstract Code Observer Occurrence Data**  
1998-07-11 L. Allen scattered, not quite full bloom  
**Heliotropium curassavicum** spatulate-leaved heliotrope SRank: S1

***Hordeum pusillum* little barley**

**Natural Region:** Dry Mixedgrass

**Habitat:** Slopes-Sandy

**Phenology:** heads out in June

**Specific Search Strategies (if any):** historical record; suggest surveys of sandy and gravelly slopes in vicinity of *Yucca glauca* stands

**Element Occurrences:**

**Element Code:** PMPOA380B0 **Occurrence Code #:** 002 **Survey Date:** 1952-06-30

**Last Observed:** 1952-06-30 **First Observed:** 1952-06-30 **Actual Mapping Precision (m):** 2500 **Precision Code:** M

**Directions:** Milk River, N side of; U.S.A. border, 1 km N of.

**Min Elev. (m):** 838 **Max Elev. (m):** 838

**Other Comments:** See Report. **Best Source of Info:** U93SMI02ABCA

**Map UTM Zone UTM Easting UTM Northing Survey Site Name Notes # Dot ID #**

72E02 12 529323 5428134 Milk River 2 13

**Source Code Author Publisher Year Title**

U93SMI02ABCA Smith, Bonnie COSEWIC 1993 Status report on the Little Barley *Hordeum pusillum* in Canada

***Hordeum pusillum* little barley** SRank: SH

***Hymenopappus filifolius* tufted hymenopappus**

**Natural Region:** Northern Fescue Grassland, Foothills Fescue Grassland, Mixedgrass, Dry Mixedgrass

**Habitat:** Slopes-Sandy

**Phenology:** flowering late May to early June

**Specific Search Strategies (if any):** search primarily at interface between valley and uplands wherever there is some eroding soil; appear to occur on both heavier and sandy textured soils, often on south-facing aspects

**Element Occurrences:**

**Element Code:** PDAST51030 **Occurrence Code #:** 001 **Survey Date:** 1992-05-31  
**Last Observed:** 1992-05-31 **First Observed:** 1940-06-25 **Actual Mapping Precision (m):** 2500 **Precision Code:** M  
**Directions:** Whiskey Gap; Sommerfeldt Ranch.  
**General Description:** Dry grassland; Rough Fescue grassland  
**Min Elev. (m):** 1280 **Max Elev. (m):** 1400 **Best Source of Info:** S92SOMCFABCA05  
**Specimen Source Code Collector Herbarium Accession # Date ID OK? Observation Detail**  
S40MOSUAABCA15 Moss, E.H. UA 18279 1940-06-25 Y flowers  
S51MOSNMONCA01 Moss, E.H. NM 216888 1951-08-18  
S51MOSUAABCA12 Moss, E.H. UA 18282 1951-08-18 Y flowers  
S87SOMCFABCA02 Sommerfeldt, B. CF 880115 1987-05-30 Flowers  
S92SOMCFABCA05 Sommerfeldt, B. CF 880115 1992-05-31 Y  
S92SOMCFABCA06 Sommerfeldt, B. CF 880115 1992-05-31 Y  
**Map UTM Zone UTM Easting UTM Northing Survey Site Name Notes # Dot ID #**  
82H03 12 352650 5431700 Whiskey Gap 49 01 30/113 01 21 961  
**Date Source Abstract Code Observer Occurrence Data**  
Flowers  
**Hymenopappus filifolius** tufted hymenopappus SRank: S2  
+++++

**Element Code:** PDAST51030 **Occurrence Code #:** 002 **Survey Date:** 1999-06-17  
**Last Observed:** 1999-06-17 **First Observed:** 1983-06-22 **Actual Mapping Precision (m):** 50 **Precision Code:** S  
**Directions:** Ross Lake, 5 km S of; North Milk River, 3.5 km N of.  
**General Description:** well drained, sparsely vegetated, moderate sloped ridge tops; Festuca spp., Thermopsis rhombifolia, Guteirrezia sarothrae, Comandra umbellata  
**Min Elev. (m):** 1350 **Max Elev. (m):** 1395 **Aspect:** W&S **Best Source of Info:** S83ALLPPABCA07  
**Specimen Source Code Collector Herbarium Accession # Date ID OK? Observation Detail**  
S83ALLPPABCA07 Allen, L., P. McIsaac & M. Bailey PP 769 1983-06-22  
S83ALLPPABCA08 Allen, L., P. McIsaac & M. Bailey PP 770 1983-06-22  
**Map UTM Zone UTM Easting UTM Northing Survey Site Name Notes # Dot ID #**  
82H02 12 359500 5440150 Ross Lake 5,6-2-22 W4M 3 921  
**Source Code Author Publisher Year Title**  
U98ERN01ABCA Ernst, Reg 1998 Ross Grassland Natural Area - Results of 1998 Rare Plant Survey  
U99ERN02ABCA Ernst, Reg 1999 Email to J. Gould  
**Date Source Abstract Code Observer Occurrence Data**  
Uncommon- S Alta, dry hills/plains  
1998-06-06 U98ERN01ABCA Reg Ernst 95% vegetative and 5% flower; widespread and locally abundant at Ross Grassland NA  
1999-06-17 U99ERN02ABCA Reg Ernst in bloom  
**Hymenopappus filifolius** tufted hymenopappus SRank: S2  
+++++

**Element Code:** PDAST51030 **Occurrence Code #:** 003 **Survey Date:** 1992-05-26  
**Last Observed:** 1992-05-26 **First Observed:** 1958-08-24 **Actual Mapping Precision (m):** 250 **Precision Code:** S  
**Directions:** Writing-on-Stone Provincial Park  
**General Description:** on dry open prairie in heavy textured soils.  
**Min Elev. (m):** 910 **Max Elev. (m):** 975 **Best Source of Info:** S92JOHCFABCA11  
**Specimen Source Code Collector Herbarium Accession # Date ID OK? Observation Detail**  
S58MOSUAABCA29 Moss, E.H. UA 18283 1958-08-24 Y remains of flowers & heads  
S64DEVACONCA15 de Vries, B. AC 389662 1964-06-12 ? local and uncommon  
S66DEVPMBABCA16 de Vries, Bernard PM B68.4.136 1966-06-12 Y  
S92JOHCFABCA11 Johnson, J.D. CF 930229 1992-05-26 Y  
**Map UTM Zone UTM Easting UTM Northing Survey Site Name Notes # Dot ID #**  
72E04 12 454849 5436708 Writing-on-stone Provincial Park 28 76  
**Hymenopappus filifolius** tufted hymenopappus SRank: S2  
+++++

**Element Code:** PDAST51030 **Occurrence Code #:** 005 **Survey Date:** 1989-06-28  
**Last Observed:** 1989-06-28 **First Observed:** 1989-06-28 **Actual Mapping Precision (m):** 2500 **Precision Code:** M  
**Directions:** Writing-on-Stone Provincial Park campground; ~11 km WNW of; Verdigris coulee; ~2.5 km SSW of mouth of.  
**Min Elev. (m):** 980 **Max Elev. (m):** 980 **Best Source of Info:** S89HRAPMABCA07  
**Specimen Source Code Collector Herbarium Accession # Date ID OK? Observation Detail**  
S89HRAPMABCA07 Hrapko, J.O. PM B89.17.20 1989-06-28 Y  
**Map UTM Zone UTM Easting UTM Northing Survey Site Name Notes # Dot ID #**  
72E04 12 443948 5437333 Milk River 49-07N/111-46W 33 4317  
**Hymenopappus filifolius** tufted hymenopappus SRank: S2  
+++++

**Element Code:** PDAST51030 **Occurrence Code #:** 006 **Survey Date:** 1983-06-19  
**Last Observed:** 1983-06-19 **First Observed:** 1983-06-19 **Actual Mapping Precision (m):** 2500 **Precision Code:** M  
**Directions:** Milk River (town); ~29 km WSW of; Milk River (SW arm) ~5km S of.  
**Min Elev. (m):** 1220 **Max Elev. (m):** 1220 **Best Source of Info:** S83ALLPMABCA02  
**Specimen Source Code Collector Herbarium Accession # Date ID OK? Observation Detail**  
S83ALLPMABCA02 Allen, L., McIsaac, P., Bailey, M. PM B86.70.17 1983-06-19 Y  
**Map UTM Zone UTM Easting UTM Northing Survey Site Name Notes # Dot ID #**  
82H01 12 395025 5431250 Milk River-SW arm 49-02N/112-27W 9 4318  
**Hymenopappus filifolius** tufted hymenopappus SRank: S2  
+++++

**Element Code:** PDAST51030 **Occurrence Code #:** 007 **Survey Date:** 1992-06-23  
**Last Observed:** 1992-06-23 **First Observed:** 1990-06-27 **Actual Mapping Precision (m):** 2500 **Precision Code:** M  
**Directions:** McIntyre Ranch; Milk River Ridge.  
**General Description:** grassy eroding base of rock outcrops on slope. Sandy gravel at base of hoodo. Along abandoned road.  
**Min Elev. (m):** 1235 **Max Elev. (m):** 1250 **Aspect:** W **Best Source of Info:** S90HRAPMABCA05  
**Specimen Source Code Collector Herbarium Accession # Date ID OK? Observation Detail**  
S90HRAPMABCA05 Hrapko, J.O., Laird, L.D. PM B90.36.20 1990-06-27 Y  
S91LAIPMABCA05 Laird, L.D., Enns, L.K. PM B91.21.22 1991-06-26 Y  
S92HRAPMABCA02 Hrapko, J.O., Laird, L.D. PM B92.25.1 1992-06-23 Y  
**Map UTM Zone UTM Easting UTM Northing Survey Site Name Notes # Dot ID #**  
82H02 12 367100 5453900 Reed Lake 49-13,14N/112-49,50,51W 24 4294  
**Hymenopappus filifolius** tufted hymenopappus SRank: S2  
+++++

**Element Code:** PDAST51030 **Occurrence Code #:** 008 **Survey Date:** 1991-07-25  
**Last Observed:** 1991-07-25 **First Observed:** 1991-07-25 **Actual Mapping Precision (m):** 2500 **Precision Code:** M  
**Directions:** Pothole Creek; S of headwaters of; Ross Lake; ~2.9 km WSW of.  
**General Description:** Stipa-Agropyron grassland near top of dry, partly-protected slope  
**Min Elev. (m):** 1360 **Max Elev. (m):** 1360 **Aspect:** S **Best Source of Info:** S91HRAPMABCA11  
**Specimen Source Code Collector Herbarium Accession # Date ID OK? Observation Detail**  
S91HRAPMABCA11 Hrapko, J.O., Laird, L.D., Enns, L.K. PM B91.40.11 1991-07-25 Y  
**Map UTM Zone UTM Easting UTM Northing Survey Site Name Notes # Dot ID #**  
82H02 12 356800 5444500 Ross Lake 49-8.5N/112-58W 25 4319  
**Hymenopappus filifolius** tufted hymenopappus SRank: S2  
+++++

**Element Code:** PDAST51030 **Occurrence Code #:** 009 **Survey Date:** 1998-06-06  
**Last Observed:** 1998-06-06 **First Observed:** 1998-06-06 **Actual Mapping Precision (m):** 50 **Precision Code:** S  
**Directions:** Ross Lake, 3.5 km SE of; North Milk River, 3.5 km N of.  
**General Description:** well drained, sparsely vegetated, moderate sloped ridge tops; Festuca spp., Thermopsis rhombifolia, Guteirrezia sarothrae, Comandra umbellata  
**Min Elev. (m):** 1275 **Max Elev. (m):** 1310 **Aspect:** W&S **Best Source of Info:** U98ERN01ABCA  
**Map UTM Zone UTM Easting UTM Northing Survey Site Name Notes # Dot ID #**  
82H02 12 362800 5442675 Ross Lake 15,16-2-22 W4M 27 5040  
**Source Code Author Publisher Year Title**  
U98ERN01ABCA Ernst, Reg 1998 Ross Grassland Natural Area - Results of 1998 Rare Plant Survey U99ERN02ABCA Ernst, Reg 1999 Email to J. Gould  
**Date Source Abstract Code Observer Occurrence Data**  
1998-06-06 U98ERN01ABCA Reg Ernst 95% vegetative and 5% flowers; widespread and locally abundant at Ross Grassland NA  
1999-06-17 U99ERN02ABCA Reg Ernst in bloom  
**Hymenopappus filifolius** tufted hymenopappus SRank: S2  
+++++

**Element Code:** PDAST51030 **Occurrence Code #:** 010 **Survey Date:** 1986-07-14  
**Last Observed:** 1986-07-14 **First Observed:** 1986-07-11 **Actual Mapping Precision (m):** 600 **Precision Code:** M  
**Directions:** Milk River, 30 km W of; North Milk River, 0.5 km S of.  
**General Description:** on flat saline terrace; associated with *Poa interior*, *Heterotheca villosa*, *Poa sandbergii* and *Koeleria macrantha*  
**Min Elev. (m):** 1105 **Max Elev. (m):** 1105 **Best Source of Info:** U99WIL02ABCA  
**Map UTM Zone UTM Easting UTM Northing Survey Site Name Notes # Dot ID #**  
82H01 12 391950 5443200 North Milk River SE21-2-19 W4M 15 5070  
**Source Code Author Publisher Year Title**  
U99WIL02ABCA Wilkinson, Kathleen 1999 Letter from K. Wilkinson to John Rintoul - at March 3, 1999  
**Hymenopappus filifolius** tufted hymenopappus SRank: S2  
+++++

**Element Code:** PDAST51030 **Occurrence Code #:** 011 **Survey Date:** 1986-07-14  
**Last Observed:** 1986-07-14 **First Observed:** 1986-07-11 **Actual Mapping Precision (m):** 600 **Precision Code:** M  
**Directions:** Milk River, 27 km W of; North Milk River, S bank of.  
**General Description:** eroded cut bank of river, associated with *Phlox hoodii*, *Paronychia sessiliflora*, *A. dasystachyum*, *P. sandbergii*; and on slump slope (mid-slope & summit) with *Selaginella densa*, *A. dasystachyum*, *S. comata*, *Koeleria macrantha*, *Carex filifolia*  
**Min Elev. (m):** 1100 **Max Elev. (m):** 1100 **Aspect:** NW **Best Source of Info:** U99WIL02ABCA  
**Map UTM Zone UTM Easting UTM Northing Survey Site Name Notes # Dot ID #**  
82H01 12 394400 5442200 North Milk River NE14-2-19 W4M 16 5071  
**Source Code Author Publisher Year Title**  
U99WIL02ABCA Wilkinson, Kathleen 1999 Letter from K. Wilkinson to John Rintoul - at March 3, 1999  
**Hymenopappus filifolius** tufted hymenopappus SRank: S2  
+++++

**Element Code:** PDAST51030 **Occurrence Code #:** 012 **Survey Date:** 1986-07-14  
**Last Observed:** 1986-07-14 **First Observed:** 1986-07-11 **Actual Mapping Precision (m):** 400 **Precision Code:** M  
**Directions:** Milk River, 22 km W of; Milk River, N bank of.  
**General Description:** bank of river; associated with *Stipa comata*, *Agropyron dasystachyum*, *Selaginella densa*, *Phlox hoodii*  
**Min Elev. (m):** 1090 **Max Elev. (m):** 1090 **Aspect:** SE **Best Source of Info:** U99WIL02ABCA  
**Map UTM Zone UTM Easting UTM Northing Survey Site Name Notes # Dot ID #**  
82H01 12 399250 5442600 Milk River NW17-2-18 W4M 17 5072  
**Source Code Author Publisher Year Title**  
U99WIL02ABCA Wilkinson, Kathleen 1999 Letter from K. Wilkinson to John Rintoul - at March 3, 1999  
**Hymenopappus filifolius** tufted hymenopappus SRank: S2

***Iris missouriensis* western blue flag**

**Natural Region:** Foothills Fescue Grassland (as a native species)

**Habitat:** Wetland-Meadow

**Phenology:** flowers late June

**Specific Search Strategies (if any):** locate some existing stands to get a "color" image and scan shallow wetlands (without standing water, or edges of wetlands with standing water) and stream banks in grassland settings with binoculars to detect additional populations

**Element Occurrences:**

**Element Code:** PMIRI090L0 **Occurrence Code #:** 001 **Survey Date:** 1998-06-20  
**Last Observed:** 1998-06-20 **First Observed:** 1964-07-01 **Actual Mapping Precision (m):** 250 **Precision Code:** S  
**Directions:** Whiskey Gap, 1.5 km NW of.

**General Description:** shrubby cinquefoil thicket beside bare alkaline areas, below springy area

**Min Elev. (m):** 1288 **Max Elev. (m):** 1288 **Aspect:** S

**Other Comments:** There were two subpopulations, one down near the road (specimens from B. de Vries) and one up on slopes described by C. Wallis. The first one has been eliminated (B.de Vries per. comm., Feb, 1989) in B89WAL02ABCA. **Best Source of Info:** S64DEVUCABCA01

**Specimen Source Code Collector Herbarium Accession # Date ID OK? Observation Detail**

S64DEVACONCA06 de Vries, B. AC none 1964-07-01  
S64DEVNMONCA01 de Vries, B. NM 477129 1964-07-01  
S64DEVNMONCA02 de Vries, B. NM 563322 1964-07-01  
S64DEVUCABCA01 de Vries, B. UC 06843 1964-07-01

**Map UTM Zone UTM Easting UTM Northing Survey Site Name Notes # Dot ID #**

82H03 12 350950 5433950 Whiskey Gap LSD16-17-1-23 W4M 17 957

**Source Code Author Publisher Year Title**

B86WAL01ABCA Wallis, Clifford et al Alberta Forestry Lands & Wildlife 203p 1986 Pilot rare plant monitoring program in the Oldman Regional Plan area of southwestern Alberta  
B88WAL01ABCA Wallis, Clifford Alberta Forestry, Lands and Wildlife 1988 Western Blue Flag (*Iris missouriensis*) Monitoring Program in Southwestern Alberta  
B89WAL02ABCA Wallis, C. World Wildlife Fund Canada 1989 Western Blue Flag (*Iris missouriensis* Nutt.) Management Plan  
R98COR01ABCA Cornish, Beth Alberta Environmental Protection, Edmonton, Alberta 1998 Western Blue Flag (*Iris missouriensis*) Monitoring Program in Southwestern Alberta: 1998 Population Assessment

**Date Source Abstract Code Observer Occurrence Data**

1964-07-01 S64DEVUCABCA de Vries only station observed between Whiskey Gap and Carway  
1987-08-04 B88WAL01ABCA Cliff Wallis 203 non-flowering stems  
1998-06-20 R98COR01ABCA Beth Cornish 111 non-flowering stems and 2 flowering  
1999-09-24 PND50M01ABCA population rarely flowers--observed only once by Sommerfeldt's

*Iris missouriensis* western blue flag SRank: S1

+++++

**Element Code:** PMIRI090L0 **Occurrence Code #:** 002 **Survey Date:** 1998-06-22  
**Last Observed:** 1998-06-22 **First Observed:** 1964-06-30 **Actual Mapping Precision (m):** 250 **Precision Code:** S  
**Directions:** Carway, 7 km NE of; Hwy 2, 250 m W of.

**General Description:** damp; open rangeland, margin of shallow depression

**Min Elev. (m):** 1355 **Max Elev. (m):** 1355 **Best Source of Info:** S64DEVUCABCA02

**Specimen Source Code Collector Herbarium Accession # Date ID OK? Observation Detail**

S64DEVACONCA05 de Vries, B. AC none 1964-06-30  
S64DEVUCABCA02 de Vries, B. UC 06844 1964-06-30

**Map UTM Zone UTM Easting UTM Northing Survey Site Name Notes # Dot ID #**

82H03 12 328700 5435500 Carway LSD8,9,10-24-26-1 W4M 18 958

**Source Code Author Publisher Year Title**

B86WAL01ABCA Wallis, Clifford et al Alberta Forestry Lands & Wildlife 203p 1986 Pilot rare plant monitoring program in the Oldman Regional Plan area of southwestern Alberta  
B88WAL01ABCA Wallis, Clifford Alberta Forestry, Lands and Wildlife 1988 Western Blue Flag (*Iris missouriensis*) Monitoring Program in Southwestern Alberta  
B89WAL02ABCA Wallis, C. World Wildlife Fund Canada 1989 Western Blue Flag (*Iris missouriensis* Nutt.) Management Plan  
R98COR01ABCA Cornish, Beth Alberta Environmental Protection, Edmonton, Alberta 1998 Western Blue Flag (*Iris missouriensis*) Monitoring Program in Southwestern Alberta: 1998 Population Assessment

*Iris missouriensis* western blue flag SRank: S1

+++++

**Element Code:** PMIRI090L0 **Occurrence Code #:** 003 **Survey Date:** 1979-06-23  
**Last Observed:** 1979-06-23 **First Observed:** 1979-05-28 **Actual Mapping Precision (m):** 250 **Precision Code:** S  
**Directions:** Village, 0.8 km N of; Lake, N of; Junky yard, E of.

**General Description:** slough edge, moist area, pasture  
**Min Elev. (m):** 914 **Max Elev. (m):** 914 **Best Source of Info:** S79GSHUAABCA01  
**Specimen Source Code Collector Herbarium Accession # Date ID OK? Observation Detail**

S78XXXALABCA01 Unknown AL 3488 1978-06-19  
S79GSCACONCA01 Gschaid, S & R AC none 1979-06-23  
S79GSHUAABCA01 Gschaid & Smoliak UA 79673 1979-06-22  
S79SMOALABCA01 Smoliak, S. & R.G. Gschaid AL 5143 1979-05-28

**Map UTM Zone UTM Easting UTM Northing Survey Site Name Notes # Dot ID #**  
82H15 12 372700 5527700 Picture Butte Reservoir Lat/Long: 49 53' 112 46' 3 1400

**Source Code Author Publisher Year Title**  
B86WAL01ABCA Wallis, Clifford et al Alberta Forestry Lands & Wildlife 203p 1986 Pilot rare plant monitoring program in the Oldman Regional Plan area of southwestern Alberta  
B89WAL02ABCA Wallis, C. World Wildlife Fund Canada 1989 Western Blue Flag (Iris missouriensis Nutt.) Management Plan

**Date Source Abstract Code Observer Occurrence Data**  
Perennial with a thick knotted rhizome, flowers in late June.

**Iris missouriensis** western blue flag SRank: S1

+++++

**Element Code:** PMIRI090L0 **Occurrence Code #:** 004 **Survey Date:** 1999-06-30  
**Last Observed:** 1999-06-30 **First Observed:** 1974-06-00 **Actual Mapping Precision (m):** 250 **Precision Code:** S  
**Directions:** Police Outpost P.P.; Outpost Lake, very SE end of.

**General Description:** willow break on lake shore; apparently not as vigorous as in many grazed stands  
**Min Elev. (m):** 1370 **Max Elev. (m):** 1370 **Aspect:** W

**Other Comments:** C. Wallis observed about 600 to 650 stems; in 1998 there are only about 325 stems, 147 stems noted in 1999  
**Best Source of Info:** R98COR01ABCA

**Map UTM Zone UTM Easting UTM Northing Survey Site Name Notes # Dot ID #**  
82H03 12 320550 5430800 Police Outpost Provincial Park LSD8-6-1-26 W4M 43 4716

**Source Code Author Publisher Year Title**  
B88WAL01ABCA Wallis, Clifford Alberta Forestry, Lands and Wildlife 1988 Western Blue Flag (Iris missouriensis) Monitoring Program in Southwestern Alberta  
B89WAL02ABCA Wallis, C. World Wildlife Fund Canada 1989 Western Blue Flag (Iris missouriensis Nutt.) Management Plan I80XXX02ABCA 1980  
INDWAL01ABCA Wallis, C.  
R98COR01ABCA Cornish, Beth Alberta Environmental Protection, Edmonton, Alberta 1998 Western Blue Flag (Iris missouriensis) Monitoring Program in Southwestern Alberta: 1998 Population Assessment  
U74CRA01ABCA Crack, S. & B.J. Danielson AB Rec., Parks & Wildlife, Parks Division 1974 Police Outpost 1974 Ecological Study  
U78MOR01ABCA More, Gavin Alberta Recreation, Parks and Wildlife 1978 Memo -- Unique Plant Species Map - Police Outpost Park

**Date Source Abstract Code Observer Occurrence Data**

1974-06-00 U74CRA01ABCA plant found growing along an intermittent stream inlet to the lake  
1986-06-17 B89WAL02ABCA C. Wallis 20 flowering stalks  
1987-06-19 B89WAL02ABCA C. Wallis 18 flowering stalks  
1989-07-01 B89WAL02ABCA C. Wallis 6 flowering stalks  
1998-06-22 R98COR01ABCA Beth Cornish about 325 individuals, only 1 flowering stalk; no Iris in monitoring plot

**Iris missouriensis** western blue flag SRank: S1

+++++

**Element Code:** PMIRI090L0 **Occurrence Code #:** 005 **Survey Date:** 1999-09-24  
**Last Observed:** 1999-09-24 **First Observed:** 1992-06-02 **Actual Mapping Precision (m):** 1400 **Precision Code:** M  
**Directions:** Whiskey Gap, Sommerfeldt Ranch

**General Description:** moist meadow  
**Min Elev. (m):** 1300 **Max Elev. (m):** 1300  
**Slope:** 0.00 **Best Source of Info:** S92SOMCFABCA07

**Specimen Source Code Collector Herbarium Accession # Date ID OK? Observation Detail**  
S92SOMCFABCA07 Sommerfeldt, B. CF 930305 1992-06-02 Y

**Map UTM Zone UTM Easting UTM Northing Survey Site Name Notes # Dot ID #**  
82H03 12 353600 5430475 Whiskey Gap 49 01N/113 01W 33 972

**Source Code Author Publisher Year Title**  
B89WAL02ABCA Wallis, C. World Wildlife Fund Canada 1989 Western Blue Flag (Iris missouriensis Nutt.) Management Plan

**Date Source Abstract Code Observer Occurrence Data**

1999-09-24 PNDSOM01ABCA B. Sommerfeldt in pers. comm. to J. Gould Sept. 24, 1999 are four subpopulations all of which are natural. Subpopulation 1--lots of plants in 1970's, stopped pasturing in ~1982 and population declined. Some bloom and have been handclipping grass--seems to have helped. Subpopulation 2--bottom of valley--doing well, ~30 corms. Subpopulation 3--200-250 corms, blooms often; subpopulation 4--5-6 corms--heavy grass but do bloom every year

**Iris missouriensis** western blue flag SRank: S1



**Element Code:** PMIRI090L0 **Occurrence Code #:** 006 **Survey Date:** 1989-06-25  
**Last Observed:** 1989-06-25 **First Observed:** 1989-06-25 **Actual Mapping Precision (m):** 250 **Precision Code:** S  
**Directions:** Beazer, 7.5 km SE of; Ockey Ridge, ~2 km SE of.  
**General Description:** along moist meadow in drainage  
**Min Elev. (m):** 1340 **Max Elev. (m):** 1340 **Best Source of Info:** B89WAL02ABCA  
**Map UTM Zone UTM Easting UTM Northing Survey Site Name Notes # Dot ID #**  
82H03 12 325750 5440400 Ockey Ridge SE3-2-26 W4M 40 4713  
**Source Code Author Publisher Year Title**  
B89WAL02ABCA Wallis, C. World Wildlife Fund Canada 1989 Western Blue Flag (*Iris missouriensis* Nutt.)  
Management Plan  
**Date Source Abstract Code Observer Occurrence Data**  
1989-06-25 B89WAL02ABCA C. Wallis several hundred flowering stalks with perhaps 1500 stems  
*Iris missouriensis* western blue flag SRank: S1  
+++++

**Element Code:** PMIRI090L0 **Occurrence Code #:** 007 **Survey Date:** 1989-00-00  
**Last Observed:** 1989-00-00 **First Observed:** 1989-00-00 **Actual Mapping Precision (m):** 250 **Precision Code:** S  
**Directions:** Mary Lake, SE end of.  
**General Description:** shore of lake  
**Min Elev. (m):** 1272 **Max Elev. (m):** 1272 **Best Source of Info:** B89WAL02ABCA  
**Map UTM Zone UTM Easting UTM Northing Survey Site Name Notes # Dot ID #**  
82H03 12 340000 5431100 Mary Lake SE7-1-24 W4M 41 4714  
**Source Code Author Publisher Year Title**  
B89WAL02ABCA Wallis, C. World Wildlife Fund Canada 1989 Western Blue Flag (*Iris missouriensis* Nutt.)  
Management Plan  
**Date Source Abstract Code Observer Occurrence Data**  
B89WAL02ABCA Dr. George Scotter small population with 4 flowering stalks  
*Iris missouriensis* western blue flag SRank: S1  
+++++

**Element Code:** PMIRI090L0 **Occurrence Code #:** 008 **Survey Date:** 1999-06-00  
**Last Observed:** 1999-06-00 **First Observed:** 1989-00-00 **Actual Mapping Precision (m):** 250 **Precision Code:** S  
**Directions:** Carway, 4 km NE of.  
**General Description:** associated with *Potentilla fruticosa*-*Festuca* and *Deschampsia cespitosa* habitat types [  
**Min Elev. (m):** 1340 **Max Elev. (m):** 1340  
**Other Comments:** on road in from Hwy 2 locate turnoff to Harrisville (signed & with a little church on right); Drive 1.8km W on Police  
Lake Rd-should be farm driveway on left; irises are between fence posts 11 & 12 W of driveway **Best Source of Info:**  
B89WAL02ABCA  
**Map UTM Zone UTM Easting UTM Northing Survey Site Name Notes # Dot ID #**  
82H03 12 328400 5433000 Boundary Creek N12-1-26 W4M 42 4715  
**Source Code Author Publisher Year Title**  
B89WAL02ABCA Wallis, C. World Wildlife Fund Canada 1989 Western Blue Flag (*Iris missouriensis* Nutt.)  
Management Plan  
U99DOL01ABCA Dolman, T. and D. 1999 Notes on *Iris missouriensis*-email to Joyce Gould  
**Date Source Abstract Code Observer Occurrence Data**  
B89WAL02ABCA Dr. George Scotter 25-30 flowering stalks  
1999-00-00 U99DOL01ABCA Doug and Teresa Dolman irises in corner between E-W fence (along the road) and the N-S fence  
1999-06-00 PNDDOL01ABCA Doug and Teresa Dolman approx. 10 stems noted  
*Iris missouriensis* western blue flag SRank: S1  
+++++

**Element Code:** PMIRI090L0 **Occurrence Code #:** 009 **Survey Date:** 1995-00-00  
**Last Observed:** 1995-00-00 **First Observed:** 1993-06-17 **Actual Mapping Precision (m):** 800 **Precision Code:** M  
**Directions:** Calgary; University of Calgary, just W of; Higher Education Reserve.  
**General Description:** in grove consisting mainly of poplar  
**Min Elev. (m):** 1112 **Max Elev. (m):** 1112  
**Other Comments:** introduced **Best Source of Info:** A95STI01ABCA  
**Map UTM Zone UTM Easting UTM Northing Survey Site Name Notes # Dot ID #**  
82O01 11 700000 5662000 Calgary - University Heights 28 1877  
**Source Code Author Publisher Year Title**  
A95STI01ABCA Stiles, Don *Iris*, Issue 24 1995 Possible outlier of a rare plant- *Iris missouriensis* Nutt.- Western Blue Flag.  
**Date Source Abstract Code Observer Occurrence Data**  
1993-06-17 A95STI01ABCA Ann Brebner one plant in bloom; from the article looks like only one plant is there  
1994-00-00 A95STI01ABCA Ann Brebner no bloom  
1995-00-00 A95STI01ABCA Ann Brebner no bloom  
*Iris missouriensis* western blue flag SRank: S1  
+++++

**Element Code:** PMIRI090L0 **Occurrence Code #:** 010 **Survey Date:** 1997-00-00  
**Last Observed:** 1997-00-00 **First Observed:** 1997-00-00 **Actual Mapping Precision (m):** 250 **Precision Code:** S  
**Directions:** Calgary; Calgary International Airport, at.  
**Min Elev. (m):** 1082 **Max Elev. (m):** 1082  
**Other Comments:** introduced; specimen has been collected **Best Source of Info:** U97WAL01ABCA  
**Map UTM Zone UTM Easting UTM Northing Survey Site Name Notes # Dot ID #**  
82O01 11 708000 5666200 Calgary International Airport 18 4743  
**Source Code Author Publisher Year Title**  
U97WAL01ABCA Wallis, Cliff 1997 Rare Native Plant Report Form  
**Date Source Abstract Code Observer Occurrence Data**  
1997-00-00 U97WAL01ABCA Cliff Wallis 400 plants - introduced  
**Iris missouriensis** western blue flag SRank: S1  
+++++

**Element Code:** PMIRI090L0 **Occurrence Code #:** 011 **Survey Date:** 1997-07-00  
**Last Observed:** 1997-07-00 **First Observed:** 1996-06-00 **Actual Mapping Precision (m):** 100 **Precision Code:** S  
**Directions:** Banff N.P.; Massive; UTM E584745 N5675105.  
**General Description:** grassy knoll with Agropyron subsecundum and Potentilla fruticosa; along powerline  
**Min Elev. (m):** 1400 **Max Elev. (m):** 1400  
**Other Comments:** appears to be introduced - rear human activity; specimen has been collected **Best Source of Info:**  
U97WAL01ABCA  
**Map UTM Zone UTM Easting UTM Northing Survey Site Name Notes # Dot ID #**  
82O04 11 584700 5675000 Massive Station 150 2051  
**Source Code Author Publisher Year Title**  
U97WAL01ABCA Wallis, Cliff 1997 Rare Native Plant Report Form  
**Date Source Abstract Code Observer Occurrence Data**  
1997-07-00 U97WAL01ABCA Cliff Wallis 1000 plants in 30 clumps and scattered individuals; 25% of population in bloom  
**Iris missouriensis** western blue flag SRank: S1  
+++++

**Element Code:** PMIRI090L0 **Occurrence Code #:** 012 **Survey Date:** 1995-00-00  
**Last Observed:** 1995-00-00 **First Observed:** 1995-00-00 **Actual Mapping Precision (m):** 250 **Precision Code:** S  
**Directions:** Frank Lake, central west shore of; N side of road.  
**General Description:** ditch; with cultivated irises  
**Min Elev. (m):** 1005 **Max Elev. (m):** 1005  
**Other Comments:** introduced; specimen has been collected; Cliff probably used for Twp border county/municipal border instead of  
real Twp border **Best Source of Info:** U95WAL02ABCA  
**Map UTM Zone UTM Easting UTM Northing Survey Site Name Notes # Dot ID #**  
82I12 12 307350 5602300 Frank Lake LSD15 Sec19-18-27 W4M 5 4744  
**Source Code Author Publisher Year Title**  
U95WAL02ABCA Wallis, Cliff 1995 Rare Native Plant Report Form  
**Iris missouriensis** western blue flag SRank: S1  
+++++

**Element Code:** PMIRI090L0 **Occurrence Code #:** 013 **Survey Date:** 1999-06-00  
**Last Observed:** 1999-06-00 **First Observed:** 1999-06-00 **Actual Mapping Precision (m):** 25 **Precision Code:** S  
**Directions:** Outpost Lake, 8 km NE of; Ockney Ridge, 1.5 km SE of.  
**General Description:** near fenceline; E from hwy 2 on road signed "Granite Ranch"; ~0.45km from Hwy in gravel road on right; ~20  
fence posts beyond gate another gate fence heads S, across watercourse into small dugout  
**Min Elev. (m):** 1372 **Max Elev. (m):** 1372 **Size of Occurrence:** **Best Source of Info:** U99DOL01ABCA  
**Map UTM Zone UTM Easting UTM Northing Survey Site Name Notes # Dot ID #**  
82H03 12 324150 5439525 Police Lake Road 44 5472  
**Source Code Author Publisher Year Title**  
U99DOL01ABCA Dolman, T. and D. 1999 Notes on Iris missouriensis-email to Joyce Gould  
**Date Source Abstract Code Observer Occurrence Data**  
1999-06-00 U99DOL01ABCA 2 clumps; one inside the fence a few feet and the other under or just outside the fence  
**Iris missouriensis** western blue flag SRank: S1

**Juncus confusus** few-flowered rush

**Natural Region:** Northern Fescue Grassland, Foothills Fescue Grassland, Mixedgrass, Dry Mixedgrass

**Habitat:** Wetland-Meadow

**Phenology:** heads out in early June

**Specific Search Strategies (if any):** easiest to detect and identify accurately in July and August after seed set; stems are clearly identifiable into September; edges of shallow wetlands in grassland-meadow interface; moist swales in grassland, especially where there is some sandy component to the soil

**Element Occurrences:**

**Element Code:** PMJUN010S0 **Occurrence Code #:** 001 **Survey Date:** 1995-06-10  
**Last Observed:** 1995-06-10 **First Observed:** 1995-06-10 **Actual Mapping Precision (m):** 250 **Precision Code:** S  
**Directions:** Hardisty, S of; large wetland.  
**General Description:** Assoc. with sedge marsh & wet meadow; open water zone has sandy clay shoreline. Wet meadow portion dom. by grasses. Junc. balticus-Carex spp.-Equis. hyemale-Antennaria sp.-Galium sp.-Sisyr. montanum-Taraxacum officinale  
**Min Elev. (m):** 670 **Max Elev. (m):** 670  
**Other Comments:** air photo 1-8 (1:30000) **Best Source of Info:** B95WIL01ABCA  
**Map UTM Zone UTM Easting UTM Northing Survey Site Name Notes # Dot ID #**  
73D11 12 481600 5830200 Hardisty Plot #51A 1 314  
**Source Code Author Publisher Year Title**  
B95WIL01ABCA J. Williams Consulting & Axys Environmental Consulting Ltd Express Pipelines Ltd 1995 Rare Plant Surveys along the Proposed Express Pipeline Project  
**Date Source Abstract Code Observer Occurrence Data**  
1995-06-10 B95WIL01ABCA In shoreline zone around large pond: 10 m band around pond. 25% coverage.  
**Juncus confusus** few-flowered rush SRank: S2S3  
+++++

**Element Code:** PMJUN010S0 **Occurrence Code #:** 002 **Survey Date:** 1939-07-31  
**Last Observed:** 1939-07-31 **First Observed:** 1939-07-29 **Precision Code:** M  
**Directions:** Pincher Creek, 2 mi N  
**General Description:** low place in prairie  
**Min Elev. (m):** 1220 **Max Elev. (m):** 1220 **Best Source of Info:** S39MOSACONCA06  
**Specimen Source Code Collector Herbarium Accession # Date ID OK? Observation Detail**  
S39MOSACONCA06 Moss, E.H. AC none 1939-07-29  
S39MOSUAABCA12 Moss, E.H. UA 4569 1939-07-31  
**Map UTM Zone UTM Easting UTM Northing Survey Site Name Notes # Dot ID #**  
82G08 11 697300 5471550 Pincher Creek 49 22/114 17 162 788  
**Juncus confusus** few-flowered rush SRank: S2S3  
+++++

**Element Code:** PMJUN010S0 **Occurrence Code #:** 003 **Survey Date:** 1940-06-24  
**Last Observed:** 1940-06-24 **First Observed:** 1940-06-24 **Precision Code:** M  
**Directions:** Twin Butte, 2 mi N of; Waterton Lakes National Park, N of.  
**General Description:** adjoining fescue prairie, salicetum.  
**Min Elev. (m):** 1340 **Max Elev. (m):** 1340 **Best Source of Info:** S40MOSUAABCA04  
**Specimen Source Code Collector Herbarium Accession # Date ID OK? Observation Detail**  
S40MOSACONCA02 Moss, E.H. AC none 1940-06-24  
S40MOSUAABCA04 Moss, E. UA 4571 1940-06-24  
**Map UTM Zone UTM Easting UTM Northing Survey Site Name Notes # Dot ID #**  
82H05 12 292550 5463650 Yarrow Creek 6 1334  
**Juncus confusus** few-flowered rush SRank: S2S3  
+++++

**Element Code:** PMJUN010S0 **Occurrence Code #:** 004 **Survey Date:** 1939-08-08  
**Last Observed:** 1939-08-08 **First Observed:** 1939-08-08 **Precision Code:** M  
**General Description:** open place, base of rocky slope, somewhat sandy soil, with grasses and shrubs  
**Min Elev. (m):** 1220 **Max Elev. (m):** 1220 **Best Source of Info:** S39MOSUAABCA11  
**Specimen Source Code Collector Herbarium Accession # Date ID OK? Observation Detail**  
S39MOSACONCA05 Moss, E.H. AC 134891 1939-08-08  
S39MOSUAABCA11 Moss, E.H. UA 4570 1939-08-08  
**Map UTM Zone UTM Easting UTM Northing Survey Site Name Notes # Dot ID #**  
82G09 11 704850 5495950 Lundbreck 49 02 N, 113 01W 24 840  
**Juncus confusus** few-flowered rush SRank: S2S3

**Element Code:** PMJUN010S0 **Occurrence Code #:** 005 **Survey Date:** 1925-06-26  
**Last Observed:** 1925-06-26 **First Observed:** 1925-06-26 **Precision Code:** M  
**Min Elev. (m):** 1130 **Max Elev. (m):** 1130 **Best Source of Info:** S25MALUCABCA21  
**Specimen Source Code Collector Herbarium Accession # Date ID OK? Observation Detail**  
S25MALNMONCA34 Malte, M.O. & W. Watson NM 10246 1925-06-26  
S25MALUCABCA21 Malte, M.O. & W. R. Watson UC 05824 1925-06-26  
**Map UTM Zone UTM Easting UTM Northing Survey Site Name Notes # Dot ID #**  
82H05 12 286350 5485600 5 1333

**Juncus confusus** few-flowered rush SRank: S2S3  
+++++

**Element Code:** PMJUN010S0 **Occurrence Code #:** 006 **Survey Date:** 1945-07-07  
**Last Observed:** 1945-07-07 **First Observed:** 1945-07-07 **Precision Code:** S  
**Directions:** Bow River Valley; Pipestone Creek, near mouth of; Lake Louise Ranger Station, near.  
**General Description:** edge of muddy pond  
**Min Elev. (m):** 1555 **Max Elev. (m):** 1555 **Best Source of Info:** S45PORNMONCA67  
**Specimen Source Code Collector Herbarium Accession # Date ID OK? Observation Detail**  
S45PORNMONCA67 Porsild & Breitung NM 289644 1945-07-07  
**Map UTM Zone UTM Easting UTM Northing Survey Site Name Notes # Dot ID #**  
82N08 11 557050 5697400 Lake Louise 60 1752

**Juncus confusus** few-flowered rush SRank: S2S3  
+++++

**Element Code:** PMJUN010S0 **Occurrence Code #:** 007 **Survey Date:** 1941-08-20  
**Last Observed:** 1941-08-20 **First Observed:** 1941-08-20 **Precision Code:** M  
**General Description:** Open place in pine woods  
**Min Elev. (m):** 1585 **Max Elev. (m):** 1585 **Best Source of Info:** S41MOSACONCA02  
**Specimen Source Code Collector Herbarium Accession # Date ID OK? Observation Detail**  
S41MOSACONCA02 Moss, E.H. AC none 1941-08-20  
S41MOSUAABCA04 Moss, E.H. UA 4572 1941-08-20  
**Map UTM Zone UTM Easting UTM Northing Survey Site Name Notes # Dot ID #**  
82G01 11 716950 5446550 Red Rock Canyon 207 597

**Juncus confusus** few-flowered rush SRank: S2S3  
+++++

**Element Code:** PMJUN010S0 **Occurrence Code #:** 008 **Survey Date:** 1995-08-31  
**Last Observed:** 1995-08-31 **First Observed:** 1995-08-31 **Actual Mapping Precision (m):** 250 **Precision Code:** S  
**Directions:** Alberta; Elkwater, ca. 10 km WSW of; Medicine Lodge Creek Coulee. West side of  
**General Description:** Submesic sandy loam of coulee basin plain with mixed meadow of *Poa pratensis* - *Stipa curtiseta* -  
*Agropyron smithii* - *Achillea millefolium* - *Artemisia ludoviciana*  
**Min Elev. (m):** 1138 **Max Elev. (m):** 1138  
**Other Comments:** Lat/Long do not correspond with elevation **Best Source of Info:** S95MACPMABCA01  
**Specimen Source Code Collector Herbarium Accession # Date ID OK? Observation Detail**  
S95MACPMABCA01 Macdonald, I.D. PM B96.1.11 1995-08-31 Y capsules present

**Map UTM Zone UTM Easting UTM Northing Survey Site Name Notes # Dot ID #**  
72E09 12 542374 5496481 Eagle Butte Site 59; 49 37/110 24; LSD 9 23 119  
**Juncus confusus** few-flowered rush SRank: S2S3  
+++++

**Element Code:** PMJUN010S0 **Occurrence Code #:** 009 **Survey Date:** 1995-09-12  
**Last Observed:** 1995-09-12 **First Observed:** 1995-09-12 **Precision Code:** S  
**Directions:** Alberta; Elkwater, ca. 10 km WNW of; Cypress Hills plateau, W of.  
**General Description:** Submesic fine sandy loam of ground moraine slope with shrubby mixed meadow of *Rosa arkansana* -  
*Festuca campestris* - *Danthonia californica* - *Galium boreale* - *Agropyron trachycaul...*  
**Min Elev. (m):** 1111 **Max Elev. (m):** 1111 **Size of Occurrence:** **Best Source of Info:** S95MACUAABCA04  
**Specimen Source Code Collector Herbarium Accession # Date ID OK? Observation Detail**  
S95MACUAABCA04 Macdonald, I.D. UA none 1995-09-12 Y [fruits]

**Map UTM Zone UTM Easting UTM Northing Survey Site Name Notes # Dot ID #**  
72E09 12 542374 5504481 Ventre Creek Site 105; 49 41/110 24; LSD 9 27 123  
**Juncus confusus** few-flowered rush SRank: S2S3  
+++++

**Element Code:** PMJUN010S0 **Occurrence Code #:** 011 **Survey Date:** 1974-08-09  
**Last Observed:** 1974-08-09 **First Observed:** 1974-08-09 **Actual Mapping Precision (m):** 1000 **Precision Code:** M  
**Directions:** Beauvais Lake P.P.  
**General Description:** Pond margin.  
**Min Elev. (m):** 1524 **Max Elev. (m):** 1524 **Best Source of Info:** S74DANUCABCA12  
**Specimen Source Code Collector Herbarium Accession # Date ID OK? Observation Detail**  
S74DANUCABCA12 Danielson, Barbara & Susan Crack UC 05823 1974-08-09 Y headed  
**Map UTM Zone UTM Easting UTM Northing Survey Site Name Notes # Dot ID #**  
82G08 11 710300 5477675 Beauvais Lake P.P. 49 25/114 06; 29-5-1 W5 3 691  
**Juncus confusus** few-flowered rush SRank: S2S3  
+++++

**Element Code:** PMJUN010S0 **Occurrence Code #:** 013 **Survey Date:** 1992-07-23  
**Last Observed:** 1992-07-23 **First Observed:** 1992-07-23 **Actual Mapping Precision (m):** 250 **Precision Code:** S  
**Directions:** Writing-on-Stone PP, 9 km SSE of; Police Creek, headwaters tributary of.  
**General Description:** mixed grassland; dry rolling prairie - coulee basin; moist seepage meadows of Carex-Epilobium-Eleocharis  
**Min Elev. (m):** 1143 **Max Elev. (m):** 1212 **Best Source of Info:** S92MACPMABCA04  
**Specimen Source Code Collector Herbarium Accession # Date ID OK? Observation Detail**  
S92MACPMABCA04 Macdonald, I.D. PM B93.5.26 1992-07-23 Y capsules present  
**Map UTM Zone UTM Easting UTM Northing Survey Site Name Notes # Dot ID #**  
72E04 12 456424 5427334 Police Creek 6-1-12 W4M; 49 00/111 36 29 77  
**Juncus confusus** few-flowered rush SRank: S2S3  
+++++

**Element Code:** PMJUN010S0 **Occurrence Code #:** 014 **Survey Date:** 1996-00-00  
**Last Observed:** 1996-00-00 **First Observed:** 1996-00-00 **Actual Mapping Precision (m):** 500 **Precision Code:** M  
**Directions:** Seven Persons; ~22.5 km SE of; Bullshead Creek; ~5km W of.  
**General Description:** Local. Depressions in fescue grassland. 10 m E of RoW. Population avoided.  
**Min Elev. (m):** 930 **Max Elev. (m):** 930 **Best Source of Info:** U96EXP01ABCA  
**Map UTM Zone UTM Easting UTM Northing Survey Site Name Notes # Dot ID #**  
72E15 12 519300 5516650 Bullshead Creek LS#50;km:333.2;LLD:SE 10 10-6-4 13 3999  
**Source Code Author Publisher Year Title**  
U96EXP01ABCA AXYS Environmental Consulting 1996 Express Pipeline Project  
**Juncus confusus** few-flowered rush SRank: S2S3  
+++++

**Element Code:** PMJUN010S0 **Occurrence Code #:** 015 **Survey Date:** 1996-00-00  
**Last Observed:** 1996-00-00 **First Observed:** 1996-00-00 **Actual Mapping Precision (m):** 250 **Precision Code:** S  
**Directions:** Peigan Creek; 5km N of; Rush Lake; 2.2km S of.  
**General Description:** Local. Depressions in fescue grassland.  
**Min Elev. (m):** 1074 **Max Elev. (m):** 1074 **Best Source of Info:** U96EXP01ABCA  
**Map UTM Zone UTM Easting UTM Northing Survey Site Name Notes # Dot ID #**  
72E10 12 525724 5500931 Buffalo Lake KP 350.6, NE 10-20-8-5-4, LS # 53/LS#53, km:350.1,LLD:NE 20 8-5-4. 7 3983  
**Source Code Author Publisher Year Title**  
U96EXP01ABCA AXYS Environmental Consulting 1996 Express Pipeline Project  
**Juncus confusus** few-flowered rush SRank: S2S3  
+++++

**Element Code:** PMJUN010S0 **Occurrence Code #:** 016 **Survey Date:** 1996-00-00  
**Last Observed:** 1996-00-00 **First Observed:** 1996-00-00 **Actual Mapping Precision (m):** 400 **Precision Code:** M  
**Directions:** Rush Lake; ~5km Se of bridge over E end of; Buffalo Lake; ~3.75km NW of; road; ~300m W of.  
**General Description:** Local. Depressions in fescue grassland. In sod salvage site #1.  
**Min Elev. (m):** 1082 **Max Elev. (m):** 1082 **Best Source of Info:** U96EXP01ABCA  
**Map UTM Zone UTM Easting UTM Northing Survey Site Name Notes # Dot ID #**  
72E10 12 527574 5498081 Buffalo Lake LS#53, km:354.2,LLD:NE 16-9 8-5-4 15 4000  
**Source Code Author Publisher Year Title**  
U96EXP01ABCA AXYS Environmental Consulting 1996 Express Pipeline Project  
**Juncus confusus** few-flowered rush SRank: S2S3  
+++++

**Element Code:** PMJUN010S0 **Occurrence Code #:** 017 **Survey Date:** 1996-00-00  
**Last Observed:** 1996-00-00 **First Observed:** 1996-00-00 **Actual Mapping Precision (m):** 250 **Precision Code:** S  
**Directions:** Rush Lake; 7.5km SE of bridge over E end of; Buffalo Lake; 1.75km SW of.  
**General Description:** Locally common. Wetlands. 1 m W of RoW near stringing truck turn-around. Population avoided. **Best Source of Info:** U96EXP01ABCA  
**Map UTM Zone UTM Easting UTM Northing Survey Site Name Notes # Dot ID #**  
72E10 12 529274 5495581 Buffalo Lake LS#54,km:357.2,LLD:SE 1-3 8-5-4 5 3957  
**Source Code Author Publisher Year Title**  
U96EXP01ABCA AXYS Environmental Consulting 1996 Express Pipeline Project  
**Juncus confusus** few-flowered rush SRank: S2S3  
+++++

**Element Code:** PMJUN010S0 **Occurrence Code #:** 018 **Survey Date:** 1996-00-00  
**Last Observed:** 1996-00-00 **First Observed:** 1996-00-00 **Actual Mapping Precision (m):** 500 **Precision Code:** M  
**Directions:** Lodge Creek; ~8km W of; end of Suiste Coulee; ~4.5km W of; Lake at beginning of Bare Creek; ~2km W of.  
**General Description:** Locally common. Wetlands. On E edge of Row. Population avoided by construction.  
**Min Elev. (m):** 1181 **Max Elev. (m):** 1181 **Best Source of Info:** U96EXP01ABCA  
**Map UTM Zone UTM Easting UTM Northing Survey Site Name Notes # Dot ID #**  
72E08 12 541000 5476175 Suiste Coulee LS#57,km:380,LLD:SE 7-2 6-4-4,SE2 6-4-W4. 16 4001  
**Source Code Author Publisher Year Title**  
U96EXP01ABCA AXYS Environmental Consulting 1996 Express Pipeline Project  
**Juncus confusus** few-flowered rush SRank: S2S3  
+++++

**Element Code:** PMJUN010S0 **Occurrence Code #:** 019 **Survey Date:** 1996-00-00  
**Last Observed:** 1996-00-00 **First Observed:** 1996-00-00 **Actual Mapping Precision (m):** 500 **Precision Code:** M  
**Directions:** Rosyth; ~3.25km SW of; Battle River; ~3.75km E of.  
**General Description:** Locally common. Wetlands. RoW re-routed to avoid population.  
**Min Elev. (m):** 655 **Max Elev. (m):** 655 **Best Source of Info:** U96EXP01ABCA  
**Map UTM Zone UTM Easting UTM Northing Survey Site Name Notes # Dot ID #**  
73D11 12 482500 5829800 Rosyth LS#1;km0.8;LLD:NE 15-17 42-9-4 3 4004  
**Source Code Author Publisher Year Title**  
U96EXP01ABCA AXYS Environmental Consulting 1996 Express Pipeline Project  
**Juncus confusus** few-flowered rush SRank: S2S3  
+++++

**Element Code:** PMJUN010S0 **Occurrence Code #:** 020 **Survey Date:** 1997-06-17  
**Last Observed:** 1997-06-17 **First Observed:** 1997-06-17 **Actual Mapping Precision (m):** 100 **Precision Code:** S  
**Directions:** Majors Lake, 10.75 km NE of; Bigstone, 9 km E of.  
**General Description:** gently sloping, grassy swale in dry mixed grass; Care pen-Dant int, Agro tra var uni, Junc bal, Gale bor, Arn sor, Peus pro, Sisy mon, Ache mil, Thal ven, Symp occ; mesic; 3 deg. slope  
**Min Elev. (m):** 838 **Max Elev. (m):** 838  
**Slope:** 3.00 **Aspect:** W **Size of Occurrence:** **Best Source of Info:** U99GOL02ABCA  
**Map UTM Zone UTM Easting UTM Northing Survey Site Name Notes # Dot ID #**  
72M03 12 496000 5672850 Bigstone 16-9-26-8-W4M; 51 12.590' N, 111 03.242' W 5 5504  
**Source Code Author Publisher Year Title**  
U99GOL02ABCA Golder Associates 1999 Rare Native Plant Forms- Golder's survey along BP Amoco Alberta Ethane Gathering System Pipeline right of way  
**Date Source Abstract Code Observer Occurrence Data**  
1997-06-17 U99GOL02ABCA ~20, 10 on RoW  
**Juncus confusus** few-flowered rush SRank: S2S3  
+++++

**Element Code:** PMJUN010S0 **Occurrence Code #:** 021 **Survey Date:** 1997-06-17  
**Last Observed:** 1997-06-17 **First Observed:** 1997-06-17 **Actual Mapping Precision (m):** 100 **Precision Code:** S  
**Directions:** Cereal, 17. 5 km SW of; Hwy 886, 7.5 km W of.  
**General Description:** shallow, E-W drainage in upland; mesic; Symp occ, Rosa woo/ Poa prat; Pot gru-Tara off-Gale loor-Ache mil- Coll lin  
**Min Elev. (m):** 777 **Max Elev. (m):** 777 **Size of Occurrence:** **Best Source of Info:** U99GOL02ABCA  
**Map UTM Zone UTM Easting UTM Northing Survey Site Name Notes # Dot ID #**  
72M07 12 506300 5680000 Highway 886 3-3-27-7-W4M; 51 16.333N, 111 11.516 W 1 5505  
**Source Code Author Publisher Year Title**  
U99GOL02ABCA Golder Associates 1999 Rare Native Plant Forms- Golder's survey along BP Amoco Alberta Ethane Gathering System Pipeline right of way  
**Date Source Abstract Code Observer Occurrence Data**  
1999-06-17 U99GOL02ABCA 100-200 vegetative and budding  
**Juncus confusus** few-flowered rush SRank: S2S3  
+++++

**Element Code:** PMJUN010S0 **Occurrence Code #:** 022 **Survey Date:** 1999-07-15  
**Last Observed:** 1999-07-15 **First Observed:** 1999-07-15 **Actual Mapping Precision (m):** 25 **Precision Code:** S  
**Directions:** Cypress Hills P.P.; Elkwater, 4.5 km SE of; Hwy 41, E side of.  
**General Description:** in *Festuca campestris*-*Potentilla fruticosa* herbaceous community near wetland on the plateau; mesic  
**Min Elev. (m):** 1440 **Max Elev. (m):** 1440  
**Slope:** 0.00 **Aspect:** 0  
**Other Comments:** Specimen has been collected, collection number CB0012.  
**Management Comments:** grazing by livestock; recreation **Best Source of Info:** U99BRA01ABCA  
**Map UTM Zone UTM Easting UTM Northing Survey Site Name Notes # Dot ID #**  
72E09 12 554200 5496600 "Spring Creek Ranger Station" 5-8-2 W4M; 12U WL 554 230/5496 620 NAD27 90 5541  
**Source Code Author Publisher Year Title**  
U99BRA01ABCA Bradley, C., R. Ernst, D. Dickinson & L. Fitch 1999 Rare Plant Survey Forms  
**Date Source Abstract Code Observer Occurrence Data**  
1999-07-15 U99BRA01ABCA Cheryl Bradley and Wynne Miles several plants; unsure it *J. confusus* at time and it was snowing; V6  
vegetative; R7 reproductive  
**Juncus confusus** few-flowered rush SRank: S2S3  
+++++

**Element Code:** PMJUN010S0 **Occurrence Code #:** 023 **Survey Date:** 1999-08-16  
**Last Observed:** 1999-08-16 **First Observed:** 1999-08-16 **Actual Mapping Precision (m):** 25 **Precision Code:** S  
**Directions:** Cypress Hills P.P.; Elkwater, 6 km SE of; Hwy 41, 3 km E of.  
**General Description:** depressional area on upland plain; early season moisture - drying later in season; mesic  
**Min Elev. (m):** 1440 **Max Elev. (m):** 1440  
**Slope:** 0.00 **Aspect:** 0  
**Other Comments:** Specimen has been collected, collector number 014. **Best Source of Info:** U99BRA01ABCA  
**Map UTM Zone UTM Easting UTM Northing Survey Site Name Notes # Dot ID #**  
72E09 12 557050 5496975 "Grabum Road" 4-8-2 W4M 91 5542  
**Source Code Author Publisher Year Title**  
U99BRA01ABCA Bradley, C., R. Ernst, D. Dickinson & L. Fitch 1999 Rare Plant Survey Forms  
**Date Source Abstract Code Observer Occurrence Data**  
1999-08-16 U99BRA01ABCA Reg Ernst population information not recorded - estimated <25; V6 vegetative; R7 reproductive  
**Juncus confusus** few-flowered rush SRank: S2S3  
+++++

**Element Code:** PMJUN010S0 **Occurrence Code #:** 024 **Survey Date:** 1999-07-14  
**Last Observed:** 1999-07-14 **First Observed:** 1999-07-14 **Actual Mapping Precision (m):** 25 **Precision Code:** S  
**Directions:** Cypress Hills P.P.; Reesor Lake, 4 km SW of; "Police Point Road", 2 km N of.  
**General Description:** in *Festuca campestris*-*Danthonia* spp.-*Carex aenea* herbaceous community near top of slope in small drain  
and in *Festuca campestris*-*Festuca idahoensis*-*Potentilla fruticosa* herbaceous community; mesic  
**Min Elev. (m):** 1410 **Max Elev. (m):** 1410  
**Slope:** 10.00 **Aspect:** E  
**Other Comments:** Specimen has been collected, collector numbers CB0010 and CB0011; aspect E & S; slope 5-10%.  
**Management Comments:** livestock grazing **Best Source of Info:** U99BRA01ABCA  
**Map UTM Zone UTM Easting UTM Northing Survey Site Name Notes # Dot ID #**  
72E09 12 561700 5498675 "Police Point Road" 15-12-8-2 W4M; UTM 12U 561 900/5498 650 and 562 090/5499 250 NAD27 92  
5543  
**Source Code Author Publisher Year Title**  
U99BRA01ABCA Bradley, C., R. Ernst, D. Dickinson & L. Fitch 1999 Rare Plant Survey Forms  
**Date Source Abstract Code Observer Occurrence Data**  
1999-07-14 U99BRA01ABCA Cheryl Bradley and Wynne Miles main dot - two populations with several individuals noted; may be  
others; one population at W end of drain and one on N side ca 50 m to the E; V6 vegetative; R7 reproductive; stil somewhat  
too early to differentiate from *Juncus tenuis* based on capsule; place 2 - several individuals noted along ca 20 m of cattle trail;  
V6 vegetative; R7 reproductive  
**Juncus confusus** few-flowered rush SRank: S2S3  
+++++

**Element Code:** PMJUN010S0 **Occurrence Code #:** 025 **Survey Date:** 1999-07-27  
**Last Observed:** 1999-07-27 **First Observed:** 1999-07-27 **Actual Mapping Precision (m):** 25 **Precision Code:** S  
**Directions:** Cypress Hills P.P.; Graburn Creek, headwaters of; N side of.  
**General Description:** well drained ephemeral drainage leading to riparian area; submesic  
**Min Elev. (m):** 1385 **Max Elev. (m):** 1385  
**Slope:** 10.00 **Aspect:** N  
**Other Comments:** Slope less than 10%. Specimen has been collected, collector number RE0017. **Best Source of Info:**  
U99BRA01ABCA

**Map UTM Zone UTM Easting UTM Northing Survey Site Name Notes # Dot ID #**

72E09 12 567625 5495350 "Kneehill Creek" 34-7-1 W4M 82 5531

**Source Code Author Publisher Year Title**

U99BRA01ABCA Bradley, C., R. Ernst, D. Dickinson & L. Fitch 1999 Rare Plant Survey Forms

**Date Source Abstract Code Observer Occurrence Data**

1999-07-27 U99BRA01ABCA Reg Ernst population information not recorded - estimated <25; V6 vegetative; R7 reproductive

**Juncus confusus** few-flowered rush SRank: S2S3

+++++

**Element Code:** PMJUN010S0 **Occurrence Code #:** 026 **Survey Date:** 1999-08-16  
**Last Observed:** 1999-08-16 **First Observed:** 1999-07-27 **Actual Mapping Precision (m):** 25 **Precision Code:** S  
**Directions:** Cypress Hills P.P.; Nine Mile Creek, headwaters of.  
**General Description:** ephemeral drainage adjacent to creek; submesic  
**Min Elev. (m):** 1370 **Max Elev. (m):** 1370  
**Slope:** 10.00 **Aspect:** E  
**Other Comments:** Specimens have been collected, collector numbers RE0018 & 0018A. Slope less than 10%. **Best Source of Info:**  
U99BRA01ABCA

**Map UTM Zone UTM Easting UTM Northing Survey Site Name Notes # Dot ID #**

72E09 12 569225 5494225 Nine Mile Creek 26(wrong)-7-1 W4M 93 5544

**Source Code Author Publisher Year Title**

U99BRA01ABCA Bradley, C., R. Ernst, D. Dickinson & L. Fitch 1999 Rare Plant Survey Forms

**Date Source Abstract Code Observer Occurrence Data**

1999-08-16 U99BRA01ABCA Reg Ernest population information not recorded - estimated <25; V6 vegetative; R7 reproductive

**Juncus confusus** few-flowered rush SRank: S2S3

+++++

**Element Code:** PMJUN010S0 **Occurrence Code #:** 027 **Survey Date:** 2000-08-23  
**Last Observed:** 2000-08-23 **First Observed:** 2000-08-23 **Actual Mapping Precision (m):** 100 **Precision Code:** S  
**Directions:** Altario, 6 km SE of  
**General Description:** edge of fescue grassland, willow and ephemeral wetland  
**Min Elev. (m):** 716 **Max Elev. (m):** 724  
**Other Comments:** 30 few-flowered rush (*Juncus confusus*) at 563324E, 5750054N, Area A **Best Source of Info:**  
U00WAL03ABCA

**Map UTM Zone UTM Easting UTM Northing Survey Site Name Notes # Dot ID #**

72M16 12 563324 5750054 Altario 1-9-34-1-W4M 6 6302

**Source Code Author Publisher Year Title**

U00WAL03ABCA Wallis, C. Cottonwood Consultants Ltd., Calgary 2000 Natural Features Assessment, Proposed Well and Access  
Route Penn West Petroleum. 1-9-34-1-W4M

**Juncus confusus** few-flowered rush SRank: S2S3



***Juncus nevadensis* Nevada rush**

**Natural Region:** Foothills Fescue Grassland, Mixedgrass

**Habitat:** Wetland-Springs

**Phenology:** heads out in July?

**Specific Search Strategies (if any):** a dot in Moss is not listed below; habitat suspected to be spring/seepage areas, likely growing near flowing water edges

**Element Occurrences:**

**Element Code:** PMJUN011Z0 **Occurrence Code #:** 001 **Survey Date:** 1947-08-16

**Last Observed:** 1947-08-16 **First Observed:** 1947-08-16 **Precision Code:** M

**Directions:** Cypress Hills; Spring Creek Ranger Station.

**Min Elev. (m):** 1424 **Max Elev. (m):** 1424

**Other Comments:** Coll. as saximontana; Rev. Boivin, 1972; Stet. Harms, 1985. **Best Source of Info:** S47BREACONCA05

**Specimen Source Code Collector Herbarium Accession # Date ID OK? Observation Detail**

S47BREACONCA05 Breitung AC 726334 1947-08-16

**Map UTM Zone UTM Easting UTM Northing Survey Site Name Notes # Dot ID #**

72E09 12 552700 5496400 Spring Creek Ranger Station 16 112

***Juncus nevadensis* Nevada rush SRank:** S1

***Lilaea scilloides* flowering-quillwort**

**Natural Region:** Dry Mixedgrass

**Habitat:** Wetland-Alkali

**Phenology:** heads out in July

**Specific Search Strategies (if any):** detectable into late September and October provided there has been no grazing; check just below high water line on mud flats without continuous vegetation and in shallow water

**Element Occurrences:**

**Element Code:** PMJCG01010 **Occurrence Code #:** 001 **Survey Date:** 1950-08-01

**Last Observed:** 1950-08-01 **First Observed:** 1943-07-13 **Precision Code:** M

**Directions:** Manyberries, 8 mi S of.

**General Description:** Saline slough with *Hordeum*, *Eleocharis* and *Iva* spp. Usually with water in spring.

**Min Elev. (m):** 900 **Max Elev. (m):** 900 **Best Source of Info:** S43SKOUAABCA01

**Specimen Source Code Collector Herbarium Accession # Date ID OK? Observation Detail**

S43SKOACONCA01 Skogland, N.A. AC 51447 1943-07-20

S43SKOACONCA02 Skogland, N.A. AC 51445 1943-07-20

S43SKOUAABCA01 Skoglund, N.A. UA 978 1943-07-20

S43SKOUAABCA02 Skoglund, N.A. UA 980 1943-07-13

S50HUBACONCA01 Hubbard, W.A. & Smoliak, S. AC 51448 1950-08-01

**Map UTM Zone UTM Easting UTM Northing Survey Site Name Notes # Dot ID #**

72E07 12 520523 5456933 Manyberries 1 82

**Date Source Abstract Code Observer Occurrence Data**

Flowers and fruits

*Lilaea scilloides* flowering-quillwort SRank: S1

+++++

**Element Code:** PMJCG01010 **Occurrence Code #:** 002 **Survey Date:** 1950-08-07

**Last Observed:** 1950-08-07 **First Observed:** 1950-08-07 **Precision Code:** M

**Directions:** Craigower vicinity.

**General Description:** Slough, in association with *Hordeum* and *Eleocharis*.

**Min Elev. (m):** 930 **Max Elev. (m):** 930 **Best Source of Info:** S50HUBUAABCA01

**Specimen Source Code Collector Herbarium Accession # Date ID OK? Observation Detail**

S50HUBUAABCA01 Hubbard, W.A. & Smoliak, S. UA 981 1950-08-07 Fruits

**Map UTM Zone UTM Easting UTM Northing Survey Site Name Notes # Dot ID #**

72E02 12 534823 5440534 Craigower Vicinity 5 16

*Lilaea scilloides* flowering-quillwort SRank: S1

+++++

**Element Code:** PMJCG01010 **Occurrence Code #:** 003 **Survey Date:** 1951-08-15

**Last Observed:** 1951-08-15 **First Observed:** 1951-08-15 **Precision Code:** M

**Directions:** Cypress Hills, top of, Elkwater, above

**General Description:** Mud flat, border of pond with *Allocarya californica* (= *Plagiobothrys scouleri*); fescue prairie area.

**Min Elev. (m):** 1430 **Max Elev. (m):** 1430

**Other Comments:** 2 duplicate sheets with same Acc.# **Best Source of Info:** S51MOSUAABCA05

**Specimen Source Code Collector Herbarium Accession # Date ID OK? Observation Detail**

S51MOSACONCA10 Moss, E.H. AC 51446 1951-08-15

S51MOSACONCA11 Moss, E.H. AC 51449 1951-08-15

S51MOSUAABCA05 Moss, E.H. UA 33299 1951-08-15 Mainly fruits

**Map UTM Zone UTM Easting UTM Northing Survey Site Name Notes # Dot ID #**

72E09 12 553873 5497031 Elkwater 18 114

*Lilaea scilloides* flowering-quillwort SRank: S1

+++++

**Element Code:** PMJCG01010 **Occurrence Code #:** 004 **Survey Date:** 1998-09-23  
**Last Observed:** 1997-07-09 **First Observed:** 1997-07-09 **Actual Mapping Precision (m):** 250 **Precision Code:** S  
**Directions:** Schuler; ~13 km NW of.; Hwy 41; ~ 8.5 km W of. AEC compressor station, SW of.  
**General Description:** 8 off RoW in wetland  
**Min Elev. (m):** 808 **Max Elev. (m):** 808 **Best Source of Info:** U97AXY03ABCA  
**Map UTM Zone UTM Easting UTM Northing Survey Site Name Notes # Dot ID #**  
72L08 12 555100 5585100 White Rock Coulee Lat 50 deg 24 min 98 sec, Long 110 deg 13 min 22 s W - 6-9-17-2-W4M 15 3908  
**Source Code Author Publisher Year Title**  
U97AXY03ABCA AXYS Environmental Consulting Ltd. 1997 AEC Suffield Pipeline  
*Lilaea scilloides* flowering-quillwort SRank: S1  
+++++

**Element Code:** PMJCG01010 **Occurrence Code #:** 005 **Survey Date:** 1997-07-09  
**Last Observed:** 1997-07-09 **First Observed:** 1997-07-09 **Actual Mapping Precision (m):** 250 **Precision Code:** S  
**Directions:** S Saskatchewan River; ~7km S of; Creek in Bull Springs Coulee; ~1km W of.  
**General Description:** 100+ in second wetland, Depression seasonally flooded, ecotone just below high water line mud flats without continuous vegetation.  
**Min Elev. (m):** 762 **Max Elev. (m):** 762  
**Other Comments:** specimen collected; appears to be a stable population, **Best Source of Info:** U97AXY03ABCA  
**Map UTM Zone UTM Easting UTM Northing Survey Site Name Notes # Dot ID #**  
72L08 12 536000 5582600 Bull Springs Coulee Lat 50 deg 23 min 78 sec, Long 110 deg 30 min 43 sec W - 15-33-16-4-W4M 18 3911  
**Source Code Author Publisher Year Title**  
U97AXY03ABCA AXYS Environmental Consulting Ltd. 1997 AEC Suffield Pipeline  
**Date Source Abstract Code Observer Occurrence Data**  
1997-07-09 U97AXY03ABCA vegetative, flowering, fruiting  
*Lilaea scilloides* flowering-quillwort SRank: S1  
+++++

**Element Code:** PMJCG01010 **Occurrence Code #:** 006 **Survey Date:** 1999-07-14  
**Last Observed:** 1999-07-14 **First Observed:** 1999-07-14 **Actual Mapping Precision (m):** 20 **Precision Code:** S  
**Directions:** Cypress Hills P.P.; Ressor Lake, 4 km SW of; Battle Creek, 1.5 km E of.  
**General Description:** wetland, in shallow open water 30 cm deep; scattered throughout a sparse Glyc gra-Alop aeq-Lemna herbaceous community; associated species Eleo pal, Rume -, Plag slo  
**Min Elev. (m):** 1410 **Max Elev. (m):** 1410  
**Slope:** 0.00 **Aspect:** 0 **Size of Occurrence:** 0.02  
**Other Comments:** specimen has been collected by Chery Bradley, collector number CB0009  
**Management Comments:** Livestock grazing; avoid severe trampling by cattle. **Best Source of Info:** U99BRA01ABCA  
**Map UTM Zone UTM Easting UTM Northing Survey Site Name Notes # Dot ID #**  
72E09 12 561500 5498850 Battle Creek 15-12-8-2-W4M 68 5517  
**Source Code Author Publisher Year Title**  
U99BRA01ABCA Bradley, C., R. Ernst, D. Dickinson & L. Fitch 1999 Rare Plant Survey Forms  
**Date Source Abstract Code Observer Occurrence Data**  
1999-07-14 U99BRA01ABCA Cherly Bradley & Wynne Miles ca 300 plants in shallow water at N edge of wetland, along 35 m of shoreline, extending out to 5 m; V6 vegetative; R5-6 reproductive, some plants in flower  
*Lilaea scilloides* flowering-quillwort SRank: S1

***Linanthus septentrionalis* linanthus**

**Natural Region:** Dry Mixedgrass

**Habitat:** Grassland-Sandy

**Phenology:** typically late May to mid-June but may be later with delayed rains

**Specific Search Strategies (if any):** moist swales in sandy grassland, especially where there are small disturbances creating bare soil; occasionally spreading into a variety of sandy sites in wet years

**Element Occurrences:**

**Element Code:** PDPLM09120 **Occurrence Code #:** 001 **Survey Date:** 1969-06-23  
**Last Observed:** 1969-06-23 **First Observed:** 1969-06-23 **Precision Code:** S  
**Directions:** Red Rock, 1 mile NW of.  
**General Description:** Damp grassy slope  
**Min Elev. (m):** 1680 **Max Elev. (m):** 1680 **Aspect:** SW **Best Source of Info:** S69BLANMONCA36  
**Specimen Source Code Collector Herbarium Accession # Date ID OK? Observation Detail**  
S59BLAUAAABCA01 Blais, W. & J. Nagy UA 45956 1959-06-23 Y flowers  
S69BLANMONCA36 Blais, W. & Nagy NM 340350 1969-06-23  
**Map UTM Zone UTM Easting UTM Northing Survey Site Name Notes # Dot ID #**  
82G01 11 716000 5447450 Red Rock Canyon 49 08/114 02 141 569  
***Linanthus septentrionalis* linanthus** SRank: S2  
+++++

**Element Code:** PDPLM09120 **Occurrence Code #:** 002 **Survey Date:** 1937-07-19  
**Last Observed:** 1937-07-19 **First Observed:** 1937-07-19 **Precision Code:** M  
**Directions:** Hillcrest  
**General Description:** Mountain side  
**Min Elev. (m):** 1980 **Max Elev. (m):** 1980 **Best Source of Info:** S37DIXUAABCA02  
**Specimen Source Code Collector Herbarium Accession # Date ID OK? Observation Detail**  
S37DIXUAABCA02 Dixon, R.H. UA 14664 1937-07-19  
**Map UTM Zone UTM Easting UTM Northing Survey Site Name Notes # Dot ID #**  
82G09 11 686950 5490850 Hillcrest Mountain 17 835  
***Linanthus septentrionalis* linanthus** SRank: S2  
+++++

**Element Code:** PDPLM09120 **Occurrence Code #:** 003 **Survey Date:** 1970-05-31  
**Last Observed:** 1970-05-31 **First Observed:** 1970-05-31 **Precision Code:** M  
**Directions:** Lake Newell, East side of. Kinbrook Island Provincial Park  
**General Description:** Pasture Land  
**Min Elev. (m):** 760 **Max Elev. (m):** 760 **Best Source of Info:** S70HALUCABCA01  
**Specimen Source Code Collector Herbarium Accession # Date ID OK? Observation Detail**  
S70HALUCABCA01 Hallworth, B.M. UC 21847 1970-05-31  
**Map UTM Zone UTM Easting UTM Northing Survey Site Name Notes # Dot ID #**  
72L05 12 435400 5588750 Kinbrook Island Provincial Park 1 183  
***Linanthus septentrionalis* linanthus** SRank: S2  
+++++

**Element Code:** PDPLM09120 **Occurrence Code #:** 004 **Survey Date:** 1953-07-16  
**Last Observed:** 1953-07-16 **First Observed:** 1953-07-16 **Precision Code:** M  
**Directions:** Mount Glendowan  
**General Description:** Disturbed soil around ground squirrel burrows.  
**Min Elev. (m):** 1525 **Max Elev. (m):** 1525 **Aspect:** S **Best Source of Info:** S53BREUAABCA72  
**Specimen Source Code Collector Herbarium Accession # Date ID OK? Observation Detail**  
S53BREUAABCA72 Breitung, A.J. UA 14666 1953-07-16  
**Map UTM Zone UTM Easting UTM Northing Survey Site Name Notes # Dot ID #**  
82G01 11 715100 5448100 Mt. Glendowan 135 566  
***Linanthus septentrionalis* linanthus** SRank: S2  
+++++

**Element Code:** PDPLM09120 **Occurrence Code #:** 005 **Survey Date:** 1996-07-10  
**Last Observed:** 1996-07-10 **First Observed:** 1996-07-10 **Precision Code:** S  
**Directions:** Waterton Lakes National Park; Mt. Galwey; Crandell campground, S. slope above; enclosure fence, ca. 10 m E of  
**General Description:** seasonal seepage area over bedrock ledges in fescue grassland  
**Min Elev. (m):** 1700 **Max Elev. (m):** 1700 **Aspect:** S **Size of Occurrence:** 1.00 **Best Source of Info:** PNDWAL01ABCA  
**Map UTM Zone UTM Easting UTM Northing Survey Site Name Notes # Dot ID #**  
82H04 12 285225 5443925 Mt. Galwey 539 1307  
**Linanthus septentrionalis** linanthus SRank: S2  
+++++

**Element Code:** PDPLM09120 **Occurrence Code #:** 006 **Survey Date:** 1985-05-28  
**Last Observed:** 1985-05-28 **First Observed:** 1985-05-28 **Actual Mapping Precision (m):** 400 **Precision Code:** M  
**Directions:** Onefour, 8 km S of; Lost River, 1.5 km NE of.  
**General Description:** seasonally moist slight depression in grassland  
**Min Elev. (m):** 906 **Max Elev. (m):** 906 **Best Source of Info:** S85WALUAABCA06  
**Specimen Source Code Collector Herbarium Accession # Date ID OK? Observation Detail**  
S85WALUAABCA06 Wallis, C. UA 098405 1985-05-28 Y rare; flowers  
**Map UTM Zone UTM Easting UTM Northing Survey Site Name Notes # Dot ID #**  
72E01 12 538625 5432975 Lost River 52 4553  
**Source Code Author Publisher Year Title**  
R86WERO1ABCA Wershler C. & C. Wallis 1986 Lost River Significant Features Assessment  
**Linanthus septentrionalis** linanthus SRank: S2  
+++++

**Element Code:** PDPLM09120 **Occurrence Code #:** 007 **Survey Date:** 1990-06-23  
**Last Observed:** 1990-06-23 **First Observed:** 1990-06-23 **Actual Mapping Precision (m):** 250 **Precision Code:** S  
**Directions:** Chappice Lake; ~3.6km NE of; Hwy 41; ~150m W of.  
**General Description:** Moist prairie; bottom of SW facing; down in fields. Abundant only in this area, Other species:Collomia,  
Plantago patagonia,  
Hedeoma.  
**Min Elev. (m):** 754 **Max Elev. (m):** 754 **Best Source of Info:** S90HUDNMONCA03  
**Specimen Source Code Collector Herbarium Accession # Date ID OK? Observation Detail**  
S90HUDNMONCA03 Hudson, J.H. NM none 1990-06-23 corolla white; abundant just here  
**Map UTM Zone UTM Easting UTM Northing Survey Site Name Notes # Dot ID #**  
72L01 12 549400 5559150 Chappice Lake LSD:7 in 23-14-W of the 4th. 4 4119  
**Linanthus septentrionalis** linanthus SRank: S2  
+++++

**Element Code:** PDPLM09120 **Occurrence Code #:** 008 **Survey Date:** 1894-06-25  
**Last Observed:** 1894-06-25 **First Observed:** 1894-06-25 **Actual Mapping Precision (m):** 2000 **Precision Code:** M  
**Directions:** Medicine Hat; Police Point.  
**General Description:** depressions in the prairie  
**Min Elev. (m):** 650 **Max Elev. (m):** 650 **Best Source of Info:** S94MACNMONCA06  
**Specimen Source Code Collector Herbarium Accession # Date ID OK? Observation Detail**  
S94MACNMONCA06 Macoun NM none 1894-06-25  
**Map UTM Zone UTM Easting UTM Northing Survey Site Name Notes # Dot ID #**  
72L02 12 525800 5543150 Medicine Hat Lat/Long: 50 03/110 38 2 169  
**Linanthus septentrionalis** linanthus SRank: S2  
+++++

**Element Code:** PDPLM09120 **Occurrence Code #:** 009 **Survey Date:** 1989-06-27  
**Last Observed:** 1989-06-27 **First Observed:** 1989-06-27 **Actual Mapping Precision (m):** 2500 **Precision Code:** M  
**Directions:** Pakowki Sand Dunes; SW of Orion.  
**General Description:** dry sandy prairie dominated by Stipa comata.  
**Min Elev. (m):** 880 **Max Elev. (m):** 880 **Best Source of Info:** S89HRAPMABCA06  
**Specimen Source Code Collector Herbarium Accession # Date ID OK? Observation Detail**  
S89HRAPMABCA06 Hrapko, J.O., Laird, L.D. PM B89.13.5 1989-06-27 Y  
**Map UTM Zone UTM Easting UTM Northing Survey Site Name Notes # Dot ID #**  
72E07 12 509873 5471783 Pakowki Sand Dunes Lat/Long: 49 24/110 52 2 83  
**Linanthus septentrionalis** linanthus SRank: S2

***Lobelia spicata* spiked lobelia**

**Natural Region:** Northern Fescue Grassland

**Habitat:** Wetland-Meadow

**Phenology:** flowers in late July

**Specific Search Strategies (if any):** do a series of extensive searches of wetlands in this area through late July, perhaps a sandy component is required?

**Element Occurrences:**

**Element Code:** PDCAM0E190 **Occurrence Code #:** 001 **Survey Date:** 1923-07-24

**Last Observed:** 1923-07-24 **First Observed:** 1923-07-24 **Actual Mapping Precision (m):** 900 **Precision Code:** M

**Directions:** Clear Lake, 4.5 km WSW of; Victoria Lake, 1.5 km SE of.

**General Description:** low spots

**Min Elev. (m):** 820 **Max Elev. (m):** 820

**Other Comments:** Elevation has been changed from 777 m to 820 m. **Best Source of Info:** S23AHBACONCA01

**Specimen Source Code Collector Herbarium Accession # Date ID OK? Observation Detail**

S23AHBACONCA01 A.B.H. AC 1133 1923-07-24

**Map UTM Zone UTM Easting UTM Northing Survey Site Name Notes # Dot ID #**

82P16 12 416700 5736250 Victoria Lake Loc 3 E Sec28 32-16 W4 6 3806

***Lobelia spicata* spiked lobelia** SRank: S1

**Lomatogonium rotatum marsh felwort**

**Natural Region:** Northern Fescue Grassland, Foothills Fescue Grassland, Dry Mixedgrass

**Habitat:** Wetland

**Phenology:** flowers in August

**Specific Search Strategies (if any):** easiest to detect when water levels are lower in August and September; springy wet meadows where there is wet soil or some standing water

**Element Occurrences:**

**Element Code:** PDGEN0C010 **Occurrence Code #:** 001 **Survey Date:** 1987-08-15  
**Last Observed:** 1987-08-15 **First Observed:** 1987-08-15 **Precision Code:** S  
**Directions:** Aspen Parkland; Mirror Valley, 6 miles NNW of; Spotted Creek, tributary valley of; Walley Quapp farm.  
**General Description:** Wet meadow  
**Min Elev. (m):** 825 **Max Elev. (m):** 825 **Best Source of Info:** S87BIRCFABCA02  
**Specimen Source Code Collector Herbarium Accession # Date ID OK? Observation Detail**  
S87BIRCFABCA02 Bird, C.D. CF 80733 1987-08-15  
**Map UTM Zone UTM Easting UTM Northing Survey Site Name Notes # Dot ID #**  
83A11 12 353750 5824300 Spotted Creek 1 2321  
**Lomatogonium rotatum** marsh felwort SRank: S2  
+++++

**Element Code:** PDGEN0C010 **Occurrence Code #:** 003 **Survey Date:** 1978-08-23  
**Last Observed:** 1978-08-23 **First Observed:** 1978-08-23 **Precision Code:** M  
**Directions:** SW Porcupine Hills, in the; Big Coulee Creek, near.  
**General Description:** flat, low moist open area. Other species include Juncus, hairgrass, sedges, gentians, wheatgrass  
**Min Elev. (m):** 1355 **Max Elev. (m):** 1355 **Best Source of Info:** S78CORUCABCA02  
**Specimen Source Code Collector Herbarium Accession # Date ID OK? Observation Detail**  
S78CORUCABCA02 Corbin, J., D. Jaques, & P. Jonker UC 44419 1978-08-23  
**Map UTM Zone UTM Easting UTM Northing Survey Site Name Notes # Dot ID #**  
82C07 11 654750 5694850 Big Coulee Creek 14 2197  
**Lomatogonium rotatum** marsh felwort SRank: S2  
+++++

**Element Code:** PDGEN0C010 **Occurrence Code #:** 004 **Survey Date:** 1976-08-19  
**Last Observed:** 1976-08-19 **First Observed:** 1976-08-14 **Actual Mapping Precision (m):** 1600 **Precision Code:** M  
**Directions:** Jasper N.P.; Talbot Lake, across of NW; Jasper Lake, N side of.  
**General Description:** brackish marsh  
**Min Elev. (m):** 1005 **Max Elev. (m):** 1005 **Best Source of Info:** S76SHAUAABCA01  
**Specimen Source Code Collector Herbarium Accession # Date ID OK? Observation Detail**  
S76SHAJPABCA01 Sharp, D.D. JP none 1976-08-18 Y flowers, fruits  
S76SHAUAABCA01 Sharp, D.D. UA 83907 1976-08-14  
S76SHAUAABCA02 Sharp, D.D. UA 83908 1976-08-14  
S76SHAUAABCA03 Sharp, D.D. UA 83909 1976-08-19  
**Map UTM Zone UTM Easting UTM Northing Survey Site Name Notes # Dot ID #**  
83E01 11 431000 5883700 Jasper Lake Lat/Long: 53 06/118 01 43 2924  
**Lomatogonium rotatum** marsh felwort SRank: S2  
+++++

**Element Code:** PDGEN0C010 **Occurrence Code #:** 005 **Survey Date:** 1958-08-12  
**Last Observed:** 1958-08-12 **First Observed:** 1958-08-12 **Precision Code:** M  
**Directions:** Jasper townsite, E of.  
**General Description:** boggy ground in river valley  
**Min Elev. (m):** 1050 **Max Elev. (m):** 1050 **Best Source of Info:** S58MOSUAABCA15  
**Specimen Source Code Collector Herbarium Accession # Date ID OK? Observation Detail**  
S58MOSUAABCA15 Moss, E.H. & P. Seymour UA 14473 1958-08-12  
**Map UTM Zone UTM Easting UTM Northing Survey Site Name Notes # Dot ID #**  
83D16 11 428250 5859650 Jasper Townsite 63 2862  
**Lomatogonium rotatum** marsh felwort SRank: S2  
+++++

**Element Code:** PDGEN0C010 **Occurrence Code #:** 006 **Survey Date:** 1950-08-27  
**Last Observed:** 1950-08-27 **First Observed:** 1950-08-27 **Precision Code:** M  
**Directions:** Jasper townsite, few mi E of; Athabasca River, near bridge on.  
**General Description:** low, wet, calcareous area near tote road  
**Min Elev. (m):** 1020 **Max Elev. (m):** 1020 **Best Source of Info:** S50MOSACONCA01  
**Specimen Source Code Collector Herbarium Accession # Date ID OK? Observation Detail**  
S50MOSACONCA01 Moss, E.H. AC 148976 1950-08-27  
S50MOSUAABCA04 Moss, E.H. UA 49284 1950-08-27  
S50MOSUAABCA05 Moss, E.H. UA 63806 1950-08-27 Y [flowers]  
**Map UTM Zone UTM Easting UTM Northing Survey Site Name Notes # Dot ID #**  
83D16 11 429050 5862700 Edith Lake 91 2877  
**Lomatogonium rotatum** marsh felwort SRank: S2  
+++++

**Element Code:** PDGEN0C010 **Occurrence Code #:** 007 **Survey Date:** 1978-08-23  
**Last Observed:** 1978-08-23 **First Observed:** 1978-08-23 **Actual Mapping Precision (m):** 100 **Precision Code:** S  
**Directions:** Oldman River & Big Coulee junction, 4.5 km N of.  
**General Description:** Low, moist and open area; other species included: Juncus, hairgrass, sedges, gentians, wheat grasses.  
**Min Elev. (m):** 1356 **Max Elev. (m):** 1356 **Best Source of Info:** S78JAQUCABCA04  
**Specimen Source Code Collector Herbarium Accession # Date ID OK? Observation Detail**  
S78JAQUCABCA04 Jaques, Dennis & Peter Jonker UC 44419 1978-08-23 Y blooming  
**Map UTM Zone UTM Easting UTM Northing Survey Site Name Notes # Dot ID #**  
82G16 11 704100 5525300 Big Coulee 11 UQF 041253 1 878  
**Lomatogonium rotatum** marsh felwort SRank: S2  
+++++

**Element Code:** PDGEN0C010 **Occurrence Code #:** 008 **Survey Date:** 1945-09-03  
**Last Observed:** 1945-09-03 **First Observed:** 1945-09-03 **Actual Mapping Precision (m):** 400 **Precision Code:** M  
**Directions:** Calgary; S.A.I.T.  
**General Description:** On the edge of a temporary slough in a grassy depression.  
**Min Elev. (m):** 1090 **Max Elev. (m):** 1090 **Best Source of Info:** S45BARUCABCA01  
**Specimen Source Code Collector Herbarium Accession # Date ID OK? Observation Detail**  
S45BARUCABCA01 Barclay, M.B. UC 21682 1945-09-03 Y blooming  
**Map UTM Zone UTM Easting UTM Northing Survey Site Name Notes # Dot ID #**  
82O01 11 704000 5660850 Calgary - S.A.I.T. 8 1859  
**Lomatogonium rotatum** marsh felwort SRank: S2  
+++++

**Element Code:** PDGEN0C010 **Occurrence Code #:** 009 **Survey Date:** 1906-08-17  
**Last Observed:** 1906-08-17 **First Observed:** 1906-07-18 **Actual Mapping Precision (m):** 2500 **Precision Code:** M  
**Directions:** Irma; ~4 km SE of; Grattan Creek; ~750 m N of; CN Railline; along.  
**Min Elev. (m):** 671 **Max Elev. (m):** 671 **Best Source of Info:** S06MACACONCA01  
**Specimen Source Code Collector Herbarium Accession # Date ID OK? Observation Detail**  
S06MACACONCA01 Macoun, J. & W. Herriot AC 140414 1906-08-17  
**Map UTM Zone UTM Easting UTM Northing Survey Site Name Notes # Dot ID #**  
73D14 12 488650 5860375 Grattan Creek 3 4153  
**Lomatogonium rotatum** marsh felwort SRank: S2  
+++++

**Element Code:** PDGEN0C010 **Occurrence Code #:** 010 **Survey Date:** 1928-08-20  
**Last Observed:** 1928-08-21 **First Observed:** 1928-08-21 **Precision Code:** M  
**Directions:** Raup Lake, 3.25 km SE of.  
**General Description:** Birch musky  
**Min Elev. (m):** 750 **Max Elev. (m):** 750 **Best Source of Info:** S28RAUNMONCA02  
**Specimen Source Code Collector Herbarium Accession # Date ID OK? Observation Detail**  
S28RAUNMONCA02 Raup, H.M. NM none 1928-08-21  
**Map UTM Zone UTM Easting UTM Northing Survey Site Name Notes # Dot ID #**  
74M12 12 447175 6616075 Raup Lake 59 41N, 111 56 W 1 4079  
**Lomatogonium rotatum** marsh felwort SRank: S2  
+++++



**Element Code:** PDGEN0C010 **Occurrence Code #:** 011 **Survey Date:** 1997-00-00  
**Last Observed:** 1997-00-00 **First Observed:** 1955-00-00 **Actual Mapping Precision (m):** 600 **Precision Code:** M  
**Directions:** Penhold;alkali flat; near SE corner of.  
**General Description:** Pakowki Lake, 3 km SE of.  
**Min Elev. (m):** 953 **Max Elev. (m):** 953  
**Other Comments:** Cattle pasture since 1948 +. Specimen collected. **Best Source of Info:** U97HAR02ABCA  
**Map UTM Zone UTM Easting UTM Northing Survey Site Name Notes # Dot ID #**  
83A04 12 311225 5770900 Penhold TWP:36, RGE:27, W:4, Section:2 4 4346  
**Source Code Author Publisher Year Title**  
U97HAR02ABCA Harris,Helen and Herbert 1997 Rare Native Plant Survey Form  
**Lomatogonium rotatum** marsh felwort SRank: S2

**Lupinus minimus** least lupine

**Natural Region:** Foothills Fescue Grassland

**Habitat:** Grassland

**Phenology:** late June-early July

**Specific Search Strategies (if any):** may be best included with southwest mountains work; may barely extend into the foothills fescue

**Element Occurrences:**

**Element Code:** PDFAB2B2N0 **Occurrence Code #:** 001 **Survey Date:** 1956-07-06

**Last Observed:** 1956-07-06 **First Observed:** 1956-07-06 **Precision Code:** M

**Directions:** Coleman, about 7 mi N of; Highwood Pass Rd, Mtn W of.

**General Description:** stony slope

**Min Elev. (m):** 1980 **Max Elev. (m):** 1980 **Best Source of Info:** S56PORNMONCA19

**Specimen Source Code Collector Herbarium Accession # Date ID OK? Observation Detail**

S56PORNMONCA19 Porsild, A.E. & Lid, L. NM 284183 1956-07-06

**Map UTM Zone UTM Easting UTM Northing Survey Site Name Notes # Dot ID #**

82G09 11 680750 5510050 Coleman 13 832

**Lupinus minimus** least lupine SRank: S1

+++++

**Element Code:** PDFAB2B2N0 **Occurrence Code #:** 002 **Survey Date:** 1969-06-30

**Last Observed:** 1969-06-30 **First Observed:** 1969-05-20 **Precision Code:** S

**General Description:** open grassland on E slope; near crest; damp

**Min Elev. (m):** 1310 **Max Elev. (m):** 1310 **Best Source of Info:** S69BLANMONCA41

**Specimen Source Code Collector Herbarium Accession # Date ID OK? Observation Detail**

S69BLANMONCA39 Blais & Nagy NM 340025 1969-05-20

S69BLANMONCA40 Blais & Nagy NM 340024 1969-05-20

S69BLANMONCA41 Blais & Nagy NM 340001 1969-06-30

S69BLANMONCA42 Blais & Nagy NM 336080 1969-06-11

**Map UTM Zone UTM Easting UTM Northing Survey Site Name Notes # Dot ID #**

82H04 12 287550 5438000 Interpretive parking lot 134 1078

**Lupinus minimus** least lupine SRank: S1

+++++

**Element Code:** PDFAB2B2N0 **Occurrence Code #:** 003 **Survey Date:** 1971-06-17

**Last Observed:** 1971-06-17 **First Observed:** 1971-06-17 **Actual Mapping Precision (m):** 250 **Precision Code:** S

**Directions:** Waterton Lakes National Park; Pass Creek, 0.2 mi S of; Red Rock Canyon road and townsite, between

**Min Elev. (m):** 1280 **Max Elev. (m):** 1280

**Other Comments:** id'd by Scott as *L. sericeus*; annot. to *L. minimus* by JM Gillett included in *L. lepidus* folder in UA herbarium with annot. label **Best Source of Info:** S71SCOUAABCA28

**Specimen Source Code Collector Herbarium Accession # Date ID OK? Observation Detail**

S71SCOUAABCA28 Scott, P.J. UA 37922 1971-06-17 ? flowers

**Map UTM Zone UTM Easting UTM Northing Survey Site Name Notes # Dot ID #**

82H04 12 289600 5439500 Lonesome Lake 205 1129

**Lupinus minimus** least lupine SRank: S1

+++++

**Element Code:** PDFAB2B2N0 **Occurrence Code #:** 004 **Survey Date:** 1997-06-26

**Last Observed:** 1997-06-26 **First Observed:** 1997-06-26 **Actual Mapping Precision (m):** 250 **Precision Code:** S

**Directions:** W side of Fish Lake; ~1.2km SW of.

**General Description:** Bearberry/ Limber pine and Rock, *Dryas octopetala*, *Arcto. uva.*, *Ante.*, *Bess wyo*, *Saxi bron.*, *Erig comp.*, *Oxytseri.* Moisture: dry. Specimen collected.

**Min Elev. (m):** 1626 **Max Elev. (m):** 1626 **Best Source of Info:** U97BUS01ABCA

**Map UTM Zone UTM Easting UTM Northing Survey Site Name Notes # Dot ID #**

82G08 11 717025 5468574 Fish Lake NW 25 4-1-5 LSD14 11U, TWP 4 RGE 1 W5M, Section 36, LSD 2-on S perimeter. 45 3899

**Source Code Author Publisher Year Title**

U97BUS01ABCA Bush, Dana 1997 Crowsnest pipeline survey - Rare Plant Survey Form

**Lupinus minimus** least lupine SRank: S1

+++++

**Element Code:** PDFAB2B2N0 **Occurrence Code #:** 005 **Survey Date:** 1997-06-24  
**Last Observed:** 1997-06-24 **First Observed:** 1997-06-24 **Actual Mapping Precision (m):** 250 **Precision Code:** S  
**Directions:** Mt. Backus; between Kylo Hill and; W. Castle river; ~3km E of.  
**General Description:** Exposed grassy ridge- E slope. Upper slopes rocky.  
**Min Elev. (m):** 1554 **Max Elev. (m):** 1554 **Best Source of Info:** U97AXY04ABCA  
**Map UTM Zone UTM Easting UTM Northing Survey Site Name Notes # Dot ID #**  
82G08 11 697137 5481265 Mt. Backus 49-27.24N; 114-16.793W 73 3940  
**Source Code Author Publisher Year Title**  
U97AXY04ABCA AXYS Environmental Consulting Ltd. 1997 Crowsnest Pipeline - CP 378  
**Lupinus minimus** least lupine SRank: S1  
+++++

**Element Code:** PDFAB2B2N0 **Occurrence Code #:** 006 **Survey Date:** 1997-06-27  
**Last Observed:** 1997-06-27 **First Observed:** 1997-06-27 **Actual Mapping Precision (m):** 250 **Precision Code:** S  
**Directions:** S end Beauvais Lake; ~4 km SW of; Mill Creek; ~2.2 km E of.  
**General Description:** off RoW to W on exposed ridge  
**Min Elev. (m):** 1554 **Max Elev. (m):** 1554 **Best Source of Info:** U97AXY04ABCA  
**Map UTM Zone UTM Easting UTM Northing Survey Site Name Notes # Dot ID #**  
82G08 11 708601 5473600 Beauvais Lake 49-22.879N; 114-7.555W 19 3916  
**Source Code Author Publisher Year Title**  
U97AXY04ABCA AXYS Environmental Consulting Ltd. 1997 Crowsnest Pipeline - CP 378  
**Lupinus minimus** least lupine SRank: S1  
+++++

**Element Code:** PDFAB2B2N0 **Occurrence Code #:** 007 **Survey Date:** 1999-06-29  
**Last Observed:** 1999-06-30 **First Observed:** 1990-06-30 **Actual Mapping Precision (m):** 25 **Precision Code:** S  
**Directions:** Beaver Mines, 3.5 km NNW of; Mt. Backus, 3.75 km NE of.  
**General Description:** dry, windy ridge with thin turfy topsoil. Dant par, Fest sca, Koel mac, Oxyt mon, Bess wyo, Pote coc, Ante par, Anem mul, Poa cusii. site 2- on crest of ridge with shallow turfy soil and high diversity of forbs  
**Min Elev. (m):** 1403 **Max Elev. (m):** 1403 **Aspect:** S  
**Other Comments:** appears to thrive in windy sites with thin turfy soil; was not found on similar ridge N of creek with thicker soils (lots of Fest sca) or higher on ridge with larger pieces of shifting shale **Best Source of Info:** U99BUS02ABCA  
**Map UTM Zone UTM Easting UTM Northing Survey Site Name Notes # Dot ID #**  
82G08 11 699600 5482200 Mt. Backus 9-7-6-2 W5M 195 5468  
**Source Code Author Publisher Year Title**  
U99BUS02ABCA Bush, Dana 1999 Axys Environmental Consulting Ltd.- Rare Native Plant Report Forms  
**Date Source Abstract Code Observer Occurrence Data**  
1999-06-29 U99BUS02ABCA Dana Bush approx. 80 plants in 100 m x 100 m area. not all possib. sites checked.  
**Lupinus minimus** least lupine SRank: S1

**Lycopus americanus** American water-horehound

**Natural Region:** Foothills Fescue Grassland, Mixedgrass, Dry Mixedgrass

**Habitat:** Wetland-Springs

**Phenology:** late June to July

**Specific Search Strategies (if any):** wooded springy areas, especially within sand dune or sand plain settings; occasionally along moist riparian channels of rivers

**Element Occurrences:**

**Element Code:** PDLAM0X010 **Occurrence Code #:** 001 **Survey Date:** 1983-07-00

**Last Observed:** 1983-07-00 **First Observed:** 1983-05-00 **Precision Code:** S

**Directions:** Wainwright Study Area

**Min Elev. (m):** 662 **Max Elev. (m):** 662 **Best Source of Info:** R84FEH01ABCA

**Map UTM Zone UTM Easting UTM Northing Survey Site Name Notes # Dot ID #**

73D10 12 525500 5826000 David Lake Vegetation Plot AF83043 & 45 13 280

**Source Code Author Publisher Year Title**

R84FEH01ABCA Fehr, A.W. Alberta Energy and Natural Resources 1984 Wainwright Study Area: A Biophysical Inventory

**Lycopus americanus** American water-horehound SRank: S2

+++++

**Element Code:** PDLAM0X010 **Occurrence Code #:** 002 **Survey Date:** 1983-07-00

**Last Observed:** 1983-07-00 **First Observed:** 1983-05-00 **Precision Code:** S

**Directions:** Wainwright Study Area.

**Min Elev. (m):** 659 **Max Elev. (m):** 659 **Best Source of Info:** R84FEH01ABCA

**Map UTM Zone UTM Easting UTM Northing Survey Site Name Notes # Dot ID #**

73D10 12 525400 5825700 David Lake Veg. plot AF83045. 32 299

**Source Code Author Publisher Year Title**

R84FEH01ABCA Fehr, A.W. Alberta Energy and Natural Resources 1984 Wainwright Study Area: A Biophysical Inventory **Lycopus**

**americanus** American water-horehound SRank: S2

+++++

**Element Code:** PDLAM0X010 **Occurrence Code #:** 003 **Survey Date:** 1973-07-14

**Last Observed:** 1973-07-14 **First Observed:** 1973-07-14 **Actual Mapping Precision (m):** 1500 **Precision Code:** M

**Directions:** Wainwright area; Arm Lake

**Min Elev. (m):** 686 **Max Elev. (m):** 686 **Best Source of Info:** S73KLAUAABCA02

**Specimen Source Code Collector Herbarium Accession # Date ID OK? Observation Detail**

S73KLAUAABCA02 Klar, Andrew UA 80426 1973-07-14 Y buds, flowers

**Map UTM Zone UTM Easting UTM Northing Survey Site Name Notes # Dot ID #**

73D10 12 528000 5843000 Arm Lake 52 44/110 35 37 304

**Lycopus americanus** American water-horehound SRank: S2

+++++

**Element Code:** PDLAM0X010 **Occurrence Code #:** 004 **Survey Date:** 1976-07-00

**Last Observed:** 1976-07-00 **First Observed:** 1976-07-00 **Actual Mapping Precision (m):** 2000 **Precision Code:** M

**Directions:** Canadian Force Base Suffield; Drowning Ford.

**General Description:** Moist depression near the edge (low banks) of the river.

**Min Elev. (m):** 617 **Max Elev. (m):** 617 **Best Source of Info:** S76JAQUCABCA02

**Specimen Source Code Collector Herbarium Accession # Date ID OK? Observation Detail**

S76JAQUCABCA02 Jaques, D. & J. Corbin UC 42849 1976-07-00 Y blooming

**Map UTM Zone UTM Easting UTM Northing Survey Site Name Notes # Dot ID #**

72L07 12 529950 5589700 Drowning Ford 50 27/110 34 1 186

**Lycopus americanus** American water-horehound SRank: S2

+++++

**Element Code:** PDLAM0X010 **Occurrence Code #:** 005 **Survey Date:** 1957-07-31  
**Last Observed:** 1957-07-31 **First Observed:** 1940-08-30 **Precision Code:** M  
**Directions:** North Saskatchewan River; near mouth of Sturgeon River  
**General Description:** shore  
**Min Elev. (m):** 587 **Max Elev. (m):** 602 **Best Source of Info:** S57TURACONCA03  
**Specimen Source Code Collector Herbarium Accession # Date ID OK? Observation Detail**  
S40TURACONCA01 Turner, G.H. AC 419148 1940-08-30  
S40TURACONCA02 Turner, G.H. AC 419147 1940-08-30  
S41TURACONCA05 Turner, G.H. AC 419150 1941-07-21  
S57TURACONCA03 Turner, G.H. AC 419152 1957-07-31  
**Map UTM Zone UTM Easting UTM Northing Survey Site Name Notes # Dot ID #**  
83H14 12 357000 5960000 Sturgeon River 1 3360  
**Lycopus americanus** American water-horehound SRank: S2  
+++++

**Element Code:** PDLAM0X010 **Occurrence Code #:** 006 **Survey Date:** 1996-00-00  
**Last Observed:** 1996-00-00 **First Observed:** 1996-00-00 **Actual Mapping Precision (m):** 600 **Precision Code:** M  
**Directions:** Bassano, 15 km E of; CPR, 3.5 km N of.  
**General Description:** creek margin; marsh fringe; flat alkaline plain with creek; along shoreline; hygic marsh of Wire Rush, Common Tall Manna  
Grass, Woolly Sedge, Tufted Hair Grass, Foxtail Barley, Sandbar Willow  
**Min Elev. (m):** 747 **Max Elev. (m):** 747  
**Other Comments:** over 20 plants in a 0.5X15m area  
**Management Comments:** grazing pressure may reduce or destroy population; alteration of drainage pattern **Best Source of Info:** U98FRY01ABCA  
**Map UTM Zone UTM Easting UTM Northing Survey Site Name Notes # Dot ID #**  
82I16 12 412450 5629000 Bassano SE 26/ SW 25 21-17-4 1 4621  
**Source Code Author Publisher Year Title**  
U98FRY01ABCA Fryer, Gina 1998 Memo from Gina Fryer to John Rintoul: rare plant locations for the Palliser Pipeline Project  
**Lycopus americanus** American water-horehound SRank: S2  
+++++

**Element Code:** PDLAM0X010 **Occurrence Code #:** 007 **Survey Date:** 1996-00-00  
**Last Observed:** 1996-00-00 **First Observed:** 1996-00-00 **Actual Mapping Precision (m):** 600 **Precision Code:** M  
**Directions:** Medicine Hat, 20 km NNE of city center; South Saskatchewan River, ravine of  
**General Description:** ravine basin, subhygic loam, in a wet meadow with tall shrubs of River Birch, Yellow Willow, Wolly Sedge, Northern Willowherb, Wild Licorice, Late Goldenrod, Narrow-leaved Goldenrod [community SF6-F1]  
**Min Elev. (m):** 736 **Max Elev. (m):** 736  
**Other Comments:** approx. 20 plants along the stream course in a 3X20 m area  
**Management Comments:** grazing pressure may reduce or destroy population; alteration of drainage pattern **Best Source of Info:** U98FRY01ABCA  
**Map UTM Zone UTM Easting UTM Northing Survey Site Name Notes # Dot ID #**  
72L02 12 526800 5561200 Old Channel Lake NE 28-14-5-4 27 4228  
**Source Code Author Publisher Year Title**  
U98FRY01ABCA Fryer, Gina 1998 Memo from Gina Fryer to John Rintoul: rare plant locations for the Palliser Pipeline Project  
**Lycopus americanus** American water-horehound SRank: S2  
+++++

**Element Code:** PDLAM0X010 **Occurrence Code #:** 008 **Survey Date:** 1994-08-29  
**Last Observed:** 1994-08-29 **First Observed:** 1994-08-29 **Actual Mapping Precision (m):** 250 **Precision Code:** S  
**Directions:** CFB Suffield; Medicine Hat; 46km N of, Fish Creek Area; Francis Peak, 6 km SE of  
**General Description:** river back slope, submesic meadow of Agro tra, Ascl spe, Xant str, Elym can, Soli gig, Glyc lep, Lyco asp, Poa com, Arte abs.  
**Min Elev. (m):** 615 **Max Elev. (m):** 635 **Best Source of Info:** U97CWS01ABCA  
**Specimen Source Code Collector Herbarium Accession # Date ID OK? Observation Detail**  
S94MACPMABCA26 Macdonald, I.D. PM B94.4.634 1994-08-29 Y  
**Map UTM Zone UTM Easting UTM Northing Survey Site Name Notes # Dot ID #**  
72L07 12 528500 5579400 Twin Peaks UTM WL ca 528500 / 5579400; 50-22'05"N/110-35'55"W 14 199  
**Source Code Author Publisher Year Title**  
U97CWS01ABCA Canadian Wildlife Service CWS 1997 Plant Database from Suffield Survey 1994-1995  
**Lycopus americanus** American water-horehound SRank: S2  
+++++

**Element Code:** PDLAM0X010 **Occurrence Code #:** 009 **Survey Date:** 1994-06-18  
**Last Observed:** 1994-06-18 **First Observed:** 1994-06-18 **Actual Mapping Precision (m):** 250 **Precision Code:** S  
**Directions:** CFB Suffield; Medicine Hat; 70 km NNE of; Ypres Area; Dishpan Lake; 9 km E of.  
**General Description:** eroded slope; hygic runoff slope meadow of Carex aquatilis; Juncus balticus; J.longistylis; Poa palustris.  
**Min Elev. (m):** 595 **Max Elev. (m):** 670  
**Other Comments:** Duplicate sheet with same coll # Access # B94.4.129B. **Best Source of Info:** U97CWS01ABCA  
**Specimen Source Code Collector Herbarium Accession # Date ID OK? Observation Detail**  
S94MACPMABCA22 Macdonald, I.D. PM B94.4.129A 1994-06-18 Y  
**Map UTM Zone UTM Easting UTM Northing Survey Site Name Notes # Dot ID #**  
72L09 12 542500 5603400 Middle Sand Hills 50-34'55"N/110-24'05"W 1 215  
**Source Code Author Publisher Year Title**  
R97MAC01ABCA Macdonald, I.D. Canadian Wildlife Service, Environment Canada, Prairie and 1997 Vascular Flora of Canadian Forces Base Suffield National Wildlife Area  
U97CWS01ABCA Canadian Wildlife Service CWS 1997 Plant Database from Suffield Survey 1994-1995  
**Lycopus americanus** American water-horehound SRank: S2  
+++++

**Element Code:** PDLAM0X010 **Occurrence Code #:** 010 **Survey Date:** 1994-06-20  
**Last Observed:** 1994-06-20 **First Observed:** 1994-06-20 **Actual Mapping Precision (m):** 250 **Precision Code:** S  
**Directions:** CFB Suffield; 47 km N of Medicine Hat; Ypres Area; 4 km S of Watching Hill; vicinity of Sherwood Forest.  
**General Description:** rip backshore slope, subhygic successional meadow of Agro rep, Poa pal, Phal aru, Sali exi, Pote ans, Care lan, Equi arv, Scir pun, Ment arv, L. ame, Lyco asp.  
**Min Elev. (m):** 615 **Max Elev. (m):** 615 **Best Source of Info:** U97CWS01ABCA  
**Specimen Source Code Collector Herbarium Accession # Date ID OK? Observation Detail**  
S94MACPMABCA23 Macdonald, I.D. PM B94.4.221A 1994-06-20 Y  
**Map UTM Zone UTM Easting UTM Northing Survey Site Name Notes # Dot ID #**  
72L07 12 529850 5590075 CFB-Suffield 50-27'50"N/110-34'50"W 30 4332  
**Source Code Author Publisher Year Title**  
U97CWS01ABCA Canadian Wildlife Service CWS 1997 Plant Database from Suffield Survey 1994-1995  
**Lycopus americanus** American water-horehound SRank: S2  
+++++

**Element Code:** PDLAM0X010 **Occurrence Code #:** 011 **Survey Date:** 1994-06-29  
**Last Observed:** 1994-06-29 **First Observed:** 1994-06-29 **Actual Mapping Precision (m):** 250 **Precision Code:** S  
**Directions:** CFB Suffield; 22km NNE of Medicine Hat; Fish Creek Area; Bull Pen;.  
**General Description:** backshore of River terrace, subsuccessional meadow of Agro tra, Hord jub, Equi lae, Xant str, Phal aru, Ment arv, Soli gig, Ascl spe, Medicago.  
**Min Elev. (m):** 630 **Max Elev. (m):** 630  
**Other Comments:** Duplicate sheet with same coll#. Access # B94.4.371B **Best Source of Info:** U97CWS01ABCA  
**Specimen Source Code Collector Herbarium Accession # Date ID OK? Observation Detail**  
S94MACPMABCA24 Macdonald, I.D. PM B94.4.371A 1994-06-29 Y  
**Map UTM Zone UTM Easting UTM Northing Survey Site Name Notes # Dot ID #**  
72L07 12 526550 5566550 CFB Suffield 50-15'05"N/110-37'40"W 22 4252  
**Source Code Author Publisher Year Title**  
U97CWS01ABCA Canadian Wildlife Service CWS 1997 Plant Database from Suffield Survey 1994-1995  
**Lycopus americanus** American water-horehound SRank: S2  
+++++

**Element Code:** PDLAM0X010 **Occurrence Code #:** 012 **Survey Date:** 1994-07-08  
**Last Observed:** 1994-07-08 **First Observed:** 1994-07-08 **Actual Mapping Precision (m):** 250 **Precision Code:** S  
**Directions:** CFB Suffield; Medicine Hat, 33 km N of; Fish Creek Area; Van Will Corral, 5 km E of.  
**General Description:** gently rolling moraine plain shallow depression, submesic intermittent marsh of Hordeum jubatum, Carex brevoir, Rumex stenophyllus, Lycop americanus  
**Min Elev. (m):** 620 **Max Elev. (m):** 710 **Best Source of Info:** U97CWS01ABCA  
**Specimen Source Code Collector Herbarium Accession # Date ID OK? Observation Detail**  
S94MACPMABCA25 Macdonald, I.D. PM B94.4.575 1994-07-08 Y  
**Map UTM Zone UTM Easting UTM Northing Survey Site Name Notes # Dot ID #**  
72L07 12 527200 5577200 Cottonwood Grove 50-20'55"N/110-37'00"W 13 198  
**Source Code Author Publisher Year Title**  
U97CWS01ABCA Canadian Wildlife Service CWS 1997 Plant Database from Suffield Survey 1994-1995  
**Lycopus americanus** American water-horehound SRank: S2  
+++++

**Element Code:** PDLAM0X010 **Occurrence Code #:** 013 **Survey Date:** 1996-08-10  
**Last Observed:** 1996-08-10 **First Observed:** 1996-08-10 **Actual Mapping Precision (m):** 50 **Precision Code:** S  
**Directions:** Acheson, 3 km SW of; Hwy 60, 1.5 km W of; "Acheson Pond".  
**General Description:** shore of sinkhole pond containing *Wolffia borealis* and *W. columbiana*  
**Min Elev. (m):** 709 **Max Elev. (m):** 709 **Aspect:** SE **Best Source of Info:** S96COTPPABCA05  
**Specimen Source Code Collector Herbarium Accession # Date ID OK? Observation Detail**  
S96COTPPABCA05 Cotterill, P.J. PP 003532 1996-08-10 Y several clumps  
**Map UTM Zone UTM Easting UTM Northing Survey Site Name Notes # Dot ID #**  
83H12 12 315250 5934475 Acheson SE 32-52-26-W4M; 12U UQ 315300E 5934500N 19 4861  
**Lycopus americanus** American water-horehound SRank: S2  
+++++

**Element Code:** PDLAM0X010 **Occurrence Code #:** 014 **Survey Date:** 1990-00-00  
**Last Observed:** 1990-00-00 **First Observed:** 1990-00-00 **Actual Mapping Precision (m):** 250 **Precision Code:** S  
**Directions:** Medicine Hat, N of; Old Channel Lake; coulee springs; Sect. 29-Tp14-R5-W4  
**General Description:** coulees along valley of S. Sask. River; woodland vegetation at edges of slightly saline springs  
**Min Elev. (m):** 640 **Max Elev. (m):** 640  
**Other Comments:** recommend protection of spring wetlands; no groundwater pumping for injection wells  
**Management Comments:** heavy grazing at one spring; petroleum dev't in adjacent lands **Best Source of Info:**  
U90WAL01ABCA  
**Map UTM Zone UTM Easting UTM Northing Survey Site Name Notes # Dot ID #**  
72L02 12 525600 5561450 Old Channel Lake Sect. 29-Tp14-R5-W5M; mapped as polygon 44 6015  
**Source Code Author Publisher Year Title**  
U90WAL01ABCA Wallis, Cliff 1990 Reconnaissance Survey of Saline Wetlands and Springs in the Grassland-Parkland Region of  
Eastern Alberta  
**Date Source Abstract Code Observer Occurrence Data**  
U90WAL01ABCA C Wallis See unpubl. report in-house  
**Lycopus americanus** American water-horehound SRank: S2

**Lysimachia hybrida**

**Natural Region:** Northern Fescue Grassland, Dry Mixedgrass

**Habitat:** Wetland-Sandy

**Phenology:** flowers in early to mid-July

**Specific Search Strategies (if any):** tall shrubbery or woodland at edge of water; shallow wetland edges; typically with some sandy component

**Element Occurrences:**

**Element Code:** PDPRI070A0 **Occurrence Code #:** 001 **Survey Date:** 1974-07-19

**Last Observed:** 1974-07-19 **First Observed:** 1974-07-19 **Precision Code:** S

**Directions:** Oyen, 3 km N of town

**Min Elev. (m):** 770 **Max Elev. (m):** 770

**Other Comments:** ssp. hybrida **Best Source of Info:** S74KLAUAABCA02

**Specimen Source Code Collector Herbarium Accession # Date ID OK? Observation Detail**

S74KLAUAABCA02 Klar, Andrew UA 80224 1974-07-19 Y [flowers, developing fruits]

**Map UTM Zone UTM Easting UTM Northing Survey Site Name Notes # Dot ID #**

72M08 12 536950 5692450 Oyen 51 23/110 28 1 259

**Lysimachia hybrida** SRank: S2

+++++

**Element Code:** PDPRI070A0 **Occurrence Code #:** 002 **Survey Date:** 1956-07-19

**Last Observed:** 1956-07-19 **First Observed:** 1956-07-19 **Precision Code:** M

**Directions:** Vermillion, 20 miles south of

**General Description:** damp edge of pond

**Min Elev. (m):** 670 **Max Elev. (m):** 670

**Other Comments:** ssp. hybrida **Best Source of Info:** S56BIRUAABCA01

**Specimen Source Code Collector Herbarium Accession # Date ID OK? Observation Detail**

S56BIRUAABCA01 Bird, C.D. UA 21315 1956-07-19 Y [flowers]

**Map UTM Zone UTM Easting UTM Northing Survey Site Name Notes # Dot ID #**

73E02 12 507900 5882050 Auburndale 1 323

**Lysimachia hybrida** SRank: S2

+++++

**Element Code:** PDPRI070A0 **Occurrence Code #:** 003 **Survey Date:** 1996-00-00

**Last Observed:** 1996-00-00 **First Observed:** 1996-00-00 **Actual Mapping Precision (m):** 200 **Precision Code:** S

**Directions:** Hilliard, 4 km SSE of; Mundare, 8 km W of.

**General Description:** samll aspen stand <20X20 m in size; moister portion of satnd; trees young

**Min Elev. (m):** 685 **Max Elev. (m):** 685 **Best Source of Info:** M97SAE01ABCA

**Map UTM Zone UTM Easting UTM Northing Survey Site Name Notes # Dot ID #**

83H09 12 402800 5940400 Hilliard Site #91b (old route); KP 711.12; SE29-53-17 W4M 1 3248

**Source Code Author Publisher Year Title**

M97SAE01ABCA Singleton Associated Engineering & TERA Alliance Pipeline 1997 NEB Certificate Application - Volume VI - A  
Environmental Alignment sheets

**Lysimachia hybrida** SRank: S2

+++++

**Element Code:** PDPRI070A0 **Occurrence Code #:** 004 **Survey Date:** 1996-07-16

**Last Observed:** 1996-07-16 **First Observed:** 1996-07-16 **Actual Mapping Precision (m):** 250 **Precision Code:** S

**Directions:** Vegreville, 6.5 km S of; then E 1 km; at northwest edge of site; 70 (decl. 12E) plus 40 m from N gatepost of compressor station.

**General Description:** moist depression; no stending water July 16, 1996; sandy loam range type; mid range condition

**Min Elev. (m):** 647 **Max Elev. (m):** 647 **Best Source of Info:** M97SAE01ABCA

**Map UTM Zone UTM Easting UTM Northing Survey Site Name Notes # Dot ID #**

83H08 12 431850 5920000 Vegreville Site #96c (old route); KP 747.4; LSD2 SE29-51-14 W4M 1 3247

**Source Code Author Publisher Year Title**

M97SAE01ABCA Singleton Associated Engineering & TERA Alliance Pipeline 1997 NEB Certificate Application - Volume VI - A  
Environmental Alignment sheets

**Date Source Abstract Code Observer Occurrence Data**

M97SAE01ABCA plant in flower and fruit; exellent vigour; samll, dense clump of between 50-75 plants

**Lysimachia hybrida** SRank: S2

+++++



**Element Code:** PDPRI070A0 **Occurrence Code #:** 005 **Survey Date:** 1996-00-00  
**Last Observed:** 1996-00-00 **First Observed:** 1996-00-00 **Actual Mapping Precision (m):** 250 **Precision Code:** S  
**Directions:** Innisfree, 14 km SW; Hwy 36, 250 m E of.  
**General Description:** in depression in cultivated field in wet willows to the east.  
**Min Elev. (m):** 685 **Max Elev. (m):** 685 **Best Source of Info:** M97SAE01ABCA  
**Map UTM Zone UTM Easting UTM Northing Survey Site Name Notes # Dot ID #**  
73E05 12 448450 5905700 Birch Lake Site #100a (off-line); KP 769.9-700.0; NW12-50-13 W4M 5 328  
**Source Code Author Publisher Year Title**  
M97SAE01ABCA Singleton Associated Engineering & TERA Alliance Pipeline 1997 NEB Certificate Application - Volume VI - A  
Environmental Alignment sheets  
**Lysimachia hybrida** SRank: S2  
+++++

**Element Code:** PDPRI070A0 **Occurrence Code #:** 006 **Survey Date:** 1997-07-13  
**Last Observed:** 1997-07-13 **First Observed:** 1997-07-13 **Actual Mapping Precision (m):** 250 **Precision Code:** S  
**Directions:** St. Lawrence Lake; 5.5km N of.; AB/SK border, 1km W of.  
**General Description:** In an ephemeral (currently dry) drainage in an aspen stand. Associated with willow sp., narrow-leaved meadowsweet, sow-thistle sp. and smooth brome.  
**Min Elev. (m):** 686 **Max Elev. (m):** 686  
**Other Comments:** 31plants found altogether on the right-of-way. Two plants on the right-of-way, approx, 3-4 plants N of the existing right-of-way, & 15 plants to the SE along the proposed r.o.w. 145 other plants found to S of existing r.o.w. in aspen grove. **Best Source of Info:** M97SAE01ABCA  
**Map UTM Zone UTM Easting UTM Northing Survey Site Name Notes # Dot ID #**  
73D08 12 566725 5805900 St. Lawrence Lake MLKP 931.3 (KW/JL Site 23);NW36-39-1 W4M 1 3866  
**Source Code Author Publisher Year Title**  
M97SAE01ABCA Singleton Associated Engineering & TERA Alliance Pipeline 1997 NEB Certificate Application - Volume VI - A  
Environmental Alignment sheets  
**Date Source Abstract Code Observer Occurrence Data**  
1997-07-13 M97SAE01ABCA good vigour; one in flower, one immature  
**Lysimachia hybrida** SRank: S2  
+++++

**Element Code:** PDPRI070A0 **Occurrence Code #:** 007 **Survey Date:** 1997-07-13  
**Last Observed:** 1997-07-13 **First Observed:** 1997-07-13 **Actual Mapping Precision (m):** 250 **Precision Code:** S  
**Directions:** St. Lawrence Lake;6.25km N of.;AB/SK border; 1.75km W of.  
**General Description:** In a seasonally moist aspen grove in a depression in a cultivated field. Among sedges at edge of willow community. Associated with wild mint, awned sedge and reed canary grass.  
**Min Elev. (m):** 686 **Max Elev. (m):** 686  
**Other Comments:** One plant approx. 8m S of proposed centre line (flagged). 11 off r.o.w. to the SW in an open sedge meadow.  
**Best Source of Info:** M97SAE01ABCA  
**Map UTM Zone UTM Easting UTM Northing Survey Site Name Notes # Dot ID #**  
73D08 12 566350 5806650 St. Lawrence Lake MLKP 930.7 (KW/JL Site 24); SW1-40-1 W4M 2 3867  
**Source Code Author Publisher Year Title**  
M97SAE01ABCA Singleton Associated Engineering & TERA Alliance Pipeline 1997 NEB Certificate Application - Volume VI - A  
Environmental Alignment sheets  
**Date Source Abstract Code Observer Occurrence Data**  
1997-07-13 M97SAE01ABCA good vigour, in flower  
**Lysimachia hybrida** SRank: S2  
+++++

**Element Code:** PDPRI070A0 **Occurrence Code #:** 008 **Survey Date:** 1997-07-13  
**Last Observed:** 1997-07-13 **First Observed:** 1997-07-13 **Actual Mapping Precision (m):** 250 **Precision Code:** S  
**Directions:** Gillespie Lake North; 2km E of.  
**General Description:** At the perimeter of a moist sedge meadow with awned sedge, fowl bluegrass under basket willow. The outer fringe is aspen. Associated species are smooth brome, Kentucky bluegrass and wild mint.  
**Min Elev. (m):** 671 **Max Elev. (m):** 671  
**Other Comments:** 16 plants on the NW half of the r.o.w. 5 plants found off the r.o.w. to the NE in the same habitat surrounding the same moist depression. **Best Source of Info:** M97SAE01ABCA  
**Map UTM Zone UTM Easting UTM Northing Survey Site Name Notes # Dot ID #**  
73D08 12 557300 5816500 Gillespie Lake MLKP 918.85 (KW/JL Site 28);SW4-41-2 W4M 3 3868  
**Source Code Author Publisher Year Title**  
M97SAE01ABCA Singleton Associated Engineering & TERA Alliance Pipeline 1997 NEB Certificate Application - Volume VI - A  
Environmental Alignment sheets  
**Date Source Abstract Code Observer Occurrence Data**  
1997-07-13 M97SAE01ABCA good vigour, in bud and flower  
**Lysimachia hybrida** SRank: S2  
+++++

**Element Code:** PDPRI070A0 **Occurrence Code #:** 009 **Survey Date:** 1997-07-14  
**Last Observed:** 1997-07-14 **First Observed:** 1997-07-14 **Actual Mapping Precision (m):** 250 **Precision Code:** S  
**Directions:** Provost; 16km NE of.; Gillespie Lake; 4km NW of.  
**General Description:** Moist creek edge, E side. Associated with manna grass sp., water parsnip, slough grass and sanbar willow.  
**Min Elev. (m):** 640 **Max Elev. (m):** 640  
**Other Comments:** Patch of approx. 25 individuals 8 to 10m N of a beaver dam (12-14m N of the centreline) (flagged). No additional plants seen off r.o.w. **Best Source of Info:** M97SAE01ABCA  
**Map UTM Zone UTM Easting UTM Northing Survey Site Name Notes # Dot ID #**  
73D08 12 552100 5816500 Provost MLKP 912.7 (KW/JL Site 28); SW4-41-2 W4M, MLKP 912.75 (KW/JL Site 28); SW 4-41-2 W4M 4 3869  
**Source Code Author Publisher Year Title**  
M97SAE01ABCA Singleton Associated Engineering & TERA Alliance Pipeline 1997 NEB Certificate Application - Volume VI - A Environmental Alignment sheets  
**Date Source Abstract Code Observer Occurrence Data**  
1997-07-14 M97SAE01ABCA good vigour, some in flower, some immature  
**Lysimachia hybrida** SRank: S2  
+++++

**Element Code:** PDPRI070A0 **Occurrence Code #:** 010 **Survey Date:** 1993-08-00  
**Last Observed:** 1993-08-00 **First Observed:** 1993-08-00 **Actual Mapping Precision (m):** 500 **Precision Code:** M  
**Directions:** Rosyth, 4.5 km SE of; Wilkins Lake, ~4 km W of.  
**General Description:** moist Salix community surrounding marsh, associated with Rosa acicularis, Poa palustris, Carex spp. and Mentha arvensis  
**Min Elev. (m):** 700 **Max Elev. (m):** 700  
**Other Comments:** Specimen has been collected by Cheryl Bradley. I.D. as L. l. ssp. hybrida **Best Source of Info:** U99WIL02ABCA  
**Map UTM Zone UTM Easting UTM Northing Survey Site Name Notes # Dot ID #**  
73D11 12 487400 5828000 Rosyth NE11-42-9 W4M 7 5076  
**Source Code Author Publisher Year Title**  
U99WIL02ABCA Wilkinson, Kathleen 1999 Letter from K. Wilkinson to John Rintoul - at March 3, 1999  
**Date Source Abstract Code Observer Occurrence Data**  
1993-08-00 U99WIL02ABCA Cheryl Bradley 2 to 5 plants, healthy and flowering  
**Lysimachia hybrida** SRank: S2

**Marsilea vestita hairy pepperwort**

**Natural Region:** Mixedgrass, Dry Mixedgrass

**Habitat:** Wetland-Sandy

**Phenology:** visible in wetland beginning late May

**Specific Search Strategies (if any):** exundated shores and slough bottoms; also along seasonal streams in sandy landscapes; most detectable in late June/early July

**Element Occurrences:**

**Element Code:** PPMAR01080 **Occurrence Code #:** 001 **Survey Date:** 1985-05-27  
**Last Observed:** 1985-05-27 **First Observed:** 1985-05-27 **Actual Mapping Precision (m):** 50 **Precision Code:** S  
**Directions:** Lost River, 1.3 km E of; USA border, 3.2 km N of.  
**General Description:** dried-out slough with sandy bottom  
**Min Elev. (m):** 900 **Max Elev. (m):** 900 **Best Source of Info:** S85WALUAABCA08  
**Specimen Source Code Collector Herbarium Accession # Date ID OK? Observation Detail**  
S85WALUAABCA08 Wallis, C. UA 098408 1985-05-27 Y sporocarps present  
**Map UTM Zone UTM Easting UTM Northing Survey Site Name Notes # Dot ID #**  
72E01 12 540425 5430425 Lost River SW 1-1-4 W4M 5 4  
**Source Code Author Publisher Year Title**  
R86WER01ABCA Wershler C. & C. Wallis 1986 Lost River Significant Features Assessment  
**Marsilea vestita** hairy pepperwort SRank: S2  
+++++

**Element Code:** PPMAR01080 **Occurrence Code #:** 002 **Survey Date:** 1927-07-02  
**Last Observed:** 1927-07-02 **First Observed:** 1927-07-02 **Precision Code:** M  
**Directions:** Brooks; roadside, irrigation system  
**General Description:** stream  
**Min Elev. (m):** 754 **Max Elev. (m):** 754 **Best Source of Info:** S27MOSUAABCA09  
**Specimen Source Code Collector Herbarium Accession # Date ID OK? Observation Detail**  
S27MOSUAABCA09 Moss, E.H. UA 24 1927-07-02 Y vegetative only  
**Map UTM Zone UTM Easting UTM Northing Survey Site Name Notes # Dot ID #**  
72L12 12 436300 5602425 Brooks 5 236  
**Marsilea vestita** hairy pepperwort SRank: S2  
+++++

**Element Code:** PPMAR01080 **Occurrence Code #:** 003 **Survey Date:** 1954-07-16  
**Last Observed:** 1954-07-16 **First Observed:** 1954-07-16 **Precision Code:** M  
**Directions:** Monarch, 1 mi E  
**General Description:** moist ground, near slough  
**Min Elev. (m):** 945 **Max Elev. (m):** 945 **Best Source of Info:** S54BARALABCA01  
**Specimen Source Code Collector Herbarium Accession # Date ID OK? Observation Detail**  
S54BARALABCA01 Bartz, H. AL 3585 1954-07-16 Y fruiting  
**Map UTM Zone UTM Easting UTM Northing Survey Site Name Notes # Dot ID #**  
82H14 12 345600 5520000 Monarch 7 1396  
**Marsilea vestita** hairy pepperwort SRank: S2  
+++++

**Element Code:** PPMAR01080 **Occurrence Code #:** 004 **Survey Date:** 1967-08-01  
**Last Observed:** 1967-08-01 **First Observed:** 1967-08-01 **Precision Code:** M  
**Directions:** Welling, 3 mi north of; Hwy 5  
**General Description:** dry slough bottom  
**Min Elev. (m):** 930 **Max Elev. (m):** 930 **Best Source of Info:** S67ALLALABCA05  
**Specimen Source Code Collector Herbarium Accession # Date ID OK? Observation Detail**  
S67ALLALABCA05 Allen, T.D. & Gschaid AL 2155 1967-08-01 Y  
**Map UTM Zone UTM Easting UTM Northing Survey Site Name Notes # Dot ID #**  
82H10 12 371150 5487425 Pothole Creek 10 1361  
**Marsilea vestita** hairy pepperwort SRank: S2  
+++++

**Element Code:** PPMAR01080 **Occurrence Code #:** 005 **Survey Date:** 1995-06-02  
**Last Observed:** 1995-07-17 **First Observed:** 1995-06-02 **Actual Mapping Precision (m):** 250 **Precision Code:** S  
**Directions:** Onefour, 15 km SE of; Hwy 48, 2.70 km W of; Rd to Onefour, 150 m S of.  
**General Description:** Small drainage with temporal ponds at base of low slope. Heavy grazing. No moisture in depressions on June 2, ponds at several locations July 17. Eleo char-Equis lae-Rum trian.  
**Min Elev. (m):** 876 **Max Elev. (m):** 876 **Aspect:** n **Best Source of Info:** B95WIL01ABCA  
**Map UTM Zone UTM Easting UTM Northing Survey Site Name Notes # Dot ID #**  
72E01 12 552000 5433700 Milk River Lake LS#64,km:425.3,LLD:NW 14-24 1-3-4. 17 3956  
**Source Code Author Publisher Year Title**  
B95WIL01ABCA J. Williams Consulting & Axys Environmental Consulting Ltd Express Pipelines Ltd 1995 Rare Plant Surveys along the Proposed Express Pipeline Project  
**Marsilea vestita** hairy pepperwort SRank: S2  
+++++

**Element Code:** PPMAR01080 **Occurrence Code #:** 006 **Survey Date:** 1996-00-00  
**Last Observed:** 1996-00-00 **First Observed:** 1996-00-00 **Actual Mapping Precision (m):** 100 **Precision Code:** S  
**Directions:** Seven Persons; ~7.5 km NE of; Fitzgerald; ~1km SE of.  
**General Description:** Locally abundant cultivated ephemeral wetland. RoW narrowed. No seed mix applied.  
**Min Elev. (m):** 762 **Max Elev. (m):** 762 **Best Source of Info:** U96EXP01ABCA  
**Map UTM Zone UTM Easting UTM Northing Survey Site Name Notes # Dot ID #**  
72E15 12 514317 5525795 Fitzgerald LS#49,km:322.7,NE 16-6 11-6-4. 14 4002  
**Source Code Author Publisher Year Title**  
U96EXP01ABCA AXYS Environmental Consulting 1996 Express Pipeline Project  
**Marsilea vestita** hairy pepperwort SRank: S2  
+++++

**Element Code:** PPMAR01080 **Occurrence Code #:** 007 **Survey Date:** 1996-00-00  
**Last Observed:** 1996-00-00 **First Observed:** 1996-00-00 **Actual Mapping Precision (m):** 100 **Precision Code:** S  
**Directions:** Hwy 48, ~6km W of, Bare Creek, ~4.75 km W of.  
**General Description:** Occasional. RoW narrowed. No seed mix applied.  
**Min Elev. (m):** 1013 **Max Elev. (m):** 1013 **Best Source of Info:** U96EXP01ABCA  
**Map UTM Zone UTM Easting UTM Northing Survey Site Name Notes # Dot ID #**  
72E08 12 548578 5459616 Bare Creek LS#60, km:398.8, LLD:NW 14-10 4-3-4. 17 4003  
**Source Code Author Publisher Year Title**  
U96EXP01ABCA AXYS Environmental Consulting 1996 Express Pipeline Project  
**Marsilea vestita** hairy pepperwort SRank: S2  
+++++

**Element Code:** PPMAR01080 **Occurrence Code #:** 008 **Survey Date:** 1996-00-00  
**Last Observed:** 1996-00-00 **First Observed:** 1996-00-00 **Actual Mapping Precision (m):** 250 **Precision Code:** S  
**Directions:** Onefour; 15km SE of; Hwy 48; 2.7km W of; Rd to Onefour; 150m S of.  
**General Description:** 10m W of RoW (1995). 10m W of RoW (1995). Population avoided.  
**Min Elev. (m):** 876 **Max Elev. (m):** 876 **Aspect:** N **Best Source of Info:** U96EXP01ABCA  
**Map UTM Zone UTM Easting UTM Northing Survey Site Name Notes # Dot ID #**  
72E01 12 552000 5433700 Milk River Lake LS#64,km:425.3,LLD:NW 14-24 1-3-4. 17 3956  
**Source Code Author Publisher Year Title**  
U96EXP01ABCA AXYS Environmental Consulting 1996 Express Pipeline Project  
**Marsilea vestita** hairy pepperwort SRank: S2

***Mertensia lanceolata* lance-leaved lungwort**

**Natural Region:** Foothills Fescue Grassland

**Habitat:** Grassland

**Phenology:** flowers in late May to mid-June

**Specific Search Strategies (if any):** perhaps best surveyed with southwest mountains rare plants

**Element Occurrences:**

**Element Code:** PDBOR0N0C0 **Occurrence Code #:** 001 **Survey Date:** 1986-05-28

**Last Observed:** 1986-05-28 **First Observed:** 1986-05-28 **Precision Code:** S

**Directions:** Turn south at T on spreadeagle road to road allowance and proceed S on road allowance to Yarrow Creek.

**General Description:** Gravel & cobble floodplain-very open vegetation consisting of *Lupinus sericeus* primarily & *Phaselia hastata*, *Astragalus aboriginum*, *Artemisia michauxiara* & *Hedysarum sulphurescens*.

**Min Elev. (m):** 1636 **Max Elev. (m):** 1636 **Size of Occurrence:** 1.00 **Best Source of Info:** B86WAL01ABCA

**Map UTM Zone UTM Easting UTM Northing Survey Site Name Notes # Dot ID #**

82H04 12 283850 5456000 Yarrow Creek 49 13/113 58 68 1030

**Source Code Author Publisher Year Title**

B86WAL01ABCA Wallis, Clifford et al Alberta Forestry Lands & Wildlife 203p 1986 Pilot rare plant monitoring program in the Oldman Regional Plan area of southwestern Alberta

**Date Source Abstract Code Observer Occurrence Data**

Total of 1,000 steams in no more than 20 clumps - 50 to 75 in larger clumps, 25 in smaller. Clumps 20-25m apart in area 200m x 50m. Population continues north and south 1-2km in discontinuous patches.

***Mertensia lanceolata* lance-leaved lungwort** SRank: S2

+++++

**Element Code:** PDBOR0N0C0 **Occurrence Code #:** 002 **Survey Date:** 1986-07-12

**Last Observed:** 1986-07-12 **First Observed:** 1977-06-05 **Precision Code:** S

**Directions:** Uppermost wellsite, directly above ; old exploration road, in small gully on; last hairpin, 15 m NE of

**General Description:** Tussocky fescue grassland in gully, bare shale areas present, scattered plant growth including *Cryptantha nubigana* and *Cirsium* sp.

**Min Elev. (m):** 1815 **Max Elev. (m):** 1815 **Aspect:** S

**Management Comments:** Construction of existing wellshas already disturbed a considerable amount of habitat. **Best Source of Info:** S77KUIUAABCA02

**Specimen Source Code Collector Herbarium Accession # Date ID OK? Observation Detail**

S77KUIUAABCA02 Kuijt, J. & D. Coxson UA 85663 1977-06-05 [flowers]

S77KUIUAABCA06 Kuijt, J. & D. Coxson UA 89949 1977-06-05 Y Buds, flowers

**Map UTM Zone UTM Easting UTM Northing Survey Site Name Notes # Dot ID #**

82G08 11 710400 5466200 Prairie Bluff 27 705

**Source Code Author Publisher Year Title**

B86WAL01ABCA Wallis, Clifford et al Alberta Forestry Lands & Wildlife 203p 1986 Pilot rare plant monitoring program in the Oldman Regional Plan area of southwestern Alberta

I85BRA01ABCA Bradley, C. 1985

**Date Source Abstract Code Observer Occurrence Data**

30-40 individuals in small gully and at least as many over the entire slope (B86WAL01ABCA); [flowers] (S77KUIUAABCA02).

***Mertensia lanceolata* lance-leaved lungwort** SRank: S2

+++++

**Element Code:** PDBOR0N0C0 **Occurrence Code #:** 003 **Survey Date:** 1970-06-05

**Last Observed:** 1970-06-05 **First Observed:** 1970-06-05 **Precision Code:** S

**Directions:** Mount Dungarvan ridge E. of

**General Description:** rocky slopes

**Min Elev. (m):** 2042 **Max Elev. (m):** 2042 **Aspect:** N

**Other Comments:** Det. as *M. Longiflora* Greene by J. Kuijt, annotated as *M. lanceolata* (PurshH) DC by John G. Packer 1976

**Best Source of Info:** S70KUIUAABCA03

**Specimen Source Code Collector Herbarium Accession # Date ID OK? Observation Detail**

S70KUIUAABCA03 Kuijt, J., M. Gadd & J. Nagy UA 45938 1970-06-05 [flowers]

**Map UTM Zone UTM Easting UTM Northing Survey Site Name Notes # Dot ID #**

82H04 12 285600 5448800 Dungarvan 49 10/113 57 125 1072

**Source Code Author Publisher Year Title**

B86WAL01ABCA Wallis, Clifford et al Alberta Forestry Lands & Wildlife 203p 1986 Pilot rare plant monitoring program in the Oldman Regional Plan area of southwestern Alberta

**Date Source Abstract Code Observer Occurrence Data**

[flowers]

***Mertensia lanceolata* lance-leaved lungwort** SRank: S2

+++++

**Element Code:** PDBOR0N0C0 **Occurrence Code #:** 004 **Survey Date:** 1970-06-19  
**Last Observed:** 1970-06-19 **First Observed:** 1970-06-19 **Actual Mapping Precision (m):** 250 **Precision Code:** S  
**Directions:** Waterton Lakes N.P.; Horseshoe Basin, Mount Galwey ridge, just NE of.  
**General Description:** rocky, alpine ridge  
**Min Elev. (m):** 1980 **Max Elev. (m):** 1980 **Best Source of Info:** S70KUIUAABCA03  
**Specimen Source Code Collector Herbarium Accession # Date ID OK? Observation Detail**  
S70KUIUAABCA03 Kuijt, J., M. Gadd & J. Nagy UA 45938 1970-06-05 [flowers]  
S70KUIUAABCA15 Kuijt, J., Gadd, M., Nagy, J. UA 45939 1970-06-19 Y flowers  
**Map UTM Zone UTM Easting UTM Northing Survey Site Name Notes # Dot ID #**  
82H04 12 285850 5445350 Horseshoe Basin 49 07/113 57 127 1074  
**Source Code Author Publisher Year Title**  
B86WAL01ABCA Wallis, Clifford et al Alberta Forestry Lands & Wildlife 203p 1986 Pilot rare plant monitoring program in the  
Oldman Regional Plan area of southwestern Alberta  
**Date Source Abstract Code Observer Occurrence Data**  
[flowers]  
***Mertensia lanceolata*** lance-leaved lungwort SRank: S2  
+++++

**Element Code:** PDBOR0N0C0 **Occurrence Code #:** 007 **Survey Date:** 1966-06-16  
**Last Observed:** 1966-06-16 **First Observed:** 1966-06-16 **Precision Code:** M  
**Directions:** Pincher Creek Mountain, Waterton Well #19  
**General Description:** east facing mountain slopes, oilfields  
**Min Elev. (m):** 1585 **Max Elev. (m):** 1585 **Aspect:** E  
**Other Comments:** ID - M. Longiflora Greene. det. M. lanceolata July 1976. J.G. Packer **Best Source of Info:**  
S66DEVUCABCA03  
**Specimen Source Code Collector Herbarium Accession # Date ID OK? Observation Detail**  
S66DEVUCABCA03 de Vries, B.D. UC 22293 1966-06-16  
**Map UTM Zone UTM Easting UTM Northing Survey Site Name Notes # Dot ID #**  
82G08 11 713550 5464250 Pincher Creek Mountain 120 759  
***Mertensia lanceolata*** lance-leaved lungwort SRank: S2  
+++++

**Element Code:** PDBOR0N0C0 **Occurrence Code #:** 008 **Survey Date:** 1932-06-17  
**Last Observed:** 1932-06-17 **First Observed:** 1932-06-17 **Precision Code:** M  
**General Description:** Rocky Place  
**Min Elev. (m):** 983 **Max Elev. (m):** 983 **Best Source of Info:** S32WHIALABCA01  
**Specimen Source Code Collector Herbarium Accession # Date ID OK? Observation Detail**  
S32WHIALABCA01 White, R.M. AL 572 1932-06-17  
**Map UTM Zone UTM Easting UTM Northing Survey Site Name Notes # Dot ID #**  
82H07 12 365000 5474500 Magrath 1 1343  
***Mertensia lanceolata*** lance-leaved lungwort SRank: S2  
+++++

**Element Code:** PDBOR0N0C0 **Occurrence Code #:** 009 **Survey Date:** 1969-06-03  
**Last Observed:** 1969-06-03 **First Observed:** 1969-06-03 **Precision Code:** S  
**Directions:** Bellevue Hill.  
**General Description:** Open shale crest.  
**Min Elev. (m):** 1830 **Max Elev. (m):** 1830 **Best Source of Info:** S69NAGNMONCA49  
**Specimen Source Code Collector Herbarium Accession # Date ID OK? Observation Detail**  
S69NAGNMONCA49 Nagy, J. & W. Blais NM 336208 1969-06-03  
**Map UTM Zone UTM Easting UTM Northing Survey Site Name Notes # Dot ID #**  
82H04 12 288000 5443400 Bellevue Hill 49 06/113 55 241 1152  
***Mertensia lanceolata*** lance-leaved lungwort SRank: S2  
+++++

**Element Code:** PDBOR0N0C0 **Occurrence Code #:** 010 **Survey Date:** 1970-06-05  
**Last Observed:** 1970-06-05 **First Observed:** 1970-06-05 **Precision Code:** M  
**Directions:** Mount Galwey, along trail on NE side of.  
**General Description:** Dry steep valley  
**Min Elev. (m):** 1830 **Max Elev. (m):** 1830 **Best Source of Info:** S70KUIINMONCA20  
**Specimen Source Code Collector Herbarium Accession # Date ID OK? Observation Detail**  
S70KUIINMONCA20 Kuijt, J., Gadd, M. & Nagy J NM 346649 1970-06-05  
S70KUIINMONCA21 Kuijt, J., Gadd, M. & Nagy J NM 346651 1970-06-05  
**Map UTM Zone UTM Easting UTM Northing Survey Site Name Notes # Dot ID #**  
82H04 12 286350 5448900 Oil Basin 49 09/113 56 187 1118  
***Mertensia lanceolata*** lance-leaved lungwort SRank: S2  
+++++

**Element Code:** PDBOR0N0C0 **Occurrence Code #:** 011 **Survey Date:** 1991-05-15  
**Last Observed:** 1991-05-15 **First Observed:** 1990-06-03 **Actual Mapping Precision (m):** 2500 **Precision Code:** M  
**Directions:** Reed Lake; ~5.1 km NNW of; Hwy 62 bridge (N of Reed Lake); ~2.5 km SSE of.  
**General Description:** open, sandy grassland on N-facing slope near eroding base of rock outcropping. Partly protected grassy bank on slope above outcroppings.  
**Min Elev. (m):** 1220 **Max Elev. (m):** 1235 **Aspect:** NNW **Best Source of Info:** S90THOPMABCA01  
**Specimen Source Code Collector Herbarium Accession # Date ID OK? Observation Detail**  
S90HRAPMABCA04 Hrapko, J.O., Laird, L.D. PM B90.36.15 1990-06-27 Y  
S90THOPMABCA01 Thormin, T.W. PM B90.27.6 1990-06-03 Y  
S91HRAPMABCA10 Hrapko, J.O., Laird, L.D. PM B91.11.1 1991-05-15 Y  
**Map UTM Zone UTM Easting UTM Northing Survey Site Name Notes # Dot ID #**  
82H02 12 367100 5453900 Reed Lake 49-13,14N/112-49,50,51W 24 4294  
**Mertensia lanceolata** lance-leaved lungwort SRank: S2  
+++++

**Element Code:** PDBOR0N0C0 **Occurrence Code #:** 013 **Survey Date:** 1988-06-00  
**Last Observed:** 1988-06-00 **First Observed:** 1988-06-00 **Actual Mapping Precision (m):** 250 **Precision Code:** S  
**Directions:** Mount Gladstone, 5 km ENE of; Whitney Creek.  
**General Description:** in dry, grassy clearing on gravelly floodplain - Populus tremuloides/Festuca campestris community, and in montane, semiopen, well drained Pinus contorta/Festuca campestris-Vaccinium myrtillus community  
**Min Elev. (m):** 1545 **Max Elev. (m):** 1545 **Best Source of Info:** U99WIL02ABCA  
**Map UTM Zone UTM Easting UTM Northing Survey Site Name Notes # Dot ID #**  
82G08 11 706100 5467250 Whitney Creek Site #2, and between site #2 and #3. 119 5064  
**Source Code Author Publisher Year Title**  
U99WIL02ABCA Wilkinson, Kathleen 1999 Letter from K. Wilkinson to John Rintoul - at March 3, 1999  
**Date Source Abstract Code Observer Occurrence Data**  
1988-06-00 U99WIL02ABCA C. Bradley & K. Wilkinson 2 plants at site between #2 and #3  
**Mertensia lanceolata** lance-leaved lungwort SRank: S2

**Muhlenbergia asperifolia scratch grass**

**Natural Region:** Northern Fescue Grassland, Mixedgrass, Dry Mixedgrass

**Habitat:** Wetland-Alkali

**Phenology:** heads out in late June

**Specific Search Strategies (if any):** search mounds and microfeatures along the edge of strongly alkali wetlands and seepages, including seasonal streams; appears to require a sandy component to the soil as well

**Element Occurrences:**

**Element Code:** PMPOA48070 **Occurrence Code #:** 001 **Survey Date:** 1965-07-00

**Last Observed:** 1965-07-00 **First Observed:** 1965-07-00 **Precision Code:** M

**Directions:** Orion

**General Description:** Low sandy & saline soil

**Min Elev. (m):** 893 **Max Elev. (m):** 893 **Best Source of Info:** S65CAMPPABCA10

**Specimen Source Code Collector Herbarium Accession # Date ID OK? Observation Detail**

S65CAMPPABCA10 Campbell, J.A. PP 564 1965-07-00

S65CAMPPABCA11 Campbell, J.A. PP 565 1965-07-00

**Map UTM Zone UTM Easting UTM Northing Survey Site Name Notes # Dot ID #**

72E07 12 514073 5477782 Orion 5 86

**Date Source Abstract Code Observer Occurrence Data**

Rare

**Muhlenbergia asperifolia** scratch grass SRank: S2

+++++

**Element Code:** PMPOA48070 **Occurrence Code #:** 002 **Survey Date:** 1989-08-14

**Last Observed:** 1989-08-14 **First Observed:** 1989-08-14 **Precision Code:** S

**Directions:** Milk River Natural Area

**General Description:** In sandy alkali soil at edge of small blowout in mixed grassland.

**Min Elev. (m):** 1021 **Max Elev. (m):** 1021

**Management Comments:** Can tolerate heavy grazing. **Best Source of Info:** S89WALPPABCA10

**Specimen Source Code Collector Herbarium Accession # Date ID OK? Observation Detail**

S89WALPPABCA10 Wallis, C. PP 563 1989-08-14 about 50 plants

**Map UTM Zone UTM Easting UTM Northing Survey Site Name Notes # Dot ID #**

72E02 12 518423 5433084 Milk River Natural Area LSD 10 14 25

**Muhlenbergia asperifolia** scratch grass SRank: S2

+++++

**Element Code:** PMPOA48070 **Occurrence Code #:** 003 **Survey Date:** 1995-00-00

**Last Observed:** 1995-00-00 **First Observed:** 1994-00-00 **Precision Code:** S

**Directions:** Canadian Forces Base Suffield National Wildlife Area; South Saskatchewan River break; seepage bottom

**General Description:** moist meadow

**Min Elev. (m):** 670 **Max Elev. (m):** 670 **Best Source of Info:** U96MAC01ABCA

**Map UTM Zone UTM Easting UTM Northing Survey Site Name Notes # Dot ID #**

72L07 12 528300 5582700 Twin Peaks UTM WL 528300 / 5582700 6 191

**Source Code Author Publisher Year Title**

U96MAC01ABCA Macdonald, I.D. Canadian Wildlife Service, Environment Canada, Prairie and 1996 Vascular Flora of Canadian Forces Base Suffield National Wildlife Area

**Date Source Abstract Code Observer Occurrence Data**

rare in SNWA

**Muhlenbergia asperifolia** scratch grass SRank: S2

+++++



**Element Code:** PMPOA48070 **Occurrence Code #:** 004 **Survey Date:** 1990-07-12  
**Last Observed:** 1990-07-12 **First Observed:** 1990-07-12 **Precision Code:** S  
**Directions:** Turin, at; Little Bow River & Hwy #25, junction of.  
**General Description:** In association with other alkali grasses - *Distichlis stricta*/*Puccinellia nuttalliana* etc. at base of badlands.  
**Min Elev. (m):** 777 **Max Elev. (m):** 777  
**Other Comments:** ID by K. Tannas. **Best Source of Info:** UNDTAN01ABCA  
**Map UTM Zone UTM Easting UTM Northing Survey Site Name Notes # Dot ID #**  
82H15 12 391800 5536800 Turin 5 1402  
**Source Code Author Publisher Year Title**  
UNDTAN01ABCA Tannas, K.E. Native Species Inventory Forms  
**Date Source Abstract Code Observer Occurrence Data**  
numerous plants; fruiting  
**Muhlenbergia asperifolia** scratch grass SRank: S2  
+++++

**Element Code:** PMPOA48070 **Occurrence Code #:** 005 **Survey Date:** 1994-07-18  
**Last Observed:** 1994-07-18 **First Observed:** 1994-07-18 **Actual Mapping Precision (m):** 100 **Precision Code:** S  
**Directions:** The Middle Sand Hills; White Horse Lake, 10 km SE of  
**General Description:** sandy ground around wetland spring and seepage  
**Min Elev. (m):** 685 **Max Elev. (m):** 685 **Best Source of Info:** S94GENPMABCA01  
**Specimen Source Code Collector Herbarium Accession # Date ID OK? Observation Detail**  
S94GENPMABCA01 Gentle, Garry PM B94.11.443 1994-07-18 Y some emerging panicles  
**Map UTM Zone UTM Easting UTM Northing Survey Site Name Notes # Dot ID #**  
72L09 12 541400 5603000 Middle Sand Hills 12 226  
**Muhlenbergia asperifolia** scratch grass SRank: S2  
+++++

**Element Code:** PMPOA48070 **Occurrence Code #:** 006 **Survey Date:** 1968-07-25  
**Last Observed:** 1968-07-25 **First Observed:** 1968-07-25 **Actual Mapping Precision (m):** 2500 **Precision Code:** M  
**Directions:** Brooks; ~3.2km SE of; railway; along.  
**General Description:** Open prairie along railway  
**Min Elev. (m):** 748 **Max Elev. (m):** 748 **Best Source of Info:** S68WALACONCA01  
**Specimen Source Code Collector Herbarium Accession # Date ID OK? Observation Detail**  
S68WALACONCA01 Walker, G. AC 586436 1968-06-25  
**Map UTM Zone UTM Easting UTM Northing Survey Site Name Notes # Dot ID #**  
72L12 12 439400 5599250 Brooks 10 4160  
**Muhlenbergia asperifolia** scratch grass SRank: S2  
+++++

**Element Code:** PMPOA48070 **Occurrence Code #:** 007 **Survey Date:** 1974-07-24  
**Last Observed:** 1974-07-24 **First Observed:** 1974-07-24 **Actual Mapping Precision (m):** 2500 **Precision Code:** M  
**Directions:** Horseshoe Lake, just S of.  
**General Description:** slough edge; salt marsh  
**Min Elev. (m):** 685 **Max Elev. (m):** 685 **Best Source of Info:** S74KLAUAABCA05  
**Specimen Source Code Collector Herbarium Accession # Date ID OK? Observation Detail**  
S74KLAUAABCA05 Klar, Andrew UA 81103 1974-07-24 Y spikelets just emerging  
**Map UTM Zone UTM Easting UTM Northing Survey Site Name Notes # Dot ID #**  
73D07 12 517000 5798000 Horseshoe Lake 52 20/110 45 4 4496  
**Muhlenbergia asperifolia** scratch grass SRank: S2  
+++++

**Element Code:** PMPOA48070 **Occurrence Code #:** 008 **Survey Date:** 1986-07-28  
**Last Observed:** 1986-07-28 **First Observed:** 1986-07-28 **Actual Mapping Precision (m):** 400 **Precision Code:** M  
**Directions:** Reflex Lakes, S shore of; border, 500 m W of.  
**General Description:** sparsely vegetated backshore  
**Min Elev. (m):** 600 **Max Elev. (m):** 600 **Best Source of Info:** S86WALUAABCA12  
**Specimen Source Code Collector Herbarium Accession # Date ID OK? Observation Detail**  
S86WALUAABCA12 Wallis, C. UA 098357 1986-07-28 Y panicles emerging  
**Map UTM Zone UTM Easting UTM Northing Survey Site Name Notes # Dot ID #**  
73D09 12 567000 5834000 Reflex Lakes 52 40/110 00; SE 36-42-1 W4M 5 4531  
**Muhlenbergia asperifolia** scratch grass SRank: S2  
+++++

**Element Code:** PMPOA48070 **Occurrence Code #:** 009 **Survey Date:** 1990-00-00  
**Last Observed:** 1990-00-00 **First Observed:** 1990-00-00 **Actual Mapping Precision (m):** 2500 **Precision Code:** M  
**Directions:** Altario south wetlands; 2.25 km NW of Altario; Sect. 23-Tp34-R2-W4M  
**General Description:** successive bands of halophytic vegetation along shores of hypersaline (unveget.) ponds  
**Min Elev. (m):** 732 **Max Elev. (m):**  
**Other Comments:** part of nationally significant northern fescue grassland association  
**Management Comments:** affected by heavy grazing; pumping of groundwater should not occur **Best Source of Info:**  
U90WAL01ABCA

**Map UTM Zone UTM Easting UTM Northing Survey Site Name Notes # Dot ID #**

72M16 12 556250 5753750 Altario Sec. 23-Tp34-R2-W4M 3 5943

**Source Code Author Publisher Year Title**

U90WAL01ABCA Wallis, Cliff 1990 Reconnaissance Survey of Saline Wetlands and Springs in the Grassland-Parkland Region of Eastern Alberta

**Date Source Abstract Code Observer Occurrence Data**

U90WAL01ABCA C Wallis See unpubl. report

**Muhlenbergia asperifolia** scratch grass SRank: S2

+++++

**Element Code:** PMPOA48070 **Occurrence Code #:** 010 **Survey Date:** 1990-00-00  
**Last Observed:** 1990-00-00 **First Observed:** 1990-00-00 **Actual Mapping Precision (m):** 250 **Precision Code:** S  
**Directions:** Altario north wetlands; 5.25 km NE of Altario; Sect. 31-Tp34-R1-W4M & Lakevold Springs Sect. 2 & 11-Tp35-R2-W4M  
**General Description:** saline shores and drier spring margins  
**Min Elev. (m):** 693 **Max Elev. (m):** 701

**Management Comments:** impact of heavy grazing; groundwater pumping should not occur **Best Source of Info:**

U90WAL01ABCA

**Map UTM Zone UTM Easting UTM Northing Survey Site Name Notes # Dot ID #**

72M16 12 556000 5758550 Altario Sect. 31-Tp34-R1-W4M; Sect. 2 & Sect.11-Tp35-R2-W4M 5 5962

**Source Code Author Publisher Year Title**

U90WAL01ABCA Wallis, Cliff 1990 Reconnaissance Survey of Saline Wetlands and Springs in the Grassland-Parkland Region of Eastern Alberta

**Date Source Abstract Code Observer Occurrence Data**

U90WAL01ABCA C Wallis See unpubl. report

**Muhlenbergia asperifolia** scratch grass SRank: S2

+++++

**Element Code:** PMPOA48070 **Occurrence Code #:** 011 **Survey Date:** 1990-00-00  
**Last Observed:** 1990-00-00 **First Observed:** 1990-00-00 **Actual Mapping Precision (m):** 250 **Precision Code:** S  
**Directions:** M.D. of Provost; Cadogan, 12.75 km SW of; Sect. 4,6,7 in Tp38-R4-W4M  
**General Description:** non-saline backshore of saline ponds and alkali shores  
**Min Elev. (m):** 648 **Max Elev. (m):**

**Management Comments:** heavy grazing pressure on parts of shoreline; recommend sufficient setback to reduce adverse impacts

**Best Source of Info:** U90WAL01ABCA

**Map UTM Zone UTM Easting UTM Northing Survey Site Name Notes # Dot ID #**

73D02 12 530100 5787000 Cadogan Sects. 4,6,7 in Tp38-R4-W4M (Multipolygon) 8 5975

**Source Code Author Publisher Year Title**

U90WAL01ABCA Wallis, Cliff 1990 Reconnaissance Survey of Saline Wetlands and Springs in the Grassland-Parkland Region of Eastern Alberta

**Date Source Abstract Code Observer Occurrence Data**

U90WAL01ABCA C Wallis See unpublished report

**Muhlenbergia asperifolia** scratch grass SRank: S2

+++++

**Element Code:** PMPOA48070 **Occurrence Code #:** 012 **Survey Date:** 1990-00-00  
**Last Observed:** 1990-00-00 **First Observed:** 1990-00-00 **Actual Mapping Precision (m):** 250 **Precision Code:** S  
**Directions:** Chappice Lake, Medicine Hat, NE of; Tp14-R3-W4M  
**General Description:** upper shores of permanent hypersaline lake  
**Min Elev. (m):** 730 **Max Elev. (m):**

**Other Comments:** recommend sufficient setback; no groundwater pumping for injection wells

**Management Comments:** current mgmt compatible with ecosystem; concerns about loss of groundwater flows; adjacent natural gas wells **Best Source of Info:** U90WAL01ABCA

**Map UTM Zone UTM Easting UTM Northing Survey Site Name Notes # Dot ID #**

72L01 12 546050 5557450 Chappice Lake Mapped as polygon 1 4416

**Source Code Author Publisher Year Title**

U90WAL01ABCA Wallis, Cliff 1990 Reconnaissance Survey of Saline Wetlands and Springs in the Grassland-Parkland Region of Eastern Alberta

**Date Source Abstract Code Observer Occurrence Data**

U90WAL01ABCA C Wallis See unpubl. report in-house

**Muhlenbergia asperifolia** scratch grass SRank: S2

**Element Code:** PMPOA48070 **Occurrence Code #:** 013 **Survey Date:** 1990-00-00  
**Last Observed:** 1990-00-00 **First Observed:** 1990-00-00 **Actual Mapping Precision (m):** 250 **Precision Code:** S  
**Directions:** Sounding Lake, ca. 1.5 km N of; "Greenlee Lake"; Sect. 26-Tp37-R4-W4M  
**General Description:** semi-perm. hypersaline water body; esp. E & S shores; on higher backshores  
**Min Elev. (m):** 600 **Max Elev. (m):** 655  
**Management Comments:** threatened by oil-well development; groundwater s/b monitored for effects; protect wetland basin with sufficient setback **Best Source of Info:** U90WAL01ABCA  
**Map UTM Zone UTM Easting UTM Northing Survey Site Name Notes # Dot ID #**  
73D01 12 535825 5784000 "Greenlee Lake" N of Sounding Lake; mapped as polygon 1 4425  
**Source Code Author Publisher Year Title**  
U90WAL01ABCA Wallis, Cliff 1990 Reconnaissance Survey of Saline Wetlands and Springs in the Grassland-Parkland Region of Eastern Alberta  
**Date Source Abstract Code Observer Occurrence Data**  
U90WAL01ABCA C. Wallis See unpubl. report in-house  
**Muhlenbergia asperifolia** scratch grass SRank: S2  
+++++

**Element Code:** PMPOA48070 **Occurrence Code #:** 014 **Survey Date:** 1990-00-00  
**Last Observed:** 1990-00-00 **First Observed:** 1990-00-00 **Actual Mapping Precision (m):** 250 **Precision Code:** S  
**Directions:** Leane Lake, 2.5 km SW of Dilberry Lake PP; Tp41-R1-W4M  
**General Description:** drier outer shoreline of hypersaline, semi-permanent lake  
**Min Elev. (m):** 587 **Max Elev. (m):**  
**Other Comments:** recommend retain as nat'l water body with sufficient setback  
**Management Comments:** relat. undist. basin & shore; nearby petroleum development **Best Source of Info:** U90WAL01ABCA  
**Map UTM Zone UTM Easting UTM Northing Survey Site Name Notes # Dot ID #**  
73D09 12 564750 5824000 Leane Lake Tp41-R1-W4M; mapped as polygon 19 6004  
**Source Code Author Publisher Year Title**  
U90WAL01ABCA Wallis, Cliff 1990 Reconnaissance Survey of Saline Wetlands and Springs in the Grassland-Parkland Region of Eastern Alberta  
**Date Source Abstract Code Observer Occurrence Data**  
U90WAL01ABCA C Wallis See unpubl. report in-house  
**Muhlenbergia asperifolia** scratch grass SRank: S2  
+++++

**Element Code:** PMPOA48070 **Occurrence Code #:** 015 **Survey Date:** 1990-00-00  
**Last Observed:** 1990-00-00 **First Observed:** 1990-00-00 **Actual Mapping Precision (m):** 250 **Precision Code:** S  
**Directions:** Consort, 12.5 km NW of; "Neutral Hills South"; "Lake A"; Sects. 3 & 4-Tp36-R7-W4M  
**General Description:** moist shores of hypersaline, semi-permanent ponds; and along creek  
**Min Elev. (m):** 750 **Max Elev. (m):** 750  
**Other Comments:** recommend retain as nat'l water body with suff. setback & addit'l monitoring of site to assess over time  
**Management Comments:** locally heavy grazing along shore but otherwise compatible with ecosystem maintenance; petrol. dev't on adj. lands **Best Source of Info:** U90WAL01ABCA  
**Map UTM Zone UTM Easting UTM Northing Survey Site Name Notes # Dot ID #**  
73D02 12 503900 5768075 "Neutral Hills Lake A" 4-36-7 W4M; 110 56/52 04; UTM 503414/5767401; mapped as polygon 5 4594  
**Source Code Author Publisher Year Title**  
U90WAL01ABCA Wallis, Cliff 1990 Reconnaissance Survey of Saline Wetlands and Springs in the Grassland-Parkland Region of Eastern Alberta  
**Date Source Abstract Code Observer Occurrence Data**  
U90WAL01ABCA C Wallis See unpubl. report  
**Muhlenbergia asperifolia** scratch grass SRank: S2  
+++++

**Element Code:** PMPOA48070 **Occurrence Code #:** 016 **Survey Date:** 1990-00-00  
**Last Observed:** 1990-00-00 **First Observed:** 1990-00-00 **Actual Mapping Precision (m):** 250 **Precision Code:** S  
**Directions:** Consort, 12.5 km NW of; "Neutral Hills South"; "Lake B1"; Sects. 16 & 17-Tp36-R7-W4M  
**General Description:** moist shores of hypersaline, semi-permanent ponds  
**Min Elev. (m):** 750 **Max Elev. (m):** 750  
**Other Comments:** recommend retain as nat'l water body with sufficient setback; also addit'l monitoring to assess site over time  
**Management Comments:** locally heavy grazing along shore but mgmt mostly compatible with ecosystem maintenance; petrol. dev't on adj. lands **Best Source of Info:** U90WAL01ABCA  
**Map UTM Zone UTM Easting UTM Northing Survey Site Name Notes # Dot ID #**  
73D02 12 503825 5770150 "Neutral Hills Lake B1" 9-7-36 W4M; 52 04/110 57; 503413/5769019 ; mapped as polygon 6 4595  
**Source Code Author Publisher Year Title**  
U90WAL01ABCA Wallis, Cliff 1990 Reconnaissance Survey of Saline Wetlands and Springs in the Grassland-Parkland Region of Eastern Alberta  
**Date Source Abstract Code Observer Occurrence Data**  
U90WAL01BCA C Wallis See unpul. report in-house  
**Muhlenbergia asperifolia** scratch grass SRank: S2

**Element Code:** PMPOA48070 **Occurrence Code #:** 017 **Survey Date:** 1990-00-00  
**Last Observed:** 1990-00-00 **First Observed:** 1990-00-00 **Actual Mapping Precision (m):** 250 **Precision Code:** S  
**Directions:** Medicine Hat, N of; Old Channel Lake; Old Channel Lake spring; Sect. 32-Tp14-R5-W4M  
**General Description:** vegetation around moder. saline spring and along uphill springline; rel. dry zone (farther from spring)  
**Min Elev. (m):** 640 **Max Elev. (m):** 640  
**Other Comments:** recommend protection of spring wetlands; no groundwater pumping for injection wells  
**Management Comments:** heavy cattle grazing of some springs; petroleum dev't on adjacent lands **Best Source of Info:**  
U90WAL01ABCA

**Map UTM Zone UTM Easting UTM Northing Survey Site Name Notes # Dot ID #**

72L02 12 525000 5563000 Old Channel Lake Sect. 32-Tp14-R5-W4M; mapped as polygon 43 6009

**Source Code Author Publisher Year Title**

U90WAL01ABCA Wallis, Cliff 1990 Reconnaissance Survey of Saline Wetlands and Springs in the Grassland-Parkland Region of Eastern Alberta

**Date Source Abstract Code Observer Occurrence Data**

U90WAL01ABCA C Wallis See unpubl. report in-house

**Muhlenbergia asperifolia** scratch grass SRank: S2

+++++

**Element Code:** PMPOA48070 **Occurrence Code #:** 018 **Survey Date:** 1990-00-00  
**Last Observed:** 1990-00-00 **First Observed:** 1990-00-00 **Actual Mapping Precision (m):** 250 **Precision Code:** S  
**Directions:** Chauvin, 8 km SE of; Reflex Lake [Salt Lake]; Tps 42 & 43-R1-W4M  
**General Description:** unveget. or sparsely vegetated shores of hypersaline lake; vegetation around springs  
**Min Elev. (m):** 600 **Max Elev. (m):** 600

**Other Comments:** recommend protectn of wetland basin; no groundwater pumping; explore purchase of critical lands; fencing & grazing mgmt; exist. lease only for cottage dev't

**Management Comments:** cattle grazing, OHV use, expansion of recreational cottage dev't pose problems; active gas & oil wells on adj lands **Best Source of Info:** U90WAL01ABCA

**Map UTM Zone UTM Easting UTM Northing Survey Site Name Notes # Dot ID #**

73D09 12 565600 5835300 Reflex Lake Polygon 15 4598

**Source Code Author Publisher Year Title**

U90WAL01ABCA Wallis, Cliff 1990 Reconnaissance Survey of Saline Wetlands and Springs in the Grassland-Parkland Region of Eastern Alberta

**Date Source Abstract Code Observer Occurrence Data**

U90WAL01ABCA C Wallis See unpubl report

**Muhlenbergia asperifolia** scratch grass SRank: S2

+++++

**Element Code:** PMPOA48070 **Occurrence Code #:** 019 **Survey Date:** 1990-00-00  
**Last Observed:** 1990-00-00 **First Observed:** 1990-00-00 **Actual Mapping Precision (m):** 250 **Precision Code:** S  
**Directions:** Metiskow, 2.5 km N of; Sunken Lake; Tp39-R5-W4M  
**General Description:** temporary, hypersaline lake in a deep basin; rel. dry vegetation zone around lake  
**Min Elev. (m):** 670 **Max Elev. (m):** 670

**Other Comments:** recommend: retain as nat'l water body with suff. setback; addit'l monitoring of site to assess site over time & monitor changes in grazing levels; no groundwater pumping for injection wells

**Management Comments:** threats due to further clearing & cultivn round lake; nearby petrol. dev't; some light grazing on backshore **Best Source of Info:** U90WAL01ABCA

**Map UTM Zone UTM Easting UTM Northing Survey Site Name Notes # Dot ID #**

73D07 12 523550 5802000 Sunken Lake Polygon 7 4604

**Source Code Author Publisher Year Title**

U90WAL01ABCA Wallis, Cliff 1990 Reconnaissance Survey of Saline Wetlands and Springs in the Grassland-Parkland Region of Eastern Alberta

**Date Source Abstract Code Observer Occurrence Data**

1990-00-00 U90WAL01ABCA C Wallis See unpubl. report in-house

**Muhlenbergia asperifolia** scratch grass SRank: S2

+++++

**Element Code:** PMPOA48070    **Occurrence Code #:** 020    **Survey Date:** 1990-00-00  
**Last Observed:** 1990-00-00    **First Observed:** 1990-00-00    **Actual Mapping Precision (m):** 250    **Precision Code:** S  
**Directions:** Bindloss, 8.5 km SW of; Prince's Springs (formerly Bindloss Depression); Sects. 27,28,34,35-Tp21-R3-W4M  
**General Description:** ungrazed drier area around main springs  
**Min Elev. (m):** 617    **Max Elev. (m):** 617  
**Other Comments:** recommend addtl fencing of spring-dependent vegn; protection of wetland basin; no groundwater pumping for wells; survey in wetter periods  
**Management Comments:** threats from cattle trampling, pumping of water out of springs for cattle watering; natural gas wells on adjacent lands    **Best Source of Info:** U90WAL01ABCA  
**Map UTM Zone UTM Easting UTM Northing Survey Site Name Notes # Dot ID #**  
72L16 12 546450 5629250 Bindloss Sects. 27,28,34,35-Tp21R3-W4M; mapped as polygon 33 6040  
**Source Code Author Publisher Year Title**  
U90WAL01ABCA Wallis, Cliff 1990 Reconnaissance Survey of Saline Wetlands and Springs in the Grassland-Parkland Region of Eastern Alberta  
**Date Source Abstract Code Observer Occurrence Data**  
1990-00-00 U90WAL01ABCA C Wallis See unpubl report in-house  
**Muhlenbergia asperifolia** scratch grass SRank: S2  
+++++

**Element Code:** PMPOA48070    **Occurrence Code #:** 021    **Survey Date:** 1990-00-00  
**Last Observed:** 1990-00-00    **First Observed:** 1990-00-00    **Actual Mapping Precision (m):** 250    **Precision Code:** S  
**Directions:** Wainwright, S of, & N of Metiskow; David Lake; Tps 41, 42-R5-W4M  
**General Description:** lakeshore; drier, upper shore; on sandy soil  
**Min Elev. (m):** 665    **Max Elev. (m):** 665  
**Other Comments:** protect entire wetland basin with sufficient setback; reduce pressure on wet meadow cts W of David L  
**Management Comments:** ecological reserve    **Best Source of Info:** U90WAL01ABCA  
**Map UTM Zone UTM Easting UTM Northing Survey Site Name Notes # Dot ID #**  
73D10 12 526500 5826250 David Lake 38 305  
**Source Code Author Publisher Year Title**  
U90WAL01ABCA Wallis, Cliff 1990 Reconnaissance Survey of Saline Wetlands and Springs in the Grassland-Parkland Region of Eastern Alberta  
**Date Source Abstract Code Observer Occurrence Data**  
1990-00-00 U90WAL01ABCA See unpubl report in-house  
**Muhlenbergia asperifolia** scratch grass SRank: S2

**Muhlenbergia racemosa marsh muhly**

**Natural Region:** Foothills Fescue Grassland, Dry Mixedgrass

**Habitat:** Slopes-Sandy

**Phenology:** heads out in late June

**Specific Search Strategies (if any):** some taxonomic uncertainty and introgression with a more common wetland species. Search seasonal river channels for minor eroding sand ridges along the edge or within the channel as well as south-facing sandy slopes with eroding sand

**Element Occurrences:**

**Element Code:** PMPOA481D0 **Occurrence Code #:** 001 **Survey Date:** 1978-04-09  
**Last Observed:** 1978-04-09 **First Observed:** 1978-04-09 **Precision Code:** S  
**Directions:** CALGARY; MACLEOD TRAIL, 0.5 MI. W. OF; FISH CREEK PROV. PARK,  
**General Description:** DRY EXPOSED S. FACING HILLSIDE, SANDY SOIL  
**Min Elev. (m):** 1066 **Max Elev. (m):** 1066 **Aspect:** S **Best Source of Info:** S78WILUCABCA01  
**Specimen Source Code Collector Herbarium Accession # Date ID OK? Observation Detail**  
S78WILUCABCA01 Wilkinson, K. UC 63225 1978-04-09  
**Map UTM Zone UTM Easting UTM Northing Survey Site Name Notes # Dot ID #**  
82J16 11 705200 5646200 Fish Creek Provincial Park 10 1704  
**Muhlenbergia racemosa** marsh muhly SRank: S1  
+++++

**Element Code:** PMPOA481D0 **Occurrence Code #:** 002 **Survey Date:** 1943-08-27  
**Last Observed:** 1943-08-27 **First Observed:** 1943-08-27 **Precision Code:** M  
**Directions:** Red Deer, few miles N of, Blindman River, margin of  
**General Description:** among bushes in sandy soil  
**Min Elev. (m):** 846 **Max Elev. (m):** 846 **Best Source of Info:** S43MCCUAABCA02  
**Specimen Source Code Collector Herbarium Accession # Date ID OK? Observation Detail**  
S43MCCUAABCA02 McCalla, W.C. UA 33615 1943-08-27 spikelets  
**Map UTM Zone UTM Easting UTM Northing Survey Site Name Notes # Dot ID #**  
83A05 12 308600 5804250 Blindman River 2 2306  
**Muhlenbergia racemosa** marsh muhly SRank: S1  
+++++

**Element Code:** PMPOA481D0 **Occurrence Code #:** 003 **Survey Date:** 1968-09-03  
**Last Observed:** 1968-09-03 **First Observed:** 1968-09-03 **Precision Code:** M  
**Directions:** Provincial Museum Area, on bank near trail  
**Min Elev. (m):** 670 **Max Elev. (m):** 670 **Best Source of Info:** S68SAVPMABCA03  
**Specimen Source Code Collector Herbarium Accession # Date ID OK? Observation Detail**  
S68SAVPMABCA03 Savale, W.F. PM B68.12.12a 1968-09-03 Y fairly common; panicle present  
S68SAVPMABCA06 Savale, W.F. PM B68.12.12b 1968-09-03 Y panicle present  
**Map UTM Zone UTM Easting UTM Northing Survey Site Name Notes # Dot ID #**  
83H12 12 331575 5935150 Edmonton Lat/Long: 53 33/113 28; Lat/Long does not match location description. 10 3353  
**Muhlenbergia racemosa** marsh muhly SRank: S1  
+++++

**Element Code:** PMPOA481D0 **Occurrence Code #:** 004 **Survey Date:** 1903-09-08  
**Last Observed:** 1903-09-08 **First Observed:** 1900-07-21 **Precision Code:** M  
**Directions:** Middle Spring  
**General Description:** By waste water. Marsh.  
**Min Elev. (m):** 1675 **Max Elev. (m):** 1675 **Best Source of Info:** S03SANUCABCA02  
**Specimen Source Code Collector Herbarium Accession # Date ID OK? Observation Detail**  
S00SANNMONCA02 Sanson NM 30227 1900-07-21  
S03SANUCABCA02 Sanson, N.B. UC none 1903-09-08  
**Map UTM Zone UTM Easting UTM Northing Survey Site Name Notes # Dot ID #**  
82O04 11 599300 5668350 Sanson Peak 182 2083  
**Muhlenbergia racemosa** marsh muhly SRank: S1  
+++++

**Element Code:** PMPOA481D0 **Occurrence Code #:** 005 **Survey Date:** 1965-08-00  
**Last Observed:** 1965-08-00 **First Observed:** 1965-08-00 **Precision Code:** M  
**General Description:** moist meadows & low ground  
**Min Elev. (m):** 745 **Max Elev. (m):** 745 **Best Source of Info:** S65CAMPPABCA04  
**Specimen Source Code Collector Herbarium Accession # Date ID OK? Observation Detail**  
S65CAMPPABCA04 Campbell, J.A. PP 566 1965-08-00  
S65CAMPPABCA05 Campbell, J.A. PP 567 1965-08-00  
**Map UTM Zone UTM Easting UTM Northing Survey Site Name Notes # Dot ID #**  
83G10 11 648500 5936200 Seba Beach 15 3139  
**Date Source Abstract Code Observer Occurrence Data**  
Scattered abundance - fair forage value for game, cattle & horses.  
***Muhlenbergia racemosa*** marsh muhly SRank: S1  
+++++

**Element Code:** PMPOA481D0 **Occurrence Code #:** 006 **Survey Date:** 2000-09-14  
**Last Observed:** 2000-09-14 **First Observed:** 2000-09-14 **Actual Mapping Precision (m):** 150 **Precision Code:** S  
**Directions:** Calgary; Fairview area, E of; Bow River W side of; Cominco Lands  
**General Description:** on smallest of river islands in a grassy, sandy dry river channel near the Bow River; dominant species in meander scar was *Poa pratensis*  
**Min Elev. (m):** 1010 **Max Elev. (m):** 1020  
**Other Comments:** specimens from area appear to be intermediate to provincially more common *M. glomerata*. 200 plants were found at NAD27 708438E 5651721N; specimen collected **Best Source of Info:** U00WAL04ABCA  
**Map UTM Zone UTM Easting UTM Northing Survey Site Name Notes # Dot ID #**  
82J16 11 708300 5651650 Calgary 21 6303  
**Source Code Author Publisher Year Title**  
U00WAL04ABCA Wallis, C. Cottonwood Consultants Ltd., Calgary 2000 Rare Plant Survey, Cominco Lands, Calgary  
***Muhlenbergia racemosa*** marsh muhly SRank: S1

**Munroa squarrosa false buffalo grass**

**Natural Region:** Dry Mixedgrass

**Habitat:** Slopes-Sandy

**Phenology:** heads out in July

**Specific Search Strategies (if any):** most easily detected in August when some drying has taken place and the plant stands out from the background vegetation; search gravelly and sandy slopes and sandy/gravelly areas along disturbances such as vehicle ruts

**Element Occurrences:**

**Element Code:** PMPOA49010 **Occurrence Code #:** 001 **Survey Date:** 1995-00-00

**Last Observed:** 1995-00-00 **First Observed:** 1994-00-00 **Precision Code:** S

**Directions:** Southern boundary of S.N.W.A., from along; Alberta Energy Company machinery compound, within, along the building and fence fringes; Gate S24, at.

**General Description:** Occurs on xeric to subxeric gravelly sand.

**Min Elev. (m):** 709 **Max Elev. (m):** 709

**Other Comments:** This population was persisting in the equipment compound through the 1994 and 1995 field season. **Best**

**Source of Info:** U96MAC01ABCA

**Map UTM Zone UTM Easting UTM Northing Survey Site Name Notes # Dot ID #**

72L02 12 520500 5563400 Old Channel Lake 3 170

**Source Code Author Publisher Year Title**

U96MAC01ABCA Macdonald, I.D. Canadian Wildlife Service, Environment Canada, Prairie and 1996 Vascular Flora of Canadian Forces Base Suffield National Wildlife Area

**Date Source Abstract Code Observer Occurrence Data**

rare; growing quite profusely and flowering as local carpets

**Munroa squarrosa** false buffalo grass SRank: S1

+++++

**Element Code:** PMPOA49010 **Occurrence Code #:** 002 **Survey Date:** 1995-00-00

**Last Observed:** 1995-00-00 **First Observed:** 1994-00-00 **Precision Code:** S

**Directions:** Canadian Forces Base Suffield National Wildlife Area, South Saskatchewan River Valley, slopes of; Bull Pen, about 1.5 km W of.

**General Description:** Slopes of the river valley; dry gravelly and sandy ridge crests.

**Min Elev. (m):** 663 **Max Elev. (m):** 663

**Other Comments:** Information was cited from some C. Wallis report by I. Macdonald. **Best Source of Info:** U96MAC01ABCA

**Map UTM Zone UTM Easting UTM Northing Survey Site Name Notes # Dot ID #**

72L07 12 524100 5566700 Brush Flats UTM WL ca 524100 / 5566700 3 188

**Source Code Author Publisher Year Title**

U96MAC01ABCA Macdonald, I.D. Canadian Wildlife Service, Environment Canada, Prairie and 1996 Vascular Flora of Canadian Forces Base Suffield National Wildlife Area

**Date Source Abstract Code Observer Occurrence Data**

single patch

**Munroa squarrosa** false buffalo grass SRank: S1

+++++

**Element Code:** PMPOA49010 **Occurrence Code #:** 003 **Survey Date:** 1996-08-19

**Last Observed:** 1996-08-19 **First Observed:** 1996-08-19 **Actual Mapping Precision (m):** 600 **Precision Code:** M

**Directions:** Bull Springs Coulee, mouth of, 4 km ESE of.

**General Description:** edge of 5m wide water pipeline disturbance; very poor topsoil salvage; needle&thread 47%, branched pepperwort 28%, Chenopodium spp. 15%. 1 plant collected

**Min Elev. (m):** 777 **Max Elev. (m):** 777

**Slope:** 0.00 **Best Source of Info:** S97GILPPABCA01

**Specimen Source Code Collector Herbarium Accession # Date ID OK? Observation Detail**

S96GILPPABCA01 Gill, Suzanne PP 003504 1996-08-19 Y 1 plant; vegetative

S97GILPPABCA01 Gill, Suzanne PP 003504 1996-08-19 1 plant

**Map UTM Zone UTM Easting UTM Northing Survey Site Name Notes # Dot ID #**

72L08 12 545125 5584000 White Rock Coulee NW4-17-3 W4M 10 213

**Source Code Author Publisher Year Title**

U96GIL01ABCA Gill, Suzanne 1996 Rare Native Plant Survey Form

**Munroa squarrosa** false buffalo grass SRank: S1

+++++



**Element Code:** PMPOA49010 **Occurrence Code #:** 004 **Survey Date:** 1959-08-23  
**Last Observed:** 1959-08-23 **First Observed:** 1959-08-23 **Actual Mapping Precision (m):** 500 **Precision Code:** M  
**Directions:** Many Island Lake, West side of, 7 km W of; E side of Sam Lake, 1.65 km SE of.  
**General Description:** Dry sandy roadside on S facing slope. Other species: Chrysopsis villosa, Verbena bracteata, Salsola kali, Plantago purshii.  
**Min Elev. (m):** 739 **Max Elev. (m):** 739 **Aspect:** S **Best Source of Info:** S59HUDACONCA02  
**Specimen Source Code Collector Herbarium Accession # Date ID OK? Observation Detail**  
S59HUDACONCA02 Hudson, T.H. AC 154081 1959-08-23  
**Map UTM Zone UTM Easting UTM Northing Survey Site Name Notes # Dot ID #**  
72L01 12 554500 5553300 Sam Lake NE1/4 32-13-II W 4th. 5 4158  
**Munroa squarrosa** false buffalo grass SRank: S1

***Nothocalais cuspidata* prairie false dandelion**

**Natural Region:** Dry Mixedgrass

**Habitat:** Grassland-Sandy

**Phenology:** flowers late May to early June

**Specific Search Strategies (if any):** extensive area searches in sand plains in extreme southeastern Alberta; widespread but only as scattered individuals

**Element Occurrences:**

**Element Code:** PDAST6P020 **Occurrence Code #:** 001 **Survey Date:** 1989-06-15

**Last Observed:** 1989-06-15 **First Observed:** 1989-06-15 **Precision Code:** S

**Directions:** Milk River Natural area

**General Description:** Very short sandy mixed grassland

**Min Elev. (m):** 975 **Max Elev. (m):** 975 **Best Source of Info:** S89WALPPABCA17

**Specimen Source Code Collector Herbarium Accession # Date ID OK? Observation Detail**

S89WALPPABCA17 Wallis, C. PP 771 1989-06-15

**Map UTM Zone UTM Easting UTM Northing Survey Site Name Notes # Dot ID #**

72E02 12 522923 5427334 Milk River Natural Area LSD 3 17 28

**Date Source Abstract Code Observer Occurrence Data**

Widely scattered plants, total #'s in low 1000's

***Nothocalais cuspidata*** prairie false dandelion SRank: S1

+++++

**Element Code:** PDAST6P020 **Occurrence Code #:** 002 **Survey Date:** 1985-00-00

**Last Observed:** 1985-00-00 **First Observed:** 1985-00-00 **Actual Mapping Precision (m):** 50 **Precision Code:** S

**Directions:** Lost River Valley and USA border, at.

**General Description:** on sandy soil on coulee slopes

**Min Elev. (m):** 846 **Max Elev. (m):** 873 **Best Source of Info:** R86WER01ABCA

**Map UTM Zone UTM Easting UTM Northing Survey Site Name Notes # Dot ID #**

72E01 12 541350 5427775 Lost River 45 4546

**Source Code Author Publisher Year Title**

R86WER01ABCA Wershler C. & C. Wallis 1986 Lost River Significant Features Assessment

***Nothocalais cuspidata*** prairie false dandelion SRank: S1

+++++

**Element Code:** PDAST6P020 **Occurrence Code #:** 003 **Survey Date:** 1985-00-00

**Last Observed:** 1985-00-00 **First Observed:** 1985-00-00 **Actual Mapping Precision (m):** 50 **Precision Code:** S

**Directions:** Lost River, 2 km W of; USA border, 1.5 km N of.

**General Description:** sandy soil

**Min Elev. (m):** 869 **Max Elev. (m):** 876 **Best Source of Info:** R86WER01ABCA

**Map UTM Zone UTM Easting UTM Northing Survey Site Name Notes # Dot ID #**

72E01 12 538300 5428650 Lost River 9 8

**Source Code Author Publisher Year Title**

R86WER01ABCA Wershler C. & C. Wallis 1986 Lost River Significant Features Assessment

***Nothocalais cuspidata*** prairie false dandelion SRank: S1

+++++

**Element Code:** PDAST6P020 **Occurrence Code #:** 004 **Survey Date:** 1985-00-00

**Last Observed:** 1985-00-00 **First Observed:** 1985-00-00 **Actual Mapping Precision (m):** 50 **Precision Code:** S

**Directions:** Lost River Valley, W rim of; USA border, 1.3 km N of.

**General Description:** sandstone outcrops

**Min Elev. (m):** 846 **Max Elev. (m):** 869 **Best Source of Info:** R86WER01ABCA

**Map UTM Zone UTM Easting UTM Northing Survey Site Name Notes # Dot ID #**

72E01 12 540000 5428550 Lost River 48 4549

**Source Code Author Publisher Year Title**

R86WER01ABCA Wershler C. & C. Wallis 1986 Lost River Significant Features Assessment

***Nothocalais cuspidata*** prairie false dandelion SRank: S1

+++++

**Element Code:** PDAST6P020 **Occurrence Code #:** 005 **Survey Date:** 1985-00-00  
**Last Observed:** 1985-00-00 **First Observed:** 1985-00-00 **Actual Mapping Precision (m):** 50 **Precision Code:** S  
**Directions:** Lost River Valley, W rim of; USA border, 2.7 km N of.  
**General Description:** moist coulee grassland  
**Min Elev. (m):** 861 **Max Elev. (m):** 884 **Best Source of Info:** U86WER01ABCA  
**Map UTM Zone UTM Easting UTM Northing Survey Site Name Notes # Dot ID #**  
72E01 12 539900 5429950 Lost River 50 4551  
**Source Code Author Publisher Year Title**  
U86WER01ABCA Wershler, C.R. Prepared for AB Forestry, Lands and Wildlife 1986 Lost River: Mountain Plover Study.  
**Nothocalais cuspidata** prairie false dandelion SRank: S1  
+++++

**Element Code:** PDAST6P020 **Occurrence Code #:** 006 **Survey Date:** 1985-00-00  
**Last Observed:** 1985-00-00 **First Observed:** 1985-00-00 **Actual Mapping Precision (m):** 50 **Precision Code:** S  
**Directions:** Onefour, 8 km S of; Lost River, 1.5 km NE of.  
**General Description:** seasonally moist depression  
**Min Elev. (m):** 906 **Max Elev. (m):** 906 **Best Source of Info:** R86WER01ABCA  
**Map UTM Zone UTM Easting UTM Northing Survey Site Name Notes # Dot ID #**  
72E01 12 538625 5432975 Lost River 52 4553  
**Source Code Author Publisher Year Title**  
R86WER01ABCA Wershler C. & C. Wallis 1986 Lost River Significant Features Assessment  
**Nothocalais cuspidata** prairie false dandelion SRank: S1  
+++++

**Element Code:** PDAST6P020 **Occurrence Code #:** 007 **Survey Date:** 1990-09-05  
**Last Observed:** 1990-09-05 **First Observed:** 1990-09-05 **Actual Mapping Precision (m):** 800 **Precision Code:** M  
**Directions:** Mount Livingstone, east facing slope of  
**General Description:** small colourful grassland with many asters, surrounded by Picea engelmannii  
**Min Elev. (m):** 1890 **Max Elev. (m):** 2195  
**Slope:** 22.00 **Aspect:** 95 **Best Source of Info:** B91TIM01ABCA  
**Map UTM Zone UTM Easting UTM Northing Survey Site Name Notes # Dot ID #**  
82J01 11 686400 5556200 Mt. Livingstone Natural Area 49 5155  
**Source Code Author Publisher Year Title**  
B91TIM01ABCA Timoney, Kevin P. Alberta Forestry, Lands & Wildlife 44p. 1991 Biophysical Inventory of the Mount Livingstone  
Natural Area  
**Nothocalais cuspidata** prairie false dandelion SRank: S1

***Nuttallanthus canadensis* field toad-flax**

**Natural Region:** Dry Mixedgrass

**Habitat:** Grassland-Sandy

**Phenology:** flowers late June

**Specific Search Strategies (if any):** extensive area searches on sand plains with a solonetzic component; extremely localized to minor blowouts and moister swales with exposed sandy soils

**Element Occurrences:**

**Element Code:** PDSCR2P010 **Occurrence Code #:** 001 **Survey Date:** 1996-00-00  
**Last Observed:** 1996-00-00 **First Observed:** 1996-00-00 **Actual Mapping Precision (m):** 500 **Precision Code:** M  
**Directions:** Kirkpatrick Lake, ~6.5km NE of E end of; Hwy 586; ~3.5km N of.  
**General Description:** 4 populations approx. 400 plants total. Exposed sand W of RoW. RoW narrowed.  
**Min Elev. (m):** 777 **Max Elev. (m):** 777 **Best Source of Info:** U96EXP01ABCA  
**Map UTM Zone UTM Easting UTM Northing Survey Site Name Notes # Dot ID #**  
72M14 12 488500 5748050 Kirkpatrick Lake LS#13;km:86.1;LLD: SE 2 34-9-4 1 4007  
**Source Code Author Publisher Year Title**  
U96EXP01ABCA AXYS Environmental Consulting 1996 Express Pipeline Project  
***Nuttallanthus canadensis* field toad-flax SRank:** S1

**Oenothera flava** low yellow evening-primrose

**Natural Region:** Foothills Fescue Grassland, Mixedgrass, Dry Mixedgrass

**Habitat:** Wetland-Sandy

**Phenology:** late June to early August

**Specific Search Strategies (if any):** along edges of sandy, gravelly wetlands or sandy ephemeral stream bottoms; occasionally on disturbed gravelly moist disturbances

**Element Occurrences:**

**Element Code:** PDONA0C0E0 **Occurrence Code #:** 001 **Survey Date:** 1969-07-05

**Last Observed:** 1969-07-05 **First Observed:** 1969-07-05 **Precision Code:** M

**Directions:** Indian Springs Pond

**General Description:** pond shore of sand and fine gravel in prairie

**Min Elev. (m):** 1372 **Max Elev. (m):** 1372 **Best Source of Info:** S69BLAULABCA15

**Specimen Source Code Collector Herbarium Accession # Date ID OK? Observation Detail**

S69BLAULABCA15 Blais, W. UL none 1969-07-05

**Map UTM Zone UTM Easting UTM Northing Survey Site Name Notes # Dot ID #**

82H04 12 290550 5445650 Buffalo Paddock 261 1163

**Oenothera flava** low yellow evening-primrose SRank: S2

+++++

**Element Code:** PDONA0C0E0 **Occurrence Code #:** 002 **Survey Date:** 1952-08-26

**Last Observed:** 1952-08-26 **First Observed:** 1952-08-26 **Precision Code:** M

**Directions:** Empress, 2 mi SW of.

**General Description:** Margin of slough **Best Source of Info:** S52MOSUAABCA07

**Specimen Source Code Collector Herbarium Accession # Date ID OK? Observation Detail**

S52MOSUAABCA07 Moss, E.H. UA 13153 1952-08-26 one plant only; yellow flowerd; stigma 4 lobed; remains of flowers

**Map UTM Zone UTM Easting UTM Northing Survey Site Name Notes # Dot ID #**

72L16 12 567000 5642200 Empress 1 248

**Oenothera flava** low yellow evening-primrose SRank: S2

+++++

**Element Code:** PDONA0C0E0 **Occurrence Code #:** 003 **Survey Date:** 1999-06-22

**Last Observed:** 1999-06-22 **First Observed:** 1947-08-14 **Actual Mapping Precision (m):** 20 **Precision Code:** S

**Directions:** Cypress Hills; Spring Creek Ranger Station, plateau west of [1998 - Murray Hill Rd., E of trail to dam, W end of plateau].

**General Description:** in middle and edge of vehicle trail; xeric

**Min Elev. (m):** 1365 **Max Elev. (m):** 1460

**Slope:** 20.00 **Aspect:** S **Size of Occurrence:** 0.50

**Other Comments:** slope less than 20%; for detailed map of plants see in electronical file of Cypress Hills.

**Management Comments:** Grazing and recreational use; threats from traffic on the road and road maintenance **Best Source of Info:** S47BREACONCA01

**Specimen Source Code Collector Herbarium Accession # Date ID OK? Observation Detail**

S47BREACONCA01 Breitung AC 168019 1947-08-14

**Map UTM Zone UTM Easting UTM Northing Survey Site Name Notes # Dot ID #**

72E09 12 546524 5496906 Spring Creek Ranger Station LSD 14 Sec 4 and Sec 5-8-3 W4M 12 108

**Source Code Author Publisher Year Title**

F98ALL01ABCA Allen, Lorna 1998 Field notes: 1998 field season U99BRA01ABCA Bradley, C., R. Ernst, D. Dickinson & L. Fitch 1999 Rare Plant Survey Forms

**Date Source Abstract Code Observer Occurrence Data**

1998-07-10 F98ALL01ABCA L. Allen 1 plant noted; in middle of road which was not use for last several weeks

1999-06-22 U99BRA01ABCA Reg Ernst 50 plants, along edge of road in cobbles, with Cirsium arvense, Bromus inermis, Taraxacum officinale, Agoseris glauca; V6 vegetative; R8 reproductive

**Oenothera flava** low yellow evening-primrose SRank: S2

+++++

**Element Code:** PDONA0C0E0 **Occurrence Code #:** 004 **Survey Date:** 1902-06-25

**Last Observed:** 1902-06-25 **First Observed:** 1902-06-25 **Precision Code:** M

**Directions:** Pincher Creek

**Min Elev. (m):** 1130 **Max Elev. (m):** 1130 **Best Source of Info:** S02XXXACONCA01

**Specimen Source Code Collector Herbarium Accession # Date ID OK? Observation Detail**

S02XXXACONCA01 Unknown AC 584946 1902-06-25

**Map UTM Zone UTM Easting UTM Northing Survey Site Name Notes # Dot ID #**

82H05 12 286350 5485600 5 1333

**Oenothera flava** low yellow evening-primrose SRank: S2

**Element Code:** PDONA0C0E0 **Occurrence Code #:** 005 **Survey Date:** 1996-00-00  
**Last Observed:** 1996-00-00 **First Observed:** 1996-00-00 **Actual Mapping Precision (m):** 100 **Precision Code:** S  
**Directions:** Hwy 48; ~ 6 km W of; Bare Creek; ~ 4.75 km W of.  
**General Description:** In cobble base of creek bed. RoW narrowed. No seed mix applied. Population avoided.  
**Min Elev. (m):** 1013 **Max Elev. (m):** 1013 **Best Source of Info:** U96EXP01ABCA  
**Map UTM Zone UTM Easting UTM Northing Survey Site Name Notes # Dot ID #**  
72E08 12 548578 5459616 Bare Creek LS#60, km:398.8, LLD:NW 14-10 4-3-4. 17 4003  
**Source Code Author Publisher Year Title**  
U96EXP01ABCA AXYS Environmental Consulting 1996 Express Pipeline Project  
**Date Source Abstract Code Observer Occurrence Data**  
1996-00-00 U96EXP01ABCA 20 plants on E RoW; 10 plants 40m E of RoW.  
**Oenothera flava** low yellow evening-primrose SRank: S2  
+++++

**Element Code:** PDONA0C0E0 **Occurrence Code #:** 006 **Survey Date:** 1998-06-04  
**Last Observed:** 1998-06-04 **First Observed:** 1998-06-04 **Actual Mapping Precision (m):** 100 **Precision Code:** S  
**Directions:** Milk River Natural Area and Kennedy Coulee Ecological Reserve, second creek crossing border.  
**General Description:** dessicated stream channel on exundated soils; at the edge of a series of small pools (10) along channel;  
assoc. spp.:  
Boisduvalia glabella, Collomia linearis.  
**Min Elev. (m):** 975 **Max Elev. (m):** 990  
**Other Comments:** Specimen to go into PP  
**Management Comments:** No known threats. **Best Source of Info:** F98GOU01ABCA  
**Map UTM Zone UTM Easting UTM Northing Survey Site Name Notes # Dot ID #**  
72E02 12 519073 5430784 Kennedy Creek Polygon; 49 02 02/110 44 18 36 4618  
**Source Code Author Publisher Year Title**  
F98GOU01ABCA Gould, Joyce 1998 Field notes: 1998 field season  
**Date Source Abstract Code Observer Occurrence Data**  
1998-06-04 F98GOU01ABCA J. Gould & D. Vujnovic 50 plants, most with flower buds  
**Oenothera flava** low yellow evening-primrose SRank: S2  
+++++

**Element Code:** PDONA0C0E0 **Occurrence Code #:** 007 **Survey Date:** 1999-06-17  
**Last Observed:** 1999-06-17 **First Observed:** 1998-06-18 **Actual Mapping Precision (m):** 50 **Precision Code:** S  
**Directions:** Ross Lake, 6 km S of; North Milk River, ~2.5 km N of.  
**General Description:** along the bottom of a drainage gully; moisture moderate; Rosa arkansana, Symphoricarpos occidentalis,  
Salix sp.  
**Min Elev. (m):** 1365 **Max Elev. (m):** 1365 **Aspect:** SE **Best Source of Info:** U98ERN01ABCA  
**Map UTM Zone UTM Easting UTM Northing Survey Site Name Notes # Dot ID #**  
82H02 12 359250 5439425 Ross Lake 5-2-22 W4M 31 5044  
**Source Code Author Publisher Year Title**  
U98ERN01ABCA Ernst, Reg 1998 Ross Grassland Natural Area - Results of 1998 Rare Plant Survey U99ERN02ABCA Ernst, Reg  
1999 Email to J. Gould  
**Date Source Abstract Code Observer Occurrence Data**  
1999-06-17 U99ERN02ABCA reg Ernst blooms faded on most plants  
**Oenothera flava** low yellow evening-primrose SRank: S2  
+++++

**Element Code:** PDONA0C0E0 **Occurrence Code #:** 008 **Survey Date:** 1998-06-18  
**Last Observed:** 1998-06-18 **First Observed:** 1998-06-18 **Actual Mapping Precision (m):** 50 **Precision Code:** S  
**Directions:** Ross Lake, 4 km SE of; North Milk River, 3 km N of.  
**General Description:** coulee bottom about thirds of the way up from lower grassland site along a cow path; moderate slope, dry-  
moderate moisture;  
Festuca scabrella, Agropyron smithii, Aster spp., Madia glomerata  
**Min Elev. (m):** 1280 **Max Elev. (m):** 1295 **Aspect:** SE **Best Source of Info:** U98ERN01ABCA  
**Map UTM Zone UTM Easting UTM Northing Survey Site Name Notes # Dot ID #**  
82H02 12 362400 5441850 Ross Lake 9,16-2-22 W4M 32 5045  
**Source Code Author Publisher Year Title**  
U98ERN01ABCA Ernst, Reg 1998 Ross Grassland Natural Area - Results of 1998 Rare Plant Survey U99ERN02ABCA Ernst, Reg  
1999 Email to J. Gould  
**Date Source Abstract Code Observer Occurrence Data**  
1998-06-18 U98ERN01ABCA Reg Ernst 80 plants, looks like all together with EO 007; 20 vegetative, 10 flowers  
1999-06-17 U99ERN02ABCA Reg Ernst blooms faded on most plants  
**Oenothera flava** low yellow evening-primrose SRank: S2  
+++++

**Element Code:** PDONA0C0E0 **Occurrence Code #:** 009 **Survey Date:** 1998-07-03  
**Last Observed:** 1998-07-03 **First Observed:** 1998-07-03 **Actual Mapping Precision (m):** 250 **Precision Code:** S  
**Directions:** Red Deer Lake, ~7 km NW of; Rapid Narrows, 6.5 km SW of; Bull Springs Coulee  
**General Description:** on perimeter of large wetland; heavily trampled; xeric  
**Min Elev. (m):** 745 **Max Elev. (m):** 745 **Aspect:** N **Best Source of Info:** U98BUS01ABCA  
**Map UTM Zone UTM Easting UTM Northing Survey Site Name Notes # Dot ID #**  
 72L08 12 537300 5581000 Bull Springs Coulee LSD14-27-16-4-W4M 28 5057  
**Source Code Author Publisher Year Title**  
 U98BUS01ABCA Bush, C. Dana 1998 Rare Native Plant Survey Forms  
**Date Source Abstract Code Observer Occurrence Data**  
 1998-07-03 U98BUS01ABCA Dana Bush 1 plant early in season - barely identifiable  
**Oenothera flava** low yellow evening-primrose SRank: S2  
 ++++++

**Element Code:** PDONA0C0E0 **Occurrence Code #:** 010 **Survey Date:** 1990-06-19  
**Last Observed:** 1990-06-19 **First Observed:** 1990-06-19 **Actual Mapping Precision (m):** 100 **Precision Code:** S  
**Directions:** south end of Natural Area  
**General Description:** eroding shales in "badlands" **Best Source of Info:** N90WAL02ABCA  
**Map UTM Zone UTM Easting UTM Northing Survey Site Name Notes # Dot ID #**  
 72E09 12 546800 5491800 Eagle Nest 60 5074  
**Source Code Author Publisher Year Title**  
 N90WAL02ABCA Wallis, Cliff Alberta Forestry, Lands and Wildlife 1990 Reconnaissance Special Feature Assessment  
 SE28 and NE21-7-3-W4  
**Date Source Abstract Code Observer Occurrence Data**  
 1990-06-19 N90WAL02ABCA Cliff Wallis 5 plants  
**Oenothera flava** low yellow evening-primrose SRank: S2  
 ++++++

**Element Code:** PDONA0C0E0 **Occurrence Code #:** 011 **Survey Date:** 1999-08-11  
**Last Observed:** 1999-08-11 **First Observed:** 1999-08-11 **Actual Mapping Precision (m):** 250 **Precision Code:** S  
**Directions:** Schuler; ~13 km NW of.; Hwy 41; ~ 8.5 km W of. AEC compressor station, SW of.  
**General Description:** dry mixed grass prairie: around boulder used by cattle for rubbing, in shallow edge of wetland. Weedy with  
 >50% bare ground. Lepi den, Agro sca, Agro smi, Guit sar, Arter lud and Poly wat (rare).  
**Min Elev. (m):** 808 **Max Elev. (m):** 808  
**Management Comments:** Pipeline construction: this wetland has numerous rare species (Elan tri, Hype maj, Cent min, Lila sci,  
 reported in 97/98 **Best Source of Info:** U99BUS02ABCA  
**Map UTM Zone UTM Easting UTM Northing Survey Site Name Notes # Dot ID #**  
 72L08 12 555100 5585100 White Rock Coulee Lat 50 deg 24 min 98 sec, Long 110 deg 13 min 22 s W - 6-9-17-2-W4M 15 3908  
**Source Code Author Publisher Year Title**  
 U99BUS02ABCA Bush, Dana 1999 Axys Environmental Consulting Ltd.- Rare Native Plant Report Forms  
**Date Source Abstract Code Observer Occurrence Data**  
 1999-08-11 U99BUS02ABCA Dana Bush 62 plants in 3 m by 3 m area; Vegetative-6; Reproductive-10; 29 vegetative plants, 31  
 plants with seeds, 2 with faded blooms  
**Oenothera flava** low yellow evening-primrose SRank: S2  
 ++++++

**Element Code:** PDONA0C0E0 **Occurrence Code #:** 012 **Survey Date:** 1999-06-24  
**Last Observed:** 1999-06-24 **First Observed:** 1999-06-24 **Actual Mapping Precision (m):** 20 **Precision Code:** S  
**Directions:** Cypress Hills P.P.; Graburn Creek, headwaters of, top of coulee.  
**General Description:** cobbled slopes in grassland; with Graminoids, Taraxacum officinale, Cirsium arvense; xeric  
**Min Elev. (m):** 1400 **Max Elev. (m):** 1400  
**Slope:** 10.00 **Aspect:** S  
**Other Comments:** slope less than 10% **Best Source of Info:** U99BRA01ABCA  
**Map UTM Zone UTM Easting UTM Northing Survey Site Name Notes # Dot ID #**  
 72E09 12 565825 5495750 Graburn Creek 69 5518  
**Source Code Author Publisher Year Title**  
 U99BRA01ABCA Bradley, C., R. Ernst, D. Dickinson & L. Fitch 1999 Rare Plant Survey Forms  
**Date Source Abstract Code Observer Occurrence Data**  
 1999-06-24 U99BRA01ABCA Reg Ernst less than 20 plants; V6 vegetative; faded blossoms, new flower buds, some seed  
**Oenothera flava** low yellow evening-primrose SRank: S2

**Onosmodium molle western false gromwell**

**Natural Region:** Foothills Fescue Grassland, Mixedgrass

**Habitat:** Woodland-Sandy

**Phenology:** flowers in June

**Specific Search Strategies (if any):** open riparian woodland and shrubbery, often in association with buckbrush; easily detectable into October

**Element Occurrences:**

**Element Code:** PDBOR0S030 **Occurrence Code #:** 001 **Survey Date:** 1954-07-02

**Last Observed:** 1954-07-02 **First Observed:** 1954-07-02 **Precision Code:** M

**Directions:** Midnapore.

**General Description:** Low prairie lands; sunny slope.

**Min Elev. (m):** 1044 **Max Elev. (m):** 1044 **Best Source of Info:** S54HODUCABCA01

**Specimen Source Code Collector Herbarium Accession # Date ID OK? Observation Detail**

S54HODUCABCA01 Hodges, K. UC 22429 1954-07-02 Y

**Map UTM Zone UTM Easting UTM Northing Survey Site Name Notes # Dot ID #**

82J16 11 705850 5644300 Midnapore 15 1709

**Onosmodium molle** western false gromwell SRank: S2

+++++

**Element Code:** PDBOR0S030 **Occurrence Code #:** 002 **Survey Date:** 1974-06-27

**Last Observed:** 1974-06-27 **First Observed:** 1958-07-12 **Precision Code:** M

**Directions:** Willow Creek Provincial Park, in.

**General Description:** grassland; association: Symph. occidentalis, Sco (?), Artemisia frigida, Glycy. lepidota, Rosa.; alluvial plain.

**Min Elev. (m):** 1052 **Max Elev. (m):** 1067 **Best Source of Info:** S74DANUCABCA04

**Specimen Source Code Collector Herbarium Accession # Date ID OK? Observation Detail**

S58JOHALABCA01 Johnston, A. & T. D. Allen AL 1747 1958-07-12 Y blooming

S74DANUCABCA04 Danielson, B. & S. Crack UC 22430 1974-06-27 Y

**Map UTM Zone UTM Easting UTM Northing Survey Site Name Notes # Dot ID #**

82I04 12 302100 5554850 Willow Creek Provincial Park 50 07/113 46; 28-013-28-W4; Field No. 107. 3 1412

**Onosmodium molle** western false gromwell SRank: S2

+++++

**Element Code:** PDBOR0S030 **Occurrence Code #:** 003 **Survey Date:** 1972-06-29

**Last Observed:** 1972-06-29 **First Observed:** 1972-06-29 **Precision Code:** M

**Directions:** Calgary; Bow River, near; Heritage Drive & 6th Str. S.E.

**General Description:** Gravelly thicket, partially disturbed; associated with rose, shrubby cinquefoil, weeds and other shrubs.

**Min Elev. (m):** 1029 **Max Elev. (m):** 1029

**Other Comments:** ID by D. Johnson **Best Source of Info:** S72JOHUCABCA02

**Specimen Source Code Collector Herbarium Accession # Date ID OK? Observation Detail**

S72JOHUCABCA02 Johnson, D. UC 22433 1972-09-29 Y

**Map UTM Zone UTM Easting UTM Northing Survey Site Name Notes # Dot ID #**

82J16 11 707500 5652150 Calgary 16 1710

**Onosmodium molle** western false gromwell SRank: S2

+++++

**Element Code:** PDBOR0S030 **Occurrence Code #:** 004 **Survey Date:** 1978-06-03

**Last Observed:** 1978-06-03 **First Observed:** 1950-08-29 **Actual Mapping Precision (m):** 2500 **Precision Code:** M

**Directions:** Ft. McLeod, 6 km W of; Oldman River

**General Description:** Populus angustifolia woods; 3200'

**Min Elev. (m):** 967 **Max Elev. (m):** 975 **Best Source of Info:** S78WALUAABCA08

**Specimen Source Code Collector Herbarium Accession # Date ID OK? Observation Detail**

S50WHYUAABCA06 Whyte, J.H. & E.H. Moss UA 14991 1950-08-29 Y ripe fruits

S51BOIACONCA09 Boivin, B. & J.M. Gillet AC 131759 1951-08-18

S51BOIUAABCA03 Boivin, B. & J.M. Gillett UA 73599 1951-08-18 Y Fruits

S52BOIACONCA11 Boivin, B. & J.F. Alex AC 127533 1952-07-02

S52BOIUAABCA08 Boivin, Bernard & J.F. Alex UA 73600 1952-07-02 Y flowers

S52MOSUAABCA17 Moss, E.H. UA 14990 1952-08-23 Y ripe fruits

S78WALUAABCA08 Wallis, C. UA 84572 1978-06-03 Y remains of flowers

S78WALUAABCA09 Wallis, C. UA 84573 1978-06-03 Y

**Map UTM Zone UTM Easting UTM Northing Survey Site Name Notes # Dot ID #**

82H11 12 320475 5509250 Fort MacLeod 5 1372

**Onosmodium molle** western false gromwell SRank: S2



**Element Code:** PDBOR0S030 **Occurrence Code #:** 005 **Survey Date:** 1960-06-16  
**Last Observed:** 1960-06-16 **First Observed:** 1960-06-16 **Actual Mapping Precision (m):** 2500 **Precision Code:** M  
**Directions:** Claresholm, 9 km W of; Willow Creek, 700 m W of  
**General Description:** freshly disturbed soil  
**Min Elev. (m):** 1029 **Max Elev. (m):** 1029  
**Other Comments:** Det. by Boivin as ssp. hispidissimum (Mack) Boivin var. occidentale (Mack) Johnston **Best Source of Info:**  
S60BOIUABCA01

**Specimen Source Code Collector Herbarium Accession # Date ID OK? Observation Detail**

S60BOIACONCA01 Boivin, B. AC 131758 1960-06-16  
S60BOIUABCA01 Boivin, Bernard UA 73598 1960-06-16 Y flowers, developing fruit

**Map UTM Zone UTM Easting UTM Northing Survey Site Name Notes # Dot ID #**

82I04 12 304875 5543925 Willow Creek 5 1414  
**Onosmodium molle** western false gromwell SRank: S2  
+++++

**Element Code:** PDBOR0S030 **Occurrence Code #:** 006 **Survey Date:** 1952-08-11  
**Last Observed:** 1952-08-11 **First Observed:** 1952-08-11 **Actual Mapping Precision (m):** 1500 **Precision Code:** M  
**Directions:** Oldman and Belly Rivers, junction of  
**Min Elev. (m):** 876 **Max Elev. (m):** 876  
**Other Comments:** Det. as O. molle Mx. spp. hispidissimum (Mack) stat. n. var. occidentale (Mack) **Best Source of Info:**  
S52BOIUABCA09

**Specimen Source Code Collector Herbarium Accession # Date ID OK? Observation Detail**

S52BOIACONCA10 Boivin, B. & J.F. Alex AC 131760 1952-08-11  
S52BOIUABCA09 Boivin, Bernard & J.F. Alex UA 73601 1952-08-11 Y developing fruits, ripe fruits

**Map UTM Zone UTM Easting UTM Northing Survey Site Name Notes # Dot ID #**

82H14 12 353650 5514850 Belly River 8 1397  
**Onosmodium molle** western false gromwell SRank: S2  
+++++

**Element Code:** PDBOR0S030 **Occurrence Code #:** 007 **Survey Date:** 1920-06-18  
**Last Observed:** 1920-06-18 **First Observed:** 1920-06-18 **Actual Mapping Precision (m):** 2500 **Precision Code:** M  
**Directions:** Waterton River and Hwy 2, bridge  
**General Description:** gravelly soil  
**Min Elev. (m):** 975 **Max Elev. (m):** 975  
**Other Comments:** Det. as O. occidental Mackenzie by McCalla; annot. to O. molle var. occidentale (Mack) **Best Source of Info:**  
S20MCCUAABCA04

**Specimen Source Code Collector Herbarium Accession # Date ID OK? Observation Detail**

S20MCCUAABCA04 McCalla, W.C. UA 64299 1920-06-18 Y flowers

**Map UTM Zone UTM Easting UTM Northing Survey Site Name Notes # Dot ID #**

82H11 12 331725 5485600 Waterton River 6 1373  
**Onosmodium molle** western false gromwell SRank: S2  
+++++

**Element Code:** PDBOR0S030 **Occurrence Code #:** 008 **Survey Date:** 1944-08-29  
**Last Observed:** 1944-08-29 **First Observed:** 1944-08-29 **Actual Mapping Precision (m):** 2500 **Precision Code:** M  
**Directions:** Nanton; Mosquito Creek, bank of  
**General Description:** dry steep bank of creek  
**Min Elev. (m):** 1013 **Max Elev. (m):** 1013  
**Other Comments:** Det. as O. occidentale by Moss, annot to O. m. occidentale **Best Source of Info:** S44MOSUAABCA03

**Specimen Source Code Collector Herbarium Accession # Date ID OK? Observation Detail**

S44MOSUAABCA03 Moss, E.H. UA 14988 1944-08-29 Y ripe fruits

**Map UTM Zone UTM Easting UTM Northing Survey Site Name Notes # Dot ID #**

82I05 12 303350 5581200 Nanton 1 1417  
**Onosmodium molle** western false gromwell SRank: S2  
+++++

**Element Code:** PDBOR0S030 **Occurrence Code #:** 009 **Survey Date:** 1943-09-01  
**Last Observed:** 1943-09-01 **First Observed:** 1943-09-01 **Actual Mapping Precision (m):** 2500 **Precision Code:** M  
**Directions:** Calgary; Elbow Valley; Glenmore Reservoir, outflow of  
**Min Elev. (m):** 1065 **Max Elev. (m):** 1065  
**Other Comments:** Det. as Lithospermum latifolium Mx. by W.C. McCalla; rev. to O. occidentale Mack. by A.J. Breitung, 1947; annot. to O. molle spp. hispidissimum var. occidentale by Boivin, 1959 etc **Best Source of Info:** S43TURUAABCA08

**Specimen Source Code Collector Herbarium Accession # Date ID OK? Observation Detail**

S43TURACONCA04 Turner, G.H. AC none 1943-09-01  
S43TURUAABCA08 Turner, G.H. UA 64045 1943-09-01 Y Ripe fruits, some already dispersed

**Map UTM Zone UTM Easting UTM Northing Survey Site Name Notes # Dot ID #**

82O01 11 704000 5653750 Glenmore Reservoir 4 1855  
**Onosmodium molle** western false gromwell SRank: S2

**Element Code:** PDBOR0S030 **Occurrence Code #:** 010 **Survey Date:** 1973-07-22  
**Last Observed:** 1973-07-22 **First Observed:** 1973-07-22 **Actual Mapping Precision (m):** 800 **Precision Code:** M  
**Directions:** Carseland, 5 km S of; Bow River.  
**General Description:** In open meadow of riverine forest.  
**Min Elev. (m):** 914 **Max Elev. (m):** 914 **Best Source of Info:** S73COOUCABCA01  
**Specimen Source Code Collector Herbarium Accession # Date ID OK? Observation Detail**  
S73COOUCABCA01 Cooley, Ellen UC 22432 1976-07-22 Y blooming  
**Map UTM Zone UTM Easting UTM Northing Survey Site Name Notes # Dot ID #**  
82I14 12 325700 5630775 Carseland 1 1426  
**Onosmodium molle** western false gromwell SRank: S2  
+++++

**Element Code:** PDBOR0S030 **Occurrence Code #:** 011 **Survey Date:** 1975-07-17  
**Last Observed:** 1975-07-17 **First Observed:** 1975-07-17 **Actual Mapping Precision (m):** 2000 **Precision Code:** M  
**Directions:** Stavely, 1.5 km W of.  
**General Description:** Dry, hilly pasture  
**Min Elev. (m):** 1050 **Max Elev. (m):** 1050 **Best Source of Info:** S75GSCALABCA02  
**Specimen Source Code Collector Herbarium Accession # Date ID OK? Observation Detail**  
S75GSCALABCA02 Gschaid, R.G., B. Kesler & P. Berg AL 3313 1975-07-17 Y blooming  
**Map UTM Zone UTM Easting UTM Northing Survey Site Name Notes # Dot ID #**  
82I04 12 309500 5559450 Stavely 6 1415  
**Onosmodium molle** western false gromwell SRank: S2  
+++++

**Element Code:** PDBOR0S030 **Occurrence Code #:** 012 **Survey Date:** 1997-09-12  
**Last Observed:** 1997-09-12 **First Observed:** 1997-09-12 **Actual Mapping Precision (m):** 250 **Precision Code:** S  
**Directions:** Highwood River, S side of; High River, 7 km SW of.  
**General Description:** prairie grasland with scattered balsam poplar saplings and Elaeagnus commutata; early successional stage of Populus balsamifera-Elaeagnus commutata community  
**Min Elev. (m):** 1082 **Max Elev. (m):** 1082  
**Other Comments:** This species probably favored by occasional soil disturbance in connection with canal maintenance, provided that herbicides are not used on the right-of-way. Specimen collected. 5 clumps seen. **Best Source of Info:** PNDGRI01ABCA  
**Specimen Source Code Collector Herbarium Accession # Date ID OK? Observation Detail**  
S97GRIPPABCA08 Griffiths, G.C.D. PP 003514 1997-09-12 +/- 5 clumps seen  
**Map UTM Zone UTM Easting UTM Northing Survey Site Name Notes # Dot ID #**  
82I12 12 289000 5603550 High River LSD 6 30-18-29 W4M 4 3796  
**Source Code Author Publisher Year Title**  
U97GRI01ABCA Griffiths, G.C.D. 1997 Rare Native Plant Survey Forms  
**Date Source Abstract Code Observer Occurrence Data**  
1997-09-12 U97GRI01ABCA G.C.D. Griffiths 5 individuals, all fruiting  
**Onosmodium molle** western false gromwell SRank: S2  
+++++

**Element Code:** PDBOR0S030 **Occurrence Code #:** 013 **Survey Date:** 1967-08-10  
**Last Observed:** 1967-08-10 **First Observed:** 1967-08-10 **Actual Mapping Precision (m):** 1500 **Precision Code:** M  
**Directions:** Carseland; ~2km SE of; Gravel quarry; just below; Bow River; ~100m N of.  
**General Description:** Several large (1.5m) diameter clumps in native grassland on S facing slope of valley just below edge of gravel quarry.  
**Min Elev. (m):** 945 **Max Elev. (m):** 945 **Aspect:** S **Best Source of Info:** S67ALEACONCA01  
**Specimen Source Code Collector Herbarium Accession # Date ID OK? Observation Detail**  
S67ALEACONCA01 Alex, J.F. & A.B. Harris AC 638046 1967-08-10 several large (1.5m) diameter clumps  
**Map UTM Zone UTM Easting UTM Northing Survey Site Name Notes # Dot ID #**  
82I14 12 328900 5634100 Carseland 5 4192  
**Onosmodium molle** western false gromwell SRank: S2  
+++++

**Element Code:** PDBOR0S030 **Occurrence Code #:** 014 **Survey Date:** 1930-06-23  
**Last Observed:** 1930-06-23 **First Observed:** 1930-06-23 **Actual Mapping Precision (m):** 2500 **Precision Code:** M  
**Directions:** Fort Macleod, just N of.  
**General Description:** brush  
**Min Elev. (m):** 937 **Max Elev. (m):** 937 **Best Source of Info:** S30DIXUAABCA05  
**Specimen Source Code Collector Herbarium Accession # Date ID OK? Observation Detail**  
S30DIXUAABCA05 Dixon, R.H. UA 14986 1930-06-23 Y flowers, developing fruits  
**Map UTM Zone UTM Easting UTM Northing Survey Site Name Notes # Dot ID #**  
82H11 12 326600 5511300 Fort MacLeod 4 1371  
**Onosmodium molle** western false gromwell SRank: S2  
+++++

**Element Code:** PDBOR0S030 **Occurrence Code #:** 015 **Survey Date:** 2000-09-14  
**Last Observed:** 2000-09-14 **First Observed:** 2000-09-14 **Actual Mapping Precision (m):** 200 **Precision Code:** S  
**Directions:** Calgary; Fairview area, E of; Bow River, W of; Cominco Lands  
**General Description:** in low buckbrush (*Symphocarpus occidentalis*)-shrubby cinquefoil (*Potentilla fruticosa*)  
**Min Elev. (m):** 1010 **Max Elev. (m):** 1020  
**Other Comments:** in NAD27 708252E 5651162N (several hundred plants, ie clumps); in NAD27 708301E 5651663N (10 plants)  
**Best Source of Info:** U00WAL04ABCA  
**Map UTM Zone UTM Easting UTM Northing Survey Site Name Notes # Dot ID #**  
82J16 11 708300 5651650 Calgary 21 6303  
**Source Code Author Publisher Year Title**  
U00WAL04ABCA Wallis, C. Cottonwood Consultants Ltd., Calgary 2000 Rare Plant Survey, Cominco Lands, Calgary  
**Onosmodium molle** western false gromwell SRank: S2  
+++++

**Element Code:** PDBOR0S030 **Occurrence Code #:** 016 **Survey Date:** 2000-09-14  
**Last Observed:** 2000-09-14 **First Observed:** 2000-09-14 **Actual Mapping Precision (m):** 100 **Precision Code:** S  
**Directions:** Calgary; Fairview area, E of; Bow River, W of; Cominco Lands  
**General Description:** in low buckbrush (*Symphocarpus occidentalis*)-shrubby cinquefoil (*Potentilla fruticosa*)  
**Min Elev. (m):** 1010 **Max Elev. (m):** 1020  
**Other Comments:** NAD27 708098E 5651277N (2 plants) **Best Source of Info:** U00WAL04ABCA  
**Map UTM Zone UTM Easting UTM Northing Survey Site Name Notes # Dot ID #**  
82J16 11 708098 5651277 Calgary 24 6306  
**Source Code Author Publisher Year Title**  
U00WAL04ABCA Wallis, C. Cottonwood Consultants Ltd., Calgary 2000 Rare Plant Survey, Cominco Lands, Calgary  
**Onosmodium molle** western false gromwell SRank: S2  
+++++

**Element Code:** PDBOR0S030 **Occurrence Code #:** 017 **Survey Date:** 2000-09-14  
**Last Observed:** 2000-09-14 **First Observed:** 2000-09-14 **Actual Mapping Precision (m):** 100 **Precision Code:** S  
**Directions:** Calgary; Fairview area, E of; Bow River, W of; Cominco Lands  
**General Description:** in a weedy area (2 plants); in a disturbed borrow pit (1 plant)  
**Min Elev. (m):** 1010 **Max Elev. (m):** 1020  
**Other Comments:** NAD27 708313E 5652098N (2 plants); NAD27 708385E 5651963N (1 plant) **Best Source of Info:**  
U00WAL04ABCA  
**Map UTM Zone UTM Easting UTM Northing Survey Site Name Notes # Dot ID #**  
82J16 11 708350 5651900 Calgary 25 6307  
**Source Code Author Publisher Year Title**  
U00WAL04ABCA Wallis, C. Cottonwood Consultants Ltd., Calgary 2000 Rare Plant Survey, Cominco Lands, Calgary  
**Onosmodium molle** western false gromwell SRank: S2

**Orobanche ludoviciana Louisiana broom-rape**

**Natural Region:** Foothills Fescue Grassland, Mixedgrass, Dry Mixedgrass

**Habitat:** Slopes-Sandy

**Phenology:** flowers in late May to June

**Specific Search Strategies (if any):** old flower stalk easily detectable year round; search in eroded sands and gravelly sands, mainly near valley rims; occasionally in sand dune slopes

**Element Occurrences:**

**Element Code:** PDORO04070 **Occurrence Code #:** 001 **Survey Date:** 1985-00-00  
**Last Observed:** 1985-00-00 **First Observed:** 1975-07-16 **Actual Mapping Precision (m):** 50 **Precision Code:** S  
**Directions:** USA border, 7.5 km N of; Lost River Valley, rim of.  
**General Description:** sandy dry prairie and active blowout  
**Min Elev. (m):** 900 **Max Elev. (m):** 900 **Best Source of Info:** S78SMOALABCA05  
**Specimen Source Code Collector Herbarium Accession # Date ID OK? Observation Detail**  
S78SMOALABCA05 Smoliak, S. & R. Gschaid AL 3534 1978-08-01 Y blooming  
S78SMOALABCA06 Smoliak, S. & P. Berg AL 3300 1975-07-16 Y blooming  
**Map UTM Zone UTM Easting UTM Northing Survey Site Name Notes # Dot ID #**  
72E02 12 536048 5434735 Lost River 33 4555  
**Source Code Author Publisher Year Title**  
R86WERO1ABCA Wershler C. & C. Wallis 1986 Lost River Significant Features Assessment  
**Orobanche ludoviciana** Louisiana broom-rape SRank: S2  
+++++

**Element Code:** PDORO04070 **Occurrence Code #:** 002 **Survey Date:** 1972-07-23  
**Last Observed:** 1972-07-23 **First Observed:** 1972-07-12 **Precision Code:** G  
**Directions:** Lethbridge, 5 mi S of  
**General Description:** dry gravel pit on a sandy slope  
**Min Elev. (m):** 930 **Max Elev. (m):** 930 **Best Source of Info:** S72ALLALABCA04  
**Specimen Source Code Collector Herbarium Accession # Date ID OK? Observation Detail**  
S72ALLALABCA04 Allen, T.D. AL 2778 1972-07-23 Y blooming  
**Map UTM Zone UTM Easting UTM Northing Survey Site Name Notes # Dot ID #**  
82H10 12 372000 5494000 Lethbridge Airport 9 1360  
**Orobanche ludoviciana** Louisiana broom-rape SRank: S2  
+++++

**Element Code:** PDORO04070 **Occurrence Code #:** 003 **Survey Date:** 1952-08-28  
**Last Observed:** 1952-08-28 **First Observed:** 1952-08-09 **Actual Mapping Precision (m):** 2500 **Precision Code:** M  
**Directions:** Medicine Hat, 4 mi SW of; Seven Persons Creek  
**General Description:** grassy, gravel bank, associated with Chysopsis and Gutierrezia; sandy soil; growing with Artemisia gnaphalodes  
**Min Elev. (m):** 701 **Max Elev. (m):** 701 **Best Source of Info:** S52MOSUAABCA20  
**Specimen Source Code Collector Herbarium Accession # Date ID OK? Observation Detail**  
S52BOIUABCA10 Boivin, B. & J.F. Alex UA 22403 1952-08-09 Y flowers  
S52MOSACONCA07 Moss, E.H. AC 35125 1952-08-28  
S52MOSUAABCA19 Moss, E.H. UA 15893 1952-08-22 Y flowers  
S52MOSUAABCA20 Moss, E.H. UA 15894 1952-08-28 Y flowers, fruits  
S52MOSUAABCA23 Moss, E.H. UA 15890 1952-08-24 flowers  
**Map UTM Zone UTM Easting UTM Northing Survey Site Name Notes # Dot ID #**  
72E15 12 519675 5536900 Seven Persons Creek 6 162  
**Orobanche ludoviciana** Louisiana broom-rape SRank: S2  
+++++

**Element Code:** PDORO04070 **Occurrence Code #:** 004 **Survey Date:** 1979-05-22  
**Last Observed:** 1979-05-22 **First Observed:** 1979-05-22 **Actual Mapping Precision (m):** 800 **Precision Code:** M  
**Directions:** Lost Creek, 1 km E of  
**General Description:** eroding, E-facing slope, with Koeleria cristata  
**Min Elev. (m):** 1044 **Max Elev. (m):** 1044 **Aspect:** E **Best Source of Info:** S79WALUAABCA06  
**Specimen Source Code Collector Herbarium Accession # Date ID OK? Observation Detail**  
S79WALUAABCA06 Wallis, C. UA 84550 1979-05-22 Y remains of fruits - presumably a last year's plant  
**Map UTM Zone UTM Easting UTM Northing Survey Site Name Notes # Dot ID #**  
72E02 12 510448 5427784 Lost Creek 23 34  
**Orobanche ludoviciana** Louisiana broom-rape SRank: S2  
+++++

**Element Code:** PDORO04070 **Occurrence Code #:** 005 **Survey Date:** 1984-07-05  
**Last Observed:** 1984-07-05 **First Observed:** 1984-07-05 **Actual Mapping Precision (m):** 1500 **Precision Code:** M  
**Directions:** Whiskey Gap; Sommerfeldt Ranch.  
**Min Elev. (m):** 1370 **Max Elev. (m):** 1370 **Best Source of Info:** S84SCOACONCA03  
**Specimen Source Code Collector Herbarium Accession # Date ID OK? Observation Detail**  
S84SCOACONCA03 Scotter, G.W. AC none 1984-07-05  
**Map UTM Zone UTM Easting UTM Northing Survey Site Name Notes # Dot ID #**  
82H03 12 352650 5431700 Whiskey Gap 49 01 30/113 01 21 961  
**Orobanche ludoviciana** Louisiana broom-rape SRank: S2  
+++++

**Element Code:** PDORO04070 **Occurrence Code #:** 006 **Survey Date:** 1986-07-20  
**Last Observed:** 1986-07-20 **First Observed:** 1986-07-20 **Actual Mapping Precision (m):** 2500 **Precision Code:** M  
**Directions:** Pakowki Lake Sand Dunes; SW of Orion.  
**General Description:** partially buried in sand in somewhat protected interdune area.  
**Min Elev. (m):** 880 **Max Elev. (m):** 880 **Best Source of Info:** S86HRAPMABCA12  
**Specimen Source Code Collector Herbarium Accession # Date ID OK? Observation Detail**  
S86HRAPMABCA12 Hrapko, J.O., Parker, M.E. PM B86.140.14 1986-07-20 Y  
**Map UTM Zone UTM Easting UTM Northing Survey Site Name Notes # Dot ID #**  
72E07 12 509873 5471783 Pakowki Sand Dunes Lat/Long: 49 24/110 52 2 83  
**Orobanche ludoviciana** Louisiana broom-rape SRank: S2  
+++++

**Element Code:** PDORO04070 **Occurrence Code #:** 007 **Survey Date:** 1993-06-14  
**Last Observed:** 1993-06-14 **First Observed:** 1993-06-14 **Actual Mapping Precision (m):** 250 **Precision Code:** S  
**Directions:** White Horse Lake, just S of.  
**General Description:** lower slope in dry prairie grassland; in *Stipa comata*-*Bouteloua gracilis* community  
**Min Elev. (m):** 635 **Max Elev. (m):** 635 **Best Source of Info:** U99WIL02ABCA  
**Map UTM Zone UTM Easting UTM Northing Survey Site Name Notes # Dot ID #**  
72L09 12 536550 5611350 White Horse Lake UTM 536600/5611500 NAD83 39 5067  
**Source Code Author Publisher Year Title**  
U99WIL02ABCA Wilkinson, Kathleen 1999 Letter from K. Wilkinson to John Rintoul - at March 3, 1999  
**Orobanche ludoviciana** Louisiana broom-rape SRank: S2  
+++++

**Element Code:** PDORO04070 **Occurrence Code #:** 008 **Survey Date:** 1999-08-16  
**Last Observed:** 1999-08-16 **First Observed:** 1999-07-21 **Actual Mapping Precision (m):** 250 **Precision Code:** S  
**Directions:** Bindloss, 6.5 km SW of; CP railway, 2 km N of.  
**General Description:** dry mixedgrass-depression in coulee; *Arte can*-*Stip com*/*Bout gra*/*Opon pol*; Additional species included:  
*Cory viv*, *Coll lin*, *Hete vil*, *Plan pat*, *Frig pum*, *Orth lut*, *Hete his*, associated with rare *Astr. lot*.  
**Min Elev. (m):** 595 **Max Elev. (m):** 595 **Other Comments:** 1 specimen collected; UAC  
**Management Comments:** Stake boundaries of areas around plants to be protected. **Best Source of Info:** U99GOL01ABCA  
**Map UTM Zone UTM Easting UTM Northing Survey Site Name Notes # Dot ID #**  
72L16 12 544750 5634725 Bindloss 03-16-22-03-W4M 22 5323  
**Source Code Author Publisher Year Title**  
U99GOL01ABCA Golder Associates & Boss environmental consulting ltd. 1999 Alberta Ethane Gathering System (AEGS) Looping  
Project - East Leg Conservation and Reclamation Plan vol. 2 (Empress to Hanna)  
**Date Source Abstract Code Observer Occurrence Data**  
1999-07-21 6 vegetative, 6-7 flowering  
1999-08-16 U99GOL01ABCA 40 - 50 individuals in a 20 by 25 m area  
**Orobanche ludoviciana** Louisiana broom-rape SRank: S2  
+++++

**Element Code:** PDORO04070 **Occurrence Code #:** 009 **Survey Date:** 1999-08-27  
**Last Observed:** 1999-08-27 **First Observed:** 1999-08-27 **Actual Mapping Precision (m):** 250 **Precision Code:** S  
**Directions:** CFB Suffield; Twin Peaks, 14 km SE of; Brush Flats, 5 km E of.  
**General Description:** sandy soils - found among *Art fri*, *Liat pun*, *Bout gra* (domin. spp.), *Stip com*; surrounding veg. included *Hete vil*, *Rosa woo*, *Opun pol*, *Cala lon*; xeric  
**Min Elev. (m):** 709 **Max Elev. (m):** 709 **Slope:** 0.00  
**Other Comments:** collected one senescent stalk  
**Management Comments:** Cattle use-trampling. Pipelines and wellsites. **Best Source of Info:** U99BUS02ABCA  
**Map UTM Zone UTM Easting UTM Northing Survey Site Name Notes # Dot ID #**  
72L07 12 530000 5567300 Twin Peak LSD 9-14-15-5-W4M 34 5470  
**Source Code Author Publisher Year Title**  
U99BUS02ABCA Bush, Dana 1999 Axys Environmental Consulting Ltd.- Rare Native Plant Report Forms  
**Date Source Abstract Code Observer Occurrence Data**  
1999-08-27 U99BUS02ABCA 2 individuals within 5 cm sq.; veg=9, repr.=8  
**Orobanche ludoviciana** Louisiana broom-rape SRank: S2

***Oryzopsis micrantha* little-seed rice grass**

**Natural Region:** Foothills Fescue Grassland, Dry Mixedgrass

**Habitat:** Woodland-Sandy

**Phenology:** heads out in early June

**Specific Search Strategies (if any):** easily detectable into the fall but the characteristic awns are deciduous so may confuse researchers unfamiliar with the species; the gross morphology of the plant is distinctive even though it is somewhat similar to some *Poa* spp. Under shrubbery, especially choke cherry and saskatoon, and woodland on distinctively sandy slopes

**Element Occurrences:**

**Element Code:** PMPOA4J070 **Occurrence Code #:** 001 **Survey Date:** 1994-06-18

**Last Observed:** 1994-06-18 **First Observed:** 1994-06-18 **Precision Code:** S

**Directions:** White Horse Lake, 8 km E of; The Middle Sand Hills

**General Description:** stabilized sand dunes; dune slope submesic prairie thicket of *Rosa woodsii*, *Prunus virginiana*, *Symphoricarpos occidentalis*, *Agropyron trachycaulum*, *Chenopodium fremontii*;

**Min Elev. (m):** 695 **Max Elev. (m):** 705 **Best Source of Info:** S94MACPMABCA01

**Specimen Source Code Collector Herbarium Accession # Date ID OK? Observation Detail**

S94ADAPMABCA04 Adams, Glen PM B94.11.184 1994-06-18 Y

S94MACPMABCA01 Macdonald, I.D., Glen Adams & P. Gregoire PM B94.4.103B 1994-06-18 Y panicles

S94MACPMABCA17 Macdonald, I.D., Adams, Glen, Gregoire, P. PM B94.4.103A 1994-06-18 Y

**Map UTM Zone UTM Easting UTM Northing Survey Site Name Notes # Dot ID #**

72L09 12 545400 5612200 Middle Sand Hills 50-39'30",40"N/110-21'25"W 9 223

***Oryzopsis micrantha* little-seed rice grass SRank:** S2

+++++

**Element Code:** PMPOA4J070 **Occurrence Code #:** 002 **Survey Date:** 1995-06-20

**Last Observed:** 1995-06-20 **First Observed:** 1995-06-20 **Precision Code:** S

**Directions:** The Middle Sand Hills, SW of

**General Description:** sandland in deciduous grove of *Populus deltoides*/*Salix lutea* - *Betula occidentalis*; 50 35 42N/110 22 15W; 660m

**Min Elev. (m):** 660 **Max Elev. (m):** 660 **Best Source of Info:** S95GREPMABCA01

**Specimen Source Code Collector Herbarium Accession # Date ID OK? Observation Detail**

S95GREPMABCA01 Gregoire, P. PM B95.10.20 1995-06-20 Y panicles

**Map UTM Zone UTM Easting UTM Northing Survey Site Name Notes # Dot ID #**

72L09 12 544500 5604750 South Saskatchewan River 10 224

***Oryzopsis micrantha* little-seed rice grass SRank:** S2

+++++

**Element Code:** PMPOA4J070 **Occurrence Code #:** 003 **Survey Date:** 1996-00-00

**Last Observed:** 1996-00-00 **First Observed:** 1996-00-00 **Actual Mapping Precision (m):** 600 **Precision Code:** M

**Directions:** McNeill, 7 km SW of

**General Description:** undulating ground moraine with a sand veneer, on subxeric-submesic sand-sandy loam, in a low thicket of Buckbrush, Common Wild Rose, Green Needle Grass, Northern Wheat Grass [community MH1-A]

**Min Elev. (m):** 739 **Max Elev. (m):** 739

**Other Comments:** over 50 plants in 3 X 3 m area

**Management Comments:** disturbance to the low thicket habitats would affect the vigor of this species **Best Source of Info:** U98FRY01ABCA

**Map UTM Zone UTM Easting UTM Northing Survey Site Name Notes # Dot ID #**

72L09 12 564325 5609250 McNeill SW 28-19-1-4 31 4305

**Source Code Author Publisher Year Title**

U98FRY01ABCA Fryer, Gina 1998 Memo from Gina Fryer to John Rintoul: rare plant locations for the Palliser Pipeline Project

***Oryzopsis micrantha* little-seed rice grass SRank:** S2

+++++

**Element Code:** PMPOA4J070 **Occurrence Code #:** 004 **Survey Date:** 1996-00-00  
**Last Observed:** 1996-00-00 **First Observed:** 1996-00-00 **Actual Mapping Precision (m):** 600 **Precision Code:** M  
**Directions:** McNeill, 8 km SW of  
**General Description:** rolling dune with subxeric sand, in a low thicket of Common Wild Rose, Wolf Willow, litter, Little-seeded Rice Grass, Low Sedge, Northern Wheat Grass [community MH1-E]  
**Min Elev. (m):** 739 **Max Elev. (m):** 739  
**Other Comments:** over 20 plants in 2X3 m area [KPMH 6 + 980]; 10 plants in 2X3 m area [KPMH 7 + 485]  
**Management Comments:** disturbance to the low thicket habitats would affect the vigor of this species **Best Source of Info:** U98FRY01ABCA  
Map UTM Zone UTM Easting UTM Northing Survey Site Name Notes # Dot ID #  
72L09 12 561850 5609250 McNeill SE 30-19-1-4 25 4225  
Source Code Author Publisher Year Title  
U98FRY01ABCA Fryer, Gina 1998 Memo from Gina Fryer to John Rintoul: rare plant locations for the Palliser Pipeline Project  
*Oryzopsis micrantha* little-seed rice grass SRank: S2  
+++++

**Element Code:** PMPOA4J070 **Occurrence Code #:** 005 **Survey Date:** 1996-00-00  
**Last Observed:** 1996-00-00 **First Observed:** 1996-00-00 **Actual Mapping Precision (m):** 600 **Precision Code:** M  
**Directions:** McNeill, 9 km SW of  
**General Description:** rolling dune on subxeric sand, in a low thicket of Common Wild Rose, Wolf Willow, litter, Little-seeded Rice Grass, Low Sedge, Northern Wheat Grass [community MH1-E]  
**Min Elev. (m):** 739 **Max Elev. (m):** 739  
**Other Comments:** over 30 plants in 3X4m area  
**Management Comments:** disturbance to the low thicket habitats would affect the vigor of this species **Best Source of Info:** U98FRY01ABCA  
Map UTM Zone UTM Easting UTM Northing Survey Site Name Notes # Dot ID #  
72L09 12 563550 5607650 McNeill SE 20-19-1-14 26 4226  
Source Code Author Publisher Year Title  
U98FRY01ABCA Fryer, Gina 1998 Memo from Gina Fryer to John Rintoul: rare plant locations for the Palliser Pipeline Project  
*Oryzopsis micrantha* little-seed rice grass SRank: S2  
+++++

**Element Code:** PMPOA4J070 **Occurrence Code #:** 006 **Survey Date:** 1996-00-00  
**Last Observed:** 1996-00-00 **First Observed:** 1996-00-00 **Actual Mapping Precision (m):** 600 **Precision Code:** M  
**Directions:** McNeill, 9.5 km SW of  
**General Description:** rolling dune with subxeric sand, in a low thicket of ,Common Wild Rose, Wolf Willow, litter, Little-seeded Rice Grass, Low Sedge, Northern Wheat Grass [community MH1-E]  
**Min Elev. (m):** 736 **Max Elev. (m):** 736  
**Management Comments:** disturbance to the low thicket habitats would affect the vigor of this species **Best Source of Info:** U98FRY01ABCA  
Map UTM Zone UTM Easting UTM Northing Survey Site Name Notes # Dot ID #  
72L09 12 563500 5606850 McNeill NE 17-19-1-4 27 4227  
Source Code Author Publisher Year Title  
U98FRY01ABCA Fryer, Gina 1998 Memo from Gina Fryer to John Rintoul: rare plant locations for the Palliser Pipeline Project  
*Oryzopsis micrantha* little-seed rice grass SRank: S2  
+++++

**Element Code:** PMPOA4J070 **Occurrence Code #:** 007 **Survey Date:** 1996-00-00  
**Last Observed:** 1996-00-00 **First Observed:** 1996-00-00 **Actual Mapping Precision (m):** 600 **Precision Code:** M  
**Directions:** Medicine Hat, 13 km NE of city limits; CFB Suffield, off SE corner of  
**General Description:** undulating, subxeric sand, in low thicket of Common Wild Rose, Buckbrush, Chokecherry, Sand Grass, Needle-and-thread [community SF7-C]  
**Min Elev. (m):** 685 **Max Elev. (m):** 693  
**Other Comments:** over 20 plants in 3X3m area  
**Management Comments:** disturbance to the low thicket habitats would affect the vigor of this species **Best Source of Info:** U98FRY01ABCA  
Map UTM Zone UTM Easting UTM Northing Survey Site Name Notes # Dot ID #  
72L02 12 526800 5561200 Old Channel Lake NE 28-14-5-4 27 4228  
Source Code Author Publisher Year Title  
U98FRY01ABCA Fryer, Gina 1998 Memo from Gina Fryer to John Rintoul: rare plant locations for the Palliser Pipeline Project  
*Oryzopsis micrantha* little-seed rice grass SRank: S2  
+++++

**Element Code:** PMPOA4J070 **Occurrence Code #:** 008 **Survey Date:** 1996-00-00  
**Last Observed:** 1996-00-00 **First Observed:** 1996-00-00 **Actual Mapping Precision (m):** 600 **Precision Code:** M  
**Directions:** Patricia, 19 km NNW of; Dinosaur Provincial Park, 7 km W of northern limits, along Red Deer River valley  
**General Description:** river valley basin plain, on suberic sandyloam, in tall thicket of Thorny Buffalo Berry, Common WildRose, Buckbrush, Little-seeded Rice Grass, Dragonwort, Western Clematis [community CF3-D]; river valley basin channel depression- see report  
**Min Elev. (m):** 640 **Max Elev. (m):** 640  
**Other Comments:** 30 plants in 4X4m area [KPCF 13 + 900]; 25 plants in 3X5m area [KPCF 13 + 930]; 10 plants in 2X2m area [KPCF 14 + 205];  
**Management Comments:** disturbance to the low thicket habitats would affect the vigor of this species **Best Source of Info:** U98FRY01ABCA  
**Map UTM Zone UTM Easting UTM Northing Survey Site Name Notes # Dot ID #**  
72L13 12 450350 5633450 Red Deer River SW 11-22-13-4 11 4229  
**Source Code Author Publisher Year Title**  
U98FRY01ABCA Fryer, Gina 1998 Memo from Gina Fryer to John Rintoul: rare plant locations for the Palliser Pipeline Project  
*Oryzopsis micrantha* little-seed rice grass SRank: S2  
+++++

**Element Code:** PMPOA4J070 **Occurrence Code #:** 009 **Survey Date:** 1994-06-20  
**Last Observed:** 1994-06-20 **First Observed:** 1994-06-20 **Actual Mapping Precision (m):** 1000 **Precision Code:** M  
**Directions:** CFB Suffield; Medicine Hat, 47 km N of; Ypres Area; Watching Hill, 4 km S of; vicinity of Sherwood Forest.  
**General Description:** rip floodplain levee terrace; mesic young forest of Populus X jackii, Prun vir, Symp occ, Rosa woo, Elym vir, Thal ven, Oryz mic.  
**Min Elev. (m):** 615 **Max Elev. (m):** 615 **Best Source of Info:** S94MACPMABCA18  
**Specimen Source Code Collector Herbarium Accession # Date ID OK? Observation Detail**  
S94MACPMABCA18 Macdonald, I.D. PM B94.4.252A 1994-06-20 Y  
**Map UTM Zone UTM Easting UTM Northing Survey Site Name Notes # Dot ID #**  
72L07 12 529850 5590075 CFB-Suffield 50-27'50"N/110-34'50"W 30 4332  
*Oryzopsis micrantha* little-seed rice grass SRank: S2  
+++++

**Element Code:** PMPOA4J070 **Occurrence Code #:** 010 **Survey Date:** 1994-06-27  
**Last Observed:** 1994-06-27 **First Observed:** 1994-06-27 **Actual Mapping Precision (m):** 250 **Precision Code:** S  
**Directions:** White Horse Lake; ~11.5 km ENE of; S Saskatchewan River; 10.75km N of.  
**General Description:** stabilized sand dune hill slope; submesic thicket of Prun vir, Arte can, Arte camp, Smil stel, Agro das, Ther rho.  
**Min Elev. (m):** 715 **Max Elev. (m):** 715 **Best Source of Info:** S94MACPMABCA19  
**Specimen Source Code Collector Herbarium Accession # Date ID OK? Observation Detail**  
S94MACPMABCA19 Macdonald, I.D., Trottier, Garry PM B94.4.280A 1994-06-27 Y  
**Map UTM Zone UTM Easting UTM Northing Survey Site Name Notes # Dot ID #**  
72L09 12 548350 5615475 CFB Suffield 50-41'25"N/110-18'55"W 32 4335  
*Oryzopsis micrantha* little-seed rice grass SRank: S2  
+++++

**Element Code:** PMPOA4J070 **Occurrence Code #:** 011 **Survey Date:** 1994-06-28  
**Last Observed:** 1994-06-28 **First Observed:** 1994-06-28 **Actual Mapping Precision (m):** 50 **Precision Code:** S  
**Directions:** CFB Suffield.  
**General Description:** river incise valley **Slope:** submesic thicket of Amel aln, Prun vir, Rosa woo, Clem lig, Pari pen, Soli can, Hack amer, Sonc asp, Cirs arv.  
**Min Elev. (m):** 595 **Max Elev. (m):** 710 **Best Source of Info:** S94MACPMABCA20  
**Specimen Source Code Collector Herbarium Accession # Date ID OK? Observation Detail**  
S94MACPMABCA20 Macdonald, I.D. PM B94.4.357 1994-06-28 Y  
**Map UTM Zone UTM Easting UTM Northing Survey Site Name Notes # Dot ID #**  
72L09 12 541050 5597600 CFB Suffield-the middle sandhills 50-31'50"N/110-25'15"W 30 4314  
*Oryzopsis micrantha* little-seed rice grass SRank: S2  
+++++



**Element Code:** PMPOA4J070 **Occurrence Code #:** 012 **Survey Date:** 1995-06-20  
**Last Observed:** 1995-06-20 **First Observed:** 1995-06-20 **Actual Mapping Precision (m):** 250 **Precision Code:** S  
**Directions:** CFB Suffield; 38 km N of Medicine Hat; Fish Creek Area; 3 km ENE of Twin Peaks.  
**General Description:** local in sandy loam of ravine basin; E facing lower slope in mesic tall shrubland community of *Prun vir/Paripen* - *Chen fr* - *Hack flo* - *Elym vir* - *Urti dio*.  
**Min Elev. (m):** 680 **Max Elev. (m):** 680  
**Slope:** 36.00 **Aspect:** E **Best Source of Info:** R97MAC01ABCA  
**Specimen Source Code Collector Herbarium Accession # Date ID OK? Observation Detail**  
S95MACPMABCA15 Macdonald, I.D., Adams, G. PM B95.9.48 1995-06-20 Y  
**Map UTM Zone UTM Easting UTM Northing Survey Site Name Notes # Dot ID #**  
72L07 12 527960 5581580 Twin Peaks 50 23 07N, 110 36 25 W 11 196  
**Source Code Author Publisher Year Title**  
R97MAC01ABCA Macdonald, I.D. Canadian Wildlife Service, Environment Canada, Prairie and 1997 Vascular Flora of Canadian Forces Base Suffield National Wildlife Area  
**Oryzopsis micrantha** little-seed rice grass SRank: S2  
+++++

**Element Code:** PMPOA4J070 **Occurrence Code #:** 013 **Survey Date:** 1994-06-29  
**Last Observed:** 1994-06-29 **First Observed:** 1994-06-29 **Actual Mapping Precision (m):** 250 **Precision Code:** S  
**Directions:** CFB Suffield; 22 km NNE of Medicine Hat; Fish Creek Area; Bull Pen.  
**General Description:** river terrace, suberic open thicket of *Arte can*, *Stip vir*, *Arte fri*, *Koel mac*, *Poa com* *Agro tra*, *Arab hol*, *Symp occ*, *Liat pun*  
**Min Elev. (m):** 630 **Max Elev. (m):** 630  
**Other Comments:** also at 526500/5567000 **Best Source of Info:** R97MAC01ABCA  
**Specimen Source Code Collector Herbarium Accession # Date ID OK? Observation Detail**  
S94MACPMABCA21 Macdonald, I.D. PM B94.4.399 1994-06-29 Y  
**Map UTM Zone UTM Easting UTM Northing Survey Site Name Notes # Dot ID #**  
72L07 12 526550 5566550 CFB Suffield 50-15'05"N/110-37'40"W 22 4252  
**Source Code Author Publisher Year Title**  
R97MAC01ABCA Macdonald, I.D. Canadian Wildlife Service, Environment Canada, Prairie and 1997 Vascular Flora of Canadian Forces Base Suffield National Wildlife Area  
**Oryzopsis micrantha** little-seed rice grass SRank: S2  
+++++

**Element Code:** PMPOA4J070 **Occurrence Code #:** 014 **Survey Date:** 1995-06-26  
**Last Observed:** 1995-06-26 **First Observed:** 1995-06-26 **Actual Mapping Precision (m):** 250 **Precision Code:** S  
**Directions:** White Horse Lake; ~6.5 km ESE of; S Saskatchewan River; ~5.5 km N of.  
**General Description:** sand of seasonally moist interdunal depression on rolling dune field in submesic tall shrubland of *Symp occ* - *Rosa woo* - *Sali lut/Glycrrhiza lepidota* - *Agro das-pin* - *Care ste*.  
**Min Elev. (m):** 695 **Max Elev. (m):** 695 **Best Source of Info:** R97MAC01ABCA  
**Specimen Source Code Collector Herbarium Accession # Date ID OK? Observation Detail**  
S95MACPMABCA16 Macdonald, I.D. PM B95.9.9 1995-06-26 Y  
**Map UTM Zone UTM Easting UTM Northing Survey Site Name Notes # Dot ID #**  
72L09 12 542500 5609000 CFB Suffield 50-37'55"N/110-23'52"W 34 4328  
**Source Code Author Publisher Year Title**  
R97MAC01ABCA Macdonald, I.D. Canadian Wildlife Service, Environment Canada, Prairie and 1997 Vascular Flora of Canadian Forces Base Suffield National Wildlife Area  
**Oryzopsis micrantha** little-seed rice grass SRank: S2  
+++++

**Element Code:** PMPOA4J070 **Occurrence Code #:** 015 **Survey Date:** 1995-07-01  
**Last Observed:** 1995-07-01 **First Observed:** 1995-07-01 **Actual Mapping Precision (m):** 250 **Precision Code:** S  
**Directions:** White Horse Lake; ~10.3 km SE of, S. Saskatchewan River, 200 m N of.  
**General Description:** sand of lower slope of ravine with mesic deciduous grove of *Popu tre/Sali beb/Symp occ* - *Ribe oxy/Equi arv* - *Agro tra*  
**Min Elev. (m):** 660 **Max Elev. (m):** 660 **Aspect:** E **Best Source of Info:** S95MACPMABCA17  
**Specimen Source Code Collector Herbarium Accession # Date ID OK? Observation Detail**  
S95MACPMABCA17 Macdonald, I.D. PM B95.9.17 1995-07-01 Y  
**Map UTM Zone UTM Easting UTM Northing Survey Site Name Notes # Dot ID #**  
72L09 12 545625 5605200 CFB Suffield 50 35 55 N, 110 21 25 W 35 4355  
**Oryzopsis micrantha** little-seed rice grass SRank: S2  
+++++

**Element Code:** PMPOA4J070 **Occurrence Code #:** 016 **Survey Date:** 1977-06-14  
**Last Observed:** 1977-06-14 **First Observed:** 1977-06-14 **Actual Mapping Precision (m):** 800 **Precision Code:** M  
**Directions:** Cavendish, 12.5 km NNE of; Red Deer River, E side of.  
**General Description:** cottonwood/grass habitat  
**Min Elev. (m):** 602 **Max Elev. (m):** 602 **Best Source of Info:** S77BRAUAABCA09  
**Specimen Source Code Collector Herbarium Accession # Date ID OK? Observation Detail**  
S77BRAUAABCA09 Bradley, C., Wallis, C. UA 75352 1977-06-14 Y spikelets; plant still green  
**Map UTM Zone UTM Easting UTM Northing Survey Site Name Notes # Dot ID #**  
72L16 12 540800 5641825 Red Deer River 6-23-3 W4M 18 4507  
***Oryzopsis micrantha*** little-seed rice grass SRank: S2  
+++++

**Element Code:** PMPOA4J070 **Occurrence Code #:** 017 **Survey Date:** 1976-07-01  
**Last Observed:** 1976-07-01 **First Observed:** 1976-07-01 **Actual Mapping Precision (m):** 250 **Precision Code:** S  
**Directions:** Pinhorn Provincial Grazing Reserve; Milk River N.A., very NW end of, 4 km WSW of.  
**General Description:** on sandy soil; growing at edge of hybrid Populus x acuminata poplar woods  
**Min Elev. (m):** 915 **Max Elev. (m):** 915 **Best Source of Info:** S76WALUAABCA02  
**Specimen Source Code Collector Herbarium Accession # Date ID OK? Observation Detail**  
S76WALUAABCA02 Wallis, C. UA 56337 1976-07-01 Y dehisced spikelets  
**Map UTM Zone UTM Easting UTM Northing Survey Site Name Notes # Dot ID #**  
72E02 12 515223 5437784 Milk River 6-2-6 W4M 21 4508  
***Oryzopsis micrantha*** little-seed rice grass SRank: S2  
+++++

**Element Code:** PMPOA4J070 **Occurrence Code #:** 018 **Survey Date:** 1987-09-23  
**Last Observed:** 1987-09-23 **First Observed:** 1987-09-23 **Actual Mapping Precision (m):** 250 **Precision Code:** S  
**Directions:** Medicine Hat golf course, 1.75 km N of; S. Sask. River, on W bank of.  
**General Description:** under saskatoon shrubbery on fault blocks halfway down river breaks  
**Min Elev. (m):** 686 **Max Elev. (m):** 686 **Size of Occurrence:** **Best Source of Info:** S87HUDNMONCA02  
**Specimen Source Code Collector Herbarium Accession # Date ID OK? Observation Detail**  
S87HUDNMONCA02 Hudson, J.H. NM 528802 1987-09-23 Y  
**Map UTM Zone UTM Easting UTM Northing Survey Site Name Notes # Dot ID #**  
72L02 12 524675 5546350 South Saskatchewan River 11-8-13-5 W4M 42 5497  
***Oryzopsis micrantha*** little-seed rice grass SRank: S2

***Osmorhiza longistylis* smooth sweet cicely**

**Natural Region:** Mixedgrass, Dry Mixedgrass

**Habitat:** Woodland-Sandy

**Phenology:** flowers in early to mid-June

**Specific Search Strategies (if any):** fruiting plants are easily identifiable into October; primarily in sandy coulee woodlands with springs, especially where ungrazed and frequently under Manitoba maple

**Element Occurrences:**

**Element Code:** PDAPI1K060 **Occurrence Code #:** 001 **Survey Date:** 1968-08-15  
**Last Observed:** 1968-08-15 **First Observed:** 1944-07-26 **Actual Mapping Precision (m):** 250 **Precision Code:** S  
**Directions:** Edmonton; Groat Ravine, bottom of; near its mouth above bridge.  
**General Description:** Forest ravine. Edge of thicket, occasional  
**Min Elev. (m):** 640 **Max Elev. (m):** 671  
**Other Comments:** Lat/long does not correspond with other information for Savale, 1968 specimen. **Best Source of Info:** S45TURUAABCA01

**Specimen Source Code Collector Herbarium Accession # Date ID OK? Observation Detail**

S44TURACONCA02 Turner, G.H. AC 118974 1944-07-26  
S44TURACONCA03 Turner, G.H. AC 118971 1944-08-02  
S44TURACONCA05 Turner, G.H. AC 346643 1944-07-03 rare on prairies  
S44TURUAABCA08 Turner, G.H. UA 62375 1944-08-02 fruits  
S44TURUCABCA05 Turner, G.H. UC 19745 1944-08-02 Y fruiting  
S44TURULABCA02 Turner, G.H. UL none 1944-08-02 fruits  
S45TURACONCA06 Turner, G.H. AC 118973 1945-06-28  
S45TURUAABCA01 Turner, G.H. UA 62377 1945-06-28 flowers, developing fruits  
S45TURUAABCA07 Turner, G.H. UA 62378 1945-06-28 Y flowers  
S68SAVPMABCA07 Savale, W.F. PM B68.7.10 1968-08-15 Y

**Map UTM Zone UTM Easting UTM Northing Survey Site Name Notes # Dot ID #**

83H12 12 331700 5935550 Edmonton 13 3356

**Date Source Abstract Code Observer Occurrence Data**

flowers, developing fruits (1945), fruits (1944)

***Osmorhiza longistylis* smooth sweet cicely** SRank: S2

+++++

**Element Code:** PDAPI1K060 **Occurrence Code #:** 002 **Survey Date:** 1946-07-12

**Last Observed:** 1946-07-12 **First Observed:** 1946-07-12 **Precision Code:** S

**Directions:** Macdonald Hotel, below.

**General Description:** mixed woods

**Min Elev. (m):** 648 **Max Elev. (m):** 648 **Best Source of Info:** S46MOSUAABCA01

**Specimen Source Code Collector Herbarium Accession # Date ID OK? Observation Detail**

S46MOSUAABCA01 Moss, E.H. UA 13461 1946-07-12 fruits

**Map UTM Zone UTM Easting UTM Northing Survey Site Name Notes # Dot ID #**

83H11 12 335200 5934950 Edmonton 17 3334

**Date Source Abstract Code Observer Occurrence Data**

fruits

***Osmorhiza longistylis* smooth sweet cicely** SRank: S2

+++++

**Element Code:** PDAPI1K060 **Occurrence Code #:** 003 **Survey Date:** 1977-06-16

**Last Observed:** 1977-06-16 **First Observed:** 1977-06-16 **Precision Code:** M

**Directions:** Bindloss bridge, 4 mi NW of.

**General Description:** Manitoba Maple woodland, along coulee.

**Min Elev. (m):** 610 **Max Elev. (m):** 610 **Best Source of Info:** S77BRAUAABCA01

**Specimen Source Code Collector Herbarium Accession # Date ID OK? Observation Detail**

S77BRAUAABCA01 Bradley, C. & C. Wallis UA 75556 1977-06-16 flowers, developing fruits

**Map UTM Zone UTM Easting UTM Northing Survey Site Name Notes # Dot ID #**

72L16 12 543000 5643000 Bindloss 2 249

**Date Source Abstract Code Observer Occurrence Data**

flowers, developing fruits

***Osmorhiza longistylis* smooth sweet cicely** SRank: S2

+++++

**Element Code:** PDAPI1K060 **Occurrence Code #:** 004 **Survey Date:** 1979-08-13  
**Last Observed:** 1979-08-13 **First Observed:** 1963-08-20 **Precision Code:** S  
**Directions:** Cypress Hills, W side of; Reesor Lake, 1.5 km N of.  
**General Description:** Spring at base of slope; mesic; willow; water birch; poplar, lush herbs. Fine textured soils  
**Min Elev. (m):** 1220 **Max Elev. (m):** 1220 **Best Source of Info:** S79BRAUAABCA02  
**Specimen Source Code Collector Herbarium Accession # Date ID OK? Observation Detail**  
S63NEWACONCA01 Newsome, R.D. AC 118970 1963-08-20 Stand No. 159  
S79BRAUAABCA02 Bradley, C. UA 84167 1979-08-13 Portion of plant in fruit  
**Map UTM Zone UTM Easting UTM Northing Survey Site Name Notes # Dot ID #**  
72E09 12 563772 5504282 Reesor Lake 13 109  
**Date Source Abstract Code Observer Occurrence Data**  
assoc. spp: *Actaea rubro*, *Osmorhiza depau?*, *Geanium richardsonii*. Portion of plant in fruit.  
*Osmorhiza longistylis* smooth sweet cicely SRank: S2  
+++++

**Element Code:** PDAPI1K060 **Occurrence Code #:** 005 **Survey Date:** 1995-06-20  
**Last Observed:** 1995-06-20 **First Observed:** 1994-00-00 **Precision Code:** S  
**Directions:** Canadian Forces Base Suffield National Wildlife Area; South Saskatchewan River ravine; valley slope  
**General Description:** mesic site, tall thicket of *Prunus virginiana*. Sandy loam of ravine basin lower slope in tall shrubland  
community of *Prunus virginiana*/*Parietaria pensylvanica*-*Chenopodium fremontii*-*Hackelia flor*-*Elymus vir*-*Urtica doi*; rare  
**Min Elev. (m):** 680 **Max Elev. (m):** 701  
**Slope:** 36.00 **Aspect:** E **Best Source of Info:** U96MAC01ABCA  
**Specimen Source Code Collector Herbarium Accession # Date ID OK? Observation Detail**  
S95MACPMABCA10 Macdonald, I.D., Adams, G.? PM B95.9.46 1995-06-20 Y  
**Map UTM Zone UTM Easting UTM Northing Survey Site Name Notes # Dot ID #**  
72L07 12 527960 5581580 Twin Peaks 50 23 07N, 110 36 25 W 11 196  
**Source Code Author Publisher Year Title**  
U96MAC01ABCA Macdonald, I.D. Canadian Wildlife Service, Environment Canada, Prairie and 1996 Vascular Flora of Canadian  
Forces Base Suffield National Wildlife Area  
**Date Source Abstract Code Observer Occurrence Data**  
rare in SNWA; very sparse in the ground cover  
*Osmorhiza longistylis* smooth sweet cicely SRank: S2  
+++++

**Element Code:** PDAPI1K060 **Occurrence Code #:** 006 **Survey Date:** 1955-09-08  
**Last Observed:** 1955-09-08 **First Observed:** 1955-09-08 **Actual Mapping Precision (m):** 2500 **Precision Code:** M  
**Directions:** Medicine Hat; ~16km NE of; Old Channel Lake; ~2.5km SE of.  
**General Description:** With aspen, alder and Manitoba maple stream valley.  
**Min Elev. (m):** 693 **Max Elev. (m):** 693 **Best Source of Info:** S55MOSACONCA01  
**Specimen Source Code Collector Herbarium Accession # Date ID OK? Observation Detail**  
S55MOSACONCA01 Moss, E.H. AC 118969 1955-09-02  
**Map UTM Zone UTM Easting UTM Northing Survey Site Name Notes # Dot ID #**  
72L02 12 526000 5564000 Old Channel Lake 50 14/110 38 12 3821  
*Osmorhiza longistylis* smooth sweet cicely SRank: S2  
+++++

**Element Code:** PDAPI1K060 **Occurrence Code #:** 007 **Survey Date:** 1974-06-00  
**Last Observed:** 1974-06-00 **First Observed:** 1974-06-00 **Actual Mapping Precision (m):** 250 **Precision Code:** S  
**Directions:** Provincial Museum of AB; SW corner of parking lot; Mouth of Groat Ravine; ~250m W of.  
**General Description:** under trees in deep shade  
**Min Elev. (m):** 640 **Max Elev. (m):** 670 **Best Source of Info:** S74TAYPMABCA01  
**Specimen Source Code Collector Herbarium Accession # Date ID OK? Observation Detail**  
S74TAYPMABCA01 Taylor, D.A. PM B74.9.1 1974-06-00 Y  
S78ALLPMABCA18 Allen, A. PM B78.10.2 1978-05-31 Y  
**Map UTM Zone UTM Easting UTM Northing Survey Site Name Notes # Dot ID #**  
83H12 12 331400 5935175 Edmonton Provincial Museum 53-30N/113-20W; 53-33N/113-28W 1 4273  
*Osmorhiza longistylis* smooth sweet cicely SRank: S2  
+++++

**Element Code:** PDAPI1K060 **Occurrence Code #:** 008 **Survey Date:** 1981-06-24  
**Last Observed:** 1981-06-24 **First Observed:** 1981-06-24 **Actual Mapping Precision (m):** 2500 **Precision Code:** M  
**Directions:** Stettler, NW of; Buffalo Lake, E shore of; Boss Hill  
**Min Elev. (m):** 805 **Max Elev. (m):** 805 **Best Source of Info:** S81HRAPMABCA03  
**Specimen Source Code Collector Herbarium Accession # Date ID OK? Observation Detail**  
S81HRAPMABCA03 Hrapko, J.O., Kerik, J.C. PM B81.15.5 1981-06-24 Y  
**Map UTM Zone UTM Easting UTM Northing Survey Site Name Notes # Dot ID #**  
83A10 12 379600 5818150 Buffalo Lake Lat/Long: 52 30' 112 46' 1 2320  
*Osmorhiza longistylis* smooth sweet cicely SRank: S2

**Element Code:** PDAPI1K060 **Occurrence Code #:** 009 **Survey Date:** 1996-10-21  
**Last Observed:** 1996-10-21 **First Observed:** 1996-10-21 **Actual Mapping Precision (m):** 100 **Precision Code:** S  
**Directions:** Winterburn School; 0.45 mi W; Twp 52 Rge 26 W4: LSD7; around old homestead building, circa 1902s  
**General Description:** submesic; disturbed area  
**Slope:** 2.00 **Aspect:** 0  
**Management Comments:** inactive homestead **Best Source of Info:** UNDSTR02ABCA  
**Map UTM Zone UTM Easting UTM Northing Survey Site Name Notes # Dot ID #**  
83H12 12 321110 5934710 Winterburn W1/3 of N1/2 of SE36 17 4619  
**Source Code Author Publisher Year Title**  
U96STR02ABCA Strong, W.L. 1996 Rare Native Plant Survey Forms  
**Date Source Abstract Code Observer Occurrence Data**  
1996-10-21 UNDSTR02ABCA Strong, Wayne - keyed at site Moss(1983) about 20 plants, all fruiting  
**Osmorhiza longistylis** smooth sweet cicely SRank: S2  
+++++

**Element Code:** PDAPI1K060 **Occurrence Code #:** 010 **Survey Date:** 1999-06-18  
**Last Observed:** 1999-06-18 **First Observed:** 1999-06-18 **Actual Mapping Precision (m):** 100 **Precision Code:** S  
**Directions:** Edmonton; Queen Elizabeth Park.  
**General Description:** moist shaded area in Balsam Poplar-dominated forest; mesic  
**Min Elev. (m):** 625 **Max Elev. (m):** 625  
**Slope:** 10.00 **Aspect:** N **Best Source of Info:** U99GRI01ABCA  
**Map UTM Zone UTM Easting UTM Northing Survey Site Name Notes # Dot ID #**  
83H11 12 334400 5933450 Edmonton - Queen Elizabeth Park 53 31 34/113 29 55 36 5164  
**Source Code Author Publisher Year Title**  
U99GRI01ABCA Griffiths, G.C.D. 1999 Rare Native Plant Survey  
**Date Source Abstract Code Observer Occurrence Data**  
1999-06-18 U99GRI01ABCA G.C.D. Griffiths about 50 individuals flowering  
**Osmorhiza longistylis** smooth sweet cicely SRank: S2  
+++++

**Element Code:** PDAPI1K060 **Occurrence Code #:** 011 **Survey Date:** 1999-07-16  
**Last Observed:** 1999-07-16 **First Observed:** 1999-06-26 **Actual Mapping Precision (m):** 20 **Precision Code:** S  
**Directions:** Cypress Hills P.P.; Ressor Lake, N side of.  
**General Description:** in Crat dou(?)/Hera lan-Urti gra-Viol can shrub (5 m tall) thicket along shallow drainage at mid-slope and deciduous fores of Popu trem, Heur lan, Hack sp.; mesic well-drained to submesic  
**Min Elev. (m):** 1210 **Max Elev. (m):** 1310  
**Slope:** 19.00 **Aspect:** S **Size of Occurrence:** 2.00  
**Other Comments:** more detailed locations in digital file of Cypress Hills. Specimen collected, collector number 009 (R. Ernst)  
**Management Comments:** livestock grazing and recreation; presence of non-native species - Arct min; difficult for livestock to access **Best Source of Info:** U99BRA01ABCA  
**Map UTM Zone UTM Easting UTM Northing Survey Site Name Notes # Dot ID #**  
72E09 12 564725 5501750 Ressor Lake 67 5516  
**Source Code Author Publisher Year Title**  
U99BRA01ABCA Bradley, C., R. Ernst, D. Dickinson & L. Fitch 1999 Rare Plant Survey Forms  
**Date Source Abstract Code Observer Occurrence Data**  
1999-06-26 U99BRA01ABCA Reg Ernst more than 100 plants scattered along the eastern ridge (in understory) of aspen woodland (5000 m2); V6 vegetative; R7 reproductive  
1999-07-16 U99BRA01ABCA Cheryl Bradley & Wynne Miles 12U 564 728/5501 750 - 15-25 plants in a plot 400 m2 (CB9001), V6 veget, R11 reprod; 12U 565 450/5501 360 - ca 75 plants in 50 m transect ca 10 m wide (500 m2), may be up to 2500 plants in whole thicket (15,000m2) - Crat dou(?)/Urti gra-Viol can shrub (5 m tall) on lower slope, V6 veget, R10 reprod, slope 49%  
**Osmorhiza longistylis** smooth sweet cicely SRank: S2  
+++++

**Element Code:** PDAPI1K060 **Occurrence Code #:** 012 **Survey Date:** 1999-07-16  
**Last Observed:** 1999-07-16 **First Observed:** 1999-07-16 **Actual Mapping Precision (m):** 20 **Precision Code:** S  
**Directions:** Cypress Hills P.P.; Ressor Lake, 3 km E of; Battle Creek, slopes N of.  
**General Description:** Crat dou/ Urt gra-Hier lan-Viol can shrub (5-6 m tall) thicket on S-facing slope above creek  
**Min Elev. (m):** 1225 **Max Elev. (m):** 1225  
**Slope:** 12.00 **Aspect:** S **Size of Occurrence:** 0.04  
**Other Comments:** PLOT CB9002  
**Management Comments:** livestock grazing and trampling from recreational use **Best Source of Info:** U99BRA01ABCA  
**Map UTM Zone UTM Easting UTM Northing Survey Site Name Notes # Dot ID #**  
72E09 12 568500 5501350 Battle Creek 70 5519  
**Source Code Author Publisher Year Title**  
U99BRA01ABCA Bradley, C., R. Ernst, D. Dickinson & L. Fitch 1999 Rare Plant Survey Forms  
**Date Source Abstract Code Observer Occurrence Data**  
1999-07-16 U99BRA01ABCA Cheryl Bradley & Wynne Miles 3 individual in 400m2 plot; V6 vegetative; R10 reproductive  
**Osmorhiza longistylis** smooth sweet cicely SRank: S2

***Oxytropis lagopus* var *conjugans* hare-footed locoweed**

**Natural Region:** Foothills Fescue Grassland

**Habitat:** Grassland-Unglaciated

**Phenology:** flowers late May to early June

**Specific Search Strategies (if any):** exposed pre-glacial gravels on unglaciated summit of Milk River Ridge; occasional on gravels elsewhere

**Element Occurrences:**

**Element Code:** PDFAB2X0A2 **Occurrence Code #:** 001 **Survey Date:** 1967-06-06  
**Last Observed:** 1967-06-06 **First Observed:** 1966-06-05 **Actual Mapping Precision (m):** 500 **Precision Code:** M  
**Directions:** Cardston, 2 km SW of; Reservoirs.

**General Description:** banks of abandoned gravel pit

**Min Elev. (m):** 1150 **Max Elev. (m):** 1150 **Aspect:** S **Best Source of Info:** S67SHAULABCA01

**Specimen Source Code Collector Herbarium Accession # Date ID OK? Observation Detail**

S66SHAACONCA01 Shaw, K. AC 591185 1966-06-05 collected on the exact site of the first collection of this species for Canada

S66SHAACONCA02 Shaw, K. AC 666478 1966-06-05 collected on the exact site of the first collection of this species for Canada

S67SHAACONCA01 Shaw, K. AC 619699 1967-06-06

S67SHAULABCA01 Shaw, Keith UL none 1967-06-06 50%

**Map UTM Zone UTM Easting UTM Northing Survey Site Name Notes # Dot ID #**

82H03 12 330550 5449650 Cardston 28 967

**Source Code Author Publisher Year Title**

A66SHA01ABCA Shaw, Keith Blue Jay 1966 A New Species of *Oxytropis* for Alberta

*Oxytropis lagopus* var *conjugans* hare-footed locoweed SRank: S1

+++++

**Element Code:** PDFAB2X0A2 **Occurrence Code #:** 002 **Survey Date:** 1992-05-31  
**Last Observed:** 1992-05-31 **First Observed:** 1986-05-24 **Actual Mapping Precision (m):** 250 **Precision Code:** S  
**Directions:** Whiskey Gap; Sommerfeldt Ranch.

**General Description:** rough fescue grassland; gravelly plateau rims on the ridge

**Min Elev. (m):** 1402 **Max Elev. (m):** 1402 **Best Source of Info:** S92SOMCFABCA08 **Source Code Collector Herbarium Accession # Date ID OK? Observation Detail**

S86SOMCFABCA03 Sommerfeldt, B. CF 860196 1986-05-24 Flowers

S92SOMCFABCA08 Sommerfeldt, B. CF 860196 1992-05-31 Y

**Map UTM Zone UTM Easting UTM Northing Survey Site Name Notes # Dot ID #**

82H03 12 352300 5434000 Whiskey Gap 3 943

**Source Code Author Publisher Year Title**

U95SMI02ABCA Smith, Bonnie Committee on the Status of Endangered Wildlife in Canada 1995 Status Report on the Hare-footed Locoweed *Oxytropis Lagopus* Nutt. in Canada

*Oxytropis lagopus* var *conjugans* hare-footed locoweed SRank: S1

+++++

**Element Code:** PDFAB2X0A2 **Occurrence Code #:** 003 **Survey Date:** 1985-05-23  
**Last Observed:** 1985-05-23 **First Observed:** 1983-06-22 **Actual Mapping Precision (m):** 1000 **Precision Code:** M  
**Directions:** North Milk River Area; Ross Lake, near.

**General Description:** fescue grassland; dry hill top

**Min Elev. (m):** 1348 **Max Elev. (m):** 1348 **Best Source of Info:** S85ALLPPABCA03

**Specimen Source Code Collector Herbarium Accession # Date ID OK? Observation Detail**

S83ALLPPABCA02 Allen, L., P. Mclsaac & M. Bailey PP 49 1983-06-22

S83ALLPPABCA03 Allen, L., P. Mclsaac & M. Bailey PP 50 1983-06-22

S85ALLPPABCA03 Allen, L. & S. Myers PP 48 1985-05-23

**Map UTM Zone UTM Easting UTM Northing Survey Site Name Notes # Dot ID #**

82H02 12 360325 5442700 Ross Lake 13 931

**Source Code Author Publisher Year Title**

U95SMI02ABCA Smith, Bonnie Committee on the Status of Endangered Wildlife in Canada 1995 Status Report on the Hare-footed Locoweed *Oxytropis Lagopus* Nutt. in Canada

*Oxytropis lagopus* var *conjugans* hare-footed locoweed SRank: S1

+++++

**Element Code:** PDFAB2X0A2 **Occurrence Code #:** 004 **Survey Date:** 1996-05-19  
**Last Observed:** 1996-05-19 **First Observed:** 1996-05-19 **Actual Mapping Precision (m):** 250 **Precision Code:** S  
**Directions:** North Milk River; an unglaciated ridge, found along  
**General Description:** little or no top soil with a shallow to gravel subsoil; common  
**Min Elev. (m):** 1387 **Max Elev. (m):** 1387 **Best Source of Info:** UNDBOY01ABCA  
**Map UTM Zone UTM Easting UTM Northing Survey Site Name Notes # Dot ID #**  
82H02 12 357800 5437850 North Milk River LSD 8 7 925  
**Source Code Author Publisher Year Title**  
UNDBOY01ABCA Boyle, Jon 1996 Letter of Nov. 18, 1996 to J. Gould from Rangeland Conservation Service  
**Date Source Abstract Code Observer Occurrence Data**  
more than 50 plants  
**Oxytropis lagopus var conjugans** hare-footed locoweed SRank: S1  
+++++

**Element Code:** PDFAB2X0A2 **Occurrence Code #:** 005 **Survey Date:** 1996-05-19  
**Last Observed:** 1996-05-19 **First Observed:** 1996-05-19 **Precision Code:** S  
**Directions:** North Milk River; upper terrace, found along an  
**General Description:** little or no top soil with a shallow to gravel subsoil  
**Min Elev. (m):** 1280 **Max Elev. (m):** 1280 **Best Source of Info:** UNDBOY01ABCA  
**Map UTM Zone UTM Easting UTM Northing Survey Site Name Notes # Dot ID #**  
82H02 12 357400 5434750 North Milk River LSD 10 8 926  
**Source Code Author Publisher Year Title**  
UNDBOY01ABCA Boyle, Jon 1996 Letter of Nov. 18, 1996 to J. Gould from Rangeland Conservation Service  
**Date Source Abstract Code Observer Occurrence Data**  
More than 50 plants  
**Oxytropis lagopus var conjugans** hare-footed locoweed SRank: S1  
+++++

**Element Code:** PDFAB2X0A2 **Occurrence Code #:** 006 **Survey Date:** 1986-05-29  
**Last Observed:** 1986-05-29 **First Observed:** 1986-05-28 **Actual Mapping Precision (m):** 600 **Precision Code:** M  
**Directions:** Ross Lake, 6.5 km SE of; North Milk River, N side of.  
**General Description:** gravelly dry grassland; rare  
**Min Elev. (m):** 1250 **Max Elev. (m):** 1250 **Best Source of Info:** PNDWAL01ABCA  
**Map UTM Zone UTM Easting UTM Northing Survey Site Name Notes # Dot ID #**  
82H02 12 363700 5439750 North Milk River 14 932  
**Source Code Author Publisher Year Title**  
U95SMI02ABCA Smith, Bonnie Committee on the Status of Endangered Wildlife in Canada 1995 Status Report on the Hare-footed  
Locoweed *Oxytropis Lagopus* Nutt. in Canada  
**Oxytropis lagopus var conjugans** hare-footed locoweed SRank: S1  
+++++

**Element Code:** PDFAB2X0A2 **Occurrence Code #:** 007 **Survey Date:** 1998-05-00  
**Last Observed:** 1998-05-00 **First Observed:** 1986-05-28 **Actual Mapping Precision (m):** 250 **Precision Code:** S  
**Directions:** Ross Lake, 6 km S of; North Milk River, ridge N of.  
**General Description:** well drained, sparsely vegetated, slightly sloped ridge tops; *Festuca* spp., *Koeleria macrantha*, *Carex* spp.,  
*Phlox hoodii*, *Oxytropis viscida*, *Comandra umbellata*  
**Min Elev. (m):** 1370 **Max Elev. (m):** 1375 **Aspect:** SE  
**Other Comments:** Gravel operations have already removed a significant amount of habitat; grazing does not seem to be sufficiently  
heavy to eliminate species - C. Wallis. **Best Source of Info:** S93SMIUCABCA01  
**Specimen Source Code Collector Herbarium Accession # Date ID OK? Observation Detail**  
S93SMIUCABCA01 Smith, Bonnie UC none 1993-05-22  
**Map UTM Zone UTM Easting UTM Northing Survey Site Name Notes # Dot ID #**  
82H02 12 359000 5439000 North Milk River S 6-2-22-W4; 49 05/112 55 - Wallis; SE 6-2-22-W4; 49 05/112 56- Smith 15 933  
**Source Code Author Publisher Year Title**  
U95SMI02ABCA Smith, Bonnie Committee on the Status of Endangered Wildlife in Canada 1995 Status Report on the Hare-footed  
Locoweed *Oxytropis Lagopus* Nutt. in Canada  
U98ERN01ABCA Ernst, Reg 1998 Ross Grassland Natural Area - Results of 1998 Rare Plant Survey  
U99ERN01ABCA Ernst, Reg 1999 E-mail message Reg Ernst to Joyce Gould  
U99ERN02ABCA Ernst, Reg 1999 Email to J. Gould  
**Date Source Abstract Code Observer Occurrence Data**  
1986-05-28 U95SMI02ABCA Cliff Wallis moist plants either in flower or with well-developed pods; most in pod stage; 500 to 1000  
plants  
1998-05-06 U98ERN01ABCA Reg Ernst about 3200 plants; 2000 adults, 600 juveniles, 100 others; 600 flowers  
1999-06-17 U99ERN02ABCA Reg Ernst heavy flower predation; only plants that may produce pods are the few located in the  
Fescue edge at main population  
**Oxytropis lagopus var conjugans** hare-footed locoweed SRank: S1  
+++++

**Element Code:** PDFAB2X0A2 **Occurrence Code #:** 008 **Survey Date:** 1993-05-23  
**Last Observed:** 1993-05-23 **First Observed:** 1986-05-28 **Actual Mapping Precision (m):** 250 **Precision Code:** S  
**Directions:** Del Bonita, 5.5 km Nw of  
**General Description:** east facing gravelly rim of unglaciated plateau; scattered plants  
**Min Elev. (m):** 1287 **Max Elev. (m):** 1287 **Aspect:** E **Best Source of Info:** S93SMIUCABCA02  
**Specimen Source Code Collector Herbarium Accession # Date ID OK? Observation Detail**  
S93SMIUCABCA02 Smith, Bonnie UC none 1993-05-23  
**Map UTM Zone UTM Easting UTM Northing Survey Site Name Notes # Dot ID #**  
82H02 12 365950 5436400 Del Bonita NE 26-1-22-W4; 49 04/112 50 16 934  
**Source Code Author Publisher Year Title**  
U95SMI02ABCA Smith, Bonnie Committee on the Status of Endangered Wildlife in Canada 1995 Status Report on the Hare-footed  
Locoweed *Oxytropis Lagopus* Nutt. in Canada  
**Oxytropis lagopus var conjugans** hare-footed locoweed SRank: S1  
+++++

**Element Code:** PDFAB2X0A2 **Occurrence Code #:** 009 **Survey Date:** 1993-05-23  
**Last Observed:** 1993-05-23 **First Observed:** 1993-05-23 **Actual Mapping Precision (m):** 250 **Precision Code:** S  
**Directions:** Shanks influence in Shanks Lake, 500 m SE of.  
**General Description:** upper slopes of the plateau rim as well as on the gravelly plain on top of the plateau (to 10 m away from  
edge; habitat semi-barren with abundant *Phlox alyssifolia* & *Artemisia campestris*  
**Min Elev. (m):** 1295 **Max Elev. (m):** 1295 **Best Source of Info:** S93SMIUCABCA03  
**Specimen Source Code Collector Herbarium Accession # Date ID OK? Observation Detail**  
S93SMIUCABCA03 Smith, Bonnie UC none 1993-05-23  
**Map UTM Zone UTM Easting UTM Northing Survey Site Name Notes # Dot ID #**  
82H02 12 373700 5435000 Shanks Lake NE 22 & SE 27-1-21-W4; 49 03.5/112 44 17 935  
**Source Code Author Publisher Year Title**  
U95SMI02ABCA Smith, Bonnie Committee on the Status of Endangered Wildlife in Canada 1995 Status Report on the Hare-footed  
Locoweed *Oxytropis Lagopus* Nutt. in Canada  
**Oxytropis lagopus var conjugans** hare-footed locoweed SRank: S1  
+++++

**Element Code:** PDFAB2X0A2 **Occurrence Code #:** 010 **Survey Date:** 1993-05-23  
**Last Observed:** 1993-05-23 **First Observed:** 1993-05-23 **Actual Mapping Precision (m):** 250 **Precision Code:** S  
**Directions:** Del Bonita, 7 km E of  
**General Description:** low hills; species makes carpets the upper slopes of lower hill  
**Min Elev. (m):** 1257 **Max Elev. (m):** 1257 **Best Source of Info:** S93SMIUCABCA04  
**Specimen Source Code Collector Herbarium Accession # Date ID OK? Observation Detail**  
S93SMIUCABCA04 Smith, Bonnie UC none 1993-05-23  
**Map UTM Zone UTM Easting UTM Northing Survey Site Name Notes # Dot ID #**  
82H02 12 376750 5431650 Shanks Lake NW 12-1-21-W4; 49 01.5/112 41 18 936  
**Source Code Author Publisher Year Title**  
U95SMI02ABCA Smith, Bonnie Committee on the Status of Endangered Wildlife in Canada 1995 Status Report on the Hare-footed  
Locoweed *Oxytropis Lagopus* Nutt. in Canada  
**Date Source Abstract Code Observer Occurrence Data**  
1993-05-22 U95SMI02ABCA Bonnie Smith this set of hills is estimated to contain low thousands of plants if fully surveyed  
**Oxytropis lagopus var conjugans** hare-footed locoweed SRank: S1  
+++++

**Element Code:** PDFAB2X0A2 **Occurrence Code #:** 011 **Survey Date:** 1993-05-23  
**Last Observed:** 1993-05-23 **First Observed:** 1976-06-01 **Actual Mapping Precision (m):** 250 **Precision Code:** S  
**Directions:** Shanks Lake, W end of, 2 km NNW of.  
**General Description:** west and north-west facing gravelly rim of unglaciated plateau; common  
**Min Elev. (m):** 1287 **Max Elev. (m):** 1287 **Aspect:** WNW **Best Source of Info:** S76FODUCABCA01  
**Specimen Source Code Collector Herbarium Accession # Date ID OK? Observation Detail**  
S76FODUCABCA01 Foder, Fred UC 17345 1976-06-01 Y blooming and fruiting  
S93SMIUCABCA05 Smith, Bonnie UC none 1993-05-23  
**Map UTM Zone UTM Easting UTM Northing Survey Site Name Notes # Dot ID #**  
82H02 12 370150 5437500 Shanks Lake SE 32-1-21-W4; 49 04.5/112 46 19 937  
**Source Code Author Publisher Year Title**  
U95SMI02ABCA Smith, Bonnie Committee on the Status of Endangered Wildlife in Canada 1995 Status Report on the Hare-footed  
Locoweed *Oxytropis Lagopus* Nutt. in Canada  
**Oxytropis lagopus var conjugans** hare-footed locoweed SRank: S1



***Parietaria pensylvanica* American pellitory**

**Natural Region:** Mixedgrass, Dry Mixedgrass

**Habitat:** Woodland-Sandy

**Phenology:** flowers in June

**Specific Search Strategies (if any):** occurs in sandy slope shrubbery (especially chokecherry) and coulee woodlands; distinctive foliage and fruits detectable into October

**Element Occurrences:**

**Element Code:** PDURT06060 **Occurrence Code #:** 001 **Survey Date:** 1989-06-15

**Last Observed:** 1989-06-15 **First Observed:** 1989-06-15 **Precision Code:** S

**Directions:** Milk River Natural Area

**General Description:** Dense chokecherry shrubbery on N-facing coulee slope, near head of coulee

**Min Elev. (m):** 950 **Max Elev. (m):** 950 **Aspect:** N **Best Source of Info:** S89WALPPABCA14

**Specimen Source Code Collector Herbarium Accession # Date ID OK? Observation Detail**

S89WALPPABCA14 Wallis, C. PP 654 1989-06-15 About 50 plants; more common in the adjacent coulees

**Map UTM Zone UTM Easting UTM Northing Survey Site Name Notes # Dot ID #**

72E02 12 524923 5427484 Milk River Natural Area LSD 2 15 26

***Parietaria pensylvanica* American pellitory** SRank: S2

+++++

**Element Code:** PDURT06060 **Occurrence Code #:** 002 **Survey Date:** 1995-09-01

**Last Observed:** 1995-09-01 **First Observed:** 1995-09-01 **Precision Code:** S

**Directions:** Alberta; Elkwater, ca. 14 km WSW of; Cypress Hills plateau, highlands W of.

**General Description:** Mesic sandy loam of slump basin north-facing upper slope with mixed forest of *Picea glauca* - *Populus tremuloides* / *Rubus idaeus* - *Prunus virginiana* / *Parietaria pensylvanica* - V...

**Min Elev. (m):** 1219 **Max Elev. (m):** 1219 **Aspect:** N **Size of Occurrence:** **Best Source of Info:** S95MACUAABCA03

**Specimen Source Code Collector Herbarium Accession # Date ID OK? Observation Detail**

S95MACSKSKCA01 Macdonald, I.D. SK none 1995-09-01

S95MACUAABCA03 Macdonald, Ian D. UA none 1995-09-01 Y [flowers]

**Map UTM Zone UTM Easting UTM Northing Survey Site Name Notes # Dot ID #**

72E09 12 540074 5494581 Eagle Butte Site 66; 49 36/110 26; LSD 11 25 121

***Parietaria pensylvanica* American pellitory** SRank: S2

+++++

**Element Code:** PDURT06060 **Occurrence Code #:** 003 **Survey Date:** 1995-09-03

**Last Observed:** 1995-09-03 **First Observed:** 1995-09-03 **Precision Code:** S

**Directions:** Alberta; Elkwater, ca. 12 km WSW of; Cypress Hills plateau, highlands NW of; head of Medicine Lodge Creek Coulee, W slope of.

**General Description:** Mesic clay loam of east facing coulee slope with coniferous forest of *Picea glauca* / *Prunus virginiana* / *Rubus idaeus* - *Symphoricarpos occidentalis* - *Spiraea betulifolia* / *Cinna* ...

**Min Elev. (m):** 1212 **Max Elev. (m):** 1212 **Aspect:** E **Size of Occurrence:** **Best Source of Info:** S95MACPMABCA02

**Specimen Source Code Collector Herbarium Accession # Date ID OK? Observation Detail**

S95MACPMABCA02 Macdonald, I.D. PM B96.1.13 1995-09-03 Y fruits

**Map UTM Zone UTM Easting UTM Northing Survey Site Name Notes # Dot ID #**

72E09 12 540374 5496581 Eagle Butte Site 75; 49 37/110 26; LSD 15 26 122

***Parietaria pensylvanica* American pellitory** SRank: S2

+++++

**Element Code:** PDURT06060 **Occurrence Code #:** 004 **Survey Date:** 1991-07-01

**Last Observed:** 1991-07-01 **First Observed:** 1958-06-27 **Actual Mapping Precision (m):** 1500 **Precision Code:** M

**Directions:** Writing-on-Stone PP

**General Description:** edge of pathway through stand of *Populus deltoides* & *Shepherdia argentea*. Flat of Milk River

**Min Elev. (m):** 915 **Max Elev. (m):** 915 **Best Source of Info:** S91JOHCFABCA11

**Specimen Source Code Collector Herbarium Accession # Date ID OK? Observation Detail**

S58BOIACONCA05 Boivin, B & J.-M. Perron AC none 1958-06-27 Plante legerement accrochante (very slight growth?)

S58BOIUABCA08 Boivin, B., Perron, J.-M. UA 7342 1958-06-27 Y fruits

S91JOHCFABCA11 Johnson, J.D. CF 930117 1991-07-01 Y

**Map UTM Zone UTM Easting UTM Northing Survey Site Name Notes # Dot ID #**

72E04 12 454074 5436383 Writing-on-Stone Provincial Park 49-05N/111-37W 7 55

***Parietaria pensylvanica* American pellitory** SRank: S2

+++++

**Element Code:** PDURT06060 **Occurrence Code #:** 005 **Survey Date:** 1992-10-01  
**Last Observed:** 1992-10-01 **First Observed:** 1992-07-23 **Actual Mapping Precision (m):** 250 **Precision Code:** S  
**Directions:** Police Creek, 4.5 km E of; USA border, 250 m N of  
**General Description:** dry mixed grass ecoregion: dry gully thicket of *Crataegus rotundifolia*-*Rosa woodsii*-*Ribes oxyacanthoides*  
and *Crataegus rotundifolia*-*Amelanchier alnifolia*-*Populus tremuloides*  
**Min Elev. (m):** 1143 **Max Elev. (m):** 1212 **Best Source of Info:** S92MACUAABCA02  
**Specimen Source Code Collector Herbarium Accession # Date ID OK? Observation Detail**  
S92MACPMABCA05 Macdonald, Ian D. PM B93.5.54 1992-07-23 Y fruits  
S92MACUAABCA02 Macdonald, Ian D. UA none 1992-10-01 Y flowers, fruits  
**Map UTM Zone UTM Easting UTM Northing Survey Site Name Notes # Dot ID #**  
72E04 12 456074 5427284 Police Creek 3 51  
**Parietaria pensylvanica** American pellitory SRank: S2  
+++++

**Element Code:** PDURT06060 **Occurrence Code #:** 006 **Survey Date:** 1996-00-00  
**Last Observed:** 1996-00-00 **First Observed:** 1996-00-00 **Actual Mapping Precision (m):** 100 **Precision Code:** S  
**Directions:** Medicine Hat Airport; ~33.75km SW of; S.Saskatchewan River; ~1km S of.  
**General Description:** Many plants. South side of S Saskatchewan River beneath rose/hawthorn.  
**Min Elev. (m):** 777 **Max Elev. (m):** 777 **Best Source of Info:** U96EXP01ABCA  
**Map UTM Zone UTM Easting UTM Northing Survey Site Name Notes # Dot ID #**  
72L02 12 500562 5539450 S. Saskatchewan River LS#46;km:302.1;LLD:NW 23 12-8-4 20 4012  
**Source Code Author Publisher Year Title**  
U96EXP01ABCA AXYS Environmental Consulting 1996 Express Pipeline Project  
**Parietaria pensylvanica** American pellitory SRank: S2  
+++++

**Element Code:** PDURT06060 **Occurrence Code #:** 007 **Survey Date:** 1996-00-00  
**Last Observed:** 1996-00-00 **First Observed:** 1996-00-00 **Actual Mapping Precision (m):** 100 **Precision Code:** S  
**Directions:** Seven Persons; ~6.5km NE of; Fitzgerald, ~2.5km NW of; Seven Persons Creek; ~250m E of.  
**General Description:** Many plants. Seven Persons Creek beneath thorny buffaloberry. Seed collected and re-seeded.  
**Min Elev. (m):** 739 **Max Elev. (m):** 739 **Best Source of Info:** U96EXP01ABCA  
**Map UTM Zone UTM Easting UTM Northing Survey Site Name Notes # Dot ID #**  
72E15 12 512156 5528768 Seven Persons Creek LS#48;km:318.7;LLD NE 13 11-7-4 15 4013  
**Source Code Author Publisher Year Title**  
U96EXP01ABCA AXYS Environmental Consulting 1996 Express Pipeline Project  
**Parietaria pensylvanica** American pellitory SRank: S2  
+++++

**Element Code:** PDURT06060 **Occurrence Code #:** 008 **Survey Date:** 1996-00-00  
**Last Observed:** 1996-00-00 **First Observed:** 1996-00-00 **Actual Mapping Precision (m):** 250 **Precision Code:** S  
**Directions:** Seven Persons; ~33.5km SE of; Bullshead Creek; ~3.75km W of.  
**General Description:** Beneath rose/hawthorn/buckbrush. Not re-located in time for seed collection. Probably occurs along creek  
either side of RoW.  
**Min Elev. (m):** 914 **Max Elev. (m):** 914 **Best Source of Info:** U96EXP01ABCA  
**Map UTM Zone UTM Easting UTM Northing Survey Site Name Notes # Dot ID #**  
72E15 12 520700 5512050 Bullshead Creek LS#51;km:338.3;LLD:SE 7-26 9-6-4 16 4014  
**Source Code Author Publisher Year Title**  
U96EXP01ABCA AXYS Environmental Consulting 1996 Express Pipeline Project  
**Parietaria pensylvanica** American pellitory SRank: S2  
+++++

**Element Code:** PDURT06060 **Occurrence Code #:** 009 **Survey Date:** 1996-00-00  
**Last Observed:** 1996-00-00 **First Observed:** 1996-00-00 **Actual Mapping Precision (m):** 100 **Precision Code:** S  
**Directions:** Seven Persons; ~34.75km SE of; Bullshead Creek; ~6.75 km W of.  
**General Description:** Beneath rose/hawthorn/buckbrush. RoW narrowed. Population avoided.  
**Min Elev. (m):** 937 **Max Elev. (m):** 937 **Best Source of Info:** U96EXP01ABCA  
**Map UTM Zone UTM Easting UTM Northing Survey Site Name Notes # Dot ID #**  
72E15 12 521436 5511290 Bullshead Creek LS#51;km:339.2;LLD:NW 13-24 9-6-4 17 4015  
**Source Code Author Publisher Year Title**  
U96EXP01ABCA AXYS Environmental Consulting 1996 Express Pipeline Project  
**Parietaria pensylvanica** American pellitory SRank: S2  
+++++

**Element Code:** PDURT06060 **Occurrence Code #:** 010 **Survey Date:** 1996-00-00  
**Last Observed:** 1996-00-00 **First Observed:** 1996-00-00 **Actual Mapping Precision (m):** 100 **Precision Code:** S  
**Directions:** Seven Persons; ~38.5km SE of; Bullshead Creek; ~1.25km E of.  
**General Description:** beneath rose/hawthorn/buckbrush. RoW narrowed. Population avoided  
**Min Elev. (m):** 945 **Max Elev. (m):** 945 **Best Source of Info:** U96EXP01ABCA  
**Map UTM Zone UTM Easting UTM Northing Survey Site Name Notes # Dot ID #**  
72E15 12 527174 5510866 Bullshead Creek LS#51;km:339.5;NW 13-24 9-6-4 18 4016  
**Source Code Author Publisher Year Title**  
U96EXP01ABCA AXYS Environmental Consulting 1996 Express Pipeline Project  
**Parietaria pensylvanica** American pellitory SRank: S2  
+++++

**Element Code:** PDURT06060 **Occurrence Code #:** 011 **Survey Date:** 1996-00-00  
**Last Observed:** 1996-00-00 **First Observed:** 1996-00-00 **Actual Mapping Precision (m):** 100 **Precision Code:** S  
**Directions:** Rush Lake; ~7km NW of; road ~1km W of.  
**General Description:** Beneath rose/hawthorn/buckbrush. Off RoW, population avoided.  
**Min Elev. (m):** 937 **Max Elev. (m):** 937 **Best Source of Info:** U96EXP01ABCA  
**Map UTM Zone UTM Easting UTM Northing Survey Site Name Notes # Dot ID #**  
72E10 12 521944 5510369 Rush Lake LS#51;km:340.6/340;SW 24 9-6-4/NW 24 9-6- 4 16 4017  
**Source Code Author Publisher Year Title**  
U96EXP01ABCA AXYS Environmental Consulting 1996 Express Pipeline Project  
**Parietaria pensylvanica** American pellitory SRank: S2  
+++++

**Element Code:** PDURT06060 **Occurrence Code #:** 012 **Survey Date:** 1996-00-00  
**Last Observed:** 1996-00-00 **First Observed:** 1996-00-00 **Actual Mapping Precision (m):** 250 **Precision Code:** S  
**Directions:** Rush Lake; ~4.5km SE of; road; 100m W of.  
**General Description:** Beneath rose/hawthorn/buckbrush. Shrubs/seed bank transplant.  
**Min Elev. (m):** 1044 **Max Elev. (m):** 1044 **Best Source of Info:** U96EXP01ABCA  
**Map UTM Zone UTM Easting UTM Northing Survey Site Name Notes # Dot ID #**  
72E10 12 522851 5508066 Rush Lake LS# 51;km:342.3;LLD:SE 13 9-6-4 17 4018  
**Source Code Author Publisher Year Title**  
U96EXP01ABCA AXYS Environmental Consulting 1996 Express Pipeline Project  
**Parietaria pensylvanica** American pellitory SRank: S2  
+++++

**Element Code:** PDURT06060 **Occurrence Code #:** 013 **Survey Date:** 1952-06-24  
**Last Observed:** 1952-06-24 **First Observed:** 1952-06-24 **Actual Mapping Precision (m):** 1000 **Precision Code:** M  
**Directions:** Medicine Hat; ~6.5kmSW of; Hwy 3; ~3.5km E of.  
**General Description:** Ravin lateral. Parmi les Urtica  
**Min Elev. (m):** 716 **Max Elev. (m):** 716 **Best Source of Info:** S52BOIACONCA16  
**Specimen Source Code Collector Herbarium Accession # Date ID OK? Observation Detail**  
S52BOIACONCA16 Boivin, B. & J.F. Alex AC none 1952-06-24 parmi les Urtica (among Urtica)  
**Map UTM Zone UTM Easting UTM Northing Survey Site Name Notes # Dot ID #**  
72E15 12 519675 5536900 Seven Persons Creek 6 162  
**Parietaria pensylvanica** American pellitory SRank: S2  
+++++

**Element Code:** PDURT06060 **Occurrence Code #:** 014 **Survey Date:** 1994-06-28  
**Last Observed:** 1994-06-28 **First Observed:** 1994-06-28 **Actual Mapping Precision (m):** 250 **Precision Code:** S  
**Directions:** CFB Suffield: Medicine Hat, 53km NNE of; Ypres Area; Dishpan Lake, 10km SE of.  
**General Description:** river incise valley basin: mesic thicket of Prun vir, Ribe oxy, Rhus rad, Brom ine, Hack ame, Urti dio  
**Min Elev. (m):** 595 **Max Elev. (m):** 710 **Best Source of Info:** U97CWS01ABCA  
**Specimen Source Code Collector Herbarium Accession # Date ID OK? Observation Detail**  
S94MACPMABCA34 Macdonald, I.D. PM B94.4.339A 1994-06-28 Y  
**Map UTM Zone UTM Easting UTM Northing Survey Site Name Notes # Dot ID #**  
72L09 12 541050 5597600 CFB Suffield-the middle sandhills 50-31'50"N/110-25'15"W 30 4314  
**Source Code Author Publisher Year Title**  
U97CWS01ABCA Canadian Wildlife Service CWS 1997 Plant Database from Suffield Survey 1994-1995  
**Parietaria pensylvanica** American pellitory SRank: S2  
+++++

**Element Code:** PDURT06060 **Occurrence Code #:** 015 **Survey Date:** 1994-06-29  
**Last Observed:** 1994-06-29 **First Observed:** 1994-06-29 **Actual Mapping Precision (m):** 250 **Precision Code:** S  
**Directions:** CFB Suffield; Medicine Hat, 22 km NNE of; Fish Creek Area; Bull Pen.  
**General Description:** river levee: submesic grove of P del, Sali exi, Poa pal, Ribe oxy, Chen fre, Hack ame  
**Min Elev. (m):** 630 **Max Elev. (m):** 630 **Best Source of Info:** U97CWS01ABCA  
**Specimen Source Code Collector Herbarium Accession # Date ID OK? Observation Detail**  
S94MACPMABCA35 Macdonald, I.D. PM B94.4.412 1994-06-29 Y  
**Map UTM Zone UTM Easting UTM Northing Survey Site Name Notes # Dot ID #**  
72L07 12 526550 5566550 CFB Suffield 50-15'05"N/110-37'40"W 22 4252  
**Source Code Author Publisher Year Title**  
U97CWS01ABCA Canadian Wildlife Service CWS 1997 Plant Database from Suffield Survey 1994-1995  
**Parietaria pensylvanica** American pellitory SRank: S2  
+++++

**Element Code:** PDURT06060 **Occurrence Code #:** 016 **Survey Date:** 1994-07-08  
**Last Observed:** 1994-07-08 **First Observed:** 1994-07-08 **Actual Mapping Precision (m):** 250 **Precision Code:** S  
**Directions:** CFB Suffield; Medicine Hat, 33 km N of; Fish Creek Area; Van Will Corral, 5 km E of.  
**General Description:** river incised valley basin, submesic thickets of Sali amy, Ribe oxy, Symp occ, Care pra.  
**Min Elev. (m):** 620 **Max Elev. (m):** 710 **Best Source of Info:** U97CWS01ABCA  
**Specimen Source Code Collector Herbarium Accession # Date ID OK? Observation Detail**  
S94MACPMABCA36 Macdonald, I.D. PM B94.4.568 1994-07-08 Y  
**Map UTM Zone UTM Easting UTM Northing Survey Site Name Notes # Dot ID #**  
72L07 12 527200 5577200 Cottonwood Grove 50-20'55"N/110-37'00"W 13 198  
**Source Code Author Publisher Year Title**  
U97CWS01ABCA Canadian Wildlife Service CWS 1997 Plant Database from Suffield Survey 1994-1995  
**Parietaria pensylvanica** American pellitory SRank: S2  
+++++

**Element Code:** PDURT06060 **Occurrence Code #:** 017 **Survey Date:** 1994-08-29  
**Last Observed:** 1994-08-29 **First Observed:** 1994-08-29 **Actual Mapping Precision (m):** 250 **Precision Code:** S  
**Directions:** Twin Peaks; ~3 km ESE of S Saskatchewan River; ~1.2 km W of.  
**General Description:** river incised valley basin: growing profusely among dried tumbleweed jumble.  
**Min Elev. (m):** 645 **Max Elev. (m):** 690 **Best Source of Info:** U97CWS01ABCA  
**Specimen Source Code Collector Herbarium Accession # Date ID OK? Observation Detail**  
S94MACPMABCA37 Macdonald, I.D. PM B94.4.604A 1994-08-29 Y  
**Map UTM Zone UTM Easting UTM Northing Survey Site Name Notes # Dot ID #**  
72L07 12 527500 5579350 CFB Suffield 50-22'05"N/110-36'50"W 33 4342  
**Source Code Author Publisher Year Title**  
U97CWS01ABCA Canadian Wildlife Service CWS 1997 Plant Database from Suffield Survey 1994-1995  
**Parietaria pensylvanica** American pellitory SRank: S2  
+++++

**Element Code:** PDURT06060 **Occurrence Code #:** 018 **Survey Date:** 1995-06-20  
**Last Observed:** 1995-06-20 **First Observed:** 1995-06-20 **Actual Mapping Precision (m):** 250 **Precision Code:** S  
**Directions:** CFB Suffield; Medicine Hat, 38 km N of; Fish Creek Area; Twin Peaks, 3 km ENE of  
**General Description:** sandy loam of ravine, lower slope, in mesic tall shrubland community of Prun vir/Parie pen-Cheno fre-Hack flo-Elym vir-Urti dio.  
**Min Elev. (m):** 680 **Max Elev. (m):** 680  
**Slope:** 36.00 **Best Source of Info:** U97CWS01ABCA  
**Specimen Source Code Collector Herbarium Accession # Date ID OK? Observation Detail**  
S95MACPMABCA18 Macdonald, I.D., Adams, Glenn PM B95.9.44 1995-06-20 Y  
**Map UTM Zone UTM Easting UTM Northing Survey Site Name Notes # Dot ID #**  
72L07 12 527960 5581580 Twin Peaks 50 23 07N, 110 36 25 W 11 196  
**Source Code Author Publisher Year Title**  
U97CWS01ABCA Canadian Wildlife Service CWS 1997 Plant Database from Suffield Survey 1994-1995  
**Parietaria pensylvanica** American pellitory SRank: S2  
+++++

**Element Code:** PDURT06060 **Occurrence Code #:** 019 **Survey Date:** 1977-06-17  
**Last Observed:** 1977-06-17 **First Observed:** 1977-06-17 **Actual Mapping Precision (m):** 250 **Precision Code:** S  
**Directions:** Lethbridge University, below; Oldman River Valley; Weir.  
**Min Elev. (m):** 820 **Max Elev. (m):** 820 **Best Source of Info:** S77KUIUAABCA07  
**Specimen Source Code Collector Herbarium Accession # Date ID OK? Observation Detail**  
S77KUIUAABCA07 Kuijt, J. UA 85543 1977-06-17 Y small plants but in fruit  
**Map UTM Zone UTM Easting UTM Northing Survey Site Name Notes # Dot ID #**  
82H10 12 366000 5505000 Lethbridge - University Area 29 4509  
**Parietaria pensylvanica** American pellitory SRank: S2  
+++++

**Element Code:** PDURT06060 **Occurrence Code #:** 020 **Survey Date:** 1985-06-27  
**Last Observed:** 1985-06-27 **First Observed:** 1985-06-27 **Actual Mapping Precision (m):** 900 **Precision Code:** M  
**Directions:** Onefour, 13.5 km NE of; Cressday, 9 km SW of; Sage Creek.  
**General Description:** in chokecherry shrubs on E-facing dry woody slope  
**Min Elev. (m):** 960 **Max Elev. (m):** 960 **Aspect:** E **Best Source of Info:** S85WERUAABCA01  
**Specimen Source Code Collector Herbarium Accession # Date ID OK? Observation Detail**  
S85WERUAABCA01 Wershler, C. UA 098411 1985-06-27 Y fruits  
**Map UTM Zone UTM Easting UTM Northing Survey Site Name Notes # Dot ID #**  
72E01 12 546100 5452300 Sage Creek E 20-3-3 W4M 1 4503  
***Parietaria pensylvanica*** American pellitory SRank: S2  
+++++

**Element Code:** PDURT06060 **Occurrence Code #:** 021 **Survey Date:** 1998-07-03  
**Last Observed:** 1998-07-03 **First Observed:** 1998-07-03 **Actual Mapping Precision (m):** 250 **Precision Code:** S  
**Directions:** Old Channel Lake, 2 km ENE of; South Saskatchewan River, 0.7 km E of.  
**General Description:** shrubs in sandhills; in *Prunus virginiana* shrub bed; heavily used by cattle and deer; weedy understory with  
*Axyris*  
*amaranthoides* and *Bromus tectorum*; overstory is broken by cattle; xeric; not enough shade for pellitory?  
**Min Elev. (m):** 630 **Max Elev. (m):** 685 **Aspect:** N  
**Management Comments:** Part of population will be eliminated by pipeline Row. **Best Source of Info:** U98BUS01ABCA  
**Map UTM Zone UTM Easting UTM Northing Survey Site Name Notes # Dot ID #**  
72L02 12 528850 5564300 South Saskatchewan River LSD12-02-15-5- W4M 39 5058  
**Source Code Author Publisher Year Title**  
U98BUS01ABCA Bush, C. Dana 1998 Rare Native Plant Survey Forms  
**Date Source Abstract Code Observer Occurrence Data**  
1998-07-03 U98BUS01ABCA Dana Bush dozens of plants  
***Parietaria pensylvanica*** American pellitory SRank: S2  
+++++

**Element Code:** PDURT06060 **Occurrence Code #:** 022 **Survey Date:** 1990-00-00  
**Last Observed:** 1990-00-00 **First Observed:** 1990-00-00 **Actual Mapping Precision (m):** 250 **Precision Code:** S  
**Directions:** Medicine Hat, N of; Old Channel Lake; coulee springs; Sect. 29-Tp14-R5-W4M  
**General Description:** coulees along valley of S. Sask. River; moist woodland at edge of slightly saline springs  
**Min Elev. (m):** 640 **Max Elev. (m):**  
**Other Comments:** recommend protection of spring wetlands; no groundwater pumping for injection wells  
**Management Comments:** heavy cattle grazing at one spring; petroleum dev't on adjacent lands **Best Source of Info:**  
U90WAL01ABCA  
**Map UTM Zone UTM Easting UTM Northing Survey Site Name Notes # Dot ID #**  
72L02 12 525600 5561450 Old Channel Lake Sect. 29-Tp14-R5-W5M; mapped as polygon 44 6015  
**Source Code Author Publisher Year Title**  
U90WAL01ABCA Wallis, Cliff 1990 Reconnaissance Survey of Saline Wetlands and Springs in the Grassland-Parkland Region of  
Eastern Alberta  
**Date Source Abstract Code Observer Occurrence Data**  
U90WAL01ABCA C. Wallis See unpubl report in-house  
***Parietaria pensylvanica*** American pellitory SRank: S2  
+++++

**Element Code:** PDURT06060 **Occurrence Code #:** 023 **Survey Date:** 1990-00-00  
**Last Observed:** 1990-00-00 **First Observed:** 1990-00-00 **Actual Mapping Precision (m):** 500 **Precision Code:** M  
**Directions:** Bindloss, W of; Dune Point Spring; N side of Red Deer River; Tp23-R3--4-W4M  
**General Description:** coulees with springs along river ; *Acer negundo* woodlands  
**Min Elev. (m):** 610 **Max Elev. (m):** 610  
**Management Comments:** current mgmt practice consistent with conservn, i.e. , no grazing, no withdrawal of groundwater **Best**  
**Source of Info:** U90WAL01ABCA  
**Map UTM Zone UTM Easting UTM Northing Survey Site Name Notes # Dot ID #**  
72L16 12 543000 5643000 Bindloss 2 249  
**Source Code Author Publisher Year Title**  
U90WAL01ABCA Wallis, Cliff 1990 Reconnaissance Survey of Saline Wetlands and Springs in the Grassland-Parkland Region of  
Eastern Alberta  
**Date Source Abstract Code Observer Occurrence Data**  
1990-00-00 U90WAL01ABCA C Wallis abundant in *Acer neg* woods  
***Parietaria pensylvanica*** American pellitory SRank: S2

***Picradeniopsis (Bahia) oppositifolia picradeniopsis***

**Natural Region:** Mixedgrass, Dry Mixedgrass

**Habitat:** Slopes-Badlands

**Phenology:** flowers in late June, early July

**Specific Search Strategies (if any):** wide area searches on gentle badland slopes, especially near rims; very localized populations with few individuals; distinctive plant and easily detectable when in flower; may be overlooked when not in flower and confused with more common species

**Element Occurrences:**

**Element Code:** PDAST76010 **Occurrence Code #:** 001 **Survey Date:** 1969-07-04

**Last Observed:** 1969-07-04 **First Observed:** 1969-07-04 **Precision Code:** M

**Directions:** West Lethbridge, new University site

**General Description:** in cultivated field

**Min Elev. (m):** 910 **Max Elev. (m):** 910

**Other Comments:** also 2nd specimen from same date, collected by J.J. Sexsmith at same location in recently abandoned field;

Access # 5023 **Best Source of Info:** S69SEXALABCA01

**Specimen Source Code Collector Herbarium Accession # Date ID OK? Observation Detail**

S69SEXALABCA01 Sexsmith, J.J. AL 2458 1969-07-04 Y blooming

S69SEXALABCA02 Sexsmith, J.J. AL 5023 1969-07-04 Y blooming

**Map UTM Zone UTM Easting UTM Northing Survey Site Name Notes # Dot ID #**

82H10 12 365650 5504350 Lethbridge - University 7 1358

***Picradeniopsis oppositifolia*** picradeniopsis SRank: S1

+++++

**Element Code:** PDAST76010 **Occurrence Code #:** 003 **Survey Date:** 1940-09-00

**Last Observed:** 1940-09-00 **First Observed:** 1940-09-00 **Actual Mapping Precision (m):** 500 **Precision Code:** M

**Directions:** Coaldale; ~3km SE of; Hwy 512; ~2km N of.

**General Description:** On irrigated land in middle of large wheat field. Infested area about one acre if all together.

**Min Elev. (m):** 262 **Max Elev. (m):** 262 **Best Source of Info:** S40HILACONCA01

**Specimen Source Code Collector Herbarium Accession # Date ID OK? Observation Detail**

S32RAUNMONCA06 Raup, H.M. & E.C. Abbe NM 60383 1932-09-01

S40HILACONCA01 Hill, K.W. AC 391399 1940-09-18

**Map UTM Zone UTM Easting UTM Northing Survey Site Name Notes # Dot ID #**

82H10 12 387550 5508100 Coaldale SE7-9-19-4 27 4199

***Picradeniopsis oppositifolia*** picradeniopsis SRank: S1

+++++

**Element Code:** PDAST76010 **Occurrence Code #:** 004 **Survey Date:** 1978-07-28

**Last Observed:** 1978-07-28 **First Observed:** 1978-07-28 **Actual Mapping Precision (m):** 2500 **Precision Code:** M

**Directions:** Henderson Lake; ~3.5 km WNW of; Fort Whoop-Up, 1.2 km NE of.

**General Description:** disturbed ground on exposed coulee top

**Min Elev. (m):** 850 **Max Elev. (m):** 850 **Best Source of Info:** S78HALPMABCA01

**Specimen Source Code Collector Herbarium Accession # Date ID OK? Observation Detail**

S78HALPMABCA01 Hall, E.C. PM B78.25.1 1978-07-28 Y

**Map UTM Zone UTM Easting UTM Northing Survey Site Name Notes # Dot ID #**

82H10 12 366750 5506700 Lethbridge 49-42N/112-50W 28 4321

***Picradeniopsis oppositifolia*** picradeniopsis SRank: S1

+++++

**Element Code:** PDAST76010 **Occurrence Code #:** 005 **Survey Date:** 1985-06-27

**Last Observed:** 1985-06-27 **First Observed:** 1985-06-27 **Actual Mapping Precision (m):** 900 **Precision Code:** M

**Directions:** Onefour, 13.5 km NE of; Cressday, 9 km SW of; Sage Creek.

**General Description:** eroding badland slope

**Min Elev. (m):** 960 **Max Elev. (m):** 960 **Aspect:** E **Best Source of Info:** S85WERUAABCA02

**Specimen Source Code Collector Herbarium Accession # Date ID OK? Observation Detail**

S85WERUAABCA02 Wershler, C. UA 098429 1985-06-27 Y flowers

**Map UTM Zone UTM Easting UTM Northing Survey Site Name Notes # Dot ID #**

72E01 12 546100 5452300 Sage Creek E 20-3-3 W4M 1 4503

***Picradeniopsis oppositifolia*** picradeniopsis SRank: S1

***Plantago canescens* western ribgrass**

**Natural Region:** Foothills Fescue Grassland

**Habitat:** Grassland-Unglaciaded

**Phenology:** flowers late May to early June

**Specific Search Strategies (if any):** exposed pre-glacial gravels on unglaciaded summit of Milk River Ridge

**Element Occurrences:**

**Element Code:** PDPLN02080 **Occurrence Code #:** 001 **Survey Date:** 1986-05-24

**Last Observed:** 1986-05-24 **First Observed:** 1939-08-17 **Precision Code:** M

**Directions:** Whiskey Gap; Sommerfeldt Ranch.

**General Description:** Rough fescue grassland. Moist meadow near river

**Min Elev. (m):** 1280 **Max Elev. (m):** 1400 **Best Source of Info:** S86JOHCFABCA05

**Specimen Source Code Collector Herbarium Accession # Date ID OK? Observation Detail**

S39MOSACONCA08 Moss, E.H. AC 154328 1939-08-17

S39MOSUAABCA22 Moss, E.H. UA 15948 1939-08-17

S66DEVPMABCA15 de Vries, Bernard PM B68.4.193 1966-06-18 Y

S66DEVUCABCA06 de Vries, B.D. UC 240920 1966-06-13

S86JOHCFABCA05 Johnson, J.D. CF 860200 1986-05-24

**Map UTM Zone UTM Easting UTM Northing Survey Site Name Notes # Dot ID #**

82H03 12 352650 5431700 Whiskey Gap 49 01 30/113 01 21 961

***Plantago canescens* western ribgrass** SRank: S2

+++++

**Element Code:** PDPLN02080 **Occurrence Code #:** 002 **Survey Date:** 1977-06-22

**Last Observed:** 1977-06-22 **First Observed:** 1977-06-22 **Precision Code:** S

**Directions:** Jasper National Park; Pyramid road.

**General Description:** Grassland; Soil: Lithic Orthic Eutric Brunisol

**Min Elev. (m):** 1330 **Max Elev. (m):** 1330

**Slope:** 15.00 **Aspect:** SSW **Best Source of Info:** S77CORCFABCA14

**Specimen Source Code Collector Herbarium Accession # Date ID OK? Observation Detail**

S77CORCFABCA14 Corns, I. CF 801308 1977-06-22

**Map UTM Zone UTM Easting UTM Northing Survey Site Name Notes # Dot ID #**

83D16 11 427600 5866000 Pyramid Lake 95 2881

***Plantago canescens* western ribgrass** SRank: S2

+++++

**Element Code:** PDPLN02080 **Occurrence Code #:** 003 **Survey Date:** 1964-06-13

**Last Observed:** 1964-06-13 **First Observed:** 1964-06-13 **Precision Code:** S

**Directions:** The Gap, 1 mile N along road leading W to; Lunbreck to Longview, beginning by road sign at junction of road leading from.

**General Description:** Semi-prairie roadside strip, dry soil

**Min Elev. (m):** 1265 **Max Elev. (m):** 1265 **Best Source of Info:** S64DEVACONCA07

**Specimen Source Code Collector Herbarium Accession # Date ID OK? Observation Detail**

S64DEVACONCA07 de Vries, B. AC 440363 1964-06-13

S64DEVUCABCA09 de Vries, B. UC 24093 1964-06-13

**Map UTM Zone UTM Easting UTM Northing Survey Site Name Notes # Dot ID #**

82G16 11 703450 5520500 Tetley Creek 27 899

***Plantago canescens* western ribgrass** SRank: S2

+++++

**Element Code:** PDPLN02080 **Occurrence Code #:** 004 **Survey Date:** 1963-08-14

**Last Observed:** 1963-08-14 **First Observed:** 1963-08-14 **Precision Code:** M

**Directions:** Lundbreck, 15 miles N of; Porcupine Hills, near; Callum Creek, on; a big ranch house, near.

**General Description:** Unfenced range, native grassland.

**Min Elev. (m):** 1280 **Max Elev. (m):** 1280 **Best Source of Info:** S63DORACONCA08

**Specimen Source Code Collector Herbarium Accession # Date ID OK? Observation Detail**

S63DORACONCA08 Dore, W.G., Tusko, F., & Ogilvie. AC 440364 1963-08-14

**Map UTM Zone UTM Easting UTM Northing Survey Site Name Notes # Dot ID #**

82G16 11 705750 5522750 Callum Creek 28 900

***Plantago canescens* western ribgrass** SRank: S2

+++++

**Element Code:** PDPLN02080 **Occurrence Code #:** 005 **Survey Date:** 1959-08-03  
**Last Observed:** 1959-08-03 **First Observed:** 1959-08-03 **Precision Code:** M  
**Directions:** Coleman, N of, West Gap; Mountain Valley.  
**General Description:** Sandy Meadow  
**Min Elev. (m):** 1370 **Max Elev. (m):** 1370 **Best Source of Info:** S59RUSACONCA01  
**Specimen Source Code Collector Herbarium Accession # Date ID OK? Observation Detail**  
S59RUSACONCA01 Russell, R.C. AC 440362 1959-08-03  
**Map UTM Zone UTM Easting UTM Northing Survey Site Name Notes # Dot ID #**  
82G16 11 690000 5527850 The Gap - Oldman River 20 892  
**Plantago canescens** western ribgrass SRank: S2  
+++++

**Element Code:** PDPLN02080 **Occurrence Code #:** 006 **Survey Date:** 1979-06-05  
**Last Observed:** 1979-06-05 **First Observed:** 1979-06-05 **Precision Code:** S  
**Directions:** Whaleback Ridge; Black Mountain.  
**General Description:** Dry west facing grassland  
**Min Elev. (m):** 1525 **Max Elev. (m):** 1525 **Aspect:** W **Best Source of Info:** S79WALUAABCA04  
**Specimen Source Code Collector Herbarium Accession # Date ID OK? Observation Detail**  
S79WALUAABCA04 Wallis, C. UA 84593 1979-06-05  
**Map UTM Zone UTM Easting UTM Northing Survey Site Name Notes # Dot ID #**  
82G16 11 702550 5537500 Black Mountain 16 889  
**Plantago canescens** western ribgrass SRank: S2  
+++++

**Element Code:** PDPLN02080 **Occurrence Code #:** 007 **Survey Date:** 1974-07-16  
**Last Observed:** 1974-07-16 **First Observed:** 1974-07-16 **Precision Code:** M  
**Directions:** Hwy 3; B.C. border, 5 miles east of.  
**General Description:** Barren gravel ridge  
**Min Elev. (m):** 1355 **Max Elev. (m):** 1355 **Best Source of Info:** S74HAIACONCA01  
**Specimen Source Code Collector Herbarium Accession # Date ID OK? Observation Detail**  
S74HAIACONCA01 Hainault AC none 1974-07-16  
**Map UTM Zone UTM Easting UTM Northing Survey Site Name Notes # Dot ID #**  
82G10 11 674150 5500600 Sentinel 9 847  
**Plantago canescens** western ribgrass SRank: S2  
+++++

**Element Code:** PDPLN02080 **Occurrence Code #:** 008 **Survey Date:** 1902-06-25  
**Last Observed:** 1902-06-25 **First Observed:** 1902-06-25 **Precision Code:** M  
**Directions:** Pincher Creek  
**General Description:** Saline soil  
**Min Elev. (m):** 1130 **Max Elev. (m):** 1130 **Best Source of Info:** S02XXXACONCA02  
**Specimen Source Code Collector Herbarium Accession # Date ID OK? Observation Detail**  
S02XXXACONCA02 Unknown AC 440368 1902-06-25  
**Map UTM Zone UTM Easting UTM Northing Survey Site Name Notes # Dot ID #**  
82H05 12 286350 5485600 5 1333  
**Plantago canescens** western ribgrass SRank: S2  
+++++

**Element Code:** PDPLN02080 **Occurrence Code #:** 009 **Survey Date:** 1960-07-14  
**Last Observed:** 1960-07-14 **First Observed:** 1960-07-14 **Precision Code:** M  
**Directions:** Jasper town, 2 miles east of.  
**General Description:** Dry grassy slope below cliffs  
**Min Elev. (m):** 1065 **Max Elev. (m):** 1065 **Best Source of Info:** S60PORNMONCA10  
**Specimen Source Code Collector Herbarium Accession # Date ID OK? Observation Detail**  
S60PORNMONCA10 Porsild, A.E. NM 266333 1960-07-14  
**Map UTM Zone UTM Easting UTM Northing Survey Site Name Notes # Dot ID #**  
83D16 11 430000 5858000 Old Fort Point 96 2882  
**Plantago canescens** western ribgrass SRank: S2  
+++++



**Element Code:** PDPLN02080 **Occurrence Code #:** 010 **Survey Date:** 1961-06-10  
**Last Observed:** 1961-06-10 **First Observed:** 1961-06-10 **Actual Mapping Precision (m):** 1000 **Precision Code:** M  
**Directions:** Hillcrest Mines, 5 km S of; Adanac Road, on.  
**General Description:** Moist areas.  
**Min Elev. (m):** 1493 **Max Elev. (m):** 1493 **Best Source of Info:** S61JOHALABCA01  
**Specimen Source Code Collector Herbarium Accession # Date ID OK? Observation Detail**  
S61JOHALABCA01 Johnston, A., T.D. Allen & T. Mikkelsen AL 1879 1961-06-10 Y blooming  
**Map UTM Zone UTM Easting UTM Northing Survey Site Name Notes # Dot ID #**  
82G09 11 689000 5489000 Bayron Creek 9 828  
**Plantago canescens** western ribgrass SRank: S2  
+++++

**Element Code:** PDPLN02080 **Occurrence Code #:** 011 **Survey Date:** 1989-06-27  
**Last Observed:** 1989-06-27 **First Observed:** 1989-06-27 **Actual Mapping Precision (m):** 2500 **Precision Code:** M  
**Directions:** Cache creek; ~9.5 km W of; Peace River; on N bank of.  
**General Description:** Saline seep on slope. A mosaic of habitats ranging from dry saline to wet saline and some non-saline areas.  
Occurring with  
Hordeum jubatum, Agropyron trachycaulum; Puccinellia nuttalliana; Scirpus pungens; S. paludosus. Non-saline  
**Min Elev. (m):** 270 **Max Elev. (m):** 270 **Aspect:** S  
**Other Comments:** Elevation of dot (297m) does not correspond with record (270m). **Best Source of Info:** S89SCHUAABCA02  
**Specimen Source Code Collector Herbarium Accession # Date ID OK? Observation Detail**  
S89SCHUAABCA02 Schwarz, A.G. UA 097771 1989-06-27  
**Map UTM Zone UTM Easting UTM Northing Survey Site Name Notes # Dot ID #**  
84F10 11 502000 6383500 Cache Creek 57-37'N;116-58'W. 1 4171  
**Plantago canescens** western ribgrass SRank: S2  
+++++

**Element Code:** PDPLN02080 **Occurrence Code #:** 012 **Survey Date:** 1964-06-13  
**Last Observed:** 1964-06-13 **First Observed:** 1964-06-13 **Actual Mapping Precision (m):** 2500 **Precision Code:** M  
**Directions:** Lundbreck  
**General Description:** grassy prairie  
**Min Elev. (m):** 1219 **Max Elev. (m):** 1219 **Best Source of Info:** S64DEVPMABCA08  
**Specimen Source Code Collector Herbarium Accession # Date ID OK? Observation Detail**  
S64DEVPMABCA08 de Vries, Bernard PM B68.4.475 1964-06-13 Y  
S88HASPMBABCA08 Hastings, R., Ellis, R.A. PM B88.28.91 1988-06-15 Y  
**Map UTM Zone UTM Easting UTM Northing Survey Site Name Notes # Dot ID #**  
82G09 11 704850 5495950 Lundbreck 49 02 N, 113 01W 24 840  
**Plantago canescens** western ribgrass SRank: S2  
+++++

**Element Code:** PDPLN02080 **Occurrence Code #:** 013 **Survey Date:** 1982-06-08  
**Last Observed:** 1982-06-08 **First Observed:** 1982-06-08 **Actual Mapping Precision (m):** 2500 **Precision Code:** M  
**Directions:** Head-Smashed-In Buffalo Jump; Porcupine Hills.  
**General Description:** first major gully N of historic site fence that runs E-W over esc. slope in track through grassland  
**Min Elev. (m):** 1220 **Max Elev. (m):** 1220 **Aspect:** NE **Best Source of Info:** S82CAMPMBABCA10  
**Specimen Source Code Collector Herbarium Accession # Date ID OK? Observation Detail**  
S82CAMPMBABCA10 Campbell-Snelling, J., Chambers, M. PM B84.1.309 1982-06-08 Y  
**Map UTM Zone UTM Easting UTM Northing Survey Site Name Notes # Dot ID #**  
82H12 12 308650 5508900 Head Smashed In Buffalo Jump 49-43N/113-39W 3 1376  
**Plantago canescens** western ribgrass SRank: S2  
+++++

**Element Code:** PDPLN02080 **Occurrence Code #:** 014 **Survey Date:** 1982-06-09  
**Last Observed:** 1982-06-09 **First Observed:** 1982-06-09 **Actual Mapping Precision (m):** 2500 **Precision Code:** M  
**Directions:** McIntyre Ranch; Milk River Ridge.  
**General Description:** somewhat eroded area on grassy slope of the Ridge  
**Min Elev. (m):** 1190 **Max Elev. (m):** 1190 **Aspect:** S **Best Source of Info:** S82HRAPMBABCA04  
**Specimen Source Code Collector Herbarium Accession # Date ID OK? Observation Detail**  
S82HRAPMBABCA04 Hrapko, J.O., Kerik, J.C. PM B82.11.66 1982-06-09 Y  
**Map UTM Zone UTM Easting UTM Northing Survey Site Name Notes # Dot ID #**  
82H02 12 367100 5453900 Reed Lake 49-13,14N/112-49,50,51W 24 4294  
**Plantago canescens** western ribgrass SRank: S2  
+++++

**Element Code:** PDPLN02080 **Occurrence Code #:** 015 **Survey Date:** 1992-05-27  
**Last Observed:** 1992-05-27 **First Observed:** 1991-07-24 **Actual Mapping Precision (m):** 2500 **Precision Code:** M  
**Directions:** McIntyre Ranch; Milk River Ridge.  
**General Description:** dry eroding slope  
**Min Elev. (m):** 1250 **Max Elev. (m):** 1260 **Aspect:** E **Best Source of Info:** S91COTPMABCA01  
**Specimen Source Code Collector Herbarium Accession # Date ID OK? Observation Detail**  
S91COTPMABCA01 Cotterill, P.J. PM B91.34.2 1991-07-24 Y  
S92HRAPMABCA01 Hrapko, J.O., Laird, L.D. PM B92.12.4 1992-05-27 Y  
**Map UTM Zone UTM Easting UTM Northing Survey Site Name Notes # Dot ID #**  
82H02 12 367700 5452900 Reed Lake 49-13N/112-49W 10 928  
**Plantago canescens** western ribgrass SRank: S2  
+++++

**Element Code:** PDPLN02080 **Occurrence Code #:** 016 **Survey Date:** 1999-06-18  
**Last Observed:** 1999-06-18 **First Observed:** 1998-06-18 **Actual Mapping Precision (m):** 50 **Precision Code:** S  
**Directions:** Ross Lake, ~ 5 km S of; North Milk River, 3.5 km N of.  
**General Description:** upland rough fescue along an old truck trail (some disturbance), moderate moisture; Festuca scabrella,  
Lupinus sericeus,  
Achillea millefolium  
**Min Elev. (m):** 1380 **Max Elev. (m):** 1380  
**Slope:** 0.00 **Best Source of Info:** U98ERN01ABCA  
**Map UTM Zone UTM Easting UTM Northing Survey Site Name Notes # Dot ID #**  
82H02 12 358575 5439700 Ross Lake 6-2-22 W4M 29 5042  
**Source Code Author Publisher Year Title**  
U98ERN01ABCA Ernst, Reg 1998 Ross Grassland Natural Area - Results of 1998 Rare Plant Survey  
U99ERN02ABCA Ernst, Reg 1999 Email to J. Gould  
**Date Source Abstract Code Observer Occurrence Data**  
1998-06-18 U98ERN01ABCA Reg Ernst 150 individuals; 100 adults, 50 flowering  
1999-06-17 U99ERN02ABCA Reg Ernst 2 additional populations found approximately 1km from where they were found last year;  
plants range from vegetative to late flowering; population appears to be quite healthy  
**Plantago canescens** western ribgrass SRank: S2

***Polanisia dodecandra* clammyweed**

**Natural Region:** Foothills Fescue Grassland, Mixedgrass, Dry Mixedgrass

**Habitat:** Sand Dunes; Slopes-Sandy

**Phenology:** flowers in July

**Specific Search Strategies (if any):** search rare silty type dunes (e.g. Turin) and sandy gravelly slopes; also gravel excavations

**Element Occurrences:**

**Element Code:** PDCPP08010 **Occurrence Code #:** 001 **Survey Date:** 1986-07-00  
**Last Observed:** 1986-07-00 **First Observed:** 1986-07-00 **Precision Code:** M  
**Min Elev. (m):** 853 **Max Elev. (m):** 853  
**Other Comments:** Slide #F361.002, #F361.003 & #F361.001A **Best Source of Info:** I86WAL02ABCA  
**Map UTM Zone UTM Easting UTM Northing Survey Site Name Notes # Dot ID #**  
82H15 12 388250 5526600 Turin Dunes 1 1398  
**Source Code Author Publisher Year Title**  
I86WAL01ABCA Wallis, C. 1986  
I86WAL02ABCA Wallis, C. 1986  
I86WAL03ABCA Wallis, C. 1986  
***Polanisia dodecandra* clammyweed** SRank: S2  
+++++

**Element Code:** PDCPP08010 **Occurrence Code #:** 002 **Survey Date:** 1995-00-00  
**Last Observed:** 1995-00-00 **First Observed:** 1994-00-00 **Precision Code:** S  
**Directions:** Canadian Forces Base Suffield National Wildlife Area; South Saskatchewan river valley, on bank of; Bull Pen, southwest of  
**General Description:** from subxeric to submesic sites in open sand of eroded bank; general habitat is exposed gravelly areas along river valleys, also gravel pits and roadsides  
**Min Elev. (m):** 625 **Max Elev. (m):** 625  
**Other Comments:** at northern limit of it's range  
**Management Comments:** habitat destabilization appears to benefit this species. **Best Source of Info:** U96MAC01ABCA  
**Map UTM Zone UTM Easting UTM Northing Survey Site Name Notes # Dot ID #**  
72L02 12 525350 5565400 Brush Flats UTM WL 525350 / 5565400 4 171  
**Source Code Author Publisher Year Title**  
U96MAC01ABCA Macdonald, I.D. Canadian Wildlife Service, Environment Canada, Prairie and 1996 Vascular Flora of Canadian Forces Base Suffield National Wildlife Area  
**Date Source Abstract Code Observer Occurrence Data**  
rare in SNWA  
***Polanisia dodecandra* clammyweed** SRank: S2  
+++++

**Element Code:** PDCPP08010 **Occurrence Code #:** 003 **Survey Date:** 1995-07-13  
**Last Observed:** 1995-07-13 **First Observed:** 1988-00-00 **Actual Mapping Precision (m):** 100 **Precision Code:** S  
**Directions:** Canadian Forces Base Suffield National Wildlife Area; South Saskatchewan River valley; Bull Pen, about 1.5 km W of; from erosional sandy crests of river valley slump blocks to NW of this site; and on upper slope gravels to E end of slump  
**General Description:** erosional sandy crests of the river valley slump blocks; upper slope gravels  
**Min Elev. (m):** 663 **Max Elev. (m):** 670  
**Other Comments:** second source from Wallis (1994) is not clear where it is from(report, personal comm.?...) **Best Source of Info:** S95MACPMABCA07  
**Specimen Source Code Collector Herbarium Accession # Date ID OK? Observation Detail**  
S95MACPMABCA07 Macdonald, I.D. PM B95.9.36 1995-07-13 Y flowers, fruits, on small plants  
**Map UTM Zone UTM Easting UTM Northing Survey Site Name Notes # Dot ID #**  
72L07 12 523950 5566700 Brush Flats UTM 523950 / 5566700 and UTM WL ca 524100 / 5566700;50-15'08"N/110-39'50"W 8 193  
**Source Code Author Publisher Year Title**  
U96MAC01ABCA Macdonald, I.D. Canadian Wildlife Service, Environment Canada, Prairie and 1996 Vascular Flora of Canadian Forces Base Suffield National Wildlife Area  
**Date Source Abstract Code Observer Occurrence Data**  
rare in SNWA; over 100 plants on upper slope gravels...  
***Polanisia dodecandra* clammyweed** SRank: S2  
+++++

**Element Code:** PDCPP08010 **Occurrence Code #:** 004 **Survey Date:** 1972-07-19  
**Last Observed:** 1972-07-19 **First Observed:** 1972-07-19 **Actual Mapping Precision (m):** 500 **Precision Code:** M  
**Directions:** Brush Flats, 700 m S of; Old Channel Lake, 800 m N of.  
**Min Elev. (m):** 655 **Max Elev. (m):** 655 **Best Source of Info:** S72JOHPMABCA02  
**Specimen Source Code Collector Herbarium Accession # Date ID OK? Observation Detail**  
S72JOHPMABCA02 Johnson, H. PM B72.39.39 1972-07-19 Y flowers, fruits  
**Map UTM Zone UTM Easting UTM Northing Survey Site Name Notes # Dot ID #**  
72L02 12 525000 5564450 Old Channel Lake 50 14/110 39 10 176  
**Polanisia dodecandra** clammyweed SRank: S2  
+++++

**Element Code:** PDCPP08010 **Occurrence Code #:** 005 **Survey Date:** 1997-07-17  
**Last Observed:** 1997-07-17 **First Observed:** 1997-07-17 **Actual Mapping Precision (m):** 100 **Precision Code:** S  
**Directions:** Lethbridge, 3 km NW of; Hardieville, 2.5 km W of; Alexandra Wilderness Park.  
**General Description:** sandy, coarse substrate (deposition from 1995 flood), located on floodplain of river; *Oryzopsis hymenoides*,  
*Salsola kali*, *Euphorbia* and other weedy species  
**Min Elev. (m):** 770 **Max Elev. (m):** 770  
**Management Comments:** Flooding and competition from non-native species. **Best Source of Info:** PNDSAU02ABCA  
**Map UTM Zone UTM Easting UTM Northing Survey Site Name Notes # Dot ID #**  
82H10 12 365650 5511000 Hardieville 3TM 81870.13 5511880.28; 81833.42 5511952.30 16 3786  
**Source Code Author Publisher Year Title**  
U97SAU01ABCA Saunders, Liz 1997 Rare Native Plant Survey Forms  
**Date Source Abstract Code Observer Occurrence Data**  
1997-07-17 UND97SAU01AB Liz Saunders approx. 50 individuals  
**Polanisia dodecandra** clammyweed SRank: S2  
+++++

**Element Code:** PDCPP08010 **Occurrence Code #:** 006 **Survey Date:** 1950-07-21  
**Last Observed:** 1950-07-21 **First Observed:** 1950-07-21 **Precision Code:** M  
**Directions:** Redcliff, SW of; South Saskatchewan River, bank of.  
**General Description:** gravelly excavation on side of arid bank down to river  
**Min Elev. (m):** 670 **Max Elev. (m):** 670 **Best Source of Info:** S50DORACONCA12  
**Specimen Source Code Collector Herbarium Accession # Date ID OK? Observation Detail**  
S50DORACONCA12 Dore, W.G. & A.J. Breitung AC 136725 1949-08-22 sticky annual; petals white; calyx and stamen red.  
**Map UTM Zone UTM Easting UTM Northing Survey Site Name Notes # Dot ID #**  
72L02 12 513550 5545050 Redcliff 14 3831  
**Polanisia dodecandra** clammyweed SRank: S2  
+++++

**Element Code:** PDCPP08010 **Occurrence Code #:** 007 **Survey Date:** 1914-07-31  
**Last Observed:** 1914-07-31 **First Observed:** 1914-07-31 **Actual Mapping Precision (m):** 2000 **Precision Code:** M  
**Directions:** Medicine Hat; Police Point Park  
**Min Elev. (m):** 650 **Max Elev. (m):** 650 **Best Source of Info:** S14FYLACONCA04  
**Specimen Source Code Collector Herbarium Accession # Date ID OK? Observation Detail**  
S14FYLACONCA04 Fyles, F. AC 567731 1914-07-31  
S14FYLACONCA05 Fyles, F. AC 567732 1914-07-31  
**Map UTM Zone UTM Easting UTM Northing Survey Site Name Notes # Dot ID #**  
72L02 12 525800 5543150 Medicine Hat Lat/Long: 50 03/110 38 2 169  
**Polanisia dodecandra** clammyweed SRank: S2  
+++++

**Element Code:** PDCPP08010 **Occurrence Code #:** 008 **Survey Date:** 1994-07-08  
**Last Observed:** 1994-07-08 **First Observed:** 1994-07-08 **Actual Mapping Precision (m):** 2000 **Precision Code:** M  
**Directions:** CFB Suffield: 33km N of Medicine Hat; Fish Creek Area; 5km E of Van Will Corral.  
**General Description:** South Saskatchewan river valley floodplain; submesic sand of eroded terrace face.  
**Min Elev. (m):** 620 **Max Elev. (m):** 710 **Best Source of Info:** U97CWS01ABCA  
**Specimen Source Code Collector Herbarium Accession # Date ID OK? Observation Detail**  
S94MACPMABCA06 Macdonald, I.D. PM B94.4.523 1994-07-07 Y  
S94MACPMABCA08 Macdonald, I.D. PM B94.4.559 1994-07-08 Y  
**Map UTM Zone UTM Easting UTM Northing Survey Site Name Notes # Dot ID #**  
72L07 12 527200 5577200 Cottonwood Grove 50-20'55"N/110-37'00"W 13 198  
**Source Code Author Publisher Year Title**  
U97CWS01ABCA Canadian Wildlife Service CWS 1997 Plant Database from Suffield Survey 1994-1995  
**Polanisia dodecandra** clammyweed SRank: S2  
+++++

**Element Code:** PDCPP08010 **Occurrence Code #:** 009 **Survey Date:** 1968-08-24  
**Last Observed:** 1968-08-24 **First Observed:** 1968-08-24 **Actual Mapping Precision (m):** 1800 **Precision Code:** M  
**Directions:** Steveville, 3 km NW of.  
**General Description:** dry stony hillside  
**Min Elev. (m):** 700 **Max Elev. (m):** 700 **Best Source of Info:** S68OSTUAABCA07  
**Specimen Source Code Collector Herbarium Accession # Date ID OK? Observation Detail**  
S68OSTUAABCA07 Ostafichuk, M. UA 81852 1968-08-24 Y fruits  
**Map UTM Zone UTM Easting UTM Northing Survey Site Name Notes # Dot ID #**  
72L13 12 456600 5634350 Steveville 50 52/111 37 14 4486  
***Polanisia dodecandra*** clammyweed SRank: S2

***Polygonum polygaloides ssp confertiflorum* Watson's knotweed**

**Natural Region:** Mixedgrass, Dry Mixedgrass

**Habitat:** Wetland-Sandy

**Phenology:** flowers in June

**Specific Search Strategies (if any):** detectable well past flowering season; search dried up edges of sandy wetlands, especially where hummocky; may be present mid-way up hummocks

**Element Occurrences:**

**Element Code:** PDPGN0L1Y1 **Occurrence Code #:** 001 **Survey Date:** 1976-08-17  
**Last Observed:** 1976-08-17 **First Observed:** 1976-08-17 **Precision Code:** S  
**Directions:** Grassy Mtn., hill immediately S of, S side of.  
**General Description:** road edges though a meadow heavily grazed  
**Min Elev. (m):** 1465 **Max Elev. (m):** 1465 **Aspect:** S **Best Source of Info:** S76CORUCABCA01  
**Specimen Source Code Collector Herbarium Accession # Date ID OK? Observation Detail**  
S76CORUCABCA01 Corbin, J. & D. Jacques UC 42238 1976-08-17 [100% flower?]  
**Map UTM Zone UTM Easting UTM Northing Survey Site Name Notes # Dot ID #**  
82G09 11 685800 5503600 Grassy Mountain UTM 11UPF858036 21 837  
***Polygonum polygaloides ssp confertiflorum* Watson's knotweed** SRank: S2  
+++++

**Element Code:** PDPGN0L1Y1 **Occurrence Code #:** 002 **Survey Date:** 1966-06-02  
**Last Observed:** 1966-06-02 **First Observed:** 1966-06-02 **Precision Code:** M  
**Directions:** Pakowki, NW of.  
**General Description:** moist hollow prairies  
**Min Elev. (m):** 836 **Max Elev. (m):** 836 **Best Source of Info:** S66WHEUCABCA01  
**Specimen Source Code Collector Herbarium Accession # Date ID OK? Observation Detail**  
S66WHEUCABCA01 Wheeler, G.W. UC 36468 1966-06-02 ? 100% flowers  
**Map UTM Zone UTM Easting UTM Northing Survey Site Name Notes # Dot ID #**  
72E10 12 502223 5494331 Pakowki 1 143  
***Polygonum polygaloides ssp confertiflorum* Watson's knotweed** SRank: S2  
+++++

**Element Code:** PDPGN0L1Y1 **Occurrence Code #:** 003 **Survey Date:** 1987-06-20  
**Last Observed:** 1987-06-20 **First Observed:** 1987-06-20 **Precision Code:** M  
**Directions:** Beauvais Lake Provincial Park, S of.  
**General Description:** moist area near small stream, imperfectly drained  
**Min Elev. (m):** 1340 **Max Elev. (m):** 1340 **Best Source of Info:** S87SCOCFABCA02  
**Specimen Source Code Collector Herbarium Accession # Date ID OK? Observation Detail**  
S87SCOCFABCA02 Scotter, G.W. CF 880139 1987-06-20 Flowers  
**Map UTM Zone UTM Easting UTM Northing Survey Site Name Notes # Dot ID #**  
82G08 11 713200 5475350 Beauvias Lake Provincial Park Lat/Long: 49 24' 114 04' 172 798  
***Polygonum polygaloides ssp confertiflorum* Watson's knotweed** SRank: S2  
+++++

**Element Code:** PDPGN0L1Y1 **Occurrence Code #:** 004 **Survey Date:** 1989-07-03  
**Last Observed:** 1989-07-03 **First Observed:** 1989-07-03 **Precision Code:** S  
**Directions:** Milk River Natural Area.  
**General Description:** ephemeral sandy wetland  
**Min Elev. (m):** 983 **Max Elev. (m):** 983 **Best Source of Info:** S89WALPPABCA07  
**Specimen Source Code Collector Herbarium Accession # Date ID OK? Observation Detail**  
S89WALPPABCA07 Wallis, C. PP 2831 1989-07-03  
**Map UTM Zone UTM Easting UTM Northing Survey Site Name Notes # Dot ID #**  
72E02 12 520873 5428534 Milk River Ecological Reserve  
LSD 13 13 24  
**Date Source Abstract Code Observer Occurrence Data**  
Very narrow environmental range includes the flooded flats of the ephemeral wetland & occurs on somewhat exposed sandy soil on hummocks 15-30cm above the surrounding flat surface , 25 plants. Prefers ungrazed sites  
***Polygonum polygaloides ssp confertiflorum* Watson's knotweed** SRank: S2  
+++++

**Element Code:** PDPGN0L1Y1 **Occurrence Code #:** 005 **Survey Date:** 1990-06-29  
**Last Observed:** 1990-06-29 **First Observed:** 1990-06-29 **Precision Code:** S  
**Directions:** Vauxhall Association grazing lease; GRP788335; Scope Field.  
**General Description:** growing with *Plantago elongata*/*Navarretia minima*/*Carex athrostachya*/*Spergularia marina*/*Alopecurus carolinianus*/*Veronica persica*  
**Min Elev. (m):** 785 **Max Elev. (m):** 785 **Size of Occurrence:** 22.00  
**Management Comments:** Depression could be fenced out to ensure seed set. Area not over utilized by livestock as it seldom would contain water. **Best Source of Info:** UNDESR01ABCA  
**Map UTM Zone UTM Easting UTM Northing Survey Site Name Notes # Dot ID #**  
72L04 12 438300 5547925 Hays 1 181  
**Source Code Author Publisher Year Title**  
UNDESR01ABCA Eastern Slopes Rangeland Consultants An *Alopecurus carolinianus* Walt. level depression near Vauxhall  
UNDTAN01ABCA Tannas, K.E. Native Species Inventory Forms  
**Date Source Abstract Code Observer Occurrence Data**  
prominence value of 3.8%; many thousands of individual plants(UNDESR01ABCA)  
**Polygonum polygaloides ssp confertiflorum** Watson's knotweed SRank: S2  
+++++

**Element Code:** PDPGN0L1Y1 **Occurrence Code #:** 006 **Survey Date:** 1989-07-14  
**Last Observed:** 1989-07-14 **First Observed:** 1989-07-14 **Precision Code:** M  
**Directions:** Bow City, about 10 km W of; Hwy. 539, off.  
**General Description:** *Stipa comata* grassland  
**Min Elev. (m):** 800 **Max Elev. (m):** 800 **Best Source of Info:** UNDTAN01ABCA  
**Map UTM Zone UTM Easting UTM Northing Survey Site Name Notes # Dot ID #**  
82I08 12 404350 5586800 Bow City 1 1418  
**Source Code Author Publisher Year Title**  
UNDTAN01ABCA Tannas, K.E. Native Species Inventory Forms  
**Polygonum polygaloides ssp confertiflorum** Watson's knotweed SRank: S2  
+++++

**Element Code:** PDPGN0L1Y1 **Occurrence Code #:** 007 **Survey Date:** 1996-00-00  
**Last Observed:** 1996-00-00 **First Observed:** 1996-00-00 **Actual Mapping Precision (m):** 500 **Precision Code:** M  
**Directions:** CFB Suffield; ~3 km W of W border of; E side of Outer Rainy Hill.  
**General Description:** common; ephemeral wetlands  
**Min Elev. (m):** 792 **Max Elev. (m):** 792 **Best Source of Info:** U96EXP01ABCA  
**Map UTM Zone UTM Easting UTM Northing Survey Site Name Notes # Dot ID #**  
72L06 12 484700 5591350 Outer Rainy Hill LS#37;km:245.7;LLD:SW 5-32-17-9-4 4 4019  
**Source Code Author Publisher Year Title**  
U96EXP01ABCA AXYS Environmental Consulting 1996 Express Pipeline Project  
**Polygonum polygaloides ssp confertiflorum** Watson's knotweed SRank: S2  
+++++

**Element Code:** PDPGN0L1Y1 **Occurrence Code #:** 008 **Survey Date:** 1996-00-00  
**Last Observed:** 1996-00-00 **First Observed:** 1996-00-00 **Actual Mapping Precision (m):** 500 **Precision Code:** M  
**Directions:** CFB Suffield; ~3 km W of W border of. Outer Rainy Hill; on SE side of.  
**General Description:** common; ephemeral wetlands  
**Min Elev. (m):** 785 **Max Elev. (m):** 785 **Best Source of Info:** U96EXP01ABCA  
**Map UTM Zone UTM Easting UTM Northing Survey Site Name Notes # Dot ID #**  
72L06 12 484750 5588500 Outer Rainy Hill LS#38;km:248.3;LLD:NW 12-20 17-9-4 5 4020  
**Source Code Author Publisher Year Title**  
U96EXP01ABCA AXYS Environmental Consulting 1996 Express Pipeline Project  
**Polygonum polygaloides ssp confertiflorum** Watson's knotweed SRank: S2  
+++++

**Element Code:** PDPGN0L1Y1 **Occurrence Code #:** 009 **Survey Date:** 1996-00-00  
**Last Observed:** 1996-00-00 **First Observed:** 1996-00-00 **Actual Mapping Precision (m):** 500 **Precision Code:** M  
**Directions:** CFB Suffield; ~3 km W of; Outer Rainy Hill; SE of.  
**General Description:** common; ephemeral wetlands  
**Min Elev. (m):** 792 **Max Elev. (m):** 792 **Best Source of Info:** U96EXP01ABCA  
**Map UTM Zone UTM Easting UTM Northing Survey Site Name Notes # Dot ID #**  
72L06 12 484750 5586400 Outer Rainy Hill LS#38;km:250.5;LLD:SW 5-17-17-9-4 6 4021  
**Source Code Author Publisher Year Title**  
U96EXP01ABCA AXYS Environmental Consulting 1996 Express Pipeline Project  
**Polygonum polygaloides ssp confertiflorum** Watson's knotweed SRank: S2  
+++++

**Element Code:** PDPGN0L1Y1 **Occurrence Code #:** 010 **Survey Date:** 1996-00-00  
**Last Observed:** 1996-00-00 **First Observed:** 1996-00-00 **Actual Mapping Precision (m):** 250 **Precision Code:** S  
**Directions:** CFB Suffield; ~3 km W of W border of; Outer Rainy Hill; SE of.  
**General Description:** common; ephemeral wetlands  
**Min Elev. (m):** 785 **Max Elev. (m):** 785 **Best Source of Info:** U96EXP01ABCA  
**Map UTM Zone UTM Easting UTM Northing Survey Site Name Notes # Dot ID #**  
72L06 12 484750 5584000 Outer Rainy Hill LS# 38, Km 252.8,NW13- 5-17-9-4 and LS#39;  
km:255.5; LLD: SW 32 16-9-4 and  
LS#37;km:245.7;LLD:SW 5-32-17-9-4  
7 4022  
**Source Code Author Publisher Year Title**  
U96EXP01ABCA AXYS Environmental Consulting 1996 Express Pipeline Project  
**Polygonum polygaloides ssp confertiflorum** Watson's knotweed SRank: S2  
+++++

**Element Code:** PDPGN0L1Y1 **Occurrence Code #:** 011 **Survey Date:** 1996-00-00  
**Last Observed:** 1996-00-00 **First Observed:** 1996-00-00 **Actual Mapping Precision (m):** 250 **Precision Code:** S  
**Directions:** Suffield Airfield; ~12.25 km NW of; Cfb Suffield; ~3 km W of W border of.  
**General Description:** common; ephemeral wetlands  
**Min Elev. (m):** 754 **Max Elev. (m):** 754 **Best Source of Info:** U96EXP01ABCA  
**Map UTM Zone UTM Easting UTM Northing Survey Site Name Notes # Dot ID #**  
72L06 12 484800 5580850 Outer Rainy Hill LS#39; km:256;LLD:NW 13-29 16-9-4 8 4023  
**Source Code Author Publisher Year Title**  
U96EXP01ABCA AXYS Environmental Consulting 1996 Express Pipeline Project  
**Polygonum polygaloides ssp confertiflorum** Watson's knotweed SRank: S2  
+++++

**Element Code:** PDPGN0L1Y1 **Occurrence Code #:** 012 **Survey Date:** 1996-00-00  
**Last Observed:** 1996-00-00 **First Observed:** 1996-00-00 **Actual Mapping Precision (m):** 250 **Precision Code:** S  
**Directions:** Suffield; ~2.5 km NW of; Hwy 1; ~ 400 m W of.  
**General Description:** common; ephemeral wetlands  
**Min Elev. (m):** 754 **Max Elev. (m):** 754 **Best Source of Info:** U96EXP01ABCA  
**Map UTM Zone UTM Easting UTM Northing Survey Site Name Notes # Dot ID #**  
72L03 12 486400 5564300 Suffield LS 41, Km 273.3, NW 12-4-15-9-4 9 4024  
**Source Code Author Publisher Year Title**  
U96EXP01ABCA AXYS Environmental Consulting 1996 Express Pipeline Project  
**Polygonum polygaloides ssp confertiflorum** Watson's knotweed SRank: S2  
+++++

**Element Code:** PDPGN0L1Y1 **Occurrence Code #:** 013 **Survey Date:** 1996-00-00  
**Last Observed:** 1996-00-00 **First Observed:** 1996-00-00 **Actual Mapping Precision (m):** 250 **Precision Code:** S  
**Directions:** Suffield; ~ 8.5 km SE of; S. Saskatchewan River; ~ 7.75 km N of.  
**General Description:** common; ephemeral wetlands  
**Min Elev. (m):** 770 **Max Elev. (m):** 770 **Best Source of Info:** U96EXP01ABCA  
**Map UTM Zone UTM Easting UTM Northing Survey Site Name Notes # Dot ID #**  
72L03 12 490500 5554000 Suffield LS#43; km: 284.6; LLD: SW 6-2-14-9-4 10 4025  
**Source Code Author Publisher Year Title**  
U96EXP01ABCA AXYS Environmental Consulting 1996 Express Pipeline Project  
**Polygonum polygaloides ssp confertiflorum** Watson's knotweed SRank: S2  
+++++

**Element Code:** PDPGN0L1Y1 **Occurrence Code #:** 014 **Survey Date:** 1996-00-00  
**Last Observed:** 1996-00-00 **First Observed:** 1996-00-00 **Actual Mapping Precision (m):** 250 **Precision Code:** S  
**Directions:** Suffield; ~ 34.75 km SE of; S. Saskatchewan River; ~ 4.5 km N of.  
**General Description:** common; ephemeral wetlands  
**Min Elev. (m):** 800 **Max Elev. (m):** 800 **Best Source of Info:** U96EXP01ABCA  
**Map UTM Zone UTM Easting UTM Northing Survey Site Name Notes # Dot ID #**  
72L03 12 497300 5544850 South Saskatchewan River LS#45; km: 296; LLD: NE 10-4-13-8-4 11 4026  
**Source Code Author Publisher Year Title**  
U96EXP01ABCA AXYS Environmental Consulting 1996 Express Pipeline Project  
**Polygonum polygaloides ssp confertiflorum** Watson's knotweed SRank: S2  
+++++



**Element Code:** PDPGN0L1Y1 **Occurrence Code #:** 015 **Survey Date:** 1996-00-00  
**Last Observed:** 1996-00-00 **First Observed:** 1996-00-00 **Actual Mapping Precision (m):** 250 **Precision Code:** S  
**Directions:** Manyberries; 17 km SE of; S Manyberries Creek; 4 km S of.  
**General Description:** common; ephemeral wetlands  
**Min Elev. (m):** 1052 **Max Elev. (m):** 1052 **Aspect:** N **Best Source of Info:** U96EXP01ABCA  
**Map UTM Zone UTM Easting UTM Northing Survey Site Name Notes # Dot ID #**  
72E07 12 535398 5482031 Cypress Hills KP 372.1 & 372.3, NE14-20 6-4-4 17 3990  
**Source Code Author Publisher Year Title**  
U96EXP01ABCA AXYS Environmental Consulting 1996 Express Pipeline Project  
**Polygonum polygaloides ssp confertiflorum** Watson's knotweed SRank: S2  
+++++

**Element Code:** PDPGN0L1Y1 **Occurrence Code #:** 016 **Survey Date:** 1996-00-00  
**Last Observed:** 1996-00-00 **First Observed:** 1996-00-00 **Actual Mapping Precision (m):** 250 **Precision Code:** S  
**Directions:** Hwy 48; ~ 7 km W of; Bare Creek; ~ 2.75 km W of.  
**General Description:** common; ephemeral wetlands  
**Min Elev. (m):** 1074 **Max Elev. (m):** 1074 **Best Source of Info:** U96EXP01ABCA  
**Map UTM Zone UTM Easting UTM Northing Survey Site Name Notes # Dot ID #**  
72E08 12 546050 5465150 Bare Creek LS:59; km:392.6; LLD:SE:8-32 4-3-4 18 4027  
**Source Code Author Publisher Year Title**  
U96EXP01ABCA AXYS Environmental Consulting 1996 Express Pipeline Project  
**Polygonum polygaloides ssp confertiflorum** Watson's knotweed SRank: S2  
+++++

**Element Code:** PDPGN0L1Y1 **Occurrence Code #:** 017 **Survey Date:** 1996-00-00  
**Last Observed:** 1996-00-00 **First Observed:** 1996-00-00 **Actual Mapping Precision (m):** 250 **Precision Code:** S  
**Directions:** Bain; ~ 6 km NE of; Bare Creek; ~ 2.5 km W of.  
**General Description:** common; ephemeral wetlands  
**Min Elev. (m):** 1067 **Max Elev. (m):** 1067 **Best Source of Info:** U96EXP01ABCA  
**Map UTM Zone UTM Easting UTM Northing Survey Site Name Notes # Dot ID #**  
72E08 12 547150 5463100 Bare Creek LS 59; km 394.9; LLD SE 2-28 5-3-4 20 4028  
**Source Code Author Publisher Year Title**  
U96EXP01ABCA AXYS Environmental Consulting 1996 Express Pipeline Project  
**Polygonum polygaloides ssp confertiflorum** Watson's knotweed SRank: S2  
+++++

**Element Code:** PDPGN0L1Y1 **Occurrence Code #:** 018 **Survey Date:** 1996-00-00  
**Last Observed:** 1996-00-00 **First Observed:** 1996-00-00 **Actual Mapping Precision (m):** 500 **Precision Code:** M  
**Directions:** Bain; ~ 5.25 km NW of; Bare Creek; ~ 2.75 km W of.  
**General Description:** common; ephemeral wetlands  
**Min Elev. (m):** 1013 **Max Elev. (m):** 1013 **Best Source of Info:** U96EXP01ABCA  
**Map UTM Zone UTM Easting UTM Northing Survey Site Name Notes # Dot ID #**  
72E08 12 549150 5458500 Bare Creek LS#59;km399.6;LLD:SE 10 4-3-4 21 4029  
**Source Code Author Publisher Year Title**  
U96EXP01ABCA AXYS Environmental Consulting 1996 Express Pipeline Project  
**Polygonum polygaloides ssp confertiflorum** Watson's knotweed SRank: S2  
+++++

**Element Code:** PDPGN0L1Y1 **Occurrence Code #:** 019 **Survey Date:** 1996-00-00  
**Last Observed:** 1996-00-00 **First Observed:** 1996-00-00 **Actual Mapping Precision (m):** 250 **Precision Code:** S  
**Directions:** Milk River Lake; ~ 4 km NW of; NW end of; Hwy 48; ~2.5 km W of.  
**General Description:** common; ephemeral wetlands  
**Min Elev. (m):** 876 **Max Elev. (m):** 876 **Best Source of Info:** U96EXP01ABCA  
**Map UTM Zone UTM Easting UTM Northing Survey Site Name Notes # Dot ID #**  
72E01 12 552150 5434850 Milk River Lake LS#64; km 424.3; LLD; NE 1-25 1-3-4. 28 4030  
**Source Code Author Publisher Year Title**  
U96EXP01ABCA AXYS Environmental Consulting 1996 Express Pipeline Project  
**Polygonum polygaloides ssp confertiflorum** Watson's knotweed SRank: S2  
+++++

**Element Code:** PDPGN0L1Y1 **Occurrence Code #:** 020 **Survey Date:** 1996-00-00  
**Last Observed:** 1996-00-00 **First Observed:** 1996-00-00 **Actual Mapping Precision (m):** 1000 **Precision Code:** M  
**Directions:** Indian Creek, 2 km E of; Cabin lake, 1 km W of.  
**Min Elev. (m):** 731 **Max Elev. (m):** 731 **Best Source of Info:** U96EXP01ABCA  
**Map UTM Zone UTM Easting UTM Northing Survey Site Name Notes # Dot ID #**  
72M03 12 486300 5653350 Indian Creek LS # 28, Km 181.3, NE 9 24-9-4 2 4144  
**Source Code Author Publisher Year Title**  
U96EXP01ABCA AXYS Environmental Consulting 1996 Express Pipeline Project  
**Polygonum polygaloides ssp confertiflorum** Watson's knotweed SRank: S2  
+++++

**Element Code:** PDPGN0L1Y1 **Occurrence Code #:** 021 **Survey Date:** 1996-00-00  
**Last Observed:** 1996-00-00 **First Observed:** 1996-00-00 **Actual Mapping Precision (m):** 600 **Precision Code:** M  
**Directions:** Schuler, 13 km SW of; Arcel "A" facility, 500 m NE of.  
**General Description:** flat undulating, subxeric loam, in trampled barrens of soil, Needle-and-thread, Blue Grama, Western Sea-blite  
[community MH8-B]  
**Min Elev. (m):** 785 **Max Elev. (m):** 785 **Size of Occurrence:** 0.06  
**Management Comments:** disturbance to the alkaline barrens surface or water table by construction could affect this species  
**Best Source of Info:** U98FRY01ABCA  
**Map UTM Zone UTM Easting UTM Northing Survey Site Name Notes # Dot ID #**  
72L08 12 551750 5573475 Schuler SW 6-16-2-4 20 4243  
**Source Code Author Publisher Year Title**  
U98FRY01ABCA Fryer, Gina 1998 Memo from Gina Fryer to John Rintoul: rare plant locations for the Palliser Pipeline Project  
**Date Source Abstract Code Observer Occurrence Data**  
1996-00-00 U98FRY01ABCA Gina Fryer probably over 100 plants at 20X30 m  
**Polygonum polygaloides ssp confertiflorum** Watson's knotweed SRank: S2  
+++++

**Element Code:** PDPGN0L1Y1 **Occurrence Code #:** 022 **Survey Date:** 1996-00-00  
**Last Observed:** 1996-00-00 **First Observed:** 1996-00-00 **Actual Mapping Precision (m):** 600 **Precision Code:** M  
**Directions:** Jenner, 14 km S of; Hwy 884, W of.  
**General Description:** depression basin, with subhygic clayloam, in drawdown marsh fringe meadow of Western Wheat Grass,  
Foxtail Barley, Creeping Prairie Sagewort [community A17-E]  
**Min Elev. (m):** 808 **Max Elev. (m):** 808 **Size of Occurrence:** 0.01  
**Management Comments:** disturbance to the alkaline barrens surface or water table by construction could affect this species  
**Best Source of Info:** U98FRY01ABCA  
**Map UTM Zone UTM Easting UTM Northing Survey Site Name Notes # Dot ID #**  
72L11 12 486800 5607325 Jenner SE 21-19-9-4 3 4244  
**Source Code Author Publisher Year Title**  
U98FRY01ABCA Fryer, Gina 1998 Memo from Gina Fryer to John Rintoul: rare plant locations for the Palliser Pipeline Project  
**Date Source Abstract Code Observer Occurrence Data**  
1996-00-00 U98FRY01ABCA Gina Fryer over 50 plants in 5X20m area  
**Polygonum polygaloides ssp confertiflorum** Watson's knotweed SRank: S2  
+++++

**Element Code:** PDPGN0L1Y1 **Occurrence Code #:** 023 **Survey Date:** 1996-00-00  
**Last Observed:** 1996-00-00 **First Observed:** 1996-00-00 **Actual Mapping Precision (m):** 600 **Precision Code:** M  
**Directions:** Morrin Bridge Provincial Recreation Area, 5 km S of; Red Deer River, on W side of.  
**General Description:** river valley basin, on subxeric alkaline clayloam, on open barrens of soil, Brittle Prickly Pear, Western Wheat  
Grass, lichen, Pasture Sagewort, Tumblegrass [community GP7-L1]  
**Min Elev. (m):** 709 **Max Elev. (m):** 709  
**Other Comments:** over 150 plants in small groups spread over 75 m of pipeline corridor; population extends both sides of corridor  
**Management Comments:** disturbance to the alkaline barrens surface or water table by construction could affect this species  
**Best Source of Info:** U98FRY01ABCA  
**Map UTM Zone UTM Easting UTM Northing Survey Site Name Notes # Dot ID #**  
82P10 12 369700 5719000 Morrin Bridge Provincial Recreation Area SW 34-30-21-4 3 4245  
**Source Code Author Publisher Year Title**  
U98FRY01ABCA Fryer, Gina 1998 Memo from Gina Fryer to John Rintoul: rare plant locations for the Palliser Pipeline Project  
**Polygonum polygaloides ssp confertiflorum** Watson's knotweed SRank: S2  
+++++

**Element Code:** PDPGN0L1Y1 **Occurrence Code #:** 024 **Survey Date:** 1999-08-11  
**Last Observed:** 1999-08-11 **First Observed:** 1999-08-11 **Actual Mapping Precision (m):** 250 **Precision Code:** S  
**Directions:** Schuler; ~13 km NW of.; Hwy 41; ~ 8.5 km W of. AEC compressor station, SW of.  
**General Description:** dry mixed grass prairie: around boulder used by cattle for rubbing, in shallow edge of wetland; weedy with > 50% bare ground; Lepi den, Agro sca, Agro smi, Guit sar, Arter lud and Poly wat.  
**Min Elev. (m):** 808 **Max Elev. (m):** 808  
**Other Comments:** Further pipeline construction should avoid this wetland completely.  
**Management Comments:** Pipeline construction: this wetland has numerous rare species ( Elan tri, Hype maj, Cent min, Lila sci reported 97/98. **Best Source of Info:** U99BUS02ABCA  
**Map UTM Zone UTM Easting UTM Northing Survey Site Name Notes # Dot ID #**  
72L08 12 555100 5585100 White Rock Coulee Lat 50 deg 24 min 98 sec, Long 110 deg 13 min 22 s W - 6-9-17-2-W4M 15 3908  
**Source Code Author Publisher Year Title**  
U99BUS02ABCA Bush, Dana 1999 Axys Environmental Consulting Ltd.- Rare Native Plant Report Forms  
**Date Source Abstract Code Observer Occurrence Data**  
1999-08-11 U99BUS02ABCA Dana Bush abundant, veg = 6, repr. = 7  
**Polygonum polygaloides ssp confertiflorum** Watson's knotweed SRank: S2

**Potamogeton foliosus leafy pondweed**

**Natural Region:** Mixedgrass

**Habitat:** Wetland

**Phenology:** most easily detected in late July/August

**Specific Search Strategies (if any):** no EO in grassland for dot in Moss; likely in irrigation district wetlands

**Element Occurrences:**

**Element Code:** PMPOT030B0 **Occurrence Code #:** 001 **Survey Date:** 1990-08-00

**Last Observed:** 1990-08-00 **First Observed:** 1990-08-00 **Precision Code:** U

**Directions:** PLOT CO2, NEAR

**Min Elev. (m):** 1298 **Max Elev. (m):** 1298 **Best Source of Info:** R90TIM01ABCA

**Map UTM Zone UTM Easting UTM Northing Survey Site Name Notes # Dot ID #**

82Q03 11 617600 5658800 Canmore Flats Natural Area PLOT CO2 63 1941

**Source Code Author Publisher Year Title**

R90TIM01ABCA Timoney, Kevin P. Alberta Forestry, Lands and Wildlife 1990 Biophysical Inventory of the Canmore Flats Natural Area.

**Potamogeton foliosus** leafy pondweed SRank: S2

+++++

**Element Code:** PMPOT030B0 **Occurrence Code #:** 002 **Survey Date:** 1996-08-14

**Last Observed:** 1996-08-14 **First Observed:** 1996-08-14 **Precision Code:** S

**Directions:** Whitetail Trail, small pond on E side of

**General Description:** Small pond without duckweed mat due to some mineralization factor, mainly in water 0.3 - 1.0 m deep ;submerged aquatic

community dominated by P. foliosus, Utricularia vulgaris and.

**Min Elev. (m):** 710 **Max Elev. (m):** 710

**Management Comments:** No current threat. **Best Source of Info:** U96GRI01ABCA

**Map UTM Zone UTM Easting UTM Northing Survey Site Name Notes # Dot ID #**

83H10 12 381500 5932125 Blackfoot Lake Floristic plot #30; LSD 15; 53 31 29/112 47 16, and Plot bf65 - 15-30-52-19 W4M 96 3317

**Source Code Author Publisher Year Title**

U96GRI01ABCA Griffiths, G.C.D. 1996 Rare Native Plant Survey Forms

**Date Source Abstract Code Observer Occurrence Data**

[vegetative, fruiting]; hundreds of individuals

**Potamogeton foliosus** leafy pondweed SRank: S2

+++++

**Element Code:** PMPOT030B0 **Occurrence Code #:** 003 **Survey Date:** 1996-09-03

**Last Observed:** 1996-09-03 **First Observed:** 1996-09-03 **Precision Code:** S

**Directions:** Detour Lake, S shore of.

**General Description:** Small sheltered lake with extensive duckweed mat around peripheral situated in deep morainal depression, with water level stabilized by beaver dams on outlet (sample from water....

**Min Elev. (m):** 750 **Max Elev. (m):** 750

**Management Comments:** Interference with beaver dams could change the habitat. **Best Source of Info:** U96GRI01ABCA

**Map UTM Zone UTM Easting UTM Northing Survey Site Name Notes # Dot ID #**

83H07 12 374150 5927150 Cooking Lake-Blackfoot Recreation Area Floristic Plot # 42; LSD 13; 53 28 55/112 53 58. 25 3232

**Source Code Author Publisher Year Title**

U96GRI01ABCA Griffiths, G.C.D. 1996 Rare Native Plant Survey Forms

**Date Source Abstract Code Observer Occurrence Data**

floating fragments, about 50 in sample; about 50 vegetative

**Potamogeton foliosus** leafy pondweed SRank: S2

+++++

**Element Code:** PMPOT030B0 **Occurrence Code #:** 004 **Survey Date:** 1996-08-01  
**Last Observed:** 1996-08-01 **First Observed:** 1996-08-01 **Precision Code:** S  
**Directions:** Wye Knott Village, immediately W of; Range Road 213, on; Hayley's House, drive to; house, pond immediately W below.  
**General Description:** Small pond at bottom of morainal depression (average water depth about 0.5m).  
**Min Elev. (m):** 755 **Max Elev. (m):** 755 **Best Source of Info:** S96GRIUAABCA03  
**Specimen Source Code Collector Herbarium Accession # Date ID OK? Observation Detail**  
 S96GRIUAABCA03 Griffiths, G.C.D. UA 098959 1996-08-01 ? vegetative only, no fruit found; dominant submerged aquatic plant throughout this pond  
**Map UTM Zone UTM Easting UTM Northing Survey Site Name Notes # Dot ID #**  
 83H06 12 365650 5925850 Cooking Lake LSD 16; 53 28/113 01 30. 10 3212  
**Potamogeton foliosus** leafy pondweed SRank: S2  
 ++++++

**Element Code:** PMPOT030B0 **Occurrence Code #:** 005 **Survey Date:** 1965-08-26  
**Last Observed:** 1965-08-26 **First Observed:** 1961-07-29 **Actual Mapping Precision (m):** 500 **Precision Code:** M  
**Directions:** Iosegun Lake, 6 km W of  
**General Description:** in 1' of water in borrow pit, sandy soil. Large dugout pond  
**Min Elev. (m):** 790 **Max Elev. (m):** 790 **Best Source of Info:** S65PEGPMABCA04  
**Specimen Source Code Collector Herbarium Accession # Date ID OK? Observation Detail**  
 S61MOSNMONCA09 Moss, E.H. NM 275039 1961-07-29  
 S65PEGPMABCA04 Pegg, George R. PM B88.1.805 1965-08-26 Y fruits present  
**Map UTM Zone UTM Easting UTM Northing Survey Site Name Notes # Dot ID #**  
 83K07 11 502000 6036200 Little Smoky River 54 27N/116 58W 10 3512  
**Potamogeton foliosus** leafy pondweed SRank: S2  
 ++++++

**Element Code:** PMPOT030B0 **Occurrence Code #:** 006 **Survey Date:** 1929-08-20  
**Last Observed:** 1929-08-20 **First Observed:** 1929-08-20 **Actual Mapping Precision (m):** 250 **Precision Code:** S  
**Directions:** Moose Lake, 16 miles east of  
**General Description:** sink hole  
**Min Elev. (m):** 310 **Max Elev. (m):** 310 **Best Source of Info:** S29RAUNMONCA01  
**Specimen Source Code Collector Herbarium Accession # Date ID OK? Observation Detail**  
 S29RAUNMONCA01 Raup, Hugh M. NM 7401 1929-08-20  
**Map UTM Zone UTM Easting UTM Northing Survey Site Name Notes # Dot ID #**  
 84P10 12 402600 6597200 Upland Lake 59-30'20" N, 112-43;30" W. 2 4086  
**Potamogeton foliosus** leafy pondweed SRank: S2  
 ++++++

**Element Code:** PMPOT030B0 **Occurrence Code #:** 007 **Survey Date:** 1929-08-14  
**Last Observed:** 1929-08-14 **First Observed:** 1929-08-14 **Actual Mapping Precision (m):** 1600 **Precision Code:** M  
**Directions:** Loon Lake; ~6 km NNE of; Ninishith Hills; ~500 m W of Esker on W side of the.  
**General Description:** lake district  
**Min Elev. (m):** 290 **Max Elev. (m):** 290  
**Other Comments:** S29RAUNMONCA02 - Det by Robert R. Haynes as *Potamogeton foliosus* var *foliosus* 1973 **Best Source of Info:** S29RAUNMONCA02  
**Specimen Source Code Collector Herbarium Accession # Date ID OK? Observation Detail**  
 S29RAUNMONCA02 Raup, Hugh M. NM 7402 1929-08-14 Y  
**Map UTM Zone UTM Easting UTM Northing Survey Site Name Notes # Dot ID #**  
 84P11 12 380725 6608600 Wood Buffalo National Park 59-36N/113-07W 1 4391  
**Source Code Author Publisher Year Title**  
 A74HAY01ABCA Haynes, R. R. *Rhodora* 76:564-649 1974 A revision of the North American *Potamogeton* subsection *Pusilli* (*Potamogetonaceae*)  
**Potamogeton foliosus** leafy pondweed SRank: S2  
 ++++++

**Element Code:** PMPOT030B0 **Occurrence Code #:** 008 **Survey Date:** 1991-08-01  
**Last Observed:** 1991-08-01 **First Observed:** 1991-07-27 **Actual Mapping Precision (m):** 300 **Precision Code:** M  
**Directions:** La Saline Natural Area; Saline Lake.  
**General Description:** amongst the cattail clumps  
**Min Elev. (m):** 245 **Max Elev. (m):** 245 **Best Source of Info:** R91TIM01ABCA  
**Map UTM Zone UTM Easting UTM Northing Survey Site Name Notes # Dot ID #**  
 74E04 12 467150 6325750 Saline Lake R2-3 and 5 12 4394  
**Source Code Author Publisher Year Title**  
 R91TIM01ABCA Timoney, Kevin P and Anne L. Robinson  
 Alberta Forestry, Lands and Wildlife 1991 Biophysical Inventory of the La Saline Natural Area  
**Potamogeton foliosus** leafy pondweed SRank: S2

**Element Code:** PMPOT030B0 **Occurrence Code #:** 009 **Survey Date:** 1960-07-30  
**Last Observed:** 1960-07-30 **First Observed:** 1948-09-02 **Actual Mapping Precision (m):** 2500 **Precision Code:** M  
**Directions:** Sangudo.  
**General Description:** shallow water, roadside pool and small lake  
**Min Elev. (m):** 685 **Max Elev. (m):** 685 **Best Source of Info:** S48MOSUAABCA08  
**Specimen Source Code Collector Herbarium Accession # Date ID OK? Observation Detail**  
S48MOSUAABCA08 Moss, E.H. UA 864 1948-09-02 Y a few fruits; [fruits with apprec. marginal keels]  
S60MOSUAABCA12 Moss, E.H. UA 788 1960-07-30 Y fruits present-keels present  
**Map UTM Zone UTM Easting UTM Northing Survey Site Name Notes # Dot ID #**  
83G15 11 639000 5973000 Sangudo 13 4459  
**Potamogeton foliosus** leafy pondweed SRank: S2  
+++++

**Element Code:** PMPOT030B0 **Occurrence Code #:** 010 **Survey Date:** 1960-07-26  
**Last Observed:** 1960-07-26 **First Observed:** 1960-07-26 **Actual Mapping Precision (m):** 2500 **Precision Code:** M  
**Directions:** Genevis  
**General Description:** small pond  
**Min Elev. (m):** 730 **Max Elev. (m):** 730  
**Other Comments:** fruits, keels present **Best Source of Info:** S60PEGUAABCA06  
**Specimen Source Code Collector Herbarium Accession # Date ID OK? Observation Detail**  
S60PEGUAABCA06 Pegg, George UA 789 1960-07-26 Y fruits--keels present  
**Map UTM Zone UTM Easting UTM Northing Survey Site Name Notes # Dot ID #**  
83G15 11 664300 5962300 Genevis 14 3161  
**Potamogeton foliosus** leafy pondweed SRank: S2

**Potentilla finitima sandhills cinquefoil**

**Natural Region:** Foothills Fescue Grassland

**Habitat:** Grassland-Sandy

**Phenology:** flowering in late June and early July

**Specific Search Strategies (if any):** distinctive, detectable into October; search minor disturbances in sand plain settings

**Element Occurrences:**

**Element Code:** PDROS1B2T0 **Occurrence Code #:** 001 **Survey Date:** 1986-07-22  
**Last Observed:** 1986-07-22 **First Observed:** 1976-07-17 **Actual Mapping Precision (m):** 2500 **Precision Code:** M  
**Directions:** Calgary, University Heights and Shaganappi Trail, between  
**General Description:** disturbed prairie; on path near concinna triangle  
**Min Elev. (m):** 1110 **Max Elev. (m):** 1110 **Best Source of Info:** S86HALUCABCA01  
**Specimen Source Code Collector Herbarium Accession # Date ID OK? Observation Detail**  
S76HALACONCA01 Hallworth, B.M. AC 145981 1976-07-17  
S76HALUAABCA01 Hallworth, B.M. UA 58385 1976-07-17 Y  
S86HALUCABCA01 Hallworth, B.M. UC 49117 1986-07-22 ? blooming  
**Map UTM Zone UTM Easting UTM Northing Survey Site Name Notes # Dot ID #**  
82O01 11 700000 5662000 Calgary - University Heights 28 1877  
**Potentilla finitima** sandhills cinquefoil SRank: S1  
+++++

**Element Code:** PDROS1B2T0 **Occurrence Code #:** 004 **Survey Date:** 1972-07-14  
**Last Observed:** 1972-07-14 **First Observed:** 1972-07-14 **Actual Mapping Precision (m):** 250 **Precision Code:** S  
**Directions:** Hardisty, 2.5 km SE of; Campground.  
**General Description:** open grassy area  
**Min Elev. (m):** 610 **Max Elev. (m):** 610 **Best Source of Info:** S72KOHUAABCA04  
**Specimen Source Code Collector Herbarium Accession # Date ID OK? Observation Detail**  
S72KOHUAABCA04 Kohli, B. UA 56943 1972-07-14 Y vegetative  
**Map UTM Zone UTM Easting UTM Northing Survey Site Name Notes # Dot ID #**  
73D11 12 479550 5833350 Hardisty 4 4493  
**Potentilla finitima** sandhills cinquefoil SRank: S1  
+++++

**Element Code:** PDROS1B2T0 **Occurrence Code #:** 005 **Survey Date:** 2000-00-00  
**Last Observed:** 2000-00-00 **First Observed:** 2000-00-00 **Actual Mapping Precision (m):** 100 **Precision Code:** S  
**Directions:** Calgary, N of; Beddington Creek, W side of  
**General Description:** west side of the large drainage in two closely situated areas, in slightly disturbed upland fescue grassland  
**Min Elev. (m):** 1097 **Max Elev. (m):** 1097  
**Other Comments:** 1 plant at UTME 704416 UTMN 5671647 (NAD27); 25 plants at UTME 704478 UTMN 5671702 (NAD27), specimen taken **Best Source of Info:** U00WAL01ABCA  
**Map UTM Zone UTM Easting UTM Northing Survey Site Name Notes # Dot ID #**  
82O01 11 704416 5671647 Beddington Creek 49  
**Source Code Author Publisher Year Title**  
U00WAL01ABCA Wallis, C. Cottonwood Consultants Ltd., Calgary 2000 Rare Plant Survey, Panorama Hills Stage 3  
**Potentilla finitima** sandhills cinquefoil SRank: S1

**Potentilla paradoxa** bushy cinquefoil

**Natural Region:** Northern Fescue Grassland, Mixedgrass, Dry Mixedgrass

**Habitat:** Wetland-Sandy

**Phenology:** flowers late June to early August

**Specific Search Strategies (if any):** gravelly shores of rivers where there is some residual moisture; sandy/rocky slough edges at high water mark

**Element Occurrences:**

**Element Code:** PDROS1B1A0 **Occurrence Code #:** 001 **Survey Date:** 1995-00-00

**Last Observed:** 1995-00-00 **First Observed:** 1994-00-00 **Precision Code:** S

**Directions:** Canadian Forces Base Suffield National Wildlife Area; South Saskatchewan River, along the  
**General Description:** subhygric sites on the shore mud flat barrens and backshore successional meadows

**Min Elev. (m):** 693 **Max Elev. (m):** 693 **Best Source of Info:** U96MAC01ABCA

**Map UTM Zone UTM Easting UTM Northing Survey Site Name Notes # Dot ID #**

72L08 12 537550 5589500 South Saskatchewan River UTM WL 537550 / 5589500 5 208

**Source Code Author Publisher Year Title**

U96MAC01ABCA Macdonald, I.D. Canadian Wildlife Service, Environment Canada, Prairie and 1996 Vascular Flora of Canadian Forces Base Suffield National Wildlife Area

**Date Source Abstract Code Observer Occurrence Data**

infrequent in SNWA

**Potentilla paradoxa** bushy cinquefoil SRank: S2

+++++

**Element Code:** PDROS1B1A0 **Occurrence Code #:** 002 **Survey Date:** 1987-00-00

**Last Observed:** 1987-00-00 **First Observed:** 1977-00-00 **Precision Code:** S

**Directions:** Canadian Forces Base Suffield National Wildlife Area, outside of, Murphys Horn, due south of; Bull Spring Coulee, mouth of

**General Description:** Subhygric sites on the shore mud flat barrens and backshore successional meadows

**Min Elev. (m):** 610 **Max Elev. (m):** 610

**Other Comments:** Information from Cottonwood Consultants (1987) **Best Source of Info:** U96MAC01ABCA

**Specimen Source Code Collector Herbarium Accession # Date ID OK? Observation Detail**

S77CORUCABCA04 Corbin J. & D. Jaques UC none 1977-00-00

**Map UTM Zone UTM Easting UTM Northing Survey Site Name Notes # Dot ID #**

72L08 12 541450 5584950 Bull Springs Coulee 6 209

**Source Code Author Publisher Year Title**

U96MAC01ABCA Macdonald, I.D. Canadian Wildlife Service, Environment Canada, Prairie and 1996 Vascular Flora of Canadian Forces Base Suffield National Wildlife Area

**Date Source Abstract Code Observer Occurrence Data**

infrequent in SNWA

**Potentilla paradoxa** bushy cinquefoil SRank: S2

+++++

**Element Code:** PDROS1B1A0 **Occurrence Code #:** 003 **Survey Date:** 1990-09-20

**Last Observed:** 1990-09-20 **First Observed:** 1990-07-24 **Actual Mapping Precision (m):** 250 **Precision Code:** S

**Directions:** Dinosaur P.P; S end of.

**General Description:** Bank near slough edge, shaded; 10 plants in population.

**Min Elev. (m):** 732 **Max Elev. (m):** 732 **Best Source of Info:** S90ROMUCABCA07

**Specimen Source Code Collector Herbarium Accession # Date ID OK? Observation Detail**

S90ROMUCABCA07 Romuld, M. UC 49466 1990-09-20 ?

S90ROMUCABCA08 Romuld, M. UC 49467 1990-07-24 Y

**Map UTM Zone UTM Easting UTM Northing Survey Site Name Notes # Dot ID #**

72L11 12 465600 5620150 Dinosaur Provincial Park Site 27. 1 231

**Source Code Author Publisher Year Title**

U93ROM01ABCA Romuld, A. Margaret MSc thesis; University of Calgary 1993 An ecological land classification of Dinosaur Provincial Park, Alberta

**Potentilla paradoxa** bushy cinquefoil SRank: S2

+++++



**Element Code:** PDROS1B1A0 **Occurrence Code #:** 004 **Survey Date:** 1996-00-00  
**Last Observed:** 1996-00-00 **First Observed:** 1996-00-00 **Actual Mapping Precision (m):** 250 **Precision Code:** S  
**Directions:** Bowell; ~15km SW of; S Saskatchewan River; on N shore of.  
**General Description:** Not re-located.  
**Min Elev. (m):** 671 **Max Elev. (m):** 671 **Best Source of Info:** U96EXP01ABCA  
**Map UTM Zone UTM Easting UTM Northing Survey Site Name Notes # Dot ID #**  
72L02 12 500219 5540404 Bowell SW 3-26 12-8-4 18 3960  
**Source Code Author Publisher Year Title**  
U96EXP01ABCA AXYS Environmental Consulting 1996 Express Pipeline Project  
**Potentilla paradoxa** bushy cinquefoil SRank: S2  
+++++

**Element Code:** PDROS1B1A0 **Occurrence Code #:** 005 **Survey Date:** 1914-07-28  
**Last Observed:** 1914-07-28 **First Observed:** 1914-07-28 **Actual Mapping Precision (m):** 1000 **Precision Code:** M  
**Directions:** Medicine Hat; Police Point.  
**General Description:** prairie  
**Min Elev. (m):** 650 **Max Elev. (m):** 650 **Best Source of Info:** S14FYLAONCA06  
**Specimen Source Code Collector Herbarium Accession # Date ID OK? Observation Detail**  
S14FYLAONCA06 Fyles, F. AC none 1914-07-28  
**Map UTM Zone UTM Easting UTM Northing Survey Site Name Notes # Dot ID #**  
72L02 12 525800 5543150 Medicine Hat Lat/Long: 50 03/110 38 2 169  
**Potentilla paradoxa** bushy cinquefoil SRank: S2  
+++++

**Element Code:** PDROS1B1A0 **Occurrence Code #:** 006 **Survey Date:** 1950-07-21  
**Last Observed:** 1950-07-21 **First Observed:** 1950-07-21 **Actual Mapping Precision (m):** 2000 **Precision Code:** M  
**Directions:** Redcliff, SW of; South Saskatchewan River, bank of.  
**Min Elev. (m):** 670 **Max Elev. (m):** 670 **Best Source of Info:** S50DORACONCA23  
**Specimen Source Code Collector Herbarium Accession # Date ID OK? Observation Detail**  
S50DORACONCA23 Dore, W. G. & A.J. Breitung AC none 1950-07-21  
**Map UTM Zone UTM Easting UTM Northing Survey Site Name Notes # Dot ID #**  
72L02 12 513550 5545050 Redcliff 14 3831  
**Potentilla paradoxa** bushy cinquefoil SRank: S2  
+++++

**Element Code:** PDROS1B1A0 **Occurrence Code #:** 007 **Survey Date:** 1935-07-00  
**Last Observed:** 1935-07-00 **First Observed:** 1935-07-00 **Actual Mapping Precision (m):** 2500 **Precision Code:** M  
**Directions:** Vulcan; 7.25km SE of; Kirkcaldy.  
**Min Elev. (m):** 1010 **Max Elev. (m):** 1010 **Best Source of Info:** S35KAWPMABCA04  
**Specimen Source Code Collector Herbarium Accession # Date ID OK? Observation Detail**  
S35KAWPMABCA04 Kawamura, Y. PM B65.4.121 1935-07-00 Y  
**Map UTM Zone UTM Easting UTM Northing Survey Site Name Notes # Dot ID #**  
82I06 12 341050 5577950 Kirkcaldy 50-20N/113-14W 2 4242  
**Potentilla paradoxa** bushy cinquefoil SRank: S2  
+++++

**Element Code:** PDROS1B1A0 **Occurrence Code #:** 008 **Survey Date:** 1991-08-14  
**Last Observed:** 1991-08-14 **First Observed:** 1990-08-10 **Actual Mapping Precision (m):** 2500 **Precision Code:** M  
**Directions:** North Milk River; ~9.5km North of; Ross Lake; 100 m North of.  
**General Description:** Sandy soil on floodplain. With *Hordeum jubatum* on saline moist area near North-East shore.  
**Min Elev. (m):** 1310 **Max Elev. (m):** 1320 **Best Source of Info:** S90HRAPMABCA03  
**Specimen Source Code Collector Herbarium Accession # Date ID OK? Observation Detail**  
S90HRAPMABCA03 Hrapko, J.O., Toogood, V.L. PM B90.54.9 1990-08-10 Y  
S91HRAPMABCA09 Hrapko, J.O. PM B91.48.1 1991-08-14 Y  
**Map UTM Zone UTM Easting UTM Northing Survey Site Name Notes # Dot ID #**  
82H02 12 359550 5446350 Ross Lake 49-9.5N/112-55.5W 23 4251  
**Potentilla paradoxa** bushy cinquefoil SRank: S2  
+++++

**Element Code:** PDROS1B1A0 **Occurrence Code #:** 009 **Survey Date:** 1994-06-29  
**Last Observed:** 1994-06-29 **First Observed:** 1994-06-29 **Actual Mapping Precision (m):** 250 **Precision Code:** S  
**Directions:** Buffalo Road; 6.15 km E of; North Saskatchewan River; ~100 m N of.  
**General Description:** River backshore terrace, subsuccessional meadow of Agropyron trachycaulum, Hordeum jubatum, Equisetum laevigatum, Xanthium strumarium, Phalaris arundinacea, Mentha arvensis, Solidago gigantea, Asclepias speciosa, Medicago  
**Min Elev. (m):** 630 **Max Elev. (m):** 630  
**Other Comments:** UTM and Lat/ Long do not agree **Best Source of Info:** U97CWS01ABCA  
**Specimen Source Code Collector Herbarium Accession # Date ID OK? Observation Detail**  
S94MACPMABCA03 Macdonald, I.D. PM B94.4.404B 1994-06-29 Y  
S94MACPMABCA30 Macdonald, I.D. PM B94.4.387 1994-06-29 Y  
**Map UTM Zone UTM Easting UTM Northing Survey Site Name Notes # Dot ID #**  
72L07 12 526550 5566550 CFB Suffield 50-15'05"N/110-37'40"W 22 4252  
**Source Code Author Publisher Year Title**  
U97CWS01ABCA Canadian Wildlife Service CWS 1997 Plant Database from Suffield Survey 1994-1995  
**Potentilla paradoxa** bushy cinquefoil SRank: S2  
+++++

**Element Code:** PDROS1B1A0 **Occurrence Code #:** 010 **Survey Date:** 1995-08-08  
**Last Observed:** 1995-08-08 **First Observed:** 1995-08-08 **Actual Mapping Precision (m):** 250 **Precision Code:** S  
**Directions:** Bingville Road; ~1.75km E of; Coyote Road (route 2); ~1.4km N of.  
**General Description:** recessional shallow lake shoreline  
**Min Elev. (m):** 700 **Max Elev. (m):** 700 **Best Source of Info:** S95ADAPMABCA01  
**Specimen Source Code Collector Herbarium Accession # Date ID OK? Observation Detail**  
S95ADAPMABCA01 Adams, G. PM B95.10.16 1995-08-08 Y  
**Map UTM Zone UTM Easting UTM Northing Survey Site Name Notes # Dot ID #**  
72L07 12 513975 5570200 CFB Suffield 50-17'05"N/110-48'15"W 23 4253  
**Potentilla paradoxa** bushy cinquefoil SRank: S2  
+++++

**Element Code:** PDROS1B1A0 **Occurrence Code #:** 011 **Survey Date:** 1994-06-20  
**Last Observed:** 1994-06-20 **First Observed:** 1976-07-19 **Actual Mapping Precision (m):** 1000 **Precision Code:** M  
**Directions:** CFB Suffield; Medicine Hat, 47 km N of; Ypres Area; Watching Hill, 4 km S of; Sherwood Forest, vicinity of.  
**General Description:** rip backshore **Slope:** subhygric successional meadow of Agropyron repens, Poa pal, Phal aru, Sali exi, Pote ans, Care lan, Equi arv, Scir pun, M arv, Lyco asp, Lyco ame.  
**Min Elev. (m):** 615 **Max Elev. (m):** 615 **Best Source of Info:** S94MACPMABCA29  
**Specimen Source Code Collector Herbarium Accession # Date ID OK? Observation Detail**  
S76CORUAABCA05 Corbin, John, Jaques, Dennis UA 90260 1976-07-19 Y fruits  
S94MACPMABCA29 Macdonald, I.D. PM B94.4.222A 1994-06-20 Y  
**Map UTM Zone UTM Easting UTM Northing Survey Site Name Notes # Dot ID #**  
72L07 12 529850 5590075 CFB-Suffield 50-27'50"N/110-34'50"W 30 4332  
**Source Code Author Publisher Year Title**  
U97CWS01ABCA Canadian Wildlife Service CWS 1997 Plant Database from Suffield Survey 1994-1995  
**Potentilla paradoxa** bushy cinquefoil SRank: S2  
+++++

**Element Code:** PDROS1B1A0 **Occurrence Code #:** 012 **Survey Date:** 1994-07-08  
**Last Observed:** 1994-07-08 **First Observed:** 1994-07-08 **Actual Mapping Precision (m):** 250 **Precision Code:** S  
**Directions:** CFB Suffield, Medicine Hat, 33 km NNE of; Fish Creek; Van Will Corral, 5 km E of.  
**General Description:** river backshore **Slope:** subhygric meadow of Agro smi, Iva axi, Xant str, Hord jub, Rori syl, Poa pal, Rume mar, Pote ans, Plan maj, aut  
**Min Elev. (m):** 620 **Max Elev. (m):** 710 **Best Source of Info:** U97CWS01ABCA  
**Specimen Source Code Collector Herbarium Accession # Date ID OK? Observation Detail**  
S94MACPMABCA31 Macdonald, I.D. PM B94.4.540 1994-07-08 Y  
**Map UTM Zone UTM Easting UTM Northing Survey Site Name Notes # Dot ID #**  
72L07 12 527200 5577200 Cottonwood Grove 50-20'55"N/110-37'00"W 13 198  
**Source Code Author Publisher Year Title**  
U97CWS01ABCA Canadian Wildlife Service CWS 1997 Plant Database from Suffield Survey 1994-1995  
**Potentilla paradoxa** bushy cinquefoil SRank: S2  
+++++

**Element Code:** PDROS1B1A0 **Occurrence Code #:** 013 **Survey Date:** 1994-07-07  
**Last Observed:** 1994-07-07 **First Observed:** 1994-07-07 **Actual Mapping Precision (m):** 250 **Precision Code:** S  
**Directions:** Bull Springs Coulee, ~5.5 km NW of mouth of; S Saskatchewan River; ~50 m E of.  
**General Description:** river backshore terrace: mesic meadow of *Agro smi*, *Glycr lep*, *Xant str*, *Equi lae*, *Phal aru*, *Ascl spe*, *Pote par*, *Poa pal*, *Elym can*, *Rori*.  
**Min Elev. (m):** 610 **Max Elev. (m):** 700 **Best Source of Info:** U97CWS01ABCA  
**Specimen Source Code Collector Herbarium Accession # Date ID OK? Observation Detail**  
S94MACPMABCA32 Macdonald, I.D. PM B94.4.487 1994-07-07 Y  
**Map UTM Zone UTM Easting UTM Northing Survey Site Name Notes # Dot ID #**  
72L08 12 537600 5588900 CFB Suffield 50-27'10"N/110-28'20"W 27 4340  
**Source Code Author Publisher Year Title**  
U97CWS01ABCA Canadian Wildlife Service CWS 1997 Plant Database from Suffield Survey 1994-1995  
***Potentilla paradoxa*** bushy cinquefoil SRank: S2  
+++++

**Element Code:** PDROS1B1A0 **Occurrence Code #:** 014 **Survey Date:** 1994-08-30  
**Last Observed:** 1994-08-30 **First Observed:** 1994-08-30 **Actual Mapping Precision (m):** 250 **Precision Code:** S  
**Directions:** Watching Hill; ~8.75 km SSE of; S Saskatchewan River; ~100 m W of.  
**General Description:** river backshore **Slope:** subhygric meadow of *Cheno sal*, *Xant str*, *Echi cru*, *Rume mar*, *Gnap uli*, *Pote par*, *Poly amp*, *Alop aeq*, *Equi arv*.  
**Min Elev. (m):** 615 **Max Elev. (m):** 615 **Best Source of Info:** U97CWS01ABCA  
**Specimen Source Code Collector Herbarium Accession # Date ID OK? Observation Detail**  
S94MACPMABCA33 Macdonald, I.D. PM B94.4.649 1994-08-30 Y  
**Map UTM Zone UTM Easting UTM Northing Survey Site Name Notes # Dot ID #**  
72L07 12 528875 5583150 CFB Suffield 50-24'05"N/110-35'45"W. 32 4341  
**Source Code Author Publisher Year Title**  
U97CWS01ABCA Canadian Wildlife Service CWS 1997 Plant Database from Suffield Survey 1994-1995  
***Potentilla paradoxa*** bushy cinquefoil SRank: S2  
+++++

**Element Code:** PDROS1B1A0 **Occurrence Code #:** 015 **Survey Date:** 1946-08-08  
**Last Observed:** 1946-08-08 **First Observed:** 1946-08-08 **Actual Mapping Precision (m):** 2500 **Precision Code:** M  
**Directions:** Little Fish Lake.  
**General Description:** lake shore, stony sandy flats  
**Min Elev. (m):** 905 **Max Elev. (m):** 905 **Best Source of Info:** S46MOSUAABCA34  
**Specimen Source Code Collector Herbarium Accession # Date ID OK? Observation Detail**  
S46MOSUAABCA34 Moss, E.H. UA 11020 1946-08-08 Y fruits; "prostrate spreading"  
**Map UTM Zone UTM Easting UTM Northing Survey Site Name Notes # Dot ID #**  
82P08 12 415000 5692800 Little Fish Lake 9 4441  
***Potentilla paradoxa*** bushy cinquefoil SRank: S2  
+++++

**Element Code:** PDROS1B1A0 **Occurrence Code #:** 016 **Survey Date:** 1976-07-17  
**Last Observed:** 1976-07-17 **First Observed:** 1976-07-17 **Actual Mapping Precision (m):** 1000 **Precision Code:** M  
**Directions:** Milk River Lake, just N of.  
**General Description:** moist slough bank  
**Min Elev. (m):** 860 **Max Elev. (m):** 860 **Best Source of Info:** S76KLAUAABCA08  
**Specimen Source Code Collector Herbarium Accession # Date ID OK? Observation Detail**  
S76KLAUAABCA08 Klar, A. UA 80450 1976-07-17 Y flowers  
**Map UTM Zone UTM Easting UTM Northing Survey Site Name Notes # Dot ID #**  
72E01 12 555000 5431000 Milk River Lake 49 02/110 15 4 4504  
***Potentilla paradoxa*** bushy cinquefoil SRank: S2  
+++++

**Element Code:** PDROS1B1A0 **Occurrence Code #:** 017 **Survey Date:** 1976-07-12  
**Last Observed:** 1976-07-12 **First Observed:** 1976-07-12 **Actual Mapping Precision (m):** 500 **Precision Code:** M  
**Directions:** Schuler, 8 km W of.  
**General Description:** roadside  
**Min Elev. (m):** 845 **Max Elev. (m):** 845 **Best Source of Info:** S76KLAUAABCA11  
**Specimen Source Code Collector Herbarium Accession # Date ID OK? Observation Detail**  
S76KLAUAABCA11 Klar, Andrew UA 80439 1976-07-12 Y flowers  
**Map UTM Zone UTM Easting UTM Northing Survey Site Name Notes # Dot ID #**  
72L08 12 556000 5576400 Schuler 50 20/110 13 13 4505  
***Potentilla paradoxa*** bushy cinquefoil SRank: S2  
+++++

**Element Code:** PDROS1B1A0 **Occurrence Code #:** 018 **Survey Date:** 1978-08-12  
**Last Observed:** 1978-08-12 **First Observed:** 1978-08-12 **Actual Mapping Precision (m):** 700 **Precision Code:** M  
**Directions:** Reesor Lake, 2.5 km N of.  
**General Description:** small dried up slough in rolling moraine, wet in spring; Hord jub predominates, with Eleo pal, Junc bal, Agro sub, Pucc nutt  
**Min Elev. (m):** 1189 **Max Elev. (m):** 1189 **Best Source of Info:** S78BRAUAABCA06  
**Specimen Source Code Collector Herbarium Accession # Date ID OK? Observation Detail**  
S78BRAUAABCA06 Bradley, C. UA 84166 1978-08-12 Y flowers and fruits  
**Map UTM Zone UTM Easting UTM Northing Survey Site Name Notes # Dot ID #**  
72E09 12 564922 5503982 Reesor Lake 32-8-1 W4M 51 4514  
**Potentilla paradoxa** bushy cinquefoil SRank: S2  
+++++

**Element Code:** PDROS1B1A0 **Occurrence Code #:** 019 **Survey Date:** 1985-00-00  
**Last Observed:** 1985-00-00 **First Observed:** 1985-00-00 **Actual Mapping Precision (m):** 50 **Precision Code:** S  
**Directions:** USA border, 3.5 km N of; Lost River, 2.5 km S of.  
**General Description:** dessicated edge of large slough  
**Min Elev. (m):** 890 **Max Elev. (m):** 890 **Best Source of Info:** R86WER01ABCA  
**Map UTM Zone UTM Easting UTM Northing Survey Site Name Notes # Dot ID #**  
72E02 12 536123 5430685 Lost River 34 4557  
**Source Code Author Publisher Year Title**  
R86WER01ABCA Wershler C. & C. Wallis 1986 Lost River Significant Features Assessment  
**Potentilla paradoxa** bushy cinquefoil SRank: S2  
+++++

**Element Code:** PDROS1B1A0 **Occurrence Code #:** 020 **Survey Date:** 1990-00-00  
**Last Observed:** 1990-00-00 **First Observed:** 1990-00-00 **Actual Mapping Precision (m):** 500 **Precision Code:** M  
**Directions:** Paradis Valley, 6.75 km ENE of; N half of sect.11-Tp47-R2-W4M  
**General Description:** subsaline meadow  
**Min Elev. (m):** 640 **Max Elev. (m):** 640  
**Other Comments:** abundant in this meadow  
**Management Comments:** grazing in meadow; recommend survey in wetter years to define site significance **Best Source of Info:** U90WAL01ABCA  
**Map UTM Zone UTM Easting UTM Northing Survey Site Name Notes # Dot ID #**  
73E01 12 554000 5877000 Paradise Valley N1/2 Sect.11-Tp47-R2-W4M 3 6017  
**Source Code Author Publisher Year Title**  
U90WAL01ABCA Wallis, Cliff 1990 Reconnaissance Survey of Saline Wetlands and Springs in the Grassland-Parkland Region of Eastern Alberta  
**Date Source Abstract Code Observer Occurrence Data**  
U90WAL01ABCA C Wallis See unpubl report in-house  
**Potentilla paradoxa** bushy cinquefoil SRank: S2

**Potentilla plattensis** low cinquefoil

**Natural Region:** Northern Fescue Grassland

**Habitat:** Grassland-Sandy

**Phenology:** flowers in late June-early July

**Specific Search Strategies (if any):** conduct searches in conjunction with *Lobelia spicata* surveys (same location)

**Element Occurrences:**

**Element Code:** PDROS1B1E0 **Occurrence Code #:** 001 **Survey Date:** 1942-07-01

**Last Observed:** 1942-07-01 **First Observed:** 1942-07-01 **Precision Code:** S

**General Description:** Prairie grassland

**Min Elev. (m):** 815 **Max Elev. (m):** 815 **Best Source of Info:** S42BRIUAABCA01

**Specimen Source Code Collector Herbarium Accession # Date ID OK? Observation Detail**

S42BRIUAABCA01 Brinkman, A.H. UA 99751 1941-07-01 Flowers

**Map UTM Zone UTM Easting UTM Northing Survey Site Name Notes # Dot ID #**

82P16 12 417550 5736600 Victoria Lake 3 2299

**Potentilla plattensis** low cinquefoil SRank: S1

+++++

**Element Code:** PDROS1B1E0 **Occurrence Code #:** 016 **Survey Date:** 1942-06-01

**Last Observed:** 1942-06-01 **First Observed:** 1942-06-01 **Actual Mapping Precision (m):** 2500 **Precision Code:** M

**Directions:** Craigmyle

**General Description:** Prairie grassland

**Min Elev. (m):** 876 **Max Elev. (m):** 876 **Best Source of Info:** S42BRIACONCA01

**Specimen Source Code Collector Herbarium Accession # Date ID OK? Observation Detail**

S42BRIACONCA01 Brinkman, A.H. AC 132300 1942-06-01

**Map UTM Zone UTM Easting UTM Northing Survey Site Name Notes # Dot ID #**

82P09 12 413950 5724700 Craigmyle 1 4121

**Potentilla plattensis** low cinquefoil SRank: S1

+++++

**Element Code:** PDROS1B1E0 **Occurrence Code #:** 017 **Survey Date:** 1943-06-18

**Last Observed:** 1943-06-18 **First Observed:** 1943-06-18 **Actual Mapping Precision (m):** 300 **Precision Code:** M

**Directions:** Craigmyle, 8 mi N of; Nelson's Draw

**General Description:** among grass prairie

**Min Elev. (m):** 830 **Max Elev. (m):** 830 **Best Source of Info:** S43BRIACONCA01

**Specimen Source Code Collector Herbarium Accession # Date ID OK? Observation Detail**

S43BRIACONCA01 Brinkman, A.H. AC 7761 1943-06-18

**Map UTM Zone UTM Easting UTM Northing Survey Site Name Notes # Dot ID #**

82P16 12 415900 5736850 Craigmyle Lat/Long: 51 47' 112 13' 1 2298

**Potentilla plattensis** low cinquefoil SRank: S1

***Psilocarphus elatior* woollyheads**

**Natural Region:** Mixedgrass, Dry Mixedgrass

**Habitat:** Wetland-Sandy

**Phenology:** flowers late May to early June

**Specific Search Strategies (if any):** detectable long past flowering into early July; very small ephemeral wetlands in sand plains

**Element Occurrences:**

**Element Code:** PDAST7R020 **Occurrence Code #:** 001 **Survey Date:** 1989-07-03

**Last Observed:** 1989-07-03 **First Observed:** 1989-07-03 **Precision Code:** S

**Directions:** Milk River Natural Area

**General Description:** Sandy ephemeral wetland on exundated soil

**Min Elev. (m):** 985 **Max Elev. (m):** 985 **Best Source of Info:** S89WALPPABCA16

**Specimen Source Code Collector Herbarium Accession # Date ID OK? Observation Detail**

S89WALPPABCA16 Wallis, C. PP 772 1989-07-03

**Map UTM Zone UTM Easting UTM Northing Survey Site Name Notes # Dot ID #**

72E02 12 520873 5428534 Milk River Ecological Reserve LSD 13 13 24

**Date Source Abstract Code Observer Occurrence Data**

Several hundred plants, generally scarce in the area

***Psilocarphus elatior* woollyheads** SRank: S2

+++++

**Element Code:** PDAST7R020 **Occurrence Code #:** 002 **Survey Date:** 1990-08-22

**Last Observed:** 1990-08-22 **First Observed:** 1990-07-24 **Actual Mapping Precision (m):** 250 **Precision Code:** S

**Directions:** Dinosaur Provincial Park, S end of.

**General Description:** Bank near slough edge; growing with grasses under willows (trees).

**Min Elev. (m):** 732 **Max Elev. (m):** 732 **Best Source of Info:** S90ROMUCABCA01

**Specimen Source Code Collector Herbarium Accession # Date ID OK? Observation Detail**

S90ROMUCABCA01 Romuld, M. UC 49471 1990-08-23 Over 50 plants in population

**Map UTM Zone UTM Easting UTM Northing Survey Site Name Notes # Dot ID #**

72L11 12 465600 5620150 Dinosaur Provincial Park Site 27. 1 231

**Source Code Author Publisher Year Title**

U93ROM01ABCA Romuld, A. Margaret MSc thesis; University of Calgary 1993 An ecological land classification of Dinosaur Provincial Park, Alberta

**Date Source Abstract Code Observer Occurrence Data**

over 50 plants in population

***Psilocarphus elatior* woollyheads** SRank: S2

+++++

**Element Code:** PDAST7R020 **Occurrence Code #:** 003 **Survey Date:** 1989-07-14

**Last Observed:** 1989-07-14 **First Observed:** 1989-07-14 **Precision Code:** M

**Directions:** Bow City, about 10 km W of; Hwy. 539, off.

**General Description:** Undisturbed soil; *Stipa comata* grassland.

**Min Elev. (m):** 800 **Max Elev. (m):** 800

**Other Comments:** Det. by K. Tannas **Best Source of Info:** UNDTAN01ABCA

**Map UTM Zone UTM Easting UTM Northing Survey Site Name Notes # Dot ID #**

82I08 12 404350 5586800 Bow City 1 1418

**Source Code Author Publisher Year Title**

UNDTAN01ABCA Tannas, K.E. Native Species Inventory Forms

***Psilocarphus elatior* woollyheads** SRank: S2

+++++

**Element Code:** PDAST7R020 **Occurrence Code #:** 004 **Survey Date:** 1985-05-27  
**Last Observed:** 1985-05-27 **First Observed:** 1979-07-04 **Actual Mapping Precision (m):** 50 **Precision Code:** S  
**Directions:** Onefour, 10 km S of.  
**General Description:** dried-out slough with sandy bottom and dessicated slough bottom  
**Min Elev. (m):** 900 **Max Elev. (m):** 900  
**Other Comments:** EO mapped as multipolygon. **Best Source of Info:** S85WALUAABCA12  
**Specimen Source Code Collector Herbarium Accession # Date ID OK? Observation Detail**  
S85WALUAABCA12 Wallis, C. UA 098412 1985-05-27 Y "Rare"; flowers  
**Map UTM Zone UTM Easting UTM Northing Survey Site Name Notes # Dot ID #**  
72E01 12 540425 5430425 Lost River SW 1-1-4 W4M 5 4  
**Source Code Author Publisher Year Title**  
R86WER01ABCA Wershler C. & C. Wallis 1986 Lost River Significant Features Assessment  
**Psilocarphus elatior** woollyheads SRank: S2  
+++++

**Element Code:** PDAST7R020 **Occurrence Code #:** 005 **Survey Date:** 1997-07-07  
**Last Observed:** 1997-07-07 **First Observed:** 1997-07-07 **Actual Mapping Precision (m):** 250 **Precision Code:** S  
**Directions:** S.Saskatchewan River, 7 km S of; Creek in Bullsprings Coulee, 5.5 km W o f.  
**General Description:** Carex ste, Agro smi, Vero per, Myos ari, Arte lud, Hor jub, Elep pal, Beck syz, Grind squ, Nav min, Bois glab.  
Depression which seasonally contains water . Flooding may result in mud flats with limited vegetation.  
**Min Elev. (m):** 762 **Max Elev. (m):** 762  
**Other Comments:** 9 Bois gla-immature(many more could emerge in spring), Psil cla- 200 on RoW, 38 North of existing pipeline and  
south of road, 20 on existing pipeline.  
**Management Comments:** Hargrave Ranch. Proposed AEC pipeline also 9 Boisduvalia glabella noted.0 % loss: off Row, and  
pipeline will not be cons **Best Source of Info:** U97AXY03ABCA  
**Map UTM Zone UTM Easting UTM Northing Survey Site Name Notes # Dot ID #**  
72L08 12 536000 5582600 Bull Springs Coulee Lat 50 deg 23 min 78 sec, Long 110 deg 30 min 43 sec W - 15-33-16-4-W4M 18  
3911  
**Source Code Author Publisher Year Title**  
U97AXY03ABCA AXYS Environmental Consulting Ltd. 1997 AEC Suffield Pipeline  
U99BUS01ABCA Bush, D. Email to Joyce Gould dated Oct. 6, 1999 Psilocarphus elatior  
**Date Source Abstract Code Observer Occurrence Data**  
1997-07-29 U97AXY03ABCA Kathy Tannas 200 individuals noted; vegetative, juveniles  
**Psilocarphus elatior** woollyheads SRank: S2  
+++++

**Element Code:** PDAST7R020 **Occurrence Code #:** 006 **Survey Date:** 1996-00-00  
**Last Observed:** 1996-00-00 **First Observed:** 1996-00-00 **Actual Mapping Precision (m):** 250 **Precision Code:** S  
**Directions:** CFB Suffield; ~3km W of W border of; Outer Rainy Hill; SE of.  
**General Description:** locally common, ephemeral wetlands  
**Min Elev. (m):** 754 **Max Elev. (m):** 792  
**Other Comments:** pipeline construction (U99BUS01ABCA) EO mapped as multipolygon.  
**Management Comments:** km 245.7--size of loss not known, km 252.8 10-15% of wetland lost, km 255.5 30 m of wetland channel  
lost through (ctd.) **Best Source of Info:** U96EXP01ABCA  
**Map UTM Zone UTM Easting UTM Northing Survey Site Name Notes # Dot ID #**  
72L06 12 484750 5584000 Outer Rainy Hill LS# 38, Km 252.8,NW13- 5-17-9-4 and LS#39;  
km:255.5; LLD: SW 32 16-9-4 and LS#37;km:245.7;LLD:SW 5-32-17-9-4 7 4022  
**Source Code Author Publisher Year Title**  
U96EXP01ABCA AXYS Environmental Consulting 1996 Express Pipeline Project  
U99BUS01ABCA Bush, D. Email to Joyce Gould dated Oct. 6, 1999 Psilocarphus elatior  
**Psilocarphus elatior** woollyheads SRank: S2  
+++++

**Element Code:** PDAST7R020 **Occurrence Code #:** 007 **Survey Date:** 1996-00-00  
**Last Observed:** 1996-00-00 **First Observed:** 1996-00-00 **Actual Mapping Precision (m):** 250 **Precision Code:** S  
**Directions:** Hwy 1; ~3km E of; Suffield airfield; ~km W of.  
**General Description:** locally common; ephemeral wetlands  
**Min Elev. (m):** 732 **Max Elev. (m):** 754  
**Other Comments:** km 269.4--10% loss of wetland through pipeline construction (U99BUS01ABCA). EO mapped as multipolygon.  
**Management Comments:** km 266.2--loss not estimated, km 266.8--30 m of drainage lost, km 285.2--0 loss (ctd.) **Best Source of Info:** U96EXP01ABCA

**Map UTM Zone UTM Easting UTM Northing Survey Site Name Notes # Dot ID #**

72L06 12 484700 5568350 Suffield airfield Multipolygon; LS#41; km:267.4; LLD:NW 4-20 15-9-4; LS#40; km:266.2; LLD:NW 29 15-9-4; LS#40;km:266.8; LLD SW 4-29-15-9-4; LS#40; km: 269.4;LLD: SW 4-17 15-9-4; LS#41; km:273.9; LLD:SW 4-4-15-9-4; LS#43; km:285.2; LLD:NW 15-35 14-9-6 12 4035

**Source Code Author Publisher Year Title**

U96EXP01ABCA AXYS Environmental Consulting 1996 Express Pipeline Project  
U99BUS01ABCA Bush, D. Email to Joyce Gould dated Oct. 6, 1999 Psilocarphus elatior  
**Psilocarphus elatior** woollyheads SRank: S2  
+++++

**Element Code:** PDAST7R020 **Occurrence Code #:** 008 **Survey Date:** 1996-00-00  
**Last Observed:** 1996-00-00 **First Observed:** 1996-00-00 **Actual Mapping Precision (m):** 250 **Precision Code:** S  
**Directions:** Suffield; ~8.75km SE of; S Saskatchewan River; ~8m N of.  
**General Description:** locally common; ephemeral wetland  
**Min Elev. (m):** 770 **Max Elev. (m):** 785  
**Other Comments:** pipeline construction (U99BUS01ABCA). EO mapped as multipolygon.  
**Management Comments:** km 284.6--20% of wetland, km 287.3--10% of wetland lost through (ctd.) **Best Source of Info:** U96EXP01ABCA

**Map UTM Zone UTM Easting UTM Northing Survey Site Name Notes # Dot ID #**

72L03 12 490900 5554425 Suffield Multipolygon; LS#43; km:284.4 & 284.6;LLD:SW 6-2-14-9-4; LS#43; km:287.3; LLD:SW 15-36 13-9-4 13 4038

**Source Code Author Publisher Year Title**

U96EXP01ABCA AXYS Environmental Consulting 1996 Express Pipeline Project U99BUS01ABCA Bush, D. Email to Joyce Gould dated Oct. 6, 1999 Psilocarphus elatior  
**Psilocarphus elatior** woollyheads SRank: S2  
+++++

**Element Code:** PDAST7R020 **Occurrence Code #:** 009 **Survey Date:** 1996-00-00  
**Last Observed:** 1996-00-00 **First Observed:** 1996-00-00 **Actual Mapping Precision (m):** 250 **Precision Code:** S  
**Directions:** Suffield; ~34.75km SE of; S Saskatchewan River; ~4.5km N of.  
**General Description:** Locally common, ephemeral wetlands.  
**Min Elev. (m):** 800 **Max Elev. (m):** 800  
**Management Comments:** km 296.0--20% loss of wetland through pipeline construction (U99BUS01ABCA) **Best Source of Info:** U96EXP01ABCA

**Map UTM Zone UTM Easting UTM Northing Survey Site Name Notes # Dot ID #**

72L03 12 497300 5544850 South Saskatchewan River LS#45; km: 296; LLD: NE 10-4-13-8-4 11 4026

**Source Code Author Publisher Year Title**

U96EXP01ABCA AXYS Environmental Consulting 1996 Express Pipeline Project  
U99BUS01ABCA Bush, D. Email to Joyce Gould dated Oct. 6, 1999 Psilocarphus elatior  
**Psilocarphus elatior** woollyheads SRank: S2  
+++++

**Element Code:** PDAST7R020 **Occurrence Code #:** 010 **Survey Date:** 1996-00-00  
**Last Observed:** 1996-00-00 **First Observed:** 1996-00-00 **Actual Mapping Precision (m):** 250 **Precision Code:** S  
**Directions:** Bridge over N side of Rattlesnake Lake; ~2 km E of.  
**General Description:** locally common; ephemeral wetlands  
**Min Elev. (m):** 808 **Max Elev. (m):** 808  
**Other Comments:** EO mapped as multipolygon.  
**Management Comments:** km 306.3--size of impact unknown, km 308.5 off ROW 0% loss through pipeline construction (U99BUS01ABCA) **Best Source of Info:** U96EXP01ABCA

**Map UTM Zone UTM Easting UTM Northing Survey Site Name Notes # Dot ID #**

72E15 12 502600 5536750 Rattlesnake Lake Multipolygon; LS#46; km:306.3; LLD:NE 9-12-12-8-4; LS:46; km:308.5;LLD: NE 16-6-12-7-4. 19 4049

**Source Code Author Publisher Year Title**

U96EXP01ABCA AXYS Environmental Consulting 1996 Express Pipeline Project  
U99BUS01ABCA Bush, D. Email to Joyce Gould dated Oct. 6, 1999 Psilocarphus elatior  
**Psilocarphus elatior** woollyheads SRank: S2  
+++++



**Element Code:** PDAST7R020 **Occurrence Code #:** 011 **Survey Date:** 1996-00-00  
**Last Observed:** 1996-00-00 **First Observed:** 1996-00-00 **Actual Mapping Precision (m):** 250 **Precision Code:** S  
**Directions:** Seven Persons; 9 km SE of; Fitzgerald; ~4.25km SE of.  
**General Description:** locally common; ephemeral wetlands  
**Min Elev. (m):** 792 **Max Elev. (m):** 792  
**Management Comments:** estimated habitat loss through pipeline construction not provided in U99BUS01ABCA **Best Source of Info:** U96EXP01ABCA

**Map UTM Zone UTM Easting UTM Northing Survey Site Name Notes # Dot ID #**  
72E15 12 515800 5522925 Fitzgerald LS#49; km: 326.1; LLD: SE 2-32-10-6-4.;SW 28 10-6-4 21 4052  
**Source Code Author Publisher Year Title**  
U96EXP01ABCA AXYS Environmental Consulting 1996 Express Pipeline Project  
U99BUS01ABCA Bush, D. Email to Joyce Gould dated Oct. 6, 1999 Psilocarphus elatior  
**Psilocarphus elatior** woollyheads SRank: S2  
+++++

**Element Code:** PDAST7R020 **Occurrence Code #:** 012 **Survey Date:** 1996-00-00  
**Last Observed:** 1996-00-00 **First Observed:** 1996-00-00 **Actual Mapping Precision (m):** 250 **Precision Code:** S  
**Directions:** Manyberries; ~31.5 km NE of; Sage Creek; ~8.25 km N of.  
**General Description:** locally common; ephemeral wetlands  
**Min Elev. (m):** 1105 **Max Elev. (m):** 1105  
**Other Comments:** polygon  
**Management Comments:** km 372.1--size of loss unknown, km 372.3--50% of wetland lost through pipeline construction (U99BUS01ABCA) **Best Source of Info:** U96EXP01ABCA

**Map UTM Zone UTM Easting UTM Northing Survey Site Name Notes # Dot ID #**  
72E07 12 535698 5481606 Sage Creek LS#56; km:372.1,372.3; LLD:NE 20 6-4-4. 18 4053  
**Source Code Author Publisher Year Title**  
U96EXP01ABCA AXYS Environmental Consulting 1996 Express Pipeline Project  
U99BUS01ABCA Bush, D. Email to Joyce Gould dated Oct. 6, 1999 Psilocarphus elatior  
**Psilocarphus elatior** woollyheads SRank: S2  
+++++

**Element Code:** PDAST7R020 **Occurrence Code #:** 013 **Survey Date:** 1996-00-00  
**Last Observed:** 1996-00-00 **First Observed:** 1996-00-00 **Actual Mapping Precision (m):** 250 **Precision Code:** S  
**Directions:** Bain; ~6.5km NE of; Bare Creek; ~2.75km W of.  
**General Description:** locally common; ephemeral wetlands  
**Min Elev. (m):** 1074 **Max Elev. (m):** 1074  
**Other Comments:** through pipeline construction (U99BUS01ABCA). Mapped as multipolygon.  
**Management Comments:** km 392.6--20% loss of wetland, km 393.4--0% loss, km 394.6--20% loss of wetland, km 395--25% loss of wetland (ctd) **Best Source of Info:** U96EXP01ABCA

**Map UTM Zone UTM Easting UTM Northing Survey Site Name Notes # Dot ID #**  
72E08 12 546800 5463650 Bain Multipolygon; LS#59; km:395,394.6,393.4;LLD:SW & SE 28 4-3-4;NW 28 4-3-4, Legal Subdivision 2,6,13; LS:59; km:392.6; LLD:SE:8-32 4-3-4 22 4054  
**Source Code Author Publisher Year Title**  
U96EXP01ABCA AXYS Environmental Consulting 1996 Express Pipeline Project U99BUS01ABCA Bush, D. Email to Joyce Gould dated Oct. 6, 1999 Psilocarphus elatior  
**Psilocarphus elatior** woollyheads SRank: S2  
+++++

**Element Code:** PDAST7R020 **Occurrence Code #:** 014 **Survey Date:** 1927-07-12  
**Last Observed:** 1927-07-12 **First Observed:** 1927-07-12 **Actual Mapping Precision (m):** 1800 **Precision Code:** M  
**Directions:** SE of Brooks; Kininvie.  
**General Description:** depression in prairie  
**Min Elev. (m):** 745 **Max Elev. (m):** 745  
**Other Comments:** flowers **Best Source of Info:** S27MOSUAABCA12

**Specimen Source Code Collector Herbarium Accession # Date ID OK? Observation Detail**  
S27MOSUAABCA12 Moss, E.H. UA 18501 1927-07-12 Y flowers  
**Map UTM Zone UTM Easting UTM Northing Survey Site Name Notes # Dot ID #**  
72L06 12 466400 5580250 Kinvie 50 22/111 28 14 4442  
**Psilocarphus elatior** woollyheads SRank: S2  
+++++

**Element Code:** PDAST7R020 **Occurrence Code #:** 015 **Survey Date:** 1996-00-00  
**Last Observed:** 1996-00-00 **First Observed:** 1996-00-00 **Actual Mapping Precision (m):** 250 **Precision Code:** S  
**Directions:** Cressday; ~4.5km SW of; Hwy 48; ~4km W of.  
**General Description:** locally common; ephemeral wetlands  
**Min Elev. (m):** 953 **Max Elev. (m):** 968  
**Other Comments:** EO mapped as multipolygon.  
**Management Comments:** km 405--possibly 100% loss of wetland, km 407.9--30% loss of wetland (U99BUS01ABCA) **Best**  
**Source of Info:** U96EXP01ABCA

**Map UTM Zone UTM Easting UTM Northing Survey Site Name Notes # Dot ID #**  
72E01 12 550675 5453900 Cressday Multipolygon; LS#61; km:405; LLD:SE 9-26 3-3-4; LS#61; km:407.9; LLD:NW 12-13-3-3-4 29  
4056

**Source Code Author Publisher Year Title**

U96EXP01ABCA AXYS Environmental Consulting 1996 Express Pipeline Project  
U99BUS01ABCA Bush, D. Email to Joyce Gould dated Oct. 6, 1999 Psilocarphus elatior

**Psilocarphus elatior** woollyheads SRank: S2

+++++

**Element Code:** PDAST7R020 **Occurrence Code #:** 016 **Survey Date:** 1979-07-04  
**Last Observed:** 1979-07-04 **First Observed:** 1979-07-04 **Actual Mapping Precision (m):** 1100 **Precision Code:** M  
**Directions:** Wild Horse, 19 km NW of; Onefour, 14 km NE of; Sage Creek.

**General Description:** mixed grassland - barren flats

**Min Elev. (m):** 914 **Max Elev. (m):** 914 **Aspect:** E **Best Source of Info:** S79WALUAABCA10

**Specimen Source Code Collector Herbarium Accession # Date ID OK? Observation Detail**

S79WALUAABCA10 Wallis, C. UA 84606 1979-07-04 Y remains of flowers; immature, mature fruits

**Map UTM Zone UTM Easting UTM Northing Survey Site Name Notes # Dot ID #**

72E01 12 551775 5446400 Sage Creek LS#62; km:412.8; LLD:NW 36 2-3-4 31 4060

**Psilocarphus elatior** woollyheads SRank: S2

***Quercus macrocarpa* bur oak**

**Natural Region:** Northern Fescue Grassland, Foothills Fescue Grassland, Mixedgrass, Dry Mixedgrass

**Habitat:** Unknown

**Phenology:** tree species

**Specific Search Strategies (if any):**

**Element Occurrences:** none known but has been reported for Alberta

**Ranunculus glaberrimus** early buttercup

**Natural Region:** Northern Fescue Grassland, Foothills Fescue Grassland, Mixedgrass, Dry Mixedgrass

**Habitat:** Grassland

**Phenology:** flowers in May

**Specific Search Strategies (if any):** wide area searches in lush grassland, seeking out moister microhabitats and swales

**Element Occurrences:**

**Element Code:** PDRAN0L0Z0 **Occurrence Code #:** 001 **Survey Date:** 1996-05-25

**Last Observed:** 1996-05-25 **First Observed:** 1953-05-30 **Precision Code:** S

**Directions:** Waterton Lakes National Park; Red Rock Canyon, on W side of trail, along; middle bridge, ca. 20 m N of.

**General Description:** shallow soil over ledges, seasonal seepage

**Min Elev. (m):** 1525 **Max Elev. (m):** 1525

**Slope:** 10.00 **Aspect:** E **Size of Occurrence:** 1.00 **Best Source of Info:** PNDACH01ABCA

**Specimen Source Code Collector Herbarium Accession # Date ID OK? Observation Detail**

S53MOSUAABCA33 Moss, E.H. UA 9044 1953-05-30 Y flowers, fruits

**Map UTM Zone UTM Easting UTM Northing Survey Site Name Notes # Dot ID #**

82G01 11 716900 5445950 Red Rock Canyon 130 562

**Date Source Abstract Code Observer Occurrence Data**

ca. 35 plants seen, flowering(PNDACH01ABCA)

**Ranunculus glaberrimus** early buttercup SRank: S2

+++++

**Element Code:** PDRAN0L0Z0 **Occurrence Code #:** 002 **Survey Date:** 1971-05-01

**Last Observed:** 1971-05-01 **First Observed:** 1971-05-01 **Precision Code:** M

**Directions:** Bigstone, near; Blood Indian Reservoir, bank on

**General Description:** on moist, south sloping bank

**Min Elev. (m):** 762 **Max Elev. (m):** 762 **Best Source of Info:** S71OWEUCABCA01

**Specimen Source Code Collector Herbarium Accession # Date ID OK? Observation Detail**

S71OWEUCABCA01 Owens, Rob UC 11365 1971-05-01 Y blooming

**Map UTM Zone UTM Easting UTM Northing Survey Site Name Notes # Dot ID #**

72M06 12 485250 5677600 Blood Indian Reservoir 2 258

**Date Source Abstract Code Observer Occurrence Data**

blooming

**Ranunculus glaberrimus** early buttercup SRank: S2

+++++

**Element Code:** PDRAN0L0Z0 **Occurrence Code #:** 003 **Survey Date:** 1964-06-23

**Last Observed:** 1964-06-23 **First Observed:** 1964-06-23 **Precision Code:** M

**Directions:** Kananaskis Forest Preserve; Raspberry Ridge, on; firetower, near

**General Description:** open mountain meadow

**Min Elev. (m):** 2286 **Max Elev. (m):** 2286 **Best Source of Info:** S64DEVUCABCA24

**Specimen Source Code Collector Herbarium Accession # Date ID OK? Observation Detail**

S64DEVUCABCA24 de Vries, B. UC 11364 1964-06-23 Y

**Map UTM Zone UTM Easting UTM Northing Survey Site Name Notes # Dot ID #**

82J07 11 668350 5574250 Cataract Creek 22 1545

**Date Source Abstract Code Observer Occurrence Data**

Uncommon apetalous form

**Ranunculus glaberrimus** early buttercup SRank: S2

+++++

**Element Code:** PDRAN0L0Z0 **Occurrence Code #:** 004 **Survey Date:** 1970-05-08

**Last Observed:** 1970-05-08 **First Observed:** 1970-05-08 **Precision Code:** M

**Directions:** Little Fish Lake; Hand Hills

**General Description:** grazed fescue prairie

**Min Elev. (m):** 914 **Max Elev. (m):** 914 **Best Source of Info:** S70OWEUCABCA01

**Specimen Source Code Collector Herbarium Accession # Date ID OK? Observation Detail**

S70OWEUCABCA01 Owen, Rob UC 11362 1970-05-08 Y blooming

**Map UTM Zone UTM Easting UTM Northing Survey Site Name Notes # Dot ID #**

82P08 12 408900 5693950 Little Fish Lake elevation changed from 2700 to 3000 feet; 15-28-17 W4 5 2289

**Ranunculus glaberrimus** early buttercup SRank: S2

+++++

**Element Code:** PDRAN0L0Z0 **Occurrence Code #:** 005 **Survey Date:** 1965-08-24  
**Last Observed:** 1965-08-24 **First Observed:** 1965-08-24 **Precision Code:** S  
**Directions:** Banff National Park; Snow Creek Valley, Windy Warden's station, 1 1/2 mi. up Snow Creek from  
**General Description:** SW-facing slope  
**Min Elev. (m):** 2019 **Max Elev. (m):** 2019 **Aspect:** SW **Best Source of Info:** S65BEDUCABCA28  
**Specimen Source Code Collector Herbarium Accession # Date ID OK? Observation Detail**  
S65BEDUCABCA28 Beder, Karen UC 11363 1965-06-24 Y blooming  
**Map UTM Zone UTM Easting UTM Northing Survey Site Name Notes # Dot ID #**  
82O12 11 586900 5711850 Snow Creek Valley 14 2219  
**Ranunculus glaberrimus** early buttercup SRank: S2  
+++++

**Element Code:** PDRAN0L0Z0 **Occurrence Code #:** 007 **Survey Date:** 1974-06-09  
**Last Observed:** 1974-06-09 **First Observed:** 1974-06-09 **Actual Mapping Precision (m):** 2500 **Precision Code:** M  
**Directions:** Livingstone River and Dry Creek junction, 2.5 km N of; Hailstone Butte.  
**General Description:** Moist, grassy meadow at edge of intermittent creek.  
**Min Elev. (m):** 1981 **Max Elev. (m):** 1981 **Best Source of Info:** S74JOHUCABCA18  
**Specimen Source Code Collector Herbarium Accession # Date ID OK? Observation Detail**  
S74JOHUCABCA18 Johnson, Derek UC 11361 1974-06-09 Y blooming and fruiting  
**Map UTM Zone UTM Easting UTM Northing Survey Site Name Notes # Dot ID #**  
82J01 11 680400 5564200 Hailstone Butte 50 12/114 30 1 1428  
**Ranunculus glaberrimus** early buttercup SRank: S2  
+++++

**Element Code:** PDRAN0L0Z0 **Occurrence Code #:** 008 **Survey Date:** 1979-05-22  
**Last Observed:** 1979-05-22 **First Observed:** 1979-05-22 **Actual Mapping Precision (m):** 1000 **Precision Code:** M  
**Directions:** Whiskey Gap; 1.5km S of.  
**General Description:** Mixed prairie grassland, Sommerfeldt Ranch.  
**Min Elev. (m):** 1370 **Max Elev. (m):** 1370 **Best Source of Info:** S79SCOACONCA01  
**Specimen Source Code Collector Herbarium Accession # Date ID OK? Observation Detail**  
S79SCOACONCA01 Scotter, G.W. AC 267116 1979-05-22  
**Map UTM Zone UTM Easting UTM Northing Survey Site Name Notes # Dot ID #**  
82H03 12 352550 5431000 Whiskey gap 49-01'30"; 113-01' 37 4141  
**Ranunculus glaberrimus** early buttercup SRank: S2  
+++++

**Element Code:** PDRAN0L0Z0 **Occurrence Code #:** 009 **Survey Date:** 1942-05-19  
**Last Observed:** 1942-05-19 **First Observed:** 1942-05-19 **Actual Mapping Precision (m):** 1500 **Precision Code:** M  
**Directions:** Waterton Lakes N.P.; Cameron Lake.  
**General Description:** flat meadows along lake  
**Min Elev. (m):** 1675 **Max Elev. (m):** 1675 **Best Source of Info:** S42MCCUAABCA36  
**Specimen Source Code Collector Herbarium Accession # Date ID OK? Observation Detail**  
S42MCCUAABCA36 McCalla, W.C. UA 71088 1942-05-19 Y flowers, fruits; "petals bright yellow" [drying white]  
**Map UTM Zone UTM Easting UTM Northing Survey Site Name Notes # Dot ID #**  
82G01 11 716300 5432950 Cameron Lake 99 543  
**Ranunculus glaberrimus** early buttercup SRank: S2  
+++++

**Element Code:** PDRAN0L0Z0 **Occurrence Code #:** 010 **Survey Date:** 1970-06-23  
**Last Observed:** 1970-06-23 **First Observed:** 1970-06-23 **Actual Mapping Precision (m):** 1400 **Precision Code:** M  
**Directions:** Waterton Lakes N.P.; Bertha Lake, slopes just above of.  
**General Description:** rocky ridge, alpine meadow  
**Min Elev. (m):** 1981 **Max Elev. (m):** 1981 **Best Source of Info:** S70GADUAABCA06  
**Specimen Source Code Collector Herbarium Accession # Date ID OK? Observation Detail**  
S70GADUAABCA06 Gadd, M., Nagy, J. UA 37759 1970-06-23 Y ripe fruits; vegetative  
**Map UTM Zone UTM Easting UTM Northing Survey Site Name Notes # Dot ID #**  
82H04 12 284500 5434150 Bertha Lake 49 02/113 56 188 1119  
**Ranunculus glaberrimus** early buttercup SRank: S2  
+++++

**Element Code:** PDRAN0L0Z0 **Occurrence Code #:** 011 **Survey Date:** 1970-06-04  
**Last Observed:** 1970-06-04 **First Observed:** 1970-06-04 **Actual Mapping Precision (m):** 400 **Precision Code:** M  
**Directions:** Waterton Lakes N.P.; Red Rock Canyon, 3.5 km NW of; Snowshoe Fire Road, on.  
**General Description:** alpine meadow  
**Min Elev. (m):** 1524 **Max Elev. (m):** 1524 **Best Source of Info:** S70NAGUAABCA14  
**Specimen Source Code Collector Herbarium Accession # Date ID OK? Observation Detail**  
S70NAGUAABCA14 Nagy, J., Gadd, M. UA 37757 1970-06-04 Y flowers, immature fruit  
**Map UTM Zone UTM Easting UTM Northing Survey Site Name Notes # Dot ID #**  
82G01 11 714000 5448000 Snowshoe Fire Road 49 08/114 03 179 591  
**Ranunculus glaberrimus** early buttercup SRank: S2  
+++++

**Element Code:** PDRAN0L0Z0 **Occurrence Code #:** 012 **Survey Date:** 1999-05-29  
**Last Observed:** 1999-05-29 **First Observed:** 1971-05-09 **Actual Mapping Precision (m):** 25 **Precision Code:** S  
**Directions:** Reesor Lake, 2 km W of; Reesor Lake Viewpoint.  
**General Description:** moss-herbaceous community on thin soil over cobble on upper slope; with Claytonia, Achillea millefolium, Juncus spp., Loma  
cous, Rosa aci; mesic, subhygric-hygric  
**Min Elev. (m):** 1370 **Max Elev. (m):** 1400  
**Other Comments:** Various aspects; slope from 5 to 30% - see EO Data table.  
**Management Comments:** inarea grazed and browsed short by cattle or wildlife; species may need lack of competition **Best**  
**Source of Info:** S71MCPUAABCA08  
**Specimen Source Code Collector Herbarium Accession # Date ID OK? Observation Detail**  
S71MCPUAABCA08 McPherson, G. UA 37643 1971-05-09 Y flowers; yellow  
**Map UTM Zone UTM Easting UTM Northing Survey Site Name Notes # Dot ID #**  
72E09 12 561672 5502282 Reesor Lake Viewpoint 43 139  
**Source Code Author Publisher Year Title**  
U99BRA01ABCA Bradley, C., R. Ernst, D. Dickinson & L. Fitch 1999 Rare Plant Survey Forms  
**Date Source Abstract Code Observer Occurrence Data**  
1999-05-20 U99BRA01ABCA Cherly Bradley 1) 2 plants in a ca 50 m2 of suitable habitat - Popu tre/Poa pratensis-Tara off herbaceous community on thin soil over cobbles in a moist seepage area at bottom of small valley - V6 vegetative, R7 reproductive; 2) 110+ plants in ca 400 m2, may be twice more that not yet in bloom - Poa pra-Phele pra-herb/ moss community below small hanging valley, thin soil over cobbles, seepage from snow melt, V4 vegetative, R5 (?); 3) Prun vir (stunted and browsed)/Poa pra sparse scrubland on thin soil with exposed cobbles. For all aspect SE, NW, slope 5%, 30%, moisture subhygric-hygric 1999-05-29 U99BRA01ABCA Cherly Bradley Main dot - 2 plants; V7 vegetative, R8 reproductive - Prun vir (<1m)/Junc com-Fest ide(?)/moss herbaceous community on thin soil over cobbles on upper slope; also with Saxi occ, Cyst fra, Dode con, Disp tra, Loma cou, aspect NW, slope 25%, moisture mesic  
**Ranunculus glaberrimus** early buttercup SRank: S2  
+++++

**Element Code:** PDRAN0L0Z0 **Occurrence Code #:** 013 **Survey Date:** 1999-05-19  
**Last Observed:** 1999-05-19 **First Observed:** 1971-05-10 **Actual Mapping Precision (m):** 25 **Precision Code:** S  
**Directions:** Graburn Creek, 3 km upstream from mouth of.  
**General Description:** small meadow with cow-docked shrubs and small forested meadow; mesic - subhygric  
**Min Elev. (m):** 1210 **Max Elev. (m):** 1235  
**Management Comments:** heavily grazed **Best Source of Info:** S71SCOUAABCA35  
**Specimen Source Code Collector Herbarium Accession # Date ID OK? Observation Detail**  
S71SCOUAABCA35 Scott, P.J. UA 37726 1971-05-10 Y flowers; flowers yellow  
**Map UTM Zone UTM Easting UTM Northing Survey Site Name Notes # Dot ID #**  
72E09 12 568972 5498783 Graburn Creek 50 4491  
**Source Code Author Publisher Year Title**  
U99BRA01ABCA Bradley, C., R. Ernst, D. Dickinson & L. Fitch 1999 Rare Plant Survey Forms  
**Date Source Abstract Code Observer Occurrence Data**  
1999-05-19 U99BRA01ABCA Reg Ernst UTM569 850/5499200 NAD27; >100 plants in 200 m2, V6 vegetative, R5 reproductive - small forested meadow, with Crategus rotundifolia, Taraxacum, Potentilla sp., Poa pratensis, Rosa, Thalictrum sp.; mesic-subhygric; aspect E, slope <10%  
**Ranunculus glaberrimus** early buttercup SRank: S2  
+++++

**Element Code:** PDRAN0L0Z0 **Occurrence Code #:** 014 **Survey Date:** 1999-05-25  
**Last Observed:** 1999-05-25 **First Observed:** 1999-05-20 **Actual Mapping Precision (m):** 25 **Precision Code:** S  
**Directions:** Cypress Hills P.P.; Grabum Creek, upper part of and headwaters of.  
**General Description:** grass/shrub meadows, cobbled ravine bottom and forested meadow; for more detailed information see EO data table

**Min Elev. (m):** 1335 **Max Elev. (m):** 1400

**Other Comments:** Detailed information about aspect, slope and moisture in EO data table.

**Management Comments:** heavily grazed **Best Source of Info:** U99BRA01ABCA

**Map UTM Zone UTM Easting UTM Northing Survey Site Name Notes # Dot ID #**

72E09 12 565475 5496325 Grabum Creek 4-8-1 W4M 104 5556

**Source Code Author Publisher Year Title**

U99BRA01ABCA Bradley, C., R. Ernst, D. Dickinson & L. Fitch 1999 Rare Plant Survey Forms

**Date Source Abstract Code Observer Occurrence Data**

1999-05-20 U99BRA01ABCA Reg Ernst Main dot (104) - ~100 plants in 300 m2, V6 vegetative, R6 reproductive -grassland/shrub meadow along creek, with Poa pratensis, Phleum pratense, Symphoricarpos, Rosa, Taraxacum, aspect E, slope <10%, moisture mesic-subhygric, heavily grazed; 1) >1000 plants in >1000 m2, V6 vegetative, R7 reproductive - cobbled ravine bottom in a forest/grassland transition, with Poa pratensis, moss, Phleum pratense, Rosa, Claytonia, Lomatium cous/Taraxacum, Potentilla spp., Trifolium sp, Festuca, aspect NE, slope <20%, moisture mesic-subhygric, only location when is found it growing in fescue, mainly found on heavily grazed Poa pratensis sites; dot # 74 - ~100 plants in 1000 m2, V6 vegetative, R6 reproductive - forest meadow on E facing slope, underlying cobbles (stones), with Poa pratensis, moss, Carex sp., Agropyron sp., Taraxacum/Fragaria, Achillea millefolium, Aspen overstory (Lomatium cous), aspect E, slope <20%, moisture mesic 1999-05-25 U99BRA01ABCA Reg Ernst 2) >1000 plants in >10000 m2, V6 vegetative, R7 reproductive - moist meadows along creek, various plant communities, mainly Poa pratensis, Claytonia, Lomatium cous, aspect various, slope <20% mixture sub hygric-hygric

**Ranunculus glaberrimus** early buttercup SRank: S2

+++++

**Element Code:** PDRAN0L0Z0 **Occurrence Code #:** 015 **Survey Date:** 1999-05-20  
**Last Observed:** 1999-05-20 **First Observed:** 1999-05-20 **Actual Mapping Precision (m):** 25 **Precision Code:** S  
**Directions:** Cypress Hills P.P.; Grabum Creek, mouth of, 3.5 km SW of, south tributary of.

**General Description:** NE facing slopes in forested meadows, with Phleum pratense, Poa pratensis, Taraxacum/Bromus inermis; mesic-sub hygric

**Min Elev. (m):** 1370 **Max Elev. (m):** 1370

**Slope:** 20.00 **Aspect:** NE

**Other Comments:** Slope less than 20%.

**Management Comments:** heavily grazed **Best Source of Info:** U99BRA01ABCA

**Map UTM Zone UTM Easting UTM Northing Survey Site Name Notes # Dot ID #**

72E09 12 568750 5497550 Grabum Creek 11-8-1 W4M 76 5525

**Source Code Author Publisher Year Title**

U99BRA01ABCA Bradley, C., R. Ernst, D. Dickinson & L. Fitch 1999 Rare Plant Survey Forms

**Date Source Abstract Code Observer Occurrence Data**

1999-05-20 U99BRA01ABCA Reg Ernst <50 plants in <100 m2; V6 vegetative; R7 reproductive

**Ranunculus glaberrimus** early buttercup SRank: S2

+++++

**Element Code:** PDRAN0L0Z0 **Occurrence Code #:** 016 **Survey Date:** 1999-05-20  
**Last Observed:** 1999-05-20 **First Observed:** 1999-05-20 **Actual Mapping Precision (m):** 25 **Precision Code:** S  
**Directions:** Cypress Hills P.P.; "Storm Creek", 1.5 km S of; Saskatchewan boundary, just W of.

**General Description:** north flowing ravine in fescue grassland/underlying cobbles, wit Poa pratensis, Taraxacum, Potentilla spp, Lomatium cous; mesic

**Min Elev. (m):** 1370 **Max Elev. (m):** 1370

**Slope:** 10.00 **Aspect:** N **Size of Occurrence:** 0.01

**Other Comments:** Slope less than 10%.

**Management Comments:** heavily grazed **Best Source of Info:** U99BRA01ABCA

**Map UTM Zone UTM Easting UTM Northing Survey Site Name Notes # Dot ID #**

72E09 12 571600 5495150 "Storm Creek" NE36-7-1 W4M 115 5599

**Source Code Author Publisher Year Title**

U99BRA01ABCA Bradley, C., R. Ernst, D. Dickinson & L. Fitch 1999 Rare Plant Survey Forms

**Date Source Abstract Code Observer Occurrence Data**

1999-05-20 U99BRA01ABCA Reg Ernst ~100 plants in >500 m2

**Ranunculus glaberrimus** early buttercup SRank: S2

+++++

**Element Code:** PDRAN0L0Z0 **Occurrence Code #:** 017 **Survey Date:** 1999-05-20  
**Last Observed:** 1999-05-20 **First Observed:** 1999-05-20 **Actual Mapping Precision (m):** 25 **Precision Code:** S  
**Directions:** Cypress Hills P.P.; "Storm Creek", 0.7 km S of; Saskatchewan boundary, 2.5 km W of.  
**General Description:** north flowing ravine in grassland, with Festuca, Potentilla spp., Taraxacum, Claytonia; mesic  
**Min Elev. (m):** 1385 **Max Elev. (m):** 1385  
**Slope:** 10.00 **Aspect:** NE **Size of Occurrence:** 0.01  
**Other Comments:** Slope less than 10%. **Best Source of Info:** U99BRA01ABCA  
**Map UTM Zone UTM Easting UTM Northing Survey Site Name Notes # Dot ID #**  
72E09 12 569500 5495325 "Storm Creek" N35-7-1 W4M 116 5600  
**Source Code Author Publisher Year Title**  
U99BRA01ABCA Bradley, C., R. Ernst, D. Dickinson & L. Fitch 1999 Rare Plant Survey Forms  
**Date Source Abstract Code Observer Occurrence Data**  
1999-05-20 U99BRA01ABCA Reg Ernst >500 plants in <500 m2; V6 vegetative; R7 reproductive  
**Ranunculus glaberrimus** early buttercup SRank: S2  
+++++

**Element Code:** PDRAN0L0Z0 **Occurrence Code #:** 018 **Survey Date:** 1999-05-24  
**Last Observed:** 1999-05-24 **First Observed:** 1999-05-24 **Actual Mapping Precision (m):** 25 **Precision Code:** S  
**Directions:** Cypress Hills P.P.; Nine Mile Creek, headwaters of.  
**General Description:** south flowing grassland ravine, stoney drainage; with Poa paratensis, Taraxacum, Fragaria sp., Achillea millefolium, Dodecatheum; hygic  
**Min Elev. (m):** 1350 **Max Elev. (m):** 1350  
**Slope:** 20.00 **Size of Occurrence:** 0.01  
**Other Comments:** Slope less than 20%.  
**Management Comments:** heavily grazed site **Best Source of Info:** U99BRA01ABCA  
**Map UTM Zone UTM Easting UTM Northing Survey Site Name Notes # Dot ID #**  
72E09 12 569525 5493950 Nine Mile Creek 73 5522  
**Source Code Author Publisher Year Title**  
U99BRA01ABCA Bradley, C., R. Ernst, D. Dickinson & L. Fitch 1999 Rare Plant Survey Forms  
**Date Source Abstract Code Observer Occurrence Data**  
1999-05-24 U99BRA01ABCA Reg Ernst >1000 plants in >1000 m2; V6 vegetative; R7 reproductive  
**Ranunculus glaberrimus** early buttercup SRank: S2  
+++++

**Element Code:** PDRAN0L0Z0 **Occurrence Code #:** 019 **Survey Date:** 2000-00-00  
**Last Observed:** 2000-00-00 **First Observed:** 2000-00-00 **Actual Mapping Precision (m):** 50 **Precision Code:** S  
**Directions:** McLean Hill, 4.5 km W of; Silvester Creek, mouth of, 1.5 km NNE of  
**General Description:** in open aspen-grassland in McLean Creek OHV area  
**Min Elev. (m):** 1447 **Max Elev. (m):** 1447  
**Other Comments:** one specimen found, abundant Botrychium (all lunaria) in this area; no specimen taken **Best Source of Info:** U00WAL02ABCA  
**Map UTM Zone UTM Easting UTM Northing Survey Site Name Notes # Dot ID #**  
82J15 11 661592 5637834 McLean Creek 10  
**Source Code Author Publisher Year Title**  
U00WAL02ABCA Wallis, C. Cottonwood Consultants Ltd., Calgary 2000 Rare Plant Survey, McLean Creek, Well Pad/Access Road Assessment  
**Ranunculus glaberrimus** early buttercup SRank: S2



**Rorippa curvipes var truncata blunt-leaved yellow cress**

**Natural Region:** Northern Fescue Grassland, Mixedgrass, Dry Mixedgrass

**Habitat:** Wetland-Sandy

**Phenology:** flowers June to August

**Specific Search Strategies (if any):** small ephemeral wetlands in sand plains; later surveys are preferable since fruits for conclusive identification are ripe

**Element Occurrences:**

**Element Code:** PDBRA270R0 **Occurrence Code #:** 001 **Survey Date:** 1976-00-00

**Last Observed:** 1976-00-00 **First Observed:** 1976-00-00 **Precision Code:** G

**Directions:** Cranford, 16 km W of

**General Description:** dried up slough

**Min Elev. (m):** 830 **Max Elev. (m):** 830

**Other Comments:** 49 31N/112 00W **Best Source of Info:** S76KLAUAABCA01

**Specimen Source Code Collector Herbarium Accession # Date ID OK? Observation Detail**

S76KLAUAABCA01 Klar, A.K. UA 80718 1976-00-00 [flowers; fruits]

**Map UTM Zone UTM Easting UTM Northing Survey Site Name Notes # Dot ID #**

82H16 12 401000 5516000 Cranford 3 1408

**Rorippa curvipes var truncata** blunt-leaved yellow cress SRank: S1

+++++

**Element Code:** PDBRA270R0 **Occurrence Code #:** 002 **Survey Date:** 1998-06-11

**Last Observed:** 1998-06-11 **First Observed:** 1998-06-11 **Actual Mapping Precision (m):** 100 **Precision Code:** S

**Directions:** Ross Lake, ~5 km SE of; North Milk River, ~2.5 km N of.

**General Description:** depression area where extra moisture collects during runoff; moisture high; Juncus sp.. Alopecurus aequalis, Potentilla anserina

**Min Elev. (m):** 1285 **Max Elev. (m):** 1285

**Slope:** 0.00 **Best Source of Info:** U98ERN01ABCA

**Map UTM Zone UTM Easting UTM Northing Survey Site Name Notes # Dot ID #**

82H02 12 364400 5442100 Ross Lake 15-2-22 W4M 33 5046

**Source Code Author Publisher Year Title**

U98ERN01ABCA Ernst, Reg 1998 Ross Grassland Natural Area - Results of 1998 Rare Plant Survey **Date Source Abstract Code**

**Observer Occurrence Data**

1998-06-11 U98ERN01ABCA Reg Ernst estimated >3000 plants; 80% vegetative, 20% flowering

**Rorippa curvipes var truncata** blunt-leaved yellow cress SRank: S1

+++++

**Element Code:** PDBRA270R0 **Occurrence Code #:** 003 **Survey Date:** 2000-09-14

**Last Observed:** 2000-09-14 **First Observed:** 2000-09-14 **Actual Mapping Precision (m):** 150 **Precision Code:** S

**Directions:** Calgary; Fairview area, E of ; Bow River, W side of; Cominco Lands

**General Description:** shallow water/exposed shore occurs in the north-central portion of the property W of Deerfoot Trail at the western end of the canal

**Min Elev. (m):** 1010 **Max Elev. (m):** 1020

**Other Comments:** 50 plants NAD27 707915E 5651927N; specimen collected; plants appear to be localized here due to the gravelly-silt substrate and the relatively gentle slope compared to the other parts of the canal **Best Source of Info:**

U00WAL04ABCA

**Map UTM Zone UTM Easting UTM Northing Survey Site Name Notes # Dot ID #**

82J16 11 707915 5651927 Calgary 23 6305

**Source Code Author Publisher Year Title**

U00WAL04ABCA Wallis, C. Cottonwood Consultants Ltd., Calgary 2000 Rare Plant Survey, Cominco Lands, Calgary

**Rorippa curvipes var truncata** blunt-leaved yellow cress SRank: S1

**Rorippa sinuata spreading yellow cress**

**Natural Region:** Northern Fescue Grassland, Foothills Fescue Grassland, Mixedgrass, Dry Mixedgrass

**Habitat:** Wetland-Sandy

**Phenology:** flowers June

**Specific Search Strategies (if any):** small ephemeral wetlands in sand plains

**Element Occurrences:**

**Element Code:** PDBRA270K0 **Occurrence Code #:** 001 **Survey Date:** 1974-06-06

**Last Observed:** 1974-06-06 **First Observed:** 1974-06-06 **Precision Code:** M

**Directions:** Lethbridge Res. Station

**General Description:** roadside

**Min Elev. (m):** 930 **Max Elev. (m):** 930

**Other Comments:** 4 specimens **Best Source of Info:** S74BOHALABCA01

**Specimen Source Code Collector Herbarium Accession # Date ID OK? Observation Detail**

S74BOHALABCA01 Bohus, G. AL 3104 1974-06-06 Y blooming, fruiting

**Map UTM Zone UTM Easting UTM Northing Survey Site Name Notes # Dot ID #**

82H10 12 359575 5508375 Lethbridge Research Station 11 1362

**Rorippa sinuata** spreading yellow cress SRank: S1

+++++

**Element Code:** PDBRA270K0 **Occurrence Code #:** 002 **Survey Date:** 1964-07-06

**Last Observed:** 1964-07-06 **First Observed:** 1964-07-06 **Actual Mapping Precision (m):** 1000 **Precision Code:** M

**Directions:** Oldman River, 11.5 km SE of; St. Mary River, 10 km E of; Hwy 5, 0.5 km E of.

**General Description:** Numerous plants in wet depression near west edge of quarter section.

**Min Elev. (m):** 930 **Max Elev. (m):** 930 **Best Source of Info:** S64ALEACONCA02

**Specimen Source Code Collector Herbarium Accession # Date ID OK? Observation Detail**

S64ALEACONCA02 Alex, J.F. & J.P. Gebhardt AC 397785 1964-07-06 stems decumbent to ascending; flowers yellow; numerous plants

**Map UTM Zone UTM Easting UTM Northing Survey Site Name Notes # Dot ID #**

82H10 12 372000 5496400 Highway 5 NW 34-7-21-W4 26 4133

**Rorippa sinuata** spreading yellow cress SRank: S1

+++++

**Element Code:** PDBRA270K0 **Occurrence Code #:** 003 **Survey Date:** 1952-06-06

**Last Observed:** 1952-06-06 **First Observed:** 1952-06-06 **Actual Mapping Precision (m):** 1000 **Precision Code:** M

**Directions:** Nobelford, 4 km WSW of.

**General Description:** edge of road

**Min Elev. (m):** 990 **Max Elev. (m):** 990 **Best Source of Info:** S52MCCUAABCA10

**Specimen Source Code Collector Herbarium Accession # Date ID OK? Observation Detail**

S52MCCUAABCA10 McCalla, W.C., Moss, E.H. UA 91226 1952-06-06 Y flowers, developing fruits; from a mat 2 yards long and 0.5 yd wide. petals bright yellow S52MOSUAABCA32 Moss, E.H. UA 9886 1952-06-06 Y flowers, developing fruits

**Map UTM Zone UTM Easting UTM Northing Survey Site Name Notes # Dot ID #**

82H14 12 348650 5526400 Nobelford 5 4466

**Rorippa sinuata** spreading yellow cress SRank: S1

**Rorippa tenerrima slender cress**

**Natural Region:** Mixedgrass, Dry Mixedgrass

**Habitat:** Wetland-Sandy

**Phenology:** flowers July to August

**Specific Search Strategies (if any):** small ephemeral wetlands in sand plains as well as seasonal stream channels in sandy habitat; may flower in early June depending on conditions; later surveys are preferable when fruits for conclusive identification are ripe

**Element Occurrences:**

**Element Code:** PDBRA270P0 **Occurrence Code #:** 002 **Survey Date:** 1969-08-07

**Last Observed:** 1969-08-07 **First Observed:** 1969-08-07 **Precision Code:** M

**Directions:** Gravenstafel Lake, terminal moraine

**General Description:** alpine meadow

**Min Elev. (m):** 2010 **Max Elev. (m):** 2010

**Other Comments:** Det Job Kuijt 1971. Rorippa obtusa **Best Source of Info:** S69GADULABCA11

**Specimen Source Code Collector Herbarium Accession # Date ID OK? Observation Detail**

S69GADULABCA11 Gadd, M. UL none 1969-08-07

**Map UTM Zone UTM Easting UTM Northing Survey Site Name Notes # Dot ID #**

82G08 11 685700 5463000 Mount Haig 95 739

**Rorippa tenerrima** slender cress SRank: S1

+++++

**Element Code:** PDBRA270P0 **Occurrence Code #:** 003 **Survey Date:** 1986-07-07

**Last Observed:** 1986-07-07 **First Observed:** 1986-07-07 **Precision Code:** M

**General Description:** in ephemeral pond in rough fescue grassland on ridgetop.

**Min Elev. (m):** 1250 **Max Elev. (m):** 1250 **Best Source of Info:** B86WAL01ABCA

**Map UTM Zone UTM Easting UTM Northing Survey Site Name Notes # Dot ID #**

72E04 12 457574 5427683 Sweetgrass Hills Lat/Long: 49 00' 11 35' 2 50

**Source Code Author Publisher Year Title**

B86WAL01ABCA Wallis, Clifford et al Alberta Forestry Lands & Wildlife 203p 1986 Pilot rare plant monitoring program in the Oldman Regional Plan area of southwestern Alberta

**Date Source Abstract Code Observer Occurrence Data**

3 plants.

**Rorippa tenerrima** slender cress SRank: S1

+++++

**Element Code:** PDBRA270P0 **Occurrence Code #:** 004 **Survey Date:** 1989-08-15

**Last Observed:** 1989-08-15 **First Observed:** 1989-08-15 **Precision Code:** S

**General Description:** Dessicated stream channel on exundated soil.

**Min Elev. (m):** 990 **Max Elev. (m):** 990 **Best Source of Info:** S89WALPPABCA04

**Specimen Source Code Collector Herbarium Accession # Date ID OK? Observation Detail**

S89WALPPABCA04 Wallis, C. PP 675 1989-08-15 Y

**Map UTM Zone UTM Easting UTM Northing Survey Site Name Notes # Dot ID #**

72E02 12 518873 5430984 Milk River Natural Area LSD 8 10 21

**Date Source Abstract Code Observer Occurrence Data**

9 plants; intolerant of grazing.

**Rorippa tenerrima** slender cress SRank: S1

+++++

**Element Code:** PDBRA270P0 **Occurrence Code #:** 005 **Survey Date:** 2000-08-23

**Last Observed:** 2000-08-23 **First Observed:** 2000-08-23 **Actual Mapping Precision (m):** 200 **Precision Code:** S

**Directions:** Altario, 6 km SE of

**General Description:** ephemeral wetland

**Min Elev. (m):** 716 **Max Elev. (m):** 724

**Other Comments:** 12 slender cress (R. tenerrima) at 563446E, 5750227N, Area C; 25 slender cress (R. tenerrima) at 563264E, 5750029N, Area B **Best Source of Info:** U00WAL03ABCA

**Map UTM Zone UTM Easting UTM Northing Survey Site Name Notes # Dot ID #**

72M16 12 563324 5750054 Altario 1-9-34-1-W4M 6 6302

**Source Code Author Publisher Year Title**

U00WAL03ABCA Wallis, C. Cottonwood Consultants Ltd., Calgary 2000 Natural Features Assessment, Proposed Well and Access Route Penn West Petroleum. 1-9-34-1-W4M

**Rorippa tenerrima** slender cress SRank: S1

**Ruppia cirrhosa widgeon-grass**

**Natural Region:** Northern Fescue Grassland, Foothills Fescue Grassland, Mixedgrass

**Habitat:** Wetland-Alkali

**Phenology:** detectable in July

**Specific Search Strategies (if any):** may require specialized equipment and boats to access areas where this species occurs

**Element Occurrences:**

**Element Code:** PMRUP01020 **Occurrence Code #:** 001 **Survey Date:** 1975-07-14  
**Last Observed:** 1975-07-14 **First Observed:** 1975-07-14 **Precision Code:** M  
**Directions:** Ministik Lake, SE basin, N shore; among island channels  
**General Description:** In shallow water (0.5 - 1.5m) of highly eutrophic lake  
**Min Elev. (m):** 762 **Max Elev. (m):** 762 **Slope:** 0.00  
**Other Comments:** Mapped in Moss & Packer (1983) and Packer & Bradley (1984) **Best Source of Info:** S75POTUAABCA01  
**Specimen Source Code Collector Herbarium Accession # Date ID OK? Observation Detail**  
S75POTUAABCA01 Potter, D.S. UA 86124 1975-07-14  
S75POTUAABCA02 Potter, D.S. UA 86126 1975-07-14  
**Map UTM Zone UTM Easting UTM Northing Survey Site Name Notes # Dot ID #**  
83H06 12 365050 5911650 Ministik Lake Bird Sanctuary 53 20/113 00 8 3210  
**Date Source Abstract Code Observer Occurrence Data**  
Buds, flowers & fruit; some plants uprooted by ducks  
**Ruppia cirrhosa** widgeon-grass SRank: S2  
+++++

**Element Code:** PMRUP01020 **Occurrence Code #:** 002 **Survey Date:** 1951-00-00  
**Last Observed:** 1951-00-00 **First Observed:** 1951-00-00 **Precision Code:** M  
**Directions:** Miquelon Lake No. 3  
**General Description:** In 1 m of water, electrical conductivity of water 6200 umhos/cm.  
**Min Elev. (m):** 768 **Max Elev. (m):** 768 **Slope:** 0.00 **Best Source of Info:** SNDHUSUAABCA01  
**Specimen Source Code Collector Herbarium Accession # Date ID OK? Observation Detail**  
SNDHUSUAABCA01 Husband, B. UA 98088 0000-00-00 [Emerging flowers, fruits]  
SNDHUSUAABCA02 Husband, B. UA 98089 0000-00-00 [Buds, flowers]  
SNDHUSUAABCA03 Husband, B. UA 98090 0000-00-00 [Buds, flowers, fruits]  
**Map UTM Zone UTM Easting UTM Northing Survey Site Name Notes # Dot ID #**  
83H02 12 378350 5896650 Miquelon Lake # 3 2 3184  
**Ruppia cirrhosa** widgeon-grass SRank: S2  
+++++

**Element Code:** PMRUP01020 **Occurrence Code #:** 003 **Survey Date:** 1975-07-07  
**Last Observed:** 1975-07-07 **First Observed:** 1975-07-07 **Precision Code:** M  
**Directions:** Oliver Lake, NW shore; sheltered bay  
**General Description:** In 1.0-1.25 m water  
**Min Elev. (m):** 762 **Max Elev. (m):** 762 **Slope:** 0.00  
**Management Comments:** Provincial Crown owns lake (but not entire adjacent upland) **Best Source of Info:**  
S75POTUAABCA03  
**Specimen Source Code Collector Herbarium Accession # Date ID OK? Observation Detail**  
S75POTUAABCA03 Potter, D.S. UA 86125 1975-07-07 [Buds, emerging flowers, small fruits]  
S75POTUAABCA04 Potter, D.S. UA 86127 1975-07-07 [Buds, small fruits]  
**Map UTM Zone UTM Easting UTM Northing Survey Site Name Notes # Dot ID #**  
83H06 12 365350 5907750 Oliver Lake 53 18/113 00 9 3211  
**Source Code Author Publisher Year Title**  
B83MOS01ABCA Moss, E.H. and J.G. Packer University of Toronto Press 1983 Flora of Alberta Second Edition  
B84PAC01ABCA Packer, J.G. and C.E. Bradley Provincial Museum of Alberta 1984 A checklist of the rare vascular plants of Alberta with maps.  
**Ruppia cirrhosa** widgeon-grass SRank: S2  
+++++

**Element Code:** PMRUP01020 **Occurrence Code #:** 004 **Survey Date:** 1979-07-26  
**Last Observed:** 1979-07-26 **First Observed:** 1979-07-26 **Precision Code:** M  
**Directions:** Tyrell Lake, eastern and western half of  
**General Description:** Rooted in sand at 2.5-3.0 m & occasionally at shallower depths  
**Min Elev. (m):** 970 **Max Elev. (m):** 970 **Best Source of Info:** S79RWHUAABCA01  
**Specimen Source Code Collector Herbarium Accession # Date ID OK? Observation Detail**  
S79RWHUAABCA01 RWH UA 81596 1979-07-26 Common; vegetative; immature flower buds  
**Map UTM Zone UTM Easting UTM Northing Survey Site Name Notes # Dot ID #**  
82H08 12 407000 5472000 Tyrrell Lake 2 1348  
**Ruppia cirrhosa** widgeon-grass SRank: S2  
+++++

**Element Code:** PMRUP01020 **Occurrence Code #:** 007 **Survey Date:** 1991-05-05  
**Last Observed:** 1991-05-05 **First Observed:** 1991-05-05 **Actual Mapping Precision (m):** 1500 **Precision Code:** M  
**Directions:** McIntyre Ranch; Ross Lake, near shore of  
**General Description:** growing profusely in shallow water  
**Min Elev. (m):** 1310 **Max Elev. (m):** 1310  
**Other Comments:** duplicates; access #B91.3.1b and B91,3.2 **Best Source of Info:** S91STEPMABCA01  
**Specimen Source Code Collector Herbarium Accession # Date ID OK? Observation Detail**  
S91STEPMABCA01 Steinhilber, M. PM B91.3.1a 1991-05-05 Y  
S91STEPMABCA02 Steinhilber, M. PM B91.3.1b 1991-05-05  
S91STEPMABCA03 Steinhilber, M. PM B91.3.2 1991-05-05  
**Map UTM Zone UTM Easting UTM Northing Survey Site Name Notes # Dot ID #**  
82H02 12 360000 5445000 Ross Lake 49 09N/112 54.5W 12 930  
**Ruppia cirrhosa** widgeon-grass SRank: S2

***Sagina decumbens***

**Natural Region:** Northern Fescue Grassland

**Habitat:** Unknown

**Phenology:** unknown but probably May or June

**Specific Search Strategies (if any):** likely in sandy shores of lakes

**Element Occurrences:** no EOs in ANHIC database but Moss shows a dot in the Little Fish Lake area

***Shinnersoseris (Lygodesmia) rostrata* annual skeletonweed**

**Natural Region:** Dry Mixedgrass

**Habitat:** Sand Dunes

**Phenology:** flowers in July

**Specific Search Strategies (if any):** search edges of active dunes; prefers coarser sand

**Element Occurrences:**

**Element Code:** PDAST8J010 **Occurrence Code #:** 001 **Survey Date:** 1992-07-29  
**Last Observed:** 1992-07-29 **First Observed:** 1992-07-29 **Precision Code:** M  
**Directions:** Wainwright Dune Ecological Reserve. **General Description:** Well drained sand dune.  
**Min Elev. (m):** 685 **Max Elev. (m):** 685 **Best Source of Info:** S92JOHCFABCA04  
**Specimen Source Code Collector Herbarium Accession # Date ID OK? Observation Detail**  
S92JOHCFABCA04 Johnson, J.D. CF 930282 1992-07-29 Y  
**Map UTM Zone UTM Easting UTM Northing Survey Site Name Notes # Dot ID #**  
73D10 12 526400 5827450 David Lake 4 271  
***Shinnersoseris rostrata* annual skeletonweed** SRank: S2  
+++++

**Element Code:** PDAST8J010 **Occurrence Code #:** 002 **Survey Date:** 1985-09-00  
**Last Observed:** 1985-09-00 **First Observed:** 1985-08-28 **Actual Mapping Precision (m):** 50 **Precision Code:** S  
**Directions:** USA border, 8 km N of; Lost River Valley, E slope of.  
**General Description:** on partially stabilized dunes  
**Min Elev. (m):** 861 **Max Elev. (m):** 899  
**Other Comments:** Slide #F929.086 **Best Source of Info:** S85WALUAABCA07  
**Specimen Source Code Collector Herbarium Accession # Date ID OK? Observation Detail**  
S85WALUAABCA07 Wallis, C. UA 098410 1985-08-28 Y remains of flowers, ripe fruits  
**Map UTM Zone UTM Easting UTM Northing Survey Site Name Notes # Dot ID #**  
72E02 12 535073 5435085 Lost River 20 31  
**Source Code Author Publisher Year Title**  
I85WER04ABCA Wershler, C. 1985  
R86WER01ABCA Wershler C. & C. Wallis 1986 Lost River Significant Features Assessment  
**Date Source Abstract Code Observer Occurrence Data**  
Rare  
***Shinnersoseris rostrata* annual skeletonweed** SRank: S2  
+++++

**Element Code:** PDAST8J010 **Occurrence Code #:** 003 **Survey Date:** 1995-08-26  
**Last Observed:** 1995-08-26 **First Observed:** 1995-08-26 **Precision Code:** S  
**Directions:** Alberta; Elkwater, ca. 18 km SW of; Cypress Hills plateau, W slope of; Manyberries Coulee, S side of.  
**General Description:** Xeric alkaline sandy clay loam of coulee slope base colluvial fan, with barrens meadow of *Poa secunda* - *Poa arida* - *Phlox hoodii* - *Sedum lanceolatum* - *Opuntia fragilis* - *Koeleria*..  
**Min Elev. (m):** 1116 **Max Elev. (m):** 1116 **Size of Occurrence:** **Best Source of Info:** S95MACUCABCA01  
**Specimen Source Code Collector Herbarium Accession # Date ID OK? Observation Detail**  
S95MACUCABCA01 Macdonald, I.D. UC none 1995-08-26  
**Map UTM Zone UTM Easting UTM Northing Survey Site Name Notes # Dot ID #**  
72E09 12 540474 5486081 Manyberries Creek Site 38; 49 31/110 26; LSD 7 22 118  
***Shinnersoseris rostrata* annual skeletonweed** SRank: S2  
+++++

**Element Code:** PDAST8J010 **Occurrence Code #:** 004 **Survey Date:** 1995-00-00  
**Last Observed:** 1988-00-00 **First Observed:** 1988-00-00 **Precision Code:** S  
**Directions:** Canadian Forces Base Suffield National Wildlife Area; the Middle Sands Hills  
**Min Elev. (m):** 700 **Max Elev. (m):** 700  
**Other Comments:** not recorded during the present survey - location from Wallis and Wershler (1988)  
**Management Comments:** threatened from encroachment of vegetation onto active dune blowouts and dune slacks **Best Source of Info:** U96MAC01ABCA  
**Map UTM Zone UTM Easting UTM Northing Survey Site Name Notes # Dot ID #**  
72L09 12 544800 5606700 Middle Sand Hills UTM WM 544800 / 5606700 6 220  
**Source Code Author Publisher Year Title**  
U96MAC01ABCA Macdonald, I.D. Canadian Wildlife Service, Environment Canada, Prairie and 1996 Vascular Flora of Canadian Forces Base Suffield National Wildlife Area  
**Date Source Abstract Code Observer Occurrence Data**  
scarce in SNWA, 10 plants; annual plant  
***Shinnersoseris rostrata* annual skeletonweed** SRank: S2

**Element Code:** PDAST8J010 **Occurrence Code #:** 005 **Survey Date:** 1995-00-00  
**Last Observed:** 1988-00-00 **First Observed:** 1988-00-00 **Precision Code:** S  
**Directions:** Canadian Forces Base Suffield National Wildlife Area; the Middle Sands Hills  
**Min Elev. (m):** 678 **Max Elev. (m):** 678  
**Other Comments:** not recorded during the present survey - location from Wallis and Wershler (1988) **Best Source of Info:**  
U96MAC01ABCA

**Map UTM Zone UTM Easting UTM Northing Survey Site Name Notes # Dot ID #**

72L09 12 544500 5605100 Middle Sand Hills UTM WM 544500 / 5605100 7 221

**Source Code Author Publisher Year Title**

U96MAC01ABCA Macdonald, I.D. Canadian Wildlife Service, Environment Canada, Prairie and 1996 Vascular Flora of Canadian Forces Base Suffield National Wildlife Area

**Date Source Abstract Code Observer Occurrence Data**

scarce in SNWA, low hundreds

**Shinersoseris rostrata** annual skeletonweed SRank: S2

+++++

**Element Code:** PDAST8J010 **Occurrence Code #:** 006 **Survey Date:** 1995-00-00  
**Last Observed:** 1988-00-00 **First Observed:** 1988-00-00 **Precision Code:** M  
**Directions:** Canadian Forces Base Suffield National Wildlife Area; Whitco Trail, along  
**Min Elev. (m):** 693 **Max Elev. (m):** 693  
**Other Comments:** not recorded during the present survey - location from Wallis and Wershler (1988) **Best Source of Info:**  
U96MAC01ABCA

**Map UTM Zone UTM Easting UTM Northing Survey Site Name Notes # Dot ID #**

72L09 12 540100 5603800 Middle Sand Hills UTM WM ca 540100 / 5603800 8 222

**Source Code Author Publisher Year Title**

U96MAC01ABCA Macdonald, I.D. Canadian Wildlife Service, Environment Canada, Prairie and 1996 Vascular Flora of Canadian Forces Base Suffield National Wildlife Area

**Date Source Abstract Code Observer Occurrence Data**

scarce in SNWA, odd plant

**Shinersoseris rostrata** annual skeletonweed SRank: S2

+++++

**Element Code:** PDAST8J010 **Occurrence Code #:** 007 **Survey Date:** 1995-00-00  
**Last Observed:** 1988-00-00 **First Observed:** 1988-00-00 **Precision Code:** S  
**Directions:** Canadian Forces Base Suffield National Wildlife Area; Van Will Coral area, east of  
**General Description:** Its habitat is open W- or S-facing active sand slopes & dune slack gravels, occasionally on N or E exposures & in recently stabilized areas with considerable loose sand.  
**Min Elev. (m):** 693 **Max Elev. (m):** 693  
**Other Comments:** not recorded during the present survey - location from Wallis and Wershler (1988) **Best Source of Info:**  
U96MAC01ABCA

**Map UTM Zone UTM Easting UTM Northing Survey Site Name Notes # Dot ID #**

72L07 12 524300 5575100 Cottonwood Grove UTM WL 524300 / 5575100 15 200

**Source Code Author Publisher Year Title**

U96MAC01ABCA Macdonald, I.D. Canadian Wildlife Service, Environment Canada, Prairie and 1996 Vascular Flora of Canadian Forces Base Suffield National Wildlife Area

**Date Source Abstract Code Observer Occurrence Data**

scarce in SNWA; rare in Canada; 4 plants

**Shinersoseris rostrata** annual skeletonweed SRank: S2

+++++

**Element Code:** PDAST8J010 **Occurrence Code #:** 008 **Survey Date:** 1995-00-00  
**Last Observed:** 1988-00-00 **First Observed:** 1988-00-00 **Precision Code:** S  
**Directions:** Canadian Forces Base Suffield National Wildlife Area; Van Will Coral area, east of  
**General Description:** Its habitat is open W- or S-facing active sand slopes & dune slack gravels, occasionally on N or E exposures & in recently stabilized areas with considerable loose sand.  
**Min Elev. (m):** 693 **Max Elev. (m):** 693  
**Other Comments:** not recorded during the present survey - information Wallis and Wershler (1988) **Best Source of Info:**  
U96MAC01ABCA

**Map UTM Zone UTM Easting UTM Northing Survey Site Name Notes # Dot ID #**

72L07 12 522800 5574100 Cottonwood Grove UTM WL 522800 / 5574100 16 201

**Source Code Author Publisher Year Title**

U96MAC01ABCA Macdonald, I.D. Canadian Wildlife Service, Environment Canada, Prairie and 1996 Vascular Flora of Canadian Forces Base Suffield National Wildlife Area

**Date Source Abstract Code Observer Occurrence Data**

scarce in SNWA; rare in Canada; 200 plants

**Shinersoseris rostrata** annual skeletonweed SRank: S2

+++++



**Element Code:** PDAST8J010 **Occurrence Code #:** 010 **Survey Date:** 1976-07-22  
**Last Observed:** 1976-07-22 **First Observed:** 1976-07-22 **Actual Mapping Precision (m):** 1500 **Precision Code:** M  
**Directions:** Orion, 6.5 km S of.  
**General Description:** sand dunes  
**Min Elev. (m):** 891 **Max Elev. (m):** 891 **Best Source of Info:** S76KLAUAABCA13  
**Specimen Source Code Collector Herbarium Accession # Date ID OK? Observation Detail**  
S76KLAUAABCA13 Klar, Andrew UA 80562 1976-07-22 Y dev. fruits  
**Map UTM Zone UTM Easting UTM Northing Survey Site Name Notes # Dot ID #**  
72E07 12 514073 5471133 Orion 8 88  
***Shinnersoseris rostrata*** annual skeletonweed SRank: S2  
+++++

**Element Code:** PDAST8J010 **Occurrence Code #:** 011 **Survey Date:** 1976-07-08  
**Last Observed:** 1976-07-08 **First Observed:** 1976-07-08 **Actual Mapping Precision (m):** 1000 **Precision Code:** M  
**Directions:** Dillberry Lake Provincial Park.  
**General Description:** sand dunes  
**Min Elev. (m):** 617 **Max Elev. (m):** 617 **Best Source of Info:** S76KLAUAABCA15  
**Specimen Source Code Collector Herbarium Accession # Date ID OK? Observation Detail**  
S76KLAUAABCA15 Klar, Andrew UA 79961 1976-07-08 Y flowers; appears to have galls  
**Map UTM Zone UTM Easting UTM Northing Survey Site Name Notes # Dot ID #**  
73D09 12 566900 5826100 Dillberry Lake Provincial Park 52 35/110 01 3 264  
***Shinnersoseris rostrata*** annual skeletonweed SRank: S2  
+++++

**Element Code:** PDAST8J010 **Occurrence Code #:** 012 **Survey Date:** 1993-08-00  
**Last Observed:** 1993-08-00 **First Observed:** 1993-08-00 **Actual Mapping Precision (m):** 250 **Precision Code:** S  
**Directions:** Hardisty, 2 km SW of.  
**General Description:** disturbed site on well-drained loose sand; associated with *Sporobolus cryptandrus*, *Calamovilfa longifolia*,  
*Heterotheca villosa*  
**Min Elev. (m):** 648 **Max Elev. (m):** 648  
**Other Comments:** Specimen has been collected by Cheryl Bradley. **Best Source of Info:** U99WIL02ABCA  
**Map UTM Zone UTM Easting UTM Northing Survey Site Name Notes # Dot ID #**  
73D11 12 477575 5834400 Hardisty NE35-42-10 W4M 5 5073  
**Source Code Author Publisher Year Title**  
U99WIL02ABCA Wilkinson, Kathleen 1999 Letter from K. Wilkinson to John Rintoul - at March 3, 1999  
**Date Source Abstract Code Observer Occurrence Data**  
1993-08-00 U99WIL02ABCA Cheryl Bradley two to five plants, healthy and fruiting  
***Shinnersoseris rostrata*** annual skeletonweed SRank: S2

***Sisyrinchium septentrionale* pale blue-eyed grass**

**Natural Region:** Northern Fescue Grassland, Foothills Fescue Grassland, Mixedgrass, Dry Mixedgrass

**Habitat:** Wetland-Meadow

**Phenology:** flowers in May and early June

**Specific Search Strategies (if any):** detectable later in the year, at least into early August; wide area searches in moist meadows, searching for microfeatures such as seepage, swales

**Element Occurrences:**

**Element Code:** PMIRI0D180 **Occurrence Code #:** 001 **Survey Date:** 1954-07-10  
**Last Observed:** 1954-07-10 **First Observed:** 1953-07-17 **Actual Mapping Precision (m):** 2500 **Precision Code:** M  
**Directions:** Conrich  
**General Description:** moist meadow  
**Min Elev. (m):** 1060 **Max Elev. (m):** 1060 **Best Source of Info:** S53SEXALABCA03  
**Specimen Source Code Collector Herbarium Accession # Date ID OK? Observation Detail**  
S53SEXALABCA03 Sexsmith, J.J. AL 3966 1953-07-17 Y fruiting  
S53SEXUAABCA03 Sexsmith, J.J. UA 5215 1953-07-17 Y fruits  
S54MCCUAABCA03 McCalla, W.C. UA 49249 1954-07-10 Y well-dev. fruits; "the few flowers seen were white or almost so"  
**Map UTM Zone UTM Easting UTM Northing Survey Site Name Notes # Dot ID #**  
82P04 12 300000 5664000 Conrich 2 2277  
***Sisyrinchium septentrionale* pale blue-eyed grass SRank:** S2S3  
+++++

**Element Code:** PMIRI0D180 **Occurrence Code #:** 002 **Survey Date:** 1966-03-22  
**Last Observed:** 1966-03-22 **First Observed:** 1966-03-22 **Precision Code:** M  
**Directions:** Fort Macleod, 5 miles NW of  
**General Description:** moist prairie  
**Min Elev. (m):** 945 **Max Elev. (m):** 945  
**Other Comments:** verified by Kathleen Wilkinson 97/3/12 **Best Source of Info:** S66ALLALABCA04  
**Specimen Source Code Collector Herbarium Accession # Date ID OK? Observation Detail**  
S66ALLALABCA04 Allen, T. D. and R. G. Gschaid AL 1996 1966-06-22 Y blooming  
**Map UTM Zone UTM Easting UTM Northing Survey Site Name Notes # Dot ID #**  
82H14 12 336000 5515000 Pearce 6 1395  
***Sisyrinchium septentrionale* pale blue-eyed grass SRank:** S2S3  
+++++

**Element Code:** PMIRI0D180 **Occurrence Code #:** 003 **Survey Date:** 1925-07-05  
**Last Observed:** 1925-07-05 **First Observed:** 1901-07-06 **Precision Code:** M  
**Directions:** Banff National Park, Tunnel Mountain flats  
**Min Elev. (m):** 1372 **Max Elev. (m):** 1372 **Best Source of Info:** S01SANUCABCA03  
**Specimen Source Code Collector Herbarium Accession # Date ID OK? Observation Detail**  
S01SANPMABCA01 Sanson, N.B. PM 1901-07-06 Y  
S01SANUCABCA03 Sanson, N. UC none 1901-07-06 Y blooming  
S25MALNMONCA80 Malte, M.O. & W. R. Watson NM 14999 1925-07-05  
**Map UTM Zone UTM Easting UTM Northing Survey Site Name Notes # Dot ID #**  
82Q04 11 602100 5671200 Banff Townsite 148 2049  
***Sisyrinchium septentrionale* pale blue-eyed grass SRank:** S2S3  
+++++

**Element Code:** PMIRI0D180 **Occurrence Code #:** 004 **Survey Date:** 1976-05-27  
**Last Observed:** 1976-05-27 **First Observed:** 1976-05-27 **Precision Code:** M  
**Directions:** south of Alberta Bow River Bridge, east side of Bow River  
**Min Elev. (m):** 1006 **Max Elev. (m):** 1021  
**Other Comments:** ID'd as *S. sarmentosum* Suksd. (= *S. septentrionale*); verified by KW Jan. 31/97 **Best Source of Info:**  
S76JOHUCABCA05  
**Specimen Source Code Collector Herbarium Accession # Date ID OK? Observation Detail**  
S76JOHUCABCA05 Johnson, J.D. UC 06915 1976-05-27 Y blooming  
**Map UTM Zone UTM Easting UTM Northing Survey Site Name Notes # Dot ID #**  
82I13 12 289725 5641000 Bow River ca 50 53/113 59 4 1425  
***Sisyrinchium septentrionale* pale blue-eyed grass SRank:** S2S3  
+++++

**Element Code:** PMIRI0D180 **Occurrence Code #:** 005 **Survey Date:** 1977-05-23  
**Last Observed:** 1977-05-23 **First Observed:** 1975-06-22 **Precision Code:** M  
**Directions:** NW Calgary, Montgomery Flats, close to Bow River  
**Min Elev. (m):** 1067 **Max Elev. (m):** 1067 **Best Source of Info:** S77ALLUCABCA01  
**Specimen Source Code Collector Herbarium Accession # Date ID OK? Observation Detail**  
S75HALUCABCA01 Hallworth, B.M. UC 06917 1975-06-22 Y blooming  
S77ALLUCABCA01 Allen, D. UC 06918 1977-05-23 Y blooming  
**Map UTM Zone UTM Easting UTM Northing Survey Site Name Notes # Dot ID #**  
82O01 11 698300 5661200 Calgary - Montgomery 27 1876  
***Sisyrinchium septentrionale*** pale blue-eyed grass SRank: S2S3  
+++++

**Element Code:** PMIRI0D180 **Occurrence Code #:** 006 **Survey Date:** 1972-08-04  
**Last Observed:** 1972-08-04 **First Observed:** 1972-08-04 **Precision Code:** M  
**Directions:** Calgary, Glenmore Natural Area  
**General Description:** moist soil  
**Min Elev. (m):** 1082 **Max Elev. (m):** 1082 **Best Source of Info:** S72DANUCABCA02  
**Specimen Source Code Collector Herbarium Accession # Date ID OK? Observation Detail**  
S72DANUCABCA02 Danielson, B. UC 06916 1972-08-04 Y blooming  
**Map UTM Zone UTM Easting UTM Northing Survey Site Name Notes # Dot ID #**  
82J16 11 700000 5652325 Calgary - Glenmore Park 51 03/114 05 [disagree with site description and twp information vdd] 17 1711  
***Sisyrinchium septentrionale*** pale blue-eyed grass SRank: S2S3  
+++++

**Element Code:** PMIRI0D180 **Occurrence Code #:** 007 **Survey Date:** 1981-06-18  
**Last Observed:** 1981-06-18 **First Observed:** 1981-06-18 **Precision Code:** M  
**Directions:** Calgary, University Heights and Shaganappi Trail, between  
**General Description:** disturbed prairie; elev. 3600'  
**Min Elev. (m):** 1097 **Max Elev. (m):** 1097 **Best Source of Info:** S81MACUCABCA01  
**Specimen Source Code Collector Herbarium Accession # Date ID OK? Observation Detail**  
S81MACUCABCA01 Macdonald, S. Ellen UC 37488 1981-06-18 Y blooming  
S81STEUACABCA01 Stewart, Elaine UC 37684 1981-06-18 Y blooming  
**Map UTM Zone UTM Easting UTM Northing Survey Site Name Notes # Dot ID #**  
82O01 11 700000 5662000 Calgary - University Heights 28 1877  
***Sisyrinchium septentrionale*** pale blue-eyed grass SRank: S2S3  
+++++

**Element Code:** PMIRI0D180 **Occurrence Code #:** 008 **Survey Date:** 1980-07-05  
**Last Observed:** 1980-07-05 **First Observed:** 1980-07-05 **Precision Code:** M  
**Directions:** Calgary, Nosehill  
**General Description:** open grassland, prairie habitat  
**Min Elev. (m):** 1226 **Max Elev. (m):** 1226 **Best Source of Info:** S80CHIUCABCA03  
**Specimen Source Code Collector Herbarium Accession # Date ID OK? Observation Detail**  
S80CHIUCABCA03 Chinnappa, C.C. & B.G. Warner UC 44845 1980-07-05 Y blooming  
**Map UTM Zone UTM Easting UTM Northing Survey Site Name Notes # Dot ID #**  
82O01 11 702000 5666675 Calgary - Nosehill 29 1878  
***Sisyrinchium septentrionale*** pale blue-eyed grass SRank: S2S3  
+++++

**Element Code:** PMIRI0D180 **Occurrence Code #:** 009 **Survey Date:** 1977-07-01  
**Last Observed:** 1977-07-01 **First Observed:** 1977-07-01 **Actual Mapping Precision (m):** 1800 **Precision Code:** M  
**Directions:** Kirriemuir, 5 km N of.  
**Min Elev. (m):** 732 **Max Elev. (m):** 732 **Best Source of Info:** S77COLPMABCA02  
**Specimen Source Code Collector Herbarium Accession # Date ID OK? Observation Detail**  
S77COLPMABCA02 Cole, J. PM B78.6.32 1977-07-01 Y depauperate specimen  
**Map UTM Zone UTM Easting UTM Northing Survey Site Name Notes # Dot ID #**  
72M16 12 548000 5757300 Kirriemuir 51 58/110 18 1 260  
***Sisyrinchium septentrionale*** pale blue-eyed grass SRank: S2S3  
+++++

**Element Code:** PMIRI0D180 **Occurrence Code #:** 010 **Survey Date:** 1972-07-27  
**Last Observed:** 1972-07-27 **First Observed:** 1972-07-27 **Actual Mapping Precision (m):** 600 **Precision Code:** M  
**Directions:** Kleskun Hill NA.  
**General Description:** open area, low on NE-facing slope  
**Min Elev. (m):** 732 **Max Elev. (m):** 732 **Aspect:** NE **Best Source of Info:** S72HRAPMABCA07  
**Specimen Source Code Collector Herbarium Accession # Date ID OK? Observation Detail**  
S72HRAPMABCA07 Hrapko, J.O. & R. J. Maltais PM B72.23.51 1972-07-27 Y fruits, one white flower; narrow leaves  
**Map UTM Zone UTM Easting UTM Northing Survey Site Name Notes # Dot ID #**  
83M07 11 404400 6124650 Kleskun Hill NA 55 16/118 30; SW 1/4 26-72-4 W6M 2 3582  
**Sisyrinchium septentrionale** pale blue-eyed grass SRank: S2S3  
+++++

**Element Code:** PMIRI0D180 **Occurrence Code #:** 012 **Survey Date:** 1999-06-09  
**Last Observed:** 1999-06-09 **First Observed:** 1997-07-09 **Actual Mapping Precision (m):** 250 **Precision Code:** S  
**Directions:** Schuler; 13.5 km NW of.; Hwy 41; ~ 8 km W of.  
**General Description:** 12off/on RoW i; in dry mixed grass prairie: Agro das, Care obt, Care ste, Symp occ (scattered), Arte lud.  
Assoc. species: Sisymon, Grin squ, Vici ame, Ther rho, Cala mon, Rati col, Comm pal, Stip vir, Koel mac, Vici ame, Bout gra.  
**Min Elev. (m):** 800 **Max Elev. (m):** 800 **Best Source of Info:** U97AXY03ABCA  
**Map UTM Zone UTM Easting UTM Northing Survey Site Name Notes # Dot ID #**  
72L08 12 556350 5587100 White Rock Coulee 5 & 12-15-17-2-W4 16 3913  
**Source Code Author Publisher Year Title**  
U97AXY03ABCA AXYS Environmental Consulting Ltd. 1997 AEC Suffield Pipeline  
U99BUS02ABCA Bush, Dana 1999 Axs Environmental Consulting Ltd.- Rare Native Plant Report Forms  
**Date Source Abstract Code Observer Occurrence Data**  
1999-06-09 U99BUS02ABCA Dana Bush > 300 plants in an area 30 m x 15 m, 6 veg.; 10 reprod., some (20%) still in flower, some  
capsules (10%) open, in discrete patches on old pipe roach  
**Sisyrinchium septentrionale** pale blue-eyed grass SRank: S2S3  
+++++

**Element Code:** PMIRI0D180 **Occurrence Code #:** 013 **Survey Date:** 1995-06-02  
**Last Observed:** 1995-07-17 **First Observed:** 1995-06-02 **Actual Mapping Precision (m):** 250 **Precision Code:** S  
**Directions:** Onefour, 15 km SE of; Hwy 48, 2.70 km W of; Rd to Onefour, 150 m S of.  
**General Description:** Small drainage with temporal ponds at base of low slope. Heavily grazed (up to 80% blue gramma in  
patches). No moisture in depressions June 2, ponded at several locations July 17. Symph alb-Dart cana-Arte frigi-Rosa sp.-  
Bout gra-Stipa coma  
**Min Elev. (m):** 876 **Max Elev. (m):** 876 **Aspect:** N  
**Other Comments:** Desch cesp-Hord jub- Grind squa var.serrata-Grind squa var.quasiperennis-Therm rhom-Antparv-Cirs sp.-  
Erigeron sp. Gaura cocc-Orth lut-Ach mill-Ali text-Ast sp.-Gail arist-Lin lewis-Phlox hoodii-Ratibida columnifera **Best Source  
of Info:** B95WIL01ABCA  
**Map UTM Zone UTM Easting UTM Northing Survey Site Name Notes # Dot ID #**  
72E01 12 552000 5433700 Milk River Lake LS#64,km:425.3,LLD:NW 14-24 1-3-4. 17 3956  
**Source Code Author Publisher Year Title**  
B95WIL01ABCA J. Williams Consulting & Axs Environmental Consulting Ltd Express Pipelines Ltd 1995 Rare Plant Surveys along  
the Proposed Express Pipeline Project  
**Sisyrinchium septentrionale** pale blue-eyed grass SRank: S2S3  
+++++

**Element Code:** PMIRI0D180 **Occurrence Code #:** 014 **Survey Date:** 1995-06-02  
**Last Observed:** 1995-06-02 **First Observed:** 1995-06-02 **Actual Mapping Precision (m):** 250 **Precision Code:** S  
**Directions:** Cressday, 8.75 km SW of; Sage Creek, 100 m N on tributary of  
**General Description:** Symphoricarpos occidentalis-Artemisia (prob cana.)-Equisetum arvense-Opuntia polyacantha-Potentilla  
anserina  
**Min Elev. (m):** 900 **Max Elev. (m):** 900  
**Slope:** 10.00 **Aspect:** sw **Best Source of Info:** B95WIL01ABCA  
**Map UTM Zone UTM Easting UTM Northing Survey Site Name Notes # Dot ID #**  
72E01 12 552200 5446200 Sage Creek LS # 45-301.2-SW 26 12 8 4 18 3954  
**Source Code Author Publisher Year Title**  
B95WIL01ABCA J. Williams Consulting & Axs Environmental Consulting Ltd Express Pipelines Ltd 1995 Rare Plant Surveys along  
the Proposed Express Pipeline Project  
**Sisyrinchium septentrionale** pale blue-eyed grass SRank: S2S3  
+++++

**Element Code:** PMIRI0D180 **Occurrence Code #:** 015 **Survey Date:** 1996-00-00  
**Last Observed:** 1996-00-00 **First Observed:** 1996-00-00 **Actual Mapping Precision (m):** 500 **Precision Code:** M  
**Directions:** Manyberries; ~32.5 km NE of; Sage Creek; ~9.25 km N of; road ~950 m N of.  
**General Description:** S shore of wetland  
**Min Elev. (m):** 1067 **Max Elev. (m):** 1067 **Best Source of Info:** U96EXP01ABCA  
**Map UTM Zone UTM Easting UTM Northing Survey Site Name Notes # Dot ID #**  
72E07 12 535123 5482681 Sage Creek LS# 56; km:370.9; LLD: SW 29 6-4-4 19 4059  
**Source Code Author Publisher Year Title**  
U96EXP01ABCA AXYS Environmental Consulting 1996 Express Pipeline Project  
**Sisyrinchium septentrionale** pale blue-eyed grass SRank: S2S3  
+++++

**Element Code:** PMIRI0D180 **Occurrence Code #:** 016 **Survey Date:** 1996-00-00  
**Last Observed:** 1996-00-00 **First Observed:** 1996-00-00 **Actual Mapping Precision (m):** 500 **Precision Code:** M  
**Directions:** Cressday; ~9 km SW of; Sage Creek on N side of.  
**General Description:** 60m E of RoW, N of Sage Creek  
**Min Elev. (m):** 899 **Max Elev. (m):** 899 **Best Source of Info:** U96EXP01ABCA  
**Map UTM Zone UTM Easting UTM Northing Survey Site Name Notes # Dot ID #**  
72E01 12 551775 5446400 Sage Creek LS#62; km:412.8; LLD:NW 36 2-3-4 31 4060  
**Source Code Author Publisher Year Title**  
U96EXP01ABCA AXYS Environmental Consulting 1996 Express Pipeline Project  
**Sisyrinchium septentrionale** pale blue-eyed grass SRank: S2S3  
+++++

**Element Code:** PMIRI0D180 **Occurrence Code #:** 017 **Survey Date:** 1996-00-00  
**Last Observed:** 1996-00-00 **First Observed:** 1996-00-00 **Actual Mapping Precision (m):** 250 **Precision Code:** S  
**Directions:** Onefour; 15 km SE of; Hwy 48; 2.7 km W of; Road to Onefour; 150 m S of.  
**Min Elev. (m):** 876 **Max Elev. (m):** 876  
**Other Comments:** 10m W of RoW in 1995. Results of Mitigation: Off RoW. Population avoided. **Best Source of Info:**  
U96EXP01ABCA  
**Map UTM Zone UTM Easting UTM Northing Survey Site Name Notes # Dot ID #**  
72E01 12 552000 5433700 Milk River Lake LS#64;km:425.3;LLD:NW 14-24 1-3-4. 17 3956  
**Source Code Author Publisher Year Title**  
U96EXP01ABCA AXYS Environmental Consulting 1996 Express Pipeline Project  
**Sisyrinchium septentrionale** pale blue-eyed grass SRank: S2S3  
+++++

**Element Code:** PMIRI0D180 **Occurrence Code #:** 018 **Survey Date:** 1996-00-00  
**Last Observed:** 1996-00-00 **First Observed:** 1996-00-00 **Actual Mapping Precision (m):** 250 **Precision Code:** S  
**Directions:** Buffalo Lake, 2.5 km SW of; Peigon Creek, 1.75 km  
**Min Elev. (m):** 1090 **Max Elev. (m):** 1090 **Best Source of Info:** U96EXP01ABCA  
**Map UTM Zone UTM Easting UTM Northing Survey Site Name Notes # Dot ID #**  
72E10 12 530249 5494206 Buffalo Lake LS# 54; km:358.7; LLD: SW 6-35 7-5-4 18 4031  
**Source Code Author Publisher Year Title**  
U96EXP01ABCA AXYS Environmental Consulting 1996 Express Pipeline Project  
**Sisyrinchium septentrionale** pale blue-eyed grass SRank: S2S3  
+++++

**Element Code:** PMIRI0D180 **Occurrence Code #:** 019 **Survey Date:** 1927-07-04  
**Last Observed:** 1927-07-04 **First Observed:** 1927-07-04 **Actual Mapping Precision (m):** 2500 **Precision Code:** M  
**Directions:** Calgary; ~12.5 km SSE of; Hwy 2; ~2 km S of.  
**Min Elev. (m):** 1097 **Max Elev. (m):** 1097 **Best Source of Info:** S27MOSNMONCA01  
**Specimen Source Code Collector Herbarium Accession # Date ID OK? Observation Detail**  
S27MOSNMONCA01 Moss, E.H. NM 119580 1927-07-04  
**Map UTM Zone UTM Easting UTM Northing Survey Site Name Notes # Dot ID #**  
82J16 11 710550 5634050 DeWinton 1 4375  
**Sisyrinchium septentrionale** pale blue-eyed grass SRank: S2S3  
+++++

**Element Code:** PMIRI0D180 **Occurrence Code #:** 020 **Survey Date:** 1926-07-19  
**Last Observed:** 1926-07-19 **First Observed:** 1926-07-19 **Actual Mapping Precision (m):** 2500 **Precision Code:** M  
**Directions:** Sand Point; ~14.25 km SSW of; Shelter Point.  
**General Description:** stony shore  
**Min Elev. (m):** 213 **Max Elev. (m):** 213 **Best Source of Info:** S26RAUNMONCA01  
**Specimen Source Code Collector Herbarium Accession # Date ID OK? Observation Detail**  
S26RAUNMONCA01 Raup, H.M. NM 310806 1926-07-19  
**Map UTM Zone UTM Easting UTM Northing Survey Site Name Notes # Dot ID #**  
74L15 12 510200 6520800 Shelter Point 58 50' N, 110 50' W. 8 4377  
***Sisyrinchium septentrionale*** pale blue-eyed grass SRank: S2S3  
+++++

**Element Code:** PMIRI0D180 **Occurrence Code #:** 021 **Survey Date:** 1914-10-06  
**Last Observed:** 1914-10-06 **First Observed:** 1914-10-06 **Actual Mapping Precision (m):** 2500 **Precision Code:** M  
**Directions:** Parallel Creek; ~2.9 km N of mouth of; Pelican River; ~4.2 km SSE of.  
**Min Elev. (m):** 457 **Max Elev. (m):** 457 **Best Source of Info:** S14HARNMONCA02  
**Specimen Source Code Collector Herbarium Accession # Date ID OK? Observation Detail**  
S14HARNMONCA02 Harper, Francis NM 267874 1914-10-06  
**Map UTM Zone UTM Easting UTM Northing Survey Site Name Notes # Dot ID #**  
83P15 12 397650 6184700 Athabasca River - Pelican Portage 1 4378  
***Sisyrinchium septentrionale*** pale blue-eyed grass SRank: S2S3  
+++++

**Element Code:** PMIRI0D180 **Occurrence Code #:** 022 **Survey Date:** 1897-06-21  
**Last Observed:** 1897-06-21 **First Observed:** 1897-06-21 **Actual Mapping Precision (m):** 2500 **Precision Code:** M  
**Directions:** Rocky Mountains; Elbow River.  
**General Description:** where water has laid in spring  
**Min Elev. (m):** 1311 **Max Elev. (m):** 1311 **Best Source of Info:** S97MACNMONCA31  
**Specimen Source Code Collector Herbarium Accession # Date ID OK? Observation Detail**  
S97MACNMONCA31 Macoun, J. NM 15034 1897-06-21  
**Map UTM Zone UTM Easting UTM Northing Survey Site Name Notes # Dot ID #**  
82J15 11 670600 5646600 Bragg Creek 24 1692  
***Sisyrinchium septentrionale*** pale blue-eyed grass SRank: S2S3  
+++++

**Element Code:** PMIRI0D180 **Occurrence Code #:** 023 **Survey Date:** 1951-00-00  
**Last Observed:** 1951-00-00 **First Observed:** 1951-00-00 **Actual Mapping Precision (m):** 1600 **Precision Code:** M  
**Directions:** Astotin Lake; ~3.5 km W of; Good Hope; ~2.75 km NNE of.  
**General Description:** large sand pit  
**Min Elev. (m):** 700 **Max Elev. (m):** 700 **Best Source of Info:** SNDSHENMONCA01  
**Specimen Source Code Collector Herbarium Accession # Date ID OK? Observation Detail**  
SNDSHENMONCA01 Shetler, Stanwyn G. & Karl J. Stone NM 297295 0000-00-00  
**Map UTM Zone UTM Easting UTM Northing Survey Site Name Notes # Dot ID #**  
83H10 12 373350 5949700 Elk Island-Good Hope 53 41' N, 112 55' W 103 4387  
***Sisyrinchium septentrionale*** pale blue-eyed grass SRank: S2S3  
+++++

**Element Code:** PMIRI0D180 **Occurrence Code #:** 024 **Survey Date:** 1968-06-11  
**Last Observed:** 1968-06-11 **First Observed:** 1968-06-11 **Actual Mapping Precision (m):** 2500 **Precision Code:** M  
**Directions:** Mount William Booth, 7 km W of; Eliot Peak, 6 km SE of; Kootenay Plains.  
**General Description:** grassy flat by roadside and edge of woods  
**Min Elev. (m):** 1340 **Max Elev. (m):** 1340 **Best Source of Info:** S68DUMUAABCA24  
**Specimen Source Code Collector Herbarium Accession # Date ID OK? Observation Detail**  
S68DUMUAABCA24 Dumais, M.G., Anderson, K. UA 28532 1968-06-11 Y flowers; white flowers  
**Map UTM Zone UTM Easting UTM Northing Survey Site Name Notes # Dot ID #**  
83C01 11 539900 5770600 Kootenay Plains 26 4481  
***Sisyrinchium septentrionale*** pale blue-eyed grass SRank: S2S3  
+++++

**Element Code:** PMIRI0D180 **Occurrence Code #:** 025 **Survey Date:** 1999-06-17  
**Last Observed:** 1999-06-17 **First Observed:** 1998-06-11 **Actual Mapping Precision (m):** 50 **Precision Code:** S  
**Directions:** Ross Lake, 4.5 km S of; North Milk River, ~4 km N of.  
**General Description:** transition areas between riparian and slopes, occasional upland sites; aspect various, slope slight and moisture moderate; Rosa sp., Poa pratensis, Potentilla fruticosa, Juncus spp., Fragaria virginiana, Geum triflorum  
**Min Elev. (m):** 1325 **Max Elev. (m):** 1370 **Best Source of Info:** U98ERN01ABCA  
**Map UTM Zone UTM Easting UTM Northing Survey Site Name Notes # Dot ID #**  
82H02 12 359050 5440550 Ross Lake 7-2-22 W4M 28 5041  
**Source Code Author Publisher Year Title**  
U98ERN01ABCA Ernst, Reg 1998 Ross Grassland Natural Area - Results of 1998 Rare Plant Survey  
U99ERN02ABCA Ernst, Reg 1999 Email to J. Gould  
**Date Source Abstract Code Observer Occurrence Data**  
1998-06-11 U98ERN01ABCA Reg Ernst 118 on one site, other scattered small populations; 118 flowering  
1999-06-17 U99ERN02ABCA Reg Ernst in bloom  
**Sisyrinchium septentrionale** pale blue-eyed grass SRank: S2S3  
+++++

**Element Code:** PMIRI0D180 **Occurrence Code #:** 026 **Survey Date:** 1998-06-11  
**Last Observed:** 1998-06-11 **First Observed:** 1998-06-11 **Actual Mapping Precision (m):** 100 **Precision Code:** S  
**Directions:** North Milk River, 6 km N of; Ross Lake, ~2.5 km SE of.  
**General Description:** transition area between riparian and slopes; Rosa sp., Poa pratensis, Potentilla fruticosa, Juncus spp., Fragaria virginiana, Geum triflorum  
**Min Elev. (m):** 1310 **Max Elev. (m):** 1310 **Best Source of Info:** U98ERN01ABCA  
**Map UTM Zone UTM Easting UTM Northing Survey Site Name Notes # Dot ID #**  
82H02 12 361000 5442775 Ross Lake 17-2-22 W4M 35 5048  
**Source Code Author Publisher Year Title**  
U98ERN01ABCA Ernst, Reg 1998 Ross Grassland Natural Area - Results of 1998 Rare Plant Survey  
**Sisyrinchium septentrionale** pale blue-eyed grass SRank: S2S3  
+++++

**Element Code:** PMIRI0D180 **Occurrence Code #:** 027 **Survey Date:** 1999-08-17  
**Last Observed:** 1999-08-17 **First Observed:** 1997-06-15 **Actual Mapping Precision (m):** 100 **Precision Code:** S  
**Directions:** Cappon, 12.5 km NE of; Hwy 886, 8.75 km E of.  
**General Description:** south end of ephemeral wetland in dry mixed grassland between buckbrush-Distichlis communities; Poa palu-Carex sp.-Dist str.; 2 degree slope  
**Min Elev. (m):** 808 **Max Elev. (m):** 808  
**Management Comments:** Stake boundaries around areas to be protected. **Best Source of Info:** U99GOL01ABCA  
**Map UTM Zone UTM Easting UTM Northing Survey Site Name Notes # Dot ID #**  
72M02 12 523250 5650000 Cappon 11-32-23-05-W4M, Lat 51 0.15' Lon 110 40.10' 1 5330  
**Source Code Author Publisher Year Title**  
U99GOL01ABCA Golder Associates & Boss environmental consulting ltd. 1999 Alberta Ethane Gathering System (AEGS) Looping Project - East Leg Conservation and Reclamation Plan vol. 2 (Empress to Hanna)  
**Date Source Abstract Code Observer Occurrence Data**  
1997-06-15 1 flowering adult  
1999-08-17 U99GOL01ABCA 1 individual sighted  
**Sisyrinchium septentrionale** pale blue-eyed grass SRank: S2S3  
+++++

**Element Code:** PMIRI0D180 **Occurrence Code #:** 028 **Survey Date:** 1999-08-11  
**Last Observed:** 1999-08-11 **First Observed:** 1999-08-11 **Actual Mapping Precision (m):** 250 **Precision Code:** S  
**Directions:** Schuler; ~13 km NW of.; Hwy 41; ~ 8.5 km W of. AEC compressor station, SW of.  
**General Description:** in depressional wetland, narrow strip between Agro sca edge of wet depression and upland Stipa-Carex stenophyla community type; Agro smi, Agro sca, Stip vir, Care ste, Sisy mon; moderately well drained  
**Min Elev. (m):** 808 **Max Elev. (m):** 808  
**Management Comments:** Pipeline construction: this wetland has numerous rare species (Elan tri, Hype maj, Cent min, Lila sci reported in '97/98 **Best Source of Info:** U99BUS02ABCA  
**Map UTM Zone UTM Easting UTM Northing Survey Site Name Notes # Dot ID #**  
72L08 12 555100 5585100 White Rock Coulee Lat 50 deg 24 min 98 sec, Long 110 deg 13 min 22 s W - 6-9-17-2-W4M 15 3908  
**Source Code Author Publisher Year Title**  
U99BUS02ABCA Bush, Dana 1999 Axy's Environmental Consulting Ltd.- Rare Native Plant Report Forms  
**Date Source Abstract Code Observer Occurrence Data**  
1999-08-11 U99BUS02ABCA Dana Bush hundreds of plants; veg = 6, repr. = 8  
**Sisyrinchium septentrionale** pale blue-eyed grass SRank: S2S3  
+++++

**Element Code:** PMIRI0D180 **Occurrence Code #:** 029 **Survey Date:** 2000-06-16  
**Last Observed:** 2000-06-16 **First Observed:** 2000-06-16 **Actual Mapping Precision (m):** 250 **Precision Code:** S  
**Directions:** Kootenay Plains ER; Two O'clock Creek campground; slope above campsites  
**General Description:** open forest of aspen-white spruce-(few) lodgepole pine/Shep can-Juni com-Roasa-Arct uva-graminoid-forb on dry sandy soil  
**Min Elev. (m):** 1387 **Max Elev. (m):** 1387 **Aspect:** E  
**Other Comments:** Det. by gp on Botany AB trip # 3: P Cotterill, J Posey, D Downing, etc. **Best Source of Info:** F00COT01ABCA  
**Map UTM Zone UTM Easting UTM Northing Survey Site Name Notes # Dot ID #**  
83C01 11 539750 5768000 Kootenay Plains 29 6098  
**Source Code Author Publisher Year Title**  
F00COT01ABCA P. J. Cotterill 2000 Field Notes for 2000  
**Date Source Abstract Code Observer Occurrence Data**  
2000-06-16 F00COT01ABCA Botany AB # 3 group ca. 12 plants scattered in sandy grassland along trail; flowers closed, perhaps post-mature  
**Sisyrinchium septentrionale** pale blue-eyed grass SRank: S2S3  
+++++

**Element Code:** PMIRI0D180 **Occurrence Code #:** 030 **Survey Date:** 2000-06-17  
**Last Observed:** 2000-06-17 **First Observed:** 2000-06-17 **Actual Mapping Precision (m):** 250 **Precision Code:** S  
**Directions:** Kootenay Plains; trail to Siffleur Falls from S.F. staging area; across bridge over Siffleur R; small side channel near trail  
**General Description:** grassy calcareous flat with almost continuous vegetation, alongside slow channel of river  
**Min Elev. (m):** 1364 **Max Elev. (m):** 1364  
**Slope:** 0.00  
**Other Comments:** 1 or 2 plants seen; fls seemed closed despite full sun; det. by Botany AB # 3 group **Best Source of Info:** F00COT01ABCA  
**Map UTM Zone UTM Easting UTM Northing Survey Site Name Notes # Dot ID #**  
83C01 11 542118 5766123 Kootenay Plains - Siffleur River 52 02 46/116 23 13 accord. to GPS reading 30 6099  
**Source Code Author Publisher Year Title**  
F00COT01ABCA P. J. Cotterill 2000 Field Notes for 2000  
**Date Source Abstract Code Observer Occurrence Data**  
2000-06-17 F00COT01ABCA P Cotterill & Botany AB # 3 gp  
**Sisyrinchium septentrionale** pale blue-eyed grass SRank: S2S3  
+++++

**Element Code:** PMIRI0D180 **Occurrence Code #:** 031 **Survey Date:** 2000-06-16  
**Last Observed:** 2000-06-16 **First Observed:** 2000-06-16 **Actual Mapping Precision (m):** 50 **Precision Code:** S  
**Directions:** Kootenay Plains; Whirlpool Pt; E side of road (W bank of N. Sask. River)  
**General Description:** scattered in open Pinus flexilis forest; dry sandy soil  
**Min Elev. (m):** 1400 **Max Elev. (m):** 1400 **Size of Occurrence:** **Best Source of Info:** F00COT01ABCA  
**Map UTM Zone UTM Easting UTM Northing Survey Site Name Notes # Dot ID #**  
83C01 11 536400 5761400 Kootenay Plains Ecological Reserve 22 2432  
**Source Code Author Publisher Year Title**  
F00COT01ABCA P. J. Cotterill 2000 Field Notes for 2000  
**Date Source Abstract Code Observer Occurrence Data**  
2000-06-16 F00COT01ABCA P Cotterill & Botany AB # 3 Group A few specimens, flowers closed up  
**Sisyrinchium septentrionale** pale blue-eyed grass SRank: S2S3



***Spartina pectinata* prairie cord grass**

**Natural Region:** Mixedgrass, Dry Mixedgrass

**Habitat:** Wetland-Alkali

**Phenology:** heads out in early July

**Specific Search Strategies (if any):** search along seasonal streams with alkali seepage and sandy substrates; appears to prefer more permanent water than other species

**Element Occurrences:**

**Element Code:** PMPOA5S090 **Occurrence Code #:** 001 **Survey Date:** 1991-07-28  
**Last Observed:** 1991-07-28 **First Observed:** 1989-10-16 **Actual Mapping Precision (m):** 100 **Precision Code:** S  
**Directions:** La Saline Natural Area.

**General Description:** Puccinella-Hordeum-Salicornia saline meadow, hygic but physiologically xeric.

**Min Elev. (m):** 240 **Max Elev. (m):** 240 **Best Source of Info:** S91TIMPPABCA03

**Specimen Source Code Collector Herbarium Accession # Date ID OK? Observation Detail**

S89SCHUAABCA01 Schwarz, A. & B. Wright UA none 1989-10-06 Fruits

S91TIMPPABCA03 Timoney, K. PP 804 1991-07-28

**Map UTM Zone UTM Easting UTM Northing Survey Site Name Notes # Dot ID #**

74E04 12 469150 6325450 La Saline Natural Area LSD 16 7 414

**Source Code Author Publisher Year Title**

R91TIM01ABCA Timoney, Kevin P and Anne L. Robinson Alberta Forestry, Lands and Wildlife 1991 Biophysical Inventory of the La Saline Natural Area

***Spartina pectinata* prairie cord grass SRank:** S1

+++++

**Element Code:** PMPOA5S090 **Occurrence Code #:** 005 **Survey Date:** 1996-00-00  
**Last Observed:** 1996-00-00 **First Observed:** 1996-00-00 **Actual Mapping Precision (m):** 250 **Precision Code:** S  
**Directions:** Bowell; ~15km SW of; S. Saskatchewan River; on N shore of.

**Min Elev. (m):** 671 **Max Elev. (m):** 671 **Best Source of Info:** U96EXP01ABCA

**Map UTM Zone UTM Easting UTM Northing Survey Site Name Notes # Dot ID #**

72L02 12 500219 5540404 Bowell SW 3-26 12-8-4 18 3960

**Source Code Author Publisher Year Title**

U96EXP01ABCA AXYS Environmental Consulting 1996 Express Pipeline Project

***Spartina pectinata* prairie cord grass SRank:** S1

+++++

**Element Code:** PMPOA5S090 **Occurrence Code #:** 006 **Survey Date:** 1996-00-00  
**Last Observed:** 1996-00-00 **First Observed:** 1996-00-00 **Actual Mapping Precision (m):** 250 **Precision Code:** S  
**Directions:** Rush Lake; ~9.5km SE of; Buffalo Lake; ~2km SW of.

**Min Elev. (m):** 1120 **Max Elev. (m):** 1120 **Best Source of Info:** U96EXP01ABCA

**Map UTM Zone UTM Easting UTM Northing Survey Site Name Notes # Dot ID #**

72E10 12 530249 5494206 Buffalo Lake LS# 54; km:358.7; LLD: SW 6-35 7-5-4 18 4031

**Source Code Author Publisher Year Title**

U96EXP01ABCA AXYS Environmental Consulting 1996 Express Pipeline Project

***Spartina pectinata* prairie cord grass SRank:** S1

+++++

**Element Code:** PMPOA5S090 **Occurrence Code #:** 007 **Survey Date:** 1935-09-10  
**Last Observed:** 1935-09-10 **First Observed:** 1935-09-10 **Precision Code:** M  
**Directions:** Fort McMurray, near; Athabasca and Clearwater Rivers, near junction of

**General Description:** bank of Athabasca River

**Min Elev. (m):** 250 **Max Elev. (m):** 250 **Size of Occurrence:** **Best Source of Info:** SNDRAUNMONCA01

**Specimen Source Code Collector Herbarium Accession # Date ID OK? Observation Detail**

SNDRAUNMONCA01 Raup, Hugh M. NM 33897 1935-09-10

**Map UTM Zone UTM Easting UTM Northing Survey Site Name Notes # Dot ID #**

74D11 12 476050 6287400 Fort McMurray 4 392

***Spartina pectinata* prairie cord grass SRank:** S1

+++++

**Element Code:** PMPOA5S090 **Occurrence Code #:** 008 **Survey Date:** 1990-00-00  
**Last Observed:** 1990-00-00 **First Observed:** 1990-00-00 **Actual Mapping Precision (m):** 250 **Precision Code:** S  
**Directions:** Medicine Hat, N of; Old Channel Lake; Old Channel Lake spring; Sect. 32-Tp14-R5-W4M  
**General Description:** vegetation around moder. saline spring and along uphill springline; moist ground  
**Min Elev. (m):** 640 **Max Elev. (m):** 640  
**Other Comments:** recommend protection of spring wetlands; no groundwater pumping for injection wells; ID not=Y because no specimen, c/b *S. gracilis*  
**Management Comments:** heavy cattle grazing in some springs; petroleum dev't on adjacent lands **Best Source of Info:** U90WAL01ABCA  
**Map UTM Zone UTM Easting UTM Northing Survey Site Name Notes # Dot ID #**  
72L02 12 525000 5563000 Old Channel Lake Sect. 32-Tp14-R5-W4M; mapped as polygon 43 6009  
**Source Code Author Publisher Year Title**  
U90WAL01ABCA Wallis, Cliff 1990 Reconnaissance Survey of Saline Wetlands and Springs in the Grassland-Parkland Region of Eastern Alberta  
**Date Source Abstract Code Observer Occurrence Data**  
U90WAL01ABCA C Wallis See unpubl report in-house  
***Spartina pectinata*** prairie cord grass SRank: S1

**Spergularia salina salt-marsh sand spurry**

**Natural Region:** Northern Fescue Grassland, Mixedgrass, Dry Mixedgrass

**Habitat:** Wetland-Alkali

**Phenology:** flowers in June

**Specific Search Strategies (if any):** search highest unvegetated shoreline in gravelly sandy alkali shores

**Element Occurrences:**

**Element Code:** PDCAR0W0D0 **Occurrence Code #:** 001 **Survey Date:** 1996-09-12  
**Last Observed:** 1996-09-12 **First Observed:** 1980-08-08 **Actual Mapping Precision (m):** 100 **Precision Code:** S

**Directions:** La Saline Natural Area; on se corner of lake; Twp 93 Rge 10 W4: LSD 16 of 15

**General Description:** Xeric tufa dune, La Saline salt spring with Thellunginella saluginea & Aster ericoides.

**Min Elev. (m):** 250 **Max Elev. (m):** 250 **Best Source of Info:** S91TIMPPABCA04

**Specimen Source Code Collector Herbarium Accession # Date ID OK? Observation Detail**

S80ALLPPABCA04 Allen, L., & P. Mclsaac & M. Fairbarns. PP 186 1980-08-08

S91TIMPPABCA04 Timoney, K. PP 797 1991-07-28

S96SANUAABCA02 Sanderson, K. & S. Myers PP 1996-09-12 Y

**Map UTM Zone UTM Easting UTM Northing Survey Site Name Notes # Dot ID #**

74E04 12 469150 6325450 La Saline Natural Area LSD 16 7 414

**Source Code Author Publisher Year Title**

R91TIM01ABCA Timoney, Kevin P and Anne L. Robinson Alberta Forestry, Lands and Wildlife 1991 Biophysical Inventory of the La Saline Natural Area

**Date Source Abstract Code Observer Occurrence Data**

Very local-rare

**Spergularia salina** salt-marsh sand spurry SRank: S2

+++++

**Element Code:** PDCAR0W0D0 **Occurrence Code #:** 002 **Survey Date:** 1986-06-25

**Last Observed:** 1986-06-25 **First Observed:** 1986-06-25 **Precision Code:** S

**Directions:** South Castle Road

**General Description:** Roadside, sandy outwash

**Min Elev. (m):** 1585 **Max Elev. (m):** 1585 **Best Source of Info:** U93ALL01ABCA

**Specimen Source Code Collector Herbarium Accession # Date ID OK? Observation Detail**

S86ALLPPABCA11 Allen, L. & V. Loewen PP 187 1986-06-25

**Map UTM Zone UTM Easting UTM Northing Survey Site Name Notes # Dot ID #**

82G01 11 705950 5454400 Castle River Site 40 315 638

**Source Code Author Publisher Year Title**

U93ALL01ABCA Allen, Lorna Natural & Protected Areas 1993 Southcastle Rare Plants Survey

**Date Source Abstract Code Observer Occurrence Data**

Rare-saline areas

**Spergularia salina** salt-marsh sand spurry SRank: S2

+++++

**Element Code:** PDCAR0W0D0 **Occurrence Code #:** 003 **Survey Date:** 1983-07-28

**Last Observed:** 1983-07-28 **First Observed:** 1983-07-28 **Precision Code:** M

**Directions:** Auburndale

**General Description:** Saline depression

**Min Elev. (m):** 600 **Max Elev. (m):** 600 **Best Source of Info:** S83ALLPPABCA05

**Specimen Source Code Collector Herbarium Accession # Date ID OK? Observation Detail**

S83ALLPPABCA05 Allen, L. PP 188 1983-07-28

S83ALLPPABCA06 Allen, L. PP 189 1983-07-28

**Map UTM Zone UTM Easting UTM Northing Survey Site Name Notes # Dot ID #**

73E02 12 516450 5876000 Auburndale 2 324

**Spergularia salina** salt-marsh sand spurry SRank: S2

+++++

**Element Code:** PDCAR0W0D0 **Occurrence Code #:** 004 **Survey Date:** 1990-06-29  
**Last Observed:** 1990-06-29 **First Observed:** 1990-06-29 **Precision Code:** S  
**Directions:** Vauxhall Association grazing lease; GRP788335; Scope Field.  
**General Description:** Sand flat; growing with *Plantago elongata*/*Navarretia minima*/*Carex athrostachya*/*Alopecurus carolinianus*/*Polygonum watsonii*/*Veronica persica*.  
**Min Elev. (m):** 785 **Max Elev. (m):** 785 **Size of Occurrence:** 22.00  
**Management Comments:** Depression could be fenced out to ensure seed set. Area not over utilised by livestock as it seldom would contain water. **Best Source of Info:** UNDESRO1ABCA  
**Map UTM Zone UTM Easting UTM Northing Survey Site Name Notes # Dot ID #**  
72L04 12 438300 5547925 Hays 1 181  
**Source Code Author Publisher Year Title**  
UNDESRO1ABCA Eastern Slopes Rangeland Consultants An *Alopecurus carolinianus* Walt. level depression near Vauxhall  
UNDTAN01ABCA Tannas, K.E. Native Species Inventory Forms  
**Date Source Abstract Code Observer Occurrence Data**  
numerous plants; fruiting  
**Spergularia salina** salt-marsh sand spurry SRank: S2  
+++++

**Element Code:** PDCAR0W0D0 **Occurrence Code #:** 005 **Survey Date:** 1968-09-25  
**Last Observed:** 1968-09-25 **First Observed:** 1968-09-25 **Actual Mapping Precision (m):** 2500 **Precision Code:** M  
**Directions:** Milo, 3.5 km SW of; McGregor Lake, N end of, W shore of.  
**General Description:** Near edge of lake; somewhat saline soil.  
**Min Elev. (m):** 868 **Max Elev. (m):** 868 **Best Source of Info:** S68ALLALABCA17  
**Specimen Source Code Collector Herbarium Accession # Date ID OK? Observation Detail**  
S68ALLALABCA17 Allen, T. D. & R.G. Gschaid AL 2320 1968-09-25 Y fruiting  
**Map UTM Zone UTM Easting UTM Northing Survey Site Name Notes # Dot ID #**  
82I10 12 363500 5602150 McGregor Lake 1 1420  
**Spergularia salina** salt-marsh sand spurry SRank: S2  
+++++

**Element Code:** PDCAR0W0D0 **Occurrence Code #:** 006 **Survey Date:** 1968-08-23  
**Last Observed:** 1968-08-23 **First Observed:** 1968-08-23 **Actual Mapping Precision (m):** 1800 **Precision Code:** M  
**Directions:** Beaverhill Lake area; Tofield, 3 km ENE of.  
**General Description:** in low meadows; uncommon  
**Min Elev. (m):** 685 **Max Elev. (m):** 685 **Best Source of Info:** S68SAVPMABCA05  
**Specimen Source Code Collector Herbarium Accession # Date ID OK? Observation Detail**  
S68SAVPMABCA05 Savale, W.F. PM B68.9.2b 1968-08-23 Y fruits; uncommon  
**Map UTM Zone UTM Easting UTM Northing Survey Site Name Notes # Dot ID #**  
83H07 12 393000 5915000 Tofield 53 22/112 37 3 3220  
**Spergularia salina** salt-marsh sand spurry SRank: S2  
+++++

**Element Code:** PDCAR0W0D0 **Occurrence Code #:** 007 **Survey Date:** 1996-00-00  
**Last Observed:** 1996-00-00 **First Observed:** 1996-00-00 **Actual Mapping Precision (m):** 750 **Precision Code:** M  
**Directions:** Sage Creek; ~ 6 km W of; Milk River Lake; ~ 2.5 km NW of.  
**Min Elev. (m):** 869 **Max Elev. (m):** 869 **Best Source of Info:** U96EXP01ABCA  
**Map UTM Zone UTM Easting UTM Northing Survey Site Name Notes # Dot ID #**  
72E01 12 551900 5433100 Milk River Lake LS#64;km426;LLD W 24 1-3-4 26 4008  
**Source Code Author Publisher Year Title**  
U96EXP01ABCA AXYS Environmental Consulting 1996 Express Pipeline Project  
**Spergularia salina** salt-marsh sand spurry SRank: S2  
+++++

**Element Code:** PDCAR0W0D0 **Occurrence Code #:** 008 **Survey Date:** 1996-00-00  
**Last Observed:** 1996-00-00 **First Observed:** 1996-00-00 **Actual Mapping Precision (m):** 250 **Precision Code:** S  
**Directions:** Milk River Lake; ~ 4.5 km NW of; Hwy 48; ~ 2.8 km W of; road to Onefour; 1 km S of.  
**General Description:** RoW narrowed. No seed mix applied.  
**Min Elev. (m):** 869 **Max Elev. (m):** 869 **Best Source of Info:** U96EXP01ABCA  
**Map UTM Zone UTM Easting UTM Northing Survey Site Name Notes # Dot ID #**  
72E01 12 551906 5432881 Milk River Lake LS#65;km:425-432;LLD 6 1-2-4.Kp 425.9: 551926.7 to 551935.67 E; 5432995.61 to 5433044.76 N; NW 24-1-3-422 3965  
**Source Code Author Publisher Year Title**  
U96EXP01ABCA AXYS Environmental Consulting 1996 Express Pipeline Project  
**Spergularia salina** salt-marsh sand spurry SRank: S2  
+++++

**Element Code:** PDCAR0W0D0 **Occurrence Code #:** 009 **Survey Date:** 1965-08-11  
**Last Observed:** 1965-08-11 **First Observed:** 1965-08-11 **Actual Mapping Precision (m):** 1000 **Precision Code:** M  
**Directions:** Hay Camp; 4 km N of; Slave River; 1.5 km W of.  
**General Description:** In muck of creek bed.  
**Min Elev. (m):** 218 **Max Elev. (m):** 218 **Best Source of Info:** S65CODACONCA01  
**Specimen Source Code Collector Herbarium Accession # Date ID OK? Observation Detail**  
S65CODACONCA01 Cody, W.J. AC 529781 1965-08-11  
**Map UTM Zone UTM Easting UTM Northing Survey Site Name Notes # Dot ID #**  
74M11 12 472875 6602400 Slave River 59 34' N,111-30'W 2 4122  
**Spergularia salina** salt-marsh sand spurry SRank: S2  
+++++

**Element Code:** PDCAR0W0D0 **Occurrence Code #:** 010 **Survey Date:** 1992-07-19  
**Last Observed:** 1992-07-19 **First Observed:** 1992-07-19 **Actual Mapping Precision (m):** 100 **Precision Code:** S  
**Directions:** Moose Lake, 4.5 km SE of; Lambert Creek, headwaters of, .75 km SW of, along mudflats of Harper Creek.  
**General Description:** growing with Salicornia at edge of mud flats adjacent to sulphur spring.  
**Min Elev. (m):** 274 **Max Elev. (m):** 274 **Size of Occurrence:** **Best Source of Info:** S92ALLPPABCA01  
**Specimen Source Code Collector Herbarium Accession # Date ID OK? Observation Detail**  
S92ALLPPABCA01 Allen, L. PP 3567 1992-07-19 Y growing with Salicornia at edge of mud flats, beside sulphur deposits (L.A);  
seeds light brown, slightly winged (P.J.C)  
**Map UTM Zone UTM Easting UTM Northing Survey Site Name Notes # Dot ID #**  
84J01 11 656650 6451050 Harper Creek 1 5358  
**Date Source Abstract Code Observer Occurrence Data**  
1992-07-19 L. Allen blooming, flowers purple with some white  
**Spergularia salina** salt-marsh sand spurry SRank: S2  
+++++

**Element Code:** PDCAR0W0D0 **Occurrence Code #:** 011 **Survey Date:** 1984-07-31  
**Last Observed:** 1984-07-31 **First Observed:** 1984-07-31 **Actual Mapping Precision (m):** 800 **Precision Code:** M  
**Directions:** Campbell Lake, 11.75 km NW of; Clearwater River, 1.25 km E of.  
**General Description:** saline springs  
**Min Elev. (m):** 360 **Max Elev. (m):** 360 **Size of Occurrence:** **Best Source of Info:** S84BLAAUABCA01  
**Specimen Source Code Collector Herbarium Accession # Date ID OK? Observation Detail**  
S84BLAAUABCA01 Blackmore, D. G. and N. Barnes AU 84-1608 1984-07-31 Y  
**Map UTM Zone UTM Easting UTM Northing Survey Site Name Notes # Dot ID #**  
74D10 12 522200 6288500 Clearwater River S32-89-4-W4M 4 5359  
**Spergularia salina** salt-marsh sand spurry SRank: S2  
+++++

**Element Code:** PDCAR0W0D0 **Occurrence Code #:** 012 **Survey Date:** 1990-00-00  
**Last Observed:** 1990-00-00 **First Observed:** 1990-00-00 **Actual Mapping Precision (m):** 250 **Precision Code:** S  
**Directions:** Albert Lake; Paradise Valley, ca. 17 km NW of; Tp48-R4-W4M  
**General Description:** sandy to muddy alkali shore of hypersaline lake  
**Min Elev. (m):** 640 **Max Elev. (m):**  
**Other Comments:** Recommend.: retain as nat'l water body with suff. setback to reduce impact of cultiv. & runoff; reduce graz.  
press. on W shoreline  
**Management Comments:** cultivn adjoins parts of lake tho' considerable natural buffer in many areas **Best Source of Info:**  
U90WAL01ABCA  
**Map UTM Zone UTM Easting UTM Northing Survey Site Name Notes # Dot ID #**  
73E01 12 536800 5890500 Albert Lake 2 4167  
**Source Code Author Publisher Year Title**  
U90WAL01ABCA Wallis, Cliff 1990 Reconnaissance Survey of Saline Wetlands and Springs in the Grassland-Parkland Region of  
Eastern Alberta  
**Date Source Abstract Code Observer Occurrence Data**  
1990-00-00 U90WAL01ABCA Cliff Wallis See report  
**Spergularia salina** salt-marsh sand spurry SRank: S2  
+++++

**Element Code:** PDCAR0W0D0 **Occurrence Code #:** 013 **Survey Date:** 1990-00-00  
**Last Observed:** 1990-00-00 **First Observed:** 1990-00-00 **Actual Mapping Precision (m):** 2500 **Precision Code:** M  
**Directions:** Altario south wetlands; 2.25 km NW of Altario; Sect. 23-Tp34-R2-W4M  
**General Description:** in successive bands of halophytic plant communities surrounding hypersaline (unvegetated) ponds  
**Min Elev. (m):** 732 **Max Elev. (m):**  
**Other Comments:** provincially significant populations  
**Management Comments:** heavy grazing is degrading some of spring-fed wetland basins; no groundwater pumping recommended  
**Best Source of Info:** U90WAL01ABCA  
**Map UTM Zone UTM Easting UTM Northing Survey Site Name Notes # Dot ID #**  
 72M16 12 556250 5753750 Altario Sec. 23-Tp34-R2-W4M 3 5943  
**Source Code Author Publisher Year Title**  
 U90WAL01ABCA Wallis, Cliff 1990 Reconnaissance Survey of Saline Wetlands and Springs in the Grassland-Parkland Region of Eastern Alberta  
**Date Source Abstract Code Observer Occurrence Data**  
 1990-00-00 U90WAL01ABCA C Wallis See unpublished report  
**Spargularia salina** salt-marsh sand spurry SRank: S2  
 ++++++

**Element Code:** PDCAR0W0D0 **Occurrence Code #:** 014 **Survey Date:** 1990-00-00  
**Last Observed:** 1990-00-00 **First Observed:** 1990-00-00 **Actual Mapping Precision (m):** 250 **Precision Code:** S  
**Directions:** Altario north wetlands; 5.25 km NE of Altario  
**General Description:** successive bands of halophytic vegetation along shore of hypersaline (unvegetated) ponds  
**Min Elev. (m):** 701 **Max Elev. (m):**  
**Other Comments:** provincially significant populations  
**Management Comments:** grazing has impact on spring-fed wetland basins; no groundwater pumping should occur **Best Source of Info:** U90WAL01ABCA  
**Map UTM Zone UTM Easting UTM Northing Survey Site Name Notes # Dot ID #**  
 72M16 12 559350 5757100 Altario Sect.31-Tp34-R1-W4M 4 5945  
**Source Code Author Publisher Year Title**  
 U90WAL01ABCA Wallis, Cliff 1990 Reconnaissance Survey of Saline Wetlands and Springs in the Grassland-Parkland Region of Eastern Alberta  
**Date Source Abstract Code Observer Occurrence Data**  
 U90WAL01ABCA C Wallis See unpublished report  
**Spargularia salina** salt-marsh sand spurry SRank: S2

***Sphenopholis obtusata* prairie wedge grass**

**Natural Region:** Northern Fescue Grassland, Foothills Fescue Grassland, Mixedgrass, Dry Mixedgrass

**Habitat:** Wetland-Springs

**Phenology:** heads out in July

**Specific Search Strategies (if any):** search along edges of running water in springs or slightly more open areas within the springs

**Element Occurrences:**

**Element Code:** PMPOA5T030 **Occurrence Code #:** 001 **Survey Date:** 1935-07-22

**Last Observed:** 1935-07-22 **First Observed:** 1935-07-22 **Precision Code:** M

**Directions:** Lacombe

**General Description:** wet ground

**Min Elev. (m):** 861 **Max Elev. (m):** 861 **Best Source of Info:** S35BOLALABCA01

**Specimen Source Code Collector Herbarium Accession # Date ID OK? Observation Detail**

S35BOLALABCA01 Bolton, J.B. AL 3721 1935-07-22 Y headed

**Map UTM Zone UTM Easting UTM Northing Survey Site Name Notes # Dot ID #**

83A05 12 312800 5815225 Lacombe Twp 040 Rge 27 W4: NE24 9 2312

***Sphenopholis obtusata* prairie wedge grass SRank:** S2

+++++

**Element Code:** PMPOA5T030 **Occurrence Code #:** 002 **Survey Date:** 1991-07-24

**Last Observed:** 1991-07-24 **First Observed:** 1991-07-24 **Actual Mapping Precision (m):** 1000 **Precision Code:** M

**Directions:** McIntyre Ranch; Reed Lake, 0.5 km NE of.

**General Description:** wet mud in *Hordeum jubatum* zone toward edge of slough

**Min Elev. (m):** 1250 **Max Elev. (m):** 1250 **Best Source of Info:** S91HRAPMABCA06

**Specimen Source Code Collector Herbarium Accession # Date ID OK? Observation Detail**

S91HRAPMABCA06 Hrapko, J.O., L.D. Laird, et al. PM B91.33.4 1991-07-24 Y panicles

**Map UTM Zone UTM Easting UTM Northing Survey Site Name Notes # Dot ID #**

82H02 12 368775 5449250 Reed Lake 9 927

***Sphenopholis obtusata* prairie wedge grass SRank:** S2

+++++

**Element Code:** PMPOA5T030 **Occurrence Code #:** 005 **Survey Date:** 1950-08-10

**Last Observed:** 1950-08-10 **First Observed:** 1950-08-10 **Actual Mapping Precision (m):** 2500 **Precision Code:** M

**Directions:** Brocket; 5km E of.

**General Description:** abundant, but localized, in slightly moister portion of native prairie

**Min Elev. (m):** 1067 **Max Elev. (m):** 1067 **Best Source of Info:** S50DORACONCA32

**Specimen Source Code Collector Herbarium Accession # Date ID OK? Observation Detail**

S50DORACONCA32 Dore, W.G. & A.J. Breitung AC 109065 1950-08-10 abundant but localized

S50DORUAABCA10 Dore, W.G., Breitung, A.J. UA 2728 1950-08-10 Y old spikelets (i.e. straw colour); "abundant, but localized"

**Map UTM Zone UTM Easting UTM Northing Survey Site Name Notes # Dot ID #**

82H12 12 306100 5491650 Brocket 8 4138

***Sphenopholis obtusata* prairie wedge grass SRank:** S2

+++++

**Element Code:** PMPOA5T030 **Occurrence Code #:** 006 **Survey Date:** 1980-07-19

**Last Observed:** 1980-07-19 **First Observed:** 1980-07-19 **Actual Mapping Precision (m):** 1000 **Precision Code:** M

**Directions:** Milk River Lake, SE end of, 1 km E of.; Wildhorse customs, 0.5 km N of.

**General Description:** In slough

**Min Elev. (m):** 887 **Max Elev. (m):** 887 **Best Source of Info:** S80AIKACONCA10

**Specimen Source Code Collector Herbarium Accession # Date ID OK? Observation Detail**

S80AIKACONCA10 Aiken, S.G. & S. Darbyshire AC 301981 1980-07-19

**Map UTM Zone UTM Easting UTM Northing Survey Site Name Notes # Dot ID #**

72E01 12 557400 5428100 Wildhorse Customs 37 4350

***Sphenopholis obtusata* prairie wedge grass SRank:** S2

+++++

**Element Code:** PMPOA5T030 **Occurrence Code #:** 007 **Survey Date:** 1926-07-25  
**Last Observed:** 1926-07-25 **First Observed:** 1926-07-25 **Actual Mapping Precision (m):** 2500 **Precision Code:** M  
**Directions:** Little Fish Lake, shore of.  
**General Description:** sandy shore  
**Min Elev. (m):** 905 **Max Elev. (m):** 905  
**Other Comments:** spikelets present **Best Source of Info:** S26BRIUAABCA03  
**Specimen Source Code Collector Herbarium Accession # Date ID OK? Observation Detail**  
S26BRIUAABCA03 Brinkman, A.H. UA 2725 1926-07-25 Y spikelets present  
**Map UTM Zone UTM Easting UTM Northing Survey Site Name Notes # Dot ID #**  
82P08 12 415000 5692800 Little Fish Lake 9 4441  
**Sphenopholis obtusata** prairie wedge grass SRank: S2  
+++++

**Element Code:** PMPOA5T030 **Occurrence Code #:** 008 **Survey Date:** 1944-08-20  
**Last Observed:** 1944-08-20 **First Observed:** 1944-08-20 **Actual Mapping Precision (m):** 400 **Precision Code:** M  
**Directions:** Calgary; Glencoe Club.  
**General Description:** open slope  
**Min Elev. (m):** 1097 **Max Elev. (m):** 1097 **Best Source of Info:** S44MCCUAABCA06  
**Specimen Source Code Collector Herbarium Accession # Date ID OK? Observation Detail**  
S44MCCUAABCA06 McCalla, W.C. UA 33490 1944-08-20 Y spikelets present but breaking up  
S44MCCUAABCA07 McCalla, W.C., Campbell, A., Moss, E.H. UA 2726 1944-08-20 Y old spikelets  
**Map UTM Zone UTM Easting UTM Northing Survey Site Name Notes # Dot ID #**  
82O01 11 704750 5656900 Calgary - Glencoe 12 4453  
**Sphenopholis obtusata** prairie wedge grass SRank: S2  
+++++

**Element Code:** PMPOA5T030 **Occurrence Code #:** 009 **Survey Date:** 1956-08-25  
**Last Observed:** 1956-08-25 **First Observed:** 1956-08-25 **Actual Mapping Precision (m):** 1500 **Precision Code:** M  
**Directions:** Embarras, 5 km SW of; Oke, 2.5 km NNE of; Hwy 47.  
**General Description:** gravelly slope, edge of lodgepole pine woods  
**Min Elev. (m):** 1066 **Max Elev. (m):** 1066 **Best Source of Info:** S56HERUAABCA25  
**Specimen Source Code Collector Herbarium Accession # Date ID OK? Observation Detail**  
S56HERUAABCA25 Hermann, F.J. UA 2727 1956-08-25 Y dehiscing spikelets  
**Map UTM Zone UTM Easting UTM Northing Survey Site Name Notes # Dot ID #**  
83F07 11 502350 5903350 Oke 2 4473  
**Sphenopholis obtusata** prairie wedge grass SRank: S2  
+++++

**Element Code:** PMPOA5T030 **Occurrence Code #:** 010 **Survey Date:** 1997-08-25  
**Last Observed:** 1997-08-25 **First Observed:** 1998-06-16 **Actual Mapping Precision (m):** 250 **Precision Code:** S  
**Directions:** Holmes Crossing, 2 km E of; Athabasca River, shore of.  
**General Description:** in a river alder-shining willow-yellow willow-sandbar willow/Equisetum hyemale riparian point bar thicket on silt and sand  
**Min Elev. (m):** 609 **Max Elev. (m):** 609 **Best Source of Info:** R98TIM01ABCA  
**Map UTM Zone UTM Easting UTM Northing Survey Site Name Notes # Dot ID #**  
83J07 11 649650 6021150 "Pemmican Island" plot fa37 1 4521  
**Source Code Author Publisher Year Title**  
R98TIM01ABCA Timoney, Kevin and Anne Robinson. Alberta Environmental Protection 1998 A floristic and landscape survey of the Ft. Assiniboine Sandhills Wildland Park  
**Date Source Abstract Code Observer Occurrence Data**  
1997-08-25 R98TIM01ABCA Kevin Timoney & Anne Robinson there were a few individuals  
**Sphenopholis obtusata** prairie wedge grass SRank: S2  
+++++

**Element Code:** PMPOA5T030 **Occurrence Code #:** 011 **Survey Date:** 1979-08-22  
**Last Observed:** 1979-08-22 **First Observed:** 1979-08-22 **Actual Mapping Precision (m):** 250 **Precision Code:** S  
**Directions:** Scandia, 9.5 km NW of; Bow River, W side of.  
**General Description:** small spring on draw on valley slope; wet; marsh dominated by Calamagrostis neglecta, Scirpus americanus, Juncus balticus, Carex rostrata; asoc. spp. Aster hesperius, Helianthus nuttallii, Mentha arvensis  
**Min Elev. (m):** 747 **Max Elev. (m):** 747  
**Slope:** 7.00 **Aspect:** E **Best Source of Info:** S79BRAUAABCA08  
**Specimen Source Code Collector Herbarium Accession # Date ID OK? Observation Detail**  
S79BRAUAABCA08 Bradley, C. UA 84154 1979-08-22 Y spikelets present  
**Map UTM Zone UTM Easting UTM Northing Survey Site Name Notes # Dot ID #**  
82I08 12 416750 5573575 Bow River UTM 12 UVL 168 735; 5-16-16 W4M 3 4516  
**Sphenopholis obtusata** prairie wedge grass SRank: S2  
+++++



**Element Code:** PMPOA5T030 **Occurrence Code #:** 012 **Survey Date:** 1980-00-00  
**Last Observed:** 1980-00-00 **First Observed:** 1980-00-00 **Actual Mapping Precision (m):** 250 **Precision Code:** S  
**Directions:** Scollard, 9 km W of; Dry Island Buffalo Jump, picnic area.  
**General Description:** along bank of river  
**Min Elev. (m):** 710 **Max Elev. (m):** 710 **Best Source of Info:** U99WIL02ABCA  
**Map UTM Zone UTM Easting UTM Northing Survey Site Name Notes # Dot ID #**  
82P15 12 365200 5755450 Dry Island Buffalo Jump Provincial Park 1 5068  
**Source Code Author Publisher Year Title**  
U99WIL02ABCA Wilkinson, Kathleen 1999 Letter from K. Wilkinson to John Rintoul - at March 3, 1999  
**Sphenopholis obtusata** prairie wedge grass SRank: S2

**Stephanomeria runcinata** rush-pink

**Natural Region:** Foothills Fescue Grassland, Mixedgrass, Dry Mixedgrass

**Habitat:** Slopes-Badlands

**Phenology:** flowers in July

**Specific Search Strategies (if any):** search silty/sandy badlands, tops of valley rims, especially south-facing slopes

**Element Occurrences:**

**Element Code:** PDAST8U0C0 **Occurrence Code #:** 001 **Survey Date:** 1990-07-11  
**Last Observed:** 1990-07-11 **First Observed:** 1990-07-11 **Actual Mapping Precision (m):** 100 **Precision Code:** S  
**Directions:** Dinosaur Provincial Park; Viewpoint, below.  
**General Description:** Southeast slope, dry prairie escarpment.  
**Min Elev. (m):** 716 **Max Elev. (m):** 716 **Aspect:** SE  
**Other Comments:** ID by Bonnie Smith. **Best Source of Info:** S90ROMUCABCA02  
**Specimen Source Code Collector Herbarium Accession # Date ID OK? Observation Detail**  
S90ROMUCABCA02 Romuld, M. UC 49473 1990-07-11 Y 48 plants in population  
**Map UTM Zone UTM Easting UTM Northing Survey Site Name Notes # Dot ID #**  
72L13 12 462850 5622300 Dinosaur Provincial Park SE 1-21-12-W4Near Site 7. 4 243  
**Source Code Author Publisher Year Title**  
U96SMI01ABCA Smith, Bonnie COSEWIC 1996 Status Report on the Rush Pink *Stephanomeria runcinata* in Canada  
**Stephanomeria runcinata** rush-pink SRank: S2  
+++++

**Element Code:** PDAST8U0C0 **Occurrence Code #:** 002 **Survey Date:** 1990-08-02  
**Last Observed:** 1990-08-02 **First Observed:** 1990-08-02 **Actual Mapping Precision (m):** 250 **Precision Code:** S  
**Directions:** Dinosaur Provincial Park.  
**General Description:** West slope, dry.  
**Min Elev. (m):** 686 **Max Elev. (m):** 686 **Aspect:** W  
**Other Comments:** ID by Bonnie Smith. **Best Source of Info:** S90ROMUCABCA03  
**Specimen Source Code Collector Herbarium Accession # Date ID OK? Observation Detail**  
S90ROMUCABCA03 Romuld, M. UC 49474 1990-08-02 Y  
**Map UTM Zone UTM Easting UTM Northing Survey Site Name Notes # Dot ID #**  
72L11 12 470150 5621850 Dinosaur Provincial Park SW 2-21-11-W4; Site 47. 2 232  
**Source Code Author Publisher Year Title**  
U93ROM01ABCA Romuld, A. Margaret MSc thesis; University of Calgary 1993 An ecological land classification of Dinosaur Provincial Park, Alberta  
U96SMI01ABCA Smith, Bonnie COSEWIC 1996 Status Report on the Rush Pink *Stephanomeria runcinata* in Canada  
**Stephanomeria runcinata** rush-pink SRank: S2  
+++++

**Element Code:** PDAST8U0C0 **Occurrence Code #:** 003 **Survey Date:** 1990-08-22  
**Last Observed:** 1990-08-22 **First Observed:** 1990-08-22 **Actual Mapping Precision (m):** 100 **Precision Code:** S  
**Directions:** Dinosaur Provincial Park; Waterfall Coulee.  
**General Description:** South slope, dry.  
**Min Elev. (m):** 716 **Max Elev. (m):** 716 **Aspect:** S  
**Other Comments:** ID by Bonnie Smith. **Best Source of Info:** S90ROMUCABCA04  
**Specimen Source Code Collector Herbarium Accession # Date ID OK? Observation Detail**  
S90ROMUCABCA04 Romuld, M. UC 49472 1990-08-22 Y 63 plants in population  
**Map UTM Zone UTM Easting UTM Northing Survey Site Name Notes # Dot ID #**  
72L12 12 464650 5620350 Dinosaur Provincial Park Site 22 3 235  
**Source Code Author Publisher Year Title**  
U96SMI01ABCA Smith, Bonnie COSEWIC 1996 Status Report on the Rush Pink *Stephanomeria runcinata* in Canada  
**Stephanomeria runcinata** rush-pink SRank: S2  
+++++

**Element Code:** PDAST8U0C0 **Occurrence Code #:** 004 **Survey Date:** 1994-00-00  
**Last Observed:** 1995-00-00 **First Observed:** 1994-00-00 **Precision Code:** S  
**Directions:** Canadian Forces Base Suffield National Wildlife Area; South Saskatchewan River, on ravine crests of the  
**General Description:** from xeric to very xeric sites on erosional barrens on river ravine crests  
**Min Elev. (m):** 724 **Max Elev. (m):** 724 **Best Source of Info:** U96MAC01ABCA  
**Map UTM Zone UTM Easting UTM Northing Survey Site Name Notes # Dot ID #**  
72L08 12 538200 5589600 South Saskatchewan River UTM WL 538200 / 5589600 3 206  
**Source Code Author Publisher Year Title**  
U96MAC01ABCA Macdonald, I.D. Canadian Wildlife Service, Environment Canada, Prairie and 1996 Vascular Flora of Canadian  
Forces Base Suffield National Wildlife Area  
**Date Source Abstract Code Observer Occurrence Data**  
rare in SNWA and in Alberta  
**Stephanomeria runcinata** rush-pink SRank: S2  
+++++

**Element Code:** PDAST8U0C0 **Occurrence Code #:** 005 **Survey Date:** 1995-00-00  
**Last Observed:** 1995-00-00 **First Observed:** 1994-00-00 **Precision Code:** S  
**Directions:** Canadian Forces Base Suffield National Wildlife Area; South Saskatchewan River  
**General Description:** from xeric to very xeric sites from drained margins of a sandy glaciofluvial outwash plain depression.  
**Min Elev. (m):** 724 **Max Elev. (m):** 724 **Best Source of Info:** U96MAC01ABCA  
**Map UTM Zone UTM Easting UTM Northing Survey Site Name Notes # Dot ID #**  
72L08 12 538200 5589900 South Saskatchewan River UTM WL 538200 / 5589900 4 207  
**Source Code Author Publisher Year Title**  
U96MAC01ABCA Macdonald, I.D. Canadian Wildlife Service, Environment Canada, Prairie and 1996 Vascular Flora of Canadian  
Forces Base Suffield National Wildlife Area  
**Date Source Abstract Code Observer Occurrence Data**  
rare in SNWA and in Alberta  
**Stephanomeria runcinata** rush-pink SRank: S2  
+++++

**Element Code:** PDAST8U0C0 **Occurrence Code #:** 006 **Survey Date:** 1971-06-23  
**Last Observed:** 1971-06-23 **First Observed:** 1971-06-23 **Actual Mapping Precision (m):** 2500 **Precision Code:** M  
**Directions:** Dinosaur P.P., E end of.  
**General Description:** Edge of large mesa; bare exposed shale slope.  
**Min Elev. (m):** 762 **Max Elev. (m):** 762 **Aspect:** SW **Best Source of Info:** S71KONUCABCA02  
**Specimen Source Code Collector Herbarium Accession # Date ID OK? Observation Detail**  
S71KONUCABCA02 Kondla, N. & H. Crawford UC 29145 1971-06-23 Y  
**Map UTM Zone UTM Easting UTM Northing Survey Site Name Notes # Dot ID #**  
72L14 12 473650 5622775 Dinosaur Provincial Park 1 247  
**Source Code Author Publisher Year Title**  
U96SMI01ABCA Smith, Bonnie COSEWIC 1996 Status Report on the Rush Pink *Stephanomeria runcinata* in Canada  
**Stephanomeria runcinata** rush-pink SRank: S2  
+++++

**Element Code:** PDAST8U0C0 **Occurrence Code #:** 007 **Survey Date:** 1989-07-04  
**Last Observed:** 1989-07-04 **First Observed:** 1989-06-30 **Actual Mapping Precision (m):** 250 **Precision Code:** S  
**Directions:** Dinosaur P.P.; Little Sandhill Creek, N slope of.  
**General Description:** along valley slopes; scattered  
**Min Elev. (m):** 663 **Max Elev. (m):** 663 **Size of Occurrence:** 0.01  
**Other Comments:** Beth Cornish, field survey; two sites (SR-1, SR-2) surveyed 1989-06-30; and SR-3 and SR-4 1989-07-04.  
**Best Source of Info:** U96SMI01ABCA  
**Map UTM Zone UTM Easting UTM Northing Survey Site Name Notes # Dot ID #**  
72L12 12 461850 5621400 Little Sandhill Creek NW1/2 Sec. 36 T20 R12 W4M; sites SR-1, SR-2, SR-3, SR-4 7 238  
**Source Code Author Publisher Year Title**  
U96SMI01ABCA Smith, Bonnie COSEWIC 1996 Status Report on the Rush Pink *Stephanomeria runcinata* in Canada  
**Date Source Abstract Code Observer Occurrence Data**  
1989-06-30 U96SMI01ABCA Beth Cornish one site 18, second 50 plants; 0.002+0.0012 ha; 10%+30% flower  
1989-07-04 U96SMI01ABCA Beth Cornish one site 115, second 29 plants; 0.004+0.003 ha; 40%+30% in flower.  
**Stephanomeria runcinata** rush-pink SRank: S2  
+++++

**Element Code:** PDAST8U0C0 **Occurrence Code #:** 008 **Survey Date:** 1989-07-17  
**Last Observed:** 1989-07-17 **First Observed:** 1989-07-17 **Actual Mapping Precision (m):** 300 **Precision Code:** M  
**Directions:** Dinosaur P.P.; Bus Tour Trail, S end of, near.  
**General Description:** scattered and clumped  
**Min Elev. (m):** 678 **Max Elev. (m):** 678  
**Other Comments:** Berth Cornish field survey; three sites: SR-5, SR-6, SR-7 **Best Source of Info:** U96SMI01ABCA  
**Map UTM Zone UTM Easting UTM Northing Survey Site Name Notes # Dot ID #**  
72L12 12 464250 5621000 Dinosaur Provincial Park NE 1/4 Sec. 31 T20 R11 W4M; Sites SR-5, SR-6, SR-7 8 239  
**Source Code Author Publisher Year Title**  
U96SMI01ABCA Smith, Bonnie COSEWIC 1996 Status Report on the Rush Pink *Stephanomeria runcinata* in Canada  
**Date Source Abstract Code Observer Occurrence Data**  
1989-07-17 U95SMI01ABCA Berth Cornish one site 3, second 22, third 17 plants; 0.0004+0,0012+0.0004 ha; 50%+30%+10% in flower; scattered+scattered+clumped.  
**Stephanomeria runcinata** rush-pink SRank: S2  
+++++

**Element Code:** PDAST8U0C0 **Occurrence Code #:** 009 **Survey Date:** 1989-07-19  
**Last Observed:** 1989-07-19 **First Observed:** 1989-07-19 **Actual Mapping Precision (m):** 250 **Precision Code:** S  
**Directions:** Dinosaur P.P.; Badlands Trail, along; interpretative post #12, S of.  
**General Description:** scattered  
**Min Elev. (m):** 648 **Max Elev. (m):** 648  
**Other Comments:** Berth Cornish field survey; Site SR-8. **Best Source of Info:** U95SMI01ABCA  
**Map UTM Zone UTM Easting UTM Northing Survey Site Name Notes # Dot ID #**  
72L13 12 464000 5622950 Little Sandhill Creek NE 1/4 Sec.6 T21 R11 W4M; Site SR-8 7 246  
**Source Code Author Publisher Year Title**  
U95SMI01ABCA Smith, Darrell 1995 Rare plant locations - Rocky/Clearwater Forest  
**Date Source Abstract Code Observer Occurrence Data**  
1989-07-19 U95SMI01ABCA Berth Cornish 6 plants; 0.0006 ha; 15% in flower.  
**Stephanomeria runcinata** rush-pink SRank: S2  
+++++

**Element Code:** PDAST8U0C0 **Occurrence Code #:** 010 **Survey Date:** 1994-00-00  
**Last Observed:** 1979-07-04 **First Observed:** 1979-07-04 **Actual Mapping Precision (m):** 1100 **Precision Code:** M  
**Directions:** Sage Creek, S of; BM 2989, 1.5 km SSE of.  
**General Description:** eroding badland slopes  
**Min Elev. (m):** 914 **Max Elev. (m):** 914 **Aspect:** E  
**Other Comments:** No specimens were found during the 1994 field season, but substantial suitable habitat was noted (Smith).  
**Best Source of Info:** S79WALUAABCA07  
**Specimen Source Code Collector Herbarium Accession # Date ID OK? Observation Detail**  
S79WALUAABCA07 Wallis, C. UA 84608 1979-07-04  
**Map UTM Zone UTM Easting UTM Northing Survey Site Name Notes # Dot ID #**  
72E01 12 552100 5445500 Sage Creek 2 2  
**Source Code Author Publisher Year Title**  
U96SMI01ABCA Smith, Bonnie COSEWIC 1996 Status Report on the Rush Pink *Stephanomeria runcinata* in Canada  
**Stephanomeria runcinata** rush-pink SRank: S2  
+++++

**Element Code:** PDAST8U0C0 **Occurrence Code #:** 011 **Survey Date:** 1993-08-27  
**Last Observed:** 1993-08-27 **First Observed:** 1993-07-18 **Actual Mapping Precision (m):** 250 **Precision Code:** S  
**Directions:** Sage Creek, W of; BM 3429, 1.5 km W of.  
**General Description:** steep badland slope  
**Min Elev. (m):** 1044 **Max Elev. (m):** 1044  
**Other Comments:** Wayne Smith (1993) states that populations of rush pink observed in this area represent the larges known in Alberta, possibly in Canada. **Best Source of Info:** U93SMI01ABCA  
**Map UTM Zone UTM Easting UTM Northing Survey Site Name Notes # Dot ID #**  
72E08 12 538375 5465900 Sage Creek LSD 13 Sec.34 T4 R4 W4M 4 95  
**Source Code Author Publisher Year Title**  
U93SMI01ABCA Smith, Wayne Alberta Fish and Wildlife, Lethbridge, AB 1993 An Assessment of Short-horned Lizard Habitat and Use Manyberries Badland, Alberta U96SMI01ABCA Smith, Bonnie COSEWIC 1996 Status Report on the Rush Pink *Stephanomeria runcinata* in Canada  
**Stephanomeria runcinata** rush-pink SRank: S2  
+++++

**Element Code:** PDAST8U0C0 **Occurrence Code #:** 012 **Survey Date:** 1993-08-22  
**Last Observed:** 1993-08-22 **First Observed:** 1993-08-08 **Actual Mapping Precision (m):** 100 **Precision Code:** S  
**Directions:** Sage Creek, W of; BM 3429, 1.2 km SW of.  
**General Description:** steep badland slopes  
**Min Elev. (m):** 1059 **Max Elev. (m):** 1059  
**Other Comments:** Wayne Smith (1993) states that populations of rush pink observed in this area represent the largest known in Alberta, possibly in Canada. **Best Source of Info:** U93SMI01ABCA  
**Map UTM Zone UTM Easting UTM Northing Survey Site Name Notes # Dot ID #**  
72E08 12 538700 5465500 Sage Creek LSD 11 Sec. 34 T4 R4 W4M 5 96  
**Source Code Author Publisher Year Title**  
U93SMI01ABCA Smith, Wayne Alberta Fish and Wildlife, Lethbridge, AB 1993 An Assessment of Short-horned Lizard Habitat and Use Manyberries Badland, Alberta U96SMI01ABCA Smith, Bonnie COSEWIC 1996 Status Report on the Rush Pink *Stephanomeria runcinata* in Canada  
**Stephanomeria runcinata** rush-pink SRank: S2  
+++++

**Element Code:** PDAST8U0C0 **Occurrence Code #:** 013 **Survey Date:** 1993-08-14  
**Last Observed:** 1993-08-14 **First Observed:** 1993-08-08 **Actual Mapping Precision (m):** 100 **Precision Code:** S  
**Directions:** Sage Creek, NW of; Manyberries, 12 km NE of.  
**General Description:** steep badland slopes  
**Min Elev. (m):** 1143 **Max Elev. (m):** 1143  
**Other Comments:** Wayne Smith (1993) states that populations of rush pink observed in this area represent the largest known in Alberta, possibly in Canada. **Best Source of Info:** U93SMI01ABCA  
**Map UTM Zone UTM Easting UTM Northing Survey Site Name Notes # Dot ID #**  
72E07 12 533898 5474132 Sage Creek Site L3; LSD 14 Sec. 30 T5 R4 W4M 11 91  
**Source Code Author Publisher Year Title**  
U93SMI01ABCA Smith, Wayne Alberta Fish and Wildlife, Lethbridge, AB 1993 An Assessment of Short-horned Lizard Habitat and Use Manyberries Badland, Alberta U96SMI01ABCA Smith, Bonnie COSEWIC 1996 Status Report on the Rush Pink *Stephanomeria runcinata* in Canada  
**Stephanomeria runcinata** rush-pink SRank: S2  
+++++

**Element Code:** PDAST8U0C0 **Occurrence Code #:** 014 **Survey Date:** 1994-00-00  
**Last Observed:** 1986-07-06 **First Observed:** 1986-07-06 **Actual Mapping Precision (m):** 600 **Precision Code:** M  
**Directions:** Chin Coulee, S side of; Wrentham, 9 km NNE of.  
**General Description:** *Koeleria macrantha*/*Poa secunda* grassland and partially disturbed *Agropyron cristatum*, very loose soil, bare ground, stony and silty clay, at edge of coulee, almost level terrain with slight north and east aspect; scattered  
**Min Elev. (m):** 901 **Max Elev. (m):** 901 **Aspect:** NE **Size of Occurrence:** 0.02  
**Other Comments:** Similar areas were checked to west and east along Chin Coulee but no plants were found. Smith (1994) visited this area but did not find any plants. Specimen should be in Alberta Provincial Museum. **Best Source of Info:** PNDWAL01ABCA  
**Map UTM Zone UTM Easting UTM Northing Survey Site Name Notes # Dot ID #**  
82H09 12 417225 5493675 Chin Coulee NW 29-7-16-W4; 49 35/112 08 1 1351  
**Source Code Author Publisher Year Title**  
U96SMI01ABCA Smith, Bonnie COSEWIC 1996 Status Report on the Rush Pink *Stephanomeria runcinata* in Canada  
**Date Source Abstract Code Observer Occurrence Data**  
1986-07-06 U96SMI01ABCA Cliff Wallis local population of 100 plants  
**Stephanomeria runcinata** rush-pink SRank: S2  
+++++

**Element Code:** PDAST8U0C0 **Occurrence Code #:** 015 **Survey Date:** 1986-07-15  
**Last Observed:** 1986-07-15 **First Observed:** 1986-07-15 **Actual Mapping Precision (m):** 400 **Precision Code:** M  
**Directions:** Oldman River, N shore of; Brocket, 5 km NW of.  
**General Description:** south-facing eroding slope, along valley; general cover of *Rhus trilobata*, but little vegetation where *S. runcinata* plants are growing; scattered  
**Min Elev. (m):** 1052 **Max Elev. (m):** 1052 **Aspect:** S **Size of Occurrence:** 0.15  
**Other Comments:** Extensive similar area east of this location was examined but no plants were found (Wallis 1986 field information). Specimen should be in Alberta Provincial Museum. **Best Source of Info:** PNDWAL01ABCA  
**Map UTM Zone UTM Easting UTM Northing Survey Site Name Notes # Dot ID #**  
82H12 12 296675 5493550 Brocket NW 13-7-29-W4; 49 34/113 49 6 1379  
**Source Code Author Publisher Year Title**  
U96SMI01ABCA Smith, Bonnie COSEWIC 1996 Status Report on the Rush Pink *Stephanomeria runcinata* in Canada  
**Date Source Abstract Code Observer Occurrence Data**  
1986-07-15 U95SMI01ABCA Cliff Wallis 30 plants were counted.  
**Stephanomeria runcinata** rush-pink SRank: S2  
+++++

**Element Code:** PDAST8U0C0 **Occurrence Code #:** 016 **Survey Date:** 1994-08-31  
**Last Observed:** 1994-08-31 **First Observed:** 1994-08-31 **Actual Mapping Precision (m):** 250 **Precision Code:** S  
**Directions:** Mouth of White Rock Coulee; ~3.75 km NW of; S Saskatchewan River; ~500 m W of.  
**General Description:** incised valley slope, subxeric barrens of *Agropyron smithii*, *Artemisia frigida*, *A. campestris*, *Atriplex nuttallii*,  
*Hymenoxys richardsonii*, *Comandra unbellata pallida*, *Oryzopsis hymenoides*, *Rhus trilobata*.  
**Min Elev. (m):** 595 **Max Elev. (m):** 740 **Best Source of Info:** U97CWS01ABCA  
**Specimen Source Code Collector Herbarium Accession # Date ID OK? Observation Detail**  
S94MACPMABCA14 Macdonald, I.D. PM B94.4.673 1994-08-31 Y  
**Map UTM Zone UTM Easting UTM Northing Survey Site Name Notes # Dot ID #**  
72L08 12 540600 5589700 CFB Suffield 50-27'35"N/110-25'40"W 24 4330  
**Source Code Author Publisher Year Title**  
U97CWS01ABCA Canadian Wildlife Service CWS 1997 Plant Database from Suffield Survey 1994-1995  
**Stephanomeria runcinata** rush-pink SRank: S2  
+++++

**Element Code:** PDAST8U0C0 **Occurrence Code #:** 017 **Survey Date:** 1998-07-08  
**Last Observed:** 1998-07-08 **First Observed:** 1998-07-08 **Actual Mapping Precision (m):** 250 **Precision Code:** S  
**Directions:** Chin, 11.5 km NNW of; Oldman River, 1.5 km S of.  
**General Description:** dry/eroded exposed slope at W end of property; *Machaeranthera canescens*, *Eriogonum flavum*, *Paronychia*  
*sessilifolia*, *Petalostemon candidum*, *Mirabilis hirsuta*, *Gutierrezia sarothrae*  
**Min Elev. (m):** 823 **Max Elev. (m):** 823 **Aspect:** SSW  
**Other Comments:** land is currently privately owned and used strictly as a residence; grazing occurs a short distance away on the  
other side of a fence-line; specimen needed to confirm ID **Best Source of Info:** UNDCOR01ABCA  
**Map UTM Zone UTM Easting UTM Northing Survey Site Name Notes # Dot ID #**  
82H16 12 392700 5524025 Chin 12 U 0392703/5524017 5 4568  
**Source Code Author Publisher Year Title**  
UNDCOR01ABCA Corbiere, Adrien & Don MacKay Rare Native Plant Survey Form  
**Date Source Abstract Code Observer Occurrence Data**  
1998-07-08 UNDCOR01ABCA Adrien Corbiere and Louise Thomas more than 50 plants flowering, at least 1 fruiting  
**Stephanomeria runcinata** rush-pink SRank: S2  
+++++

**Element Code:** PDAST8U0C0 **Occurrence Code #:** 018 **Survey Date:** 1999-06-14  
**Last Observed:** 1999-06-14 **First Observed:** 1999-06-14 **Actual Mapping Precision (m):** 100 **Precision Code:** S  
**Directions:** Manyberries, 8 km E of, Manyberries Badlands, bench of badland slope  
**General Description:** small, flat bench with some shale. Litte vegetation. Scattered *Eriog fla*, *Arte cana*, *A.fili*, *Chry nau*, *Koeleria*,  
*Therm rho*.  
**Min Elev. (m):** 1030 **Max Elev. (m):** 1030  
**Management Comments:** area of intensive PNG development **Best Source of Info:** F99ALL01ABCA  
**Map UTM Zone UTM Easting UTM Northing Survey Site Name Notes # Dot ID #**  
72E07 12 530450 5470050 Manyberries Badlands 42 5158  
**Source Code Author Publisher Year Title**  
F99ALL01ABCA Allen, Lorna 1999 Field notes: 1999 field season  
**Date Source Abstract Code Observer Occurrence Data**  
1999-07-14 F99ALL01ABCA L. Allen about 100 plants, not blooming, buds just forming  
**Stephanomeria runcinata** rush-pink SRank: S2  
+++++

**Element Code:** PDAST8U0C0 **Occurrence Code #:** 019 **Survey Date:** 1999-06-14  
**Last Observed:** 1999-06-14 **First Observed:** 1999-06-14 **Actual Mapping Precision (m):** 100 **Precision Code:** S  
**Directions:** Manyberries, 8 km E of, Manyberries Badlands, badland slope  
**General Description:** gentle slope with *Chry nau*, *Ther rho*, *Guti sar*, *Juni com*, *Rosa*. About 95% bare ground  
**Min Elev. (m):** 1030 **Max Elev. (m):** 1030 **Aspect:** 220  
**Management Comments:** Area of intensive PNG development. **Best Source of Info:** F99ALL01ABCA  
**Map UTM Zone UTM Easting UTM Northing Survey Site Name Notes # Dot ID #**  
72E07 12 530750 5469025 Manyberries Badlands 43 5159  
**Source Code Author Publisher Year Title**  
F99ALL01ABCA Allen, Lorna 1999 Field notes: 1999 field season  
**Date Source Abstract Code Observer Occurrence Data**  
1999-06-14 F99ALL01ABCA L. Allen about 12 plants in 4m x 2m area, not blooming, buds just forming  
**Stephanomeria runcinata** rush-pink SRank: S2  
+++++

**Element Code:** PDAST8U0C0 **Occurrence Code #:** 020 **Survey Date:** 1999-06-14  
**Last Observed:** 1999-06-14 **First Observed:** 1999-06-14 **Actual Mapping Precision (m):** 100 **Precision Code:** S  
**Directions:** Manyberries, 8 km E of, Manyberries Badlands, bench of badland slope just above intermittent creek  
**General Description:** flat bench with Eriog fla, Ther rho, Guti sar, Rosa, Coma umb, Agropyron. About 90% bare ground  
**Min Elev. (m):** 1045 **Max Elev. (m):** 1045  
**Management Comments:** Area of intensive PNG development. **Best Source of Info:** F99ALL01ABCA  
**Map UTM Zone UTM Easting UTM Northing Survey Site Name Notes # Dot ID #**  
72E07 12 530850 5473550 Manyberries Badlands 40 5160  
**Source Code Author Publisher Year Title**  
F99ALL01ABCA Allen, Lorna 1999 Field notes: 1999 field season  
**Date Source Abstract Code Observer Occurrence Data**  
1999-06-14 F99ALL01ABCA L. Allen about 100 plants, not blooming, buds just forming  
**Stephanomeria runcinata** rush-pink SRank: S2  
+++++

**Element Code:** PDAST8U0C0 **Occurrence Code #:** 021 **Survey Date:** 1999-08-16  
**Last Observed:** 1999-08-16 **First Observed:** 1997-07-00 **Actual Mapping Precision (m):** 100 **Precision Code:** S  
**Directions:** Cavendish, 6.25 km NNE of, Red Deer River, 225 m W of.  
**General Description:** eroding soils on upper east bank of Red Deer River; exposed soils <50%; Stip com, Ruhl cus, Bout gra, Arte  
fri, Phlo hoo; very xeric; 15 degree slope  
**Min Elev. (m):** 602 **Max Elev. (m):** 602  
**Slope:** 15.00 **Aspect:** SW  
**Management Comments:** Stake boundaries of areas to be protected. **Best Source of Info:** U99GOL01ABCA  
**Map UTM Zone UTM Easting UTM Northing Survey Site Name Notes # Dot ID #**  
72L16 12 539475 5639275 Red Deer River 13-25-22-04-W4M, Lat 50 54.265' Lon 110 25.596' 24 5325  
**Source Code Author Publisher Year Title**  
U99GOL01ABCA Golder Associates & Boss environmental consulting ltd. 1999 Alberta Ethane Gathering System (AEGS) Looping  
Project - East Leg Conservation and Reclamation Plan vol. 2 (Empress to Hanna)  
**Date Source Abstract Code Observer Occurrence Data**  
1997-07-00 individuals; 6 on S bank; 15 on N bank; 5% flowering and 95% fruiting  
1999-08-16 U99GOL01ABCA 6 individuals  
**Stephanomeria runcinata** rush-pink SRank: S2  
+++++

**Element Code:** PDAST8U0C0 **Occurrence Code #:** 022 **Survey Date:** 1999-08-16  
**Last Observed:** 1999-08-16 **First Observed:** 1999-08-16 **Actual Mapping Precision (m):** 100 **Precision Code:** S  
**Directions:** Cavendish, 6.25 km N of, Red Deer River, .75 km W of.  
**General Description:** eroding soils on upper west bank of Red Deer River; eroding soils <50%; Stip com, Ruhl cus, Bout gra, Arte  
fri, Phlo hoo; very xeric; slope 15 degrees  
**Min Elev. (m):** 663 **Max Elev. (m):** 663  
**Management Comments:** Stake boundaries around areas to be protected. **Best Source of Info:** U99GOL01ABCA  
**Map UTM Zone UTM Easting UTM Northing Survey Site Name Notes # Dot ID #**  
72L16 12 539000 5639475 Red Deer River 16-26-22-04-W4M 25 5326  
**Source Code Author Publisher Year Title**  
U99GOL01ABCA Golder Associates & Boss environmental consulting ltd. 1999 Alberta Ethane Gathering System (AEGS) Looping  
Project - East Leg Conservation and Reclamation Plan vol. 2 (Empress to Hanna) U99GOL02ABCA Golder Associates 1999  
Rare Native Plant Forms- Golder's survey along BP Amoco Alberta Ethane Gathering System Pipeline right of way  
**Date Source Abstract Code Observer Occurrence Data**  
1999-07-00 U99GOL02ABCA 5% flowering, 95% fruiting  
1999-08-16 U99GOL01ABCA 15 individuals  
**Stephanomeria runcinata** rush-pink SRank: S2

**Suaeda moquinii** Moquin's sea-blite

**Natural Region:** Dry Mixedgrass

**Habitat:** Slopes-Badlands

**Phenology:** shrubby, observable throughout the growing season

**Specific Search Strategies (if any):** occurs on softer shale badland slopes, often the only plant growing there

**Element Occurrences:**

**Element Code:** PDCHE0P0F0 **Occurrence Code #:** 001 **Survey Date:** 1968-09-11  
**Last Observed:** 1968-09-11 **First Observed:** 1968-09-11 **Precision Code:** M  
**Directions:** Milk River Coulee; P.M.A.A. Pronghorn Exhibit Site, near.  
**General Description:** On dry eroded slopes with Sarcobatus.  
**Min Elev. (m):** 975 **Max Elev. (m):** 975 **Aspect:** E **Best Source of Info:** S68SAVPMABCA01  
**Specimen Source Code Collector Herbarium Accession # Date ID OK? Observation Detail**  
S68SAVPMABCA01 Savale, W.F. PM B68.17.7 1968-09-11 fairly common; Vegetative  
**Map UTM Zone UTM Easting UTM Northing Survey Site Name Notes # Dot ID #**  
72E02 12 507423 5442084 Milk River Coulee Lat/Long: 49 08' 110 55' 6 17  
**Suaeda moquinii** Moquin's sea-blite SRank: S2  
+++++

**Element Code:** PDCHE0P0F0 **Occurrence Code #:** 002 **Survey Date:** 1986-06-11  
**Last Observed:** 1986-06-11 **First Observed:** 1986-06-11 **Precision Code:** M  
**Directions:** Orion, SW of; Pakowki Lake, NE shore of.  
**General Description:** Sandy mud at water's edge of intermittent prairie lake.  
**Min Elev. (m):** 880 **Max Elev. (m):** 880 **Best Source of Info:** S86HRAPMABCA04  
**Specimen Source Code Collector Herbarium Accession # Date ID OK? Observation Detail**  
S86HRAPMABCA04 Hrapko, J.O. & W. M. Richards & R.B. Dickinson PM B86.127.26 1986-06-11 Vegetative  
**Map UTM Zone UTM Easting UTM Northing Survey Site Name Notes # Dot ID #**  
72E07 12 509873 5471783 Pakowki Sand Dunes Lat/Long: 49 24/110 52 2 83  
**Suaeda moquinii** Moquin's sea-blite SRank: S2  
+++++

**Element Code:** PDCHE0P0F0 **Occurrence Code #:** 003 **Survey Date:** 1979-07-14  
**Last Observed:** 1979-07-14 **First Observed:** 1979-07-14 **Precision Code:** M  
**Directions:** Foremost, about 2 mi. N of; Hwy. 879.  
**General Description:** Growing in saline area below dry eroded slopes.  
**Min Elev. (m):** 884 **Max Elev. (m):** 884 **Aspect:** 0  
**Other Comments:** Det. by K. Tannas; specimen housed at E.S.R.C. herbarium. **Best Source of Info:** UNDTAN01ABCA  
**Map UTM Zone UTM Easting UTM Northing Survey Site Name Notes # Dot ID #**  
72E11 12 467623 5484009 Chin Coulee 1 147  
**Source Code Author Publisher Year Title**  
UNDTAN01ABCA Tannas, K.E. Native Species Inventory Forms  
**Date Source Abstract Code Observer Occurrence Data**  
several sporadically occurring individuals; vegetative and flowering  
**Suaeda moquinii** Moquin's sea-blite SRank: S2  
+++++

**Element Code:** PDCHE0P0F0 **Occurrence Code #:** 005 **Survey Date:** 1996-00-00  
**Last Observed:** 1996-00-00 **First Observed:** 1996-00-00 **Actual Mapping Precision (m):** 250 **Precision Code:** S  
**Directions:** Medicine Hat, 36 km W of  
**General Description:** 14 plants; 6 were avoided. Badlands on south bank of S. Sask. River. Infected seed collected from 10 plants-not reseeded.  
**Min Elev. (m):** 671 **Max Elev. (m):** 671  
**Other Comments:** Actual UTM's are 500107.60E, 5540888.35N but location description says on South bank therefore this EO was combined with 72L02 dot 19. **Best Source of Info:** U96EXP01ABCA  
**Map UTM Zone UTM Easting UTM Northing Survey Site Name Notes # Dot ID #**  
72L02 12 500327 5540006 S.Sask. River NW 14-23 12-8-4; LS # 46, 301.2 km, LLD NW 23 12-8-4 19 3969  
**Source Code Author Publisher Year Title**  
U96EXP01ABCA AXYS Environmental Consulting 1996 Express Pipeline Project  
**Suaeda moquinii** Moquin's sea-blite SRank: S2  
+++++



**Element Code:** PDCHE0P0F0 **Occurrence Code #:** 006 **Survey Date:** 1996-00-00  
**Last Observed:** 1996-00-00 **First Observed:** 1996-00-00 **Actual Mapping Precision (m):** 250 **Precision Code:** S  
**Directions:** Bowell; ~15km SW of; S Saskatchewan River; on N shore of.  
**General Description:** 34 plants within an extra workspace: 24 plants were avoided. 200 plants 30 M W of RoW, 45 plants E of Row. Badlands on N bank of S. Sask. River. Seed collected and re-seeded.  
**Min Elev. (m):** 671 **Max Elev. (m):** 671 **Best Source of Info:** U96EXP01ABCA  
**Map UTM Zone UTM Easting UTM Northing Survey Site Name Notes # Dot ID #**  
72L02 12 500562 5539450 S. Saskatchewan River LS#46;km:302.1;LLD:NW 23 12-8-4 20 4012  
**Source Code Author Publisher Year Title**  
U96EXP01ABCA AXYS Environmental Consulting 1996 Express Pipeline Project  
**Suaeda moquinii** Moquin's sea-blite SRank: S2  
+++++

**Element Code:** PDCHE0P0F0 **Occurrence Code #:** 007 **Survey Date:** 1996-00-00  
**Last Observed:** 1996-00-00 **First Observed:** 1996-00-00 **Actual Mapping Precision (m):** 250 **Precision Code:** S  
**Directions:** Fitzgerald; ~6m SE of.  
**General Description:** E side of side coulee; Robinson Coulee. Off RoW. Population avoided.  
**Min Elev. (m):** 800 **Max Elev. (m):** 800 **Best Source of Info:** U96EXP01ABCA  
**Map UTM Zone UTM Easting UTM Northing Survey Site Name Notes # Dot ID #**  
72E15 12 517000 5521650 Fitzgerald LS# 49, Km 328, SW 6-28-10-6-4 22 4077  
**Source Code Author Publisher Year Title**  
U96EXP01ABCA AXYS Environmental Consulting 1996 Express Pipeline Project  
**Suaeda moquinii** Moquin's sea-blite SRank: S2  
+++++

**Element Code:** PDCHE0P0F0 **Occurrence Code #:** 008 **Survey Date:** 1969-08-12  
**Last Observed:** 1969-08-12 **First Observed:** 1969-08-12 **Actual Mapping Precision (m):** 2500 **Precision Code:** M  
**Directions:** Milk River (town), 15 km E of; Hwy 501, N of.  
**General Description:** On slope of eroded hill - heavy clay soil. Scattered plants, not seen elsewhere on badland.  
**Min Elev. (m):** 975 **Max Elev. (m):** 975 **Best Source of Info:** S69BASACONCA04  
**Specimen Source Code Collector Herbarium Accession # Date ID OK? Observation Detail**  
S69BASACONCA04 Bassett, I.J. & B. Baum AC 601428 1969-08-12 scattered, not seen elsewhere on badland  
S69BASACONCA05 Bassett, I.J. & B. Baum AC none 1969-08-12  
**Map UTM Zone UTM Easting UTM Northing Survey Site Name Notes # Dot ID #**  
72E04 12 437224 5443785 Highway 501 32 4156  
**Suaeda moquinii** Moquin's sea-blite SRank: S2  
+++++

**Element Code:** PDCHE0P0F0 **Occurrence Code #:** 009 **Survey Date:** 1985-00-00  
**Last Observed:** 1985-00-00 **First Observed:** 1985-00-00 **Actual Mapping Precision (m):** 250 **Precision Code:** S  
**Directions:** Lost River and USA border, 2 km ENE of.  
**General Description:** locally dominant on softer shale in badlands  
**Min Elev. (m):** 846 **Max Elev. (m):** 853 **Best Source of Info:** R86WER01ABCA  
**Map UTM Zone UTM Easting UTM Northing Survey Site Name Notes # Dot ID #**  
72E01 12 543050 5427750 Lost River 43 4544  
**Source Code Author Publisher Year Title**  
R86WER01ABCA Wershler C. & C. Wallis 1986 Lost River Significant Features Assessment  
**Suaeda moquinii** Moquin's sea-blite SRank: S2  
+++++

**Element Code:** PDCHE0P0F0 **Occurrence Code #:** 010 **Survey Date:** 1985-00-00  
**Last Observed:** 1985-00-00 **First Observed:** 1985-00-00 **Actual Mapping Precision (m):** 50 **Precision Code:** S  
**Directions:** Lost River Valley, E slope of; USA border, 2.5 km N of.  
**General Description:** locally dominant on softer shale in badlands  
**Min Elev. (m):** 838 **Max Elev. (m):** 892 **Best Source of Info:** R86WER01ABCA  
**Map UTM Zone UTM Easting UTM Northing Survey Site Name Notes # Dot ID #**  
72E01 12 540375 5429600 Lost River 53 4554  
**Source Code Author Publisher Year Title**  
R86WER01ABCA Wershler C. & C. Wallis 1986 Lost River Significant Features Assessment  
**Suaeda moquinii** Moquin's sea-blite SRank: S2

**Suckleya suckleyana poison suckleya**

**Natural Region:** Dry Mixedgrass

**Habitat:** Wetland-Alkali

**Phenology:** flowers in June

**Specific Search Strategies (if any):** possibly prefers a sandy component, e.g. ephemeral sandy streams; occasionally weedy on disturbed sites

**Element Occurrences:**

**Element Code:** PDCHE0Q010 **Occurrence Code #:** 001 **Survey Date:** 1952-06-28  
**Last Observed:** 1952-06-28 **First Observed:** 1952-06-28 **Precision Code:** M  
**Directions:** Manyberries, 8 mi. S of; Ruisseau Ketchum (Lower bank of Ketchum Creek), rivage desseche du (Ketchum Creek, dried shore of ?).  
**General Description:** Rivage desseche(dried shore).  
**Min Elev. (m):** 899 **Max Elev. (m):** 899 **Best Source of Info:** S52BOIUCABCA02  
**Specimen Source Code Collector Herbarium Accession # Date ID OK? Observation Detail**  
S52BOIACONCA07 Boivin, B. & J.F. Alex AC 131994 1952-06-28  
S52BOIUAAABCA12 Boivin, Bernard & J.F. Alex UA 73634 1952-06-28 Y flowers; plants all very young, still with seed leaves, and small  
S52BOIUCABCA02 Boivin, B. & J.F. Alex UC 09456 1952-06-28  
**Map UTM Zone UTM Easting UTM Northing Survey Site Name Notes # Dot ID #**  
72E07 12 523273 5459983 Ketchum Creek 6 87  
**Suckleya suckleyana** poison suckleya SRank: S1  
+++++

**Element Code:** PDCHE0Q010 **Occurrence Code #:** 003 **Survey Date:** 1964-06-16  
**Last Observed:** 1964-06-16 **First Observed:** 1964-06-16 **Actual Mapping Precision (m):** 2500 **Precision Code:** M  
**Directions:** Barnwell.  
**General Description:** Low spot in sugarbeet field.  
**Min Elev. (m):** 830 **Max Elev. (m):** 830 **Best Source of Info:** S64SEXALABCA02  
**Specimen Source Code Collector Herbarium Accession # Date ID OK? Observation Detail**  
S64SEXALABCA02 Sexsmith, J.J. AL 4077 1964-06-16 Y  
**Map UTM Zone UTM Easting UTM Northing Survey Site Name Notes # Dot ID #**  
82H16 12 409525 5513000 Barnwell 4 1409  
**Suckleya suckleyana** poison suckleya SRank: S1  
+++++

**Element Code:** PDCHE0Q010 **Occurrence Code #:** 004 **Survey Date:** 1950-08-07  
**Last Observed:** 1950-08-07 **First Observed:** 1950-08-07 **Actual Mapping Precision (m):** 2500 **Precision Code:** M  
**Directions:** New Dayton.  
**General Description:** Low spot in grain field.  
**Min Elev. (m):** 975 **Max Elev. (m):** 975 **Best Source of Info:** S50SEXALABCA02  
**Specimen Source Code Collector Herbarium Accession # Date ID OK? Observation Detail**  
S50SEXALABCA02 Sexsmith, J.J. AL 4075 1950-07-07 Y  
S50SEXALABCA03 Sexsmith, J.J. AL 1938 1950-07-07 Y  
**Map UTM Zone UTM Easting UTM Northing Survey Site Name Notes # Dot ID #**  
82H08 12 399500 5475575 New Dayton 4 1350  
**Suckleya suckleyana** poison suckleya SRank: S1  
+++++

**Element Code:** PDCHE0Q010 **Occurrence Code #:** 005 **Survey Date:** 1950-08-07  
**Last Observed:** 1950-08-07 **First Observed:** 1950-08-07 **Actual Mapping Precision (m):** 1000 **Precision Code:** M  
**Directions:** Craddock, 10 km E of; Tyrell Lake, 7 km N of; Eitzikom Coulee, 6 km W of.  
**General Description:** Along roadway through field. Not abundant  
**Min Elev. (m):** 960 **Max Elev. (m):** 960 **Best Source of Info:** S50SEXACONCA01  
**Specimen Source Code Collector Herbarium Accession # Date ID OK? Observation Detail**  
S50SEXACONCA01 Sexsmith, J. AC none 1950-08-07 not abundant  
**Map UTM Zone UTM Easting UTM Northing Survey Site Name Notes # Dot ID #**  
82H08 12 405500 5479800 Eitzikom Coulee 13-6-18-W4M 6 4129  
**Suckleya suckleyana** poison suckleya SRank: S1

***Thelesperma subnudum* var *marginatum* greenthread**

**Natural Region:** Mixedgrass, Dry Mixedgrass

**Habitat:** Grassland-Sandy

**Phenology:** flowers in June

**Specific Search Strategies (if any):** at top edges of valley where there is some eroding sand

**Element Occurrences:**

**Element Code:** PDAST980A1 **Occurrence Code #:** 001 **Survey Date:** 1895-08-09  
**Last Observed:** 1895-08-09 **First Observed:** 1895-08-09 **Actual Mapping Precision (m):** 5000 **Precision Code:** G  
**Directions:** Medicine Hat

**Min Elev. (m):** 685 **Max Elev. (m):** 685 **Best Source of Info:** S95MACNMONCA26

**Specimen Source Code Collector Herbarium Accession # Date ID OK? Observation Detail**

S95MACNMONCA26 Macoun, J. NM 506860 1895-08-09

**Map UTM Zone UTM Easting UTM Northing Survey Site Name Notes # Dot ID #**

72L02 12 525000 5542850 Medicine Hat 8 174

*Thelesperma subnudum* var *marginatum* greenthread SRank: S1

+++++

**Element Code:** PDAST980A1 **Occurrence Code #:** 002 **Survey Date:** 1997-06-16  
**Last Observed:** 1997-06-16 **First Observed:** 1997-06-16 **Actual Mapping Precision (m):** 100 **Precision Code:** S  
**Directions:** Lethbridge; Oldman River Valley, E slope of; High Level Bridge, 750 m N of.

**General Description:** along an old cart trail running along ridgetop; *Stipa* spp., *Koeleria*, *Agropyron smithii*, *Artemisia* spp.,  
*Hymenoxys richardsonii*.

**Min Elev. (m):** 890 **Max Elev. (m):** 890 **Best Source of Info:** U97ERN01ABCA

**Map UTM Zone UTM Easting UTM Northing Survey Site Name Notes # Dot ID #**

82H10 12 366275 5507250 Lethbridge 3TM 82732.68 5507961.26 19 3790

**Source Code Author Publisher Year Title**

U97ERN01ABCA Ernst, Reg 1997 Rare Native Plant Survey Forms

**Date Source Abstract Code Observer Occurrence Data**

1997-06-16 U97ERN01ABCA Reg Ernst 200-300 individuals

*Thelesperma subnudum* var *marginatum* greenthread SRank: S1

**Townsendia exscapa low townsendia**

**Natural Region:** Northern Fescue Grassland, Mixedgrass, Dry Mixedgrass

**Habitat:** Grassland-Sandy

**Phenology:** flowers in May

**Specific Search Strategies (if any):** difficult to detect past mid-June; valley rims where there is some eroding soil, especially sandy soils

**Element Occurrences:**

**Element Code:** PDAST9C060 **Occurrence Code #:** 001 **Survey Date:** 1965-05-28

**Last Observed:** 1965-05-28 **First Observed:** 1965-05-15 **Precision Code:** G

**Directions:** Lost River Coulee, Manyberries Range Station

**General Description:** dry exposed areas, stoney hillsides, gravelly, sandy soil

**Min Elev. (m):** 900 **Max Elev. (m):** 900

**Other Comments:** S65SMOALABCA01 & S65SMOALABCA02, ID = Y K.W. Oct 99 **Best Source of Info:** S65SMOALABCA03

**Specimen Source Code Collector Herbarium Accession # Date ID OK? Observation Detail**

S65SMOALABCA01 Smoliak, S. AL 1965 1965-05-28 Y blooming

S65SMOALABCA02 Smoliak, S. AL 1965 1965-05-15 Y blooming

S65SMOALABCA03 Smoliak, S. UL 1965 1965-05-28 Y flowering

**Map UTM Zone UTM Easting UTM Northing Survey Site Name Notes # Dot ID #**

72E01 12 538000 5433000 Lost River 6 5

**Date Source Abstract Code Observer Occurrence Data**

1965-05-15 Smoliak, S. blooming

1965-05-28 Smoliak, S. flowering

**Townsendia exscapa low townsendia** SRank: S2

+++++

**Element Code:** PDAST9C060 **Occurrence Code #:** 003 **Survey Date:** 1995-06-04

**Last Observed:** 1995-06-04 **First Observed:** 1995-06-04 **Actual Mapping Precision (m):** 250 **Precision Code:** S

**Directions:** Rush Lake, 7.5km SE of bridge over E end of; Buffalo Lake, 1.75 km SW of.

**General Description:** Top of knob in ice ablation zone (knob and kettle topography). **Size of Occurrence:** **Best Source of Info:** B95WIL01ABCA

**Map UTM Zone UTM Easting UTM Northing Survey Site Name Notes # Dot ID #**

72E10 12 529274 5495581 Buffalo Lake LS#54, km: 357.2, LLD: SE 1-3 8-5-4 5 3957

**Source Code Author Publisher Year Title**

B95WIL01ABCA J. Williams Consulting & Axys Environmental Consulting Ltd. Express Pipelines Ltd 1995 Rare Plant Surveys along the Proposed Express Pipeline Project

**Townsendia exscapa low townsendia** SRank: S2

+++++

**Element Code:** PDAST9C060 **Occurrence Code #:** 004 **Survey Date:** 1996-00-00

**Last Observed:** 1996-00-00 **First Observed:** 1996-00-00 **Actual Mapping Precision (m):** 500 **Precision Code:** M

**Directions:** Rush Lake; ~7.5 km SE of bridge over E side of; Buffalo Lake; ~2.5 km SW of.

**General Description:** Upland plains; off RoW, population avoided.

**Min Elev. (m):** 671 **Max Elev. (m):** 671 **Best Source of Info:** U96EXP01ABCA

**Map UTM Zone UTM Easting UTM Northing Survey Site Name Notes # Dot ID #**

72E10 12 528374 5495681 Buffalo Lake LS#54; km: 356.6; LLD: SW 3 8-5-4 19 4062

**Source Code Author Publisher Year Title**

U96EXP01ABCA AXYS Environmental Consulting 1996 Express Pipeline Project

**Townsendia exscapa low townsendia** SRank: S2

+++++

**Element Code:** PDAST9C060 **Occurrence Code #:** 005 **Survey Date:** 1914-05-02

**Last Observed:** 1914-05-02 **First Observed:** 1914-05-02 **Actual Mapping Precision (m):** 2000 **Precision Code:** M

**Directions:** Rosedale

**General Description:** Bare grassy hills

**Min Elev. (m):** 686 **Max Elev. (m):** 686 **Best Source of Info:** S14MOOACONCA02

**Specimen Source Code Collector Herbarium Accession # Date ID OK? Observation Detail**

S14MOOACONCA02 Moodie, M.E. AC none 1914-05-02

**Map UTM Zone UTM Easting UTM Northing Survey Site Name Notes # Dot ID #**

82P07 12 386350 5697350 Rosedale 51 25/112 38 6 2285

**Townsendia exscapa low townsendia** SRank: S2

+++++

**Element Code:** PDAST9C060 **Occurrence Code #:** 009 **Survey Date:** 1934-05-06  
**Last Observed:** 1934-05-06 **First Observed:** 1928-04-29 **Actual Mapping Precision (m):** 2500 **Precision Code:** M  
**Directions:** Fort Macleod  
**General Description:** dry soil  
**Min Elev. (m):** 945 **Max Elev. (m):** 945  
**Other Comments:** phenology ranges from flowers to remains of flowers to dehiscent fruit **Best Source of Info:**  
S28DIXUAABCA02  
**Specimen Source Code Collector Herbarium Accession # Date ID OK? Observation Detail**  
S28DIXUAABCA02 Dixon, R.H. UA 19031 1928-04-29 Y phenology ranges from flowers to remains of flowers to dehiscent fruit  
**Map UTM Zone UTM Easting UTM Northing Survey Site Name Notes # Dot ID #**  
82H11 12 327500 5510300 Fort Macleod 8 4444  
**Townsendia exscapa** low townsendia SRank: S2  
+++++

**Element Code:** PDAST9C060 **Occurrence Code #:** 010 **Survey Date:** 1942-05-14  
**Last Observed:** 1942-05-14 **First Observed:** 1942-05-14 **Actual Mapping Precision (m):** 2500 **Precision Code:** M  
**Directions:** Czar.  
**Min Elev. (m):** 685 **Max Elev. (m):** 685 **Best Source of Info:** S42MOSUAABCA02  
**Specimen Source Code Collector Herbarium Accession # Date ID OK? Observation Detail**  
S42JONUAABCA01 Jones, Edith UA 19030 1942-05-14 Y flowers  
**Map UTM Zone UTM Easting UTM Northing Survey Site Name Notes # Dot ID #**  
73D07 12 512000 5811000 Czar 3 4451  
**Townsendia exscapa** low townsendia SRank: S2  
+++++

**Element Code:** PDAST9C060 **Occurrence Code #:** 011 **Survey Date:** 1945-06-03  
**Last Observed:** 1945-06-03 **First Observed:** 1945-06-03 **Actual Mapping Precision (m):** 1400 **Precision Code:** M  
**Directions:** Hughenden.  
**Min Elev. (m):** 716 **Max Elev. (m):** 716 **Best Source of Info:** S45DIXUAABCA01  
**Specimen Source Code Collector Herbarium Accession # Date ID OK? Observation Detail**  
S45DIXUAABCA01 Dixon, Marjorie M. UA 19034 1945-06-03 Y remains of flowers  
**Map UTM Zone UTM Easting UTM Northing Survey Site Name Notes # Dot ID #**  
73D10 12 502000 5818225 Hughenden 52 31/110 59 47 4455  
**Townsendia exscapa** low townsendia SRank: S2  
+++++

**Element Code:** PDAST9C060 **Occurrence Code #:** 012 **Survey Date:** 1951-04-29  
**Last Observed:** 1951-04-29 **First Observed:** 1951-04-29 **Actual Mapping Precision (m):** 250 **Precision Code:** S  
**Directions:** Ghost Lake, 6 km NNE of; Bow River; Ghost Dam, 1.5 km E of.  
**General Description:** open bank of river  
**Min Elev. (m):** 1143 **Max Elev. (m):** 1143 **Best Source of Info:** S51BREUAABCA01  
**Specimen Source Code Collector Herbarium Accession # Date ID OK? Observation Detail**  
S51BREUAABCA01 Brethour, A.C. UA 67145 1951-04-29 Y flowers  
**Map UTM Zone UTM Easting UTM Northing Survey Site Name Notes # Dot ID #**  
82C02 11 662000 5676300 Ghost Dam 2 4462  
**Townsendia exscapa** low townsendia SRank: S2  
+++++

**Element Code:** PDAST9C060 **Occurrence Code #:** 013 **Survey Date:** 1982-05-26  
**Last Observed:** 1982-05-26 **First Observed:** 1982-05-20 **Actual Mapping Precision (m):** 250 **Precision Code:** S  
**Directions:** Brocket, 5 mi NW of; Oldman, River, S side of; in coniferous woodland, coniferous slope, W of; green bridge, E of.  
**General Description:** coniferous woodland, ridge edge of E/W slopes, loose soil, open location & lower grassland slope, loose, dry, sandy soil  
**Min Elev. (m):** 1036 **Max Elev. (m):** 1036 **Aspect:** N **Best Source of Info:** S82CAMULABCA07  
**Specimen Source Code Collector Herbarium Accession # Date ID OK? Observation Detail**  
S82CAMULABCA06 Campbell-Snelling and M. Chambers UL none 1982-05-20 ? starting to flower  
S82CAMULABCA07 Campbell-Snelling and M. Chambers UL none 1982-05-26 Y starting to flower  
S82CAMULABCA08 Campbell-Snelling and M. Chambers UL none 1982-05-26 Y flowering  
**Map UTM Zone UTM Easting UTM Northing Survey Site Name Notes # Dot ID #**  
82H12 12 296100 5492900 Brocket 43 33/113 49 4 1377  
**Date Source Abstract Code Observer Occurrence Data**  
1982-05-20 Campbell-Snelling and M. Chambers starting to flower 1982-05-26 Campbell-Snelling and M. Chambers starting to flower  
**Townsendia exscapa** low townsendia SRank: S2  
+++++

**Element Code:** PDAST9C060 **Occurrence Code #:** 014 **Survey Date:** 1982-06-01  
**Last Observed:** 1982-06-01 **First Observed:** 1982-06-01 **Actual Mapping Precision (m):** 250 **Precision Code:** S  
**Directions:** Head-Smashed-In-Buffalo-Jump, south tip of; below first escarpment, by road.  
**General Description:** grassland. **Aspect:** S **Best Source of Info:** S82CAMULABCA09  
**Specimen Source Code Collector Herbarium Accession # Date ID OK? Observation Detail**  
S82CAMULABCA09 Campbell-Snelling, J. and M. Chambers UL none 1982-06-01 Y flowering  
**Map UTM Zone UTM Easting UTM Northing Survey Site Name Notes # Dot ID #**  
82H12 12 308650 5508900 Head Smashed In Buffalo Jump 49-43N/113-39W 3 1376  
**Date Source Abstract Code Observer Occurrence Data**  
1982-06-01 Campbell-Snelling, J. and M. Chambers flowering  
**Townsendia exscapa** low townsendia SRank: S2  
+++++

**Element Code:** PDAST9C060 **Occurrence Code #:** 015 **Survey Date:** 1978-05-13  
**Last Observed:** 1978-05-13 **First Observed:** 1978-05-13 **Actual Mapping Precision (m):** 2500 **Precision Code:** M  
**Directions:** Old Man River Valley; Pincher Station, north of, on secondary highway.  
**General Description:** open grassland.  
**Min Elev. (m):** 1067 **Max Elev. (m):** 1097 **Aspect:** S **Best Source of Info:** S78COXULABCA03  
**Specimen Source Code Collector Herbarium Accession # Date ID OK? Observation Detail**  
S78COXULABCA03 Coxson, D. UL none 1978-05-13 Y flowering  
**Map UTM Zone UTM Easting UTM Northing Survey Site Name Notes # Dot ID #**  
82H12 12 288500 5496750 Oldman River 11 6064  
**Date Source Abstract Code Observer Occurrence Data**  
1978-05-13 Coxson, D. flowering  
**Townsendia exscapa** low townsendia SRank: S2

***Tradescantia occidentalis* western spiderwort**

**Natural Region:** Dry Mixedgrass

**Habitat:** Sand Dunes

**Phenology:** flowers late June

**Specific Search Strategies (if any):** wide area searches in active dune and immediately adjacent area

**Element Occurrences:**

**Element Code:** PMCOM0B0F0 **Occurrence Code #:** 001 **Survey Date:** 1999-06-29

**Last Observed:** 1999-06-29 **First Observed:** 1986-06-11 **Actual Mapping Precision (m):** 100 **Precision Code:** S

**Directions:** Orion, 7.5 km SW of; Pakowki Sand Dunes.

**General Description:** very local in one interdune area protected on N, W & S. sides, slopes dominated by *Rosa arkansana* & *Koeleria macrantha*. Associates with other plants include *Oryzopsis hymenoides*; *Stipa comata* and *Koeleria macrantha*

**Min Elev. (m):** 800 **Max Elev. (m):** 880

**Other Comments:** three small subpopulations noted June 28 and 29, 1999

**Management Comments:** no known threats or concerns at present **Best Source of Info:** S90SMIUCABCA01

**Specimen Source Code Collector Herbarium Accession # Date ID OK? Observation Detail**

S86DICAUABCA02 Dickinson, R. and T. S. Bakshi AU 86-0822 1986-06-11 Y

S86HRAACONCA01 Hrapko, J.O. & M. E. Parker AC 577372 1986-07-20

S86HRAPMABCA02 Hrapko, J.O. & W. M. Richards & R.B. Dickinson PM B86.127.90a 1986-06-11

S86HRAPMABCA03 Hrapko, J.O. & M. E. Parker PM B86.140.1a 1986-06-11

S86HRAPMABCA08 Hrapko, J.O., W.M. Richards & R.B. Dickinson PM B86.127.90 1986-06-11 Y flower buds

S89HRAPMABCA01 Hrapko, J.O., W.M. Richards & R.B. Dickinson PM B89.13.7 1989-06-27 Y early flowers

S90SMIUCABCA01 Smith, B & G. Lewis UC 49458 1990-06-21 locally rather common; 210 in population; [bloom]

**Map UTM Zone UTM Easting UTM Northing Survey Site Name Notes # Dot ID #**

72E07 12 509100 5471450 Pakowki Lake multipolygon 10 90

**Source Code Author Publisher Year Title**

F99GOU01ABCA Gould, Joyce 1999 Field Notes (the site is described)

U92SMI01ABCA Smith, Bonnie & Cheryl Bradley COSEWIC 1992 Status Report on the Western Spiderwort *Tradescantia occidentalis* in Canada

**Date Source Abstract Code Observer Occurrence Data**

Buds 1999-06-29 J. Gould and P. Cotterill 27 plants observed; 3 in flower, 24 in bud; 3 in flower, 0 in bud (subpop. 1), 19 plants all in bud (subpop. 2), 5 plants all in bud (subpop. 3)

***Tradescantia occidentalis* western spiderwort SRank:** S1

***Tripterocalyx micranthus (Abronia micrantha) sand verbena***

**Natural Region:** Dry Mixedgrass

**Habitat:** Sand Dunes

**Phenology:** flowers in July

**Specific Search Strategies (if any):** detectable in most seasons due to its distinctive leaves, flowers and fruits; search active silty dunes

**Element Occurrences:**

**Element Code:** PDNYC0G030 **Occurrence Code #:** 001 **Survey Date:** 1979-07-06

**Last Observed:** 1979-07-06 **First Observed:** 1979-07-06 **Precision Code:** S

**Directions:** Lost River, N of.

**General Description:** Xeric mixed grass prairie; stabilized (alluvial) sand.

**Min Elev. (m):** 905 **Max Elev. (m):** 905 **Best Source of Info:** S79STGULABCA01

**Specimen Source Code Collector Herbarium Accession # Date ID OK? Observation Detail**

S79STGULABCA01 STG UL none 1979-07-06 rare; Fruit

**Map UTM Zone UTM Easting UTM Northing Survey Site Name Notes # Dot ID #**

72E02 12 533473 5436684 Lost River Lat/Long: 49 41' 110 35'; Lat/Long do not match Legals. 9 20

**Source Code Author Publisher Year Title**

U92SMI03ABCA Smith, Bonnie & Cheryl Bradley COSEWIC 1992 Status Report on the Sand Verbena *Abronia micrantha* in Canada

***Tripterocalyx micranthus* sand verbena SRank: S2**

+++++

**Element Code:** PDNYC0G030 **Occurrence Code #:** 002 **Survey Date:** 1972-07-06

**Last Observed:** 1972-07-06 **First Observed:** 1972-07-06 **Precision Code:** M

**Directions:** Wildhorse, 10 miles W of.

**General Description:** silty-sandy outwash on valley floor

**Min Elev. (m):** 845 **Max Elev. (m):** 845 **Best Source of Info:** S72SHAULABCA05

**Specimen Source Code Collector Herbarium Accession # Date ID OK? Observation Detail**

S72SHAULABCA05 Sharp, W.H. UL none 1972-07-06 Fruit

**Map UTM Zone UTM Easting UTM Northing Survey Site Name Notes # Dot ID #**

72E01 12 540000 5429600 Lost River Valley 3 3

***Tripterocalyx micranthus* sand verbena SRank: S2**

+++++

**Element Code:** PDNYC0G030 **Occurrence Code #:** 003 **Survey Date:** 1994-00-00

**Last Observed:** 1995-00-00 **First Observed:** 1994-06-18 **Precision Code:** S

**Directions:** Canadian Forces Base Suffield National Wildlife Area; South Saskatchewan River, along eroded slope of; Whitco Road, eastern end of.

**General Description:** Occurs along submesic sites; on the eroded **Slope:** xeric barrens of *Stip com*, *Cala lon*, *Bout gra*, *Arte can*, *Arte fri*, *Rhus tril*, *Opun pol*

**Min Elev. (m):** 595 **Max Elev. (m):** 670

**Management Comments:** threatened by encroachment on active sand areas, but destabilization of dunes may be beneficial in the long term **Best Source of Info:** U97CWS01ABCA

**Specimen Source Code Collector Herbarium Accession # Date ID OK? Observation Detail**

S94MACPMABCA28 Macdonald, I.D. PM B94.4.124 1994-06-18 Y

**Map UTM Zone UTM Easting UTM Northing Survey Site Name Notes # Dot ID #**

72L09 12 542500 5603400 Middle Sand Hills 50-34'55N/110-24'05"W 1 215

**Source Code Author Publisher Year Title**

U96MAC01ABCA Macdonald, I.D. Canadian Wildlife Service, Environment Canada, Prairie and 1996 Vascular Flora of Canadian Forces Base Suffield National Wildlife Area

U97CWS01ABCA Canadian Wildlife Service CWS 1997 Plant Database from Suffield Survey 1994-1995

**Date Source Abstract Code Observer Occurrence Data**

rare in SNWA, single plant

***Tripterocalyx micranthus* sand verbena SRank: S2**

+++++



**Element Code:** PDNYC0G030 **Occurrence Code #:** 004 **Survey Date:** 1972-00-00  
**Last Observed:** 1972-00-00 **First Observed:** 1972-00-00 **Actual Mapping Precision (m):** 250 **Precision Code:** S  
**Directions:** Medicine Hat, N of; Brush Flats, across river.  
**General Description:** sand dunes  
**Min Elev. (m):** 632 **Max Elev. (m):** 701 **Best Source of Info:** S73JOHPMABCA02  
**Specimen Source Code Collector Herbarium Accession # Date ID OK? Observation Detail**  
S73JOHPMABCA02 Johnson, H. PM B73.69.76a 1973-07-22 Y fruits  
S73JOHPMABCA03 Johnson, H. PM B73.69.76b 1973-07-22 Y fruits  
**Map UTM Zone UTM Easting UTM Northing Survey Site Name Notes # Dot ID #**  
72L02 12 527000 5566000 Brush Flats 7 173  
**Source Code Author Publisher Year Title**  
U92SMI03ABCA Smith, Bonnie & Cheryl Bradley COSEWIC 1992 Status Report on the Sand Verbena Abronia micrantha in  
Canada  
U96MAC01ABCA Macdonald, I.D. Canadian Wildlife Service, Environment Canada, Prairie and 1996 Vascular Flora of Canadian  
Forces Base Suffield National Wildlife Area  
**Tripterocalyx micranthus** sand verbena SRank: S2  
+++++

**Element Code:** PDNYC0G030 **Occurrence Code #:** 005 **Survey Date:** 1987-00-00  
**Last Observed:** 1987-00-00 **First Observed:** 1987-00-00 **Actual Mapping Precision (m):** 250 **Precision Code:** S  
**Directions:** Bow Island, 3 km N of.  
**Min Elev. (m):** 708 **Max Elev. (m):** 747  
**Slope:** 747.00 **Best Source of Info:** U92SMI03ABCA  
**Map UTM Zone UTM Easting UTM Northing Survey Site Name Notes # Dot ID #**  
72E13 12 450000 5533575 Bow Island 8 154  
**Source Code Author Publisher Year Title**  
U92SMI03ABCA Smith, Bonnie & Cheryl Bradley COSEWIC 1992 Status Report on the Sand Verbena Abronia micrantha in  
Canada  
**Tripterocalyx micranthus** sand verbena SRank: S2  
+++++

**Element Code:** PDNYC0G030 **Occurrence Code #:** 006 **Survey Date:** 1987-00-00  
**Last Observed:** 1987-00-00 **First Observed:** 1987-00-00 **Actual Mapping Precision (m):** 250 **Precision Code:** S  
**Directions:** Wolf Island, N across river.  
**Min Elev. (m):** 792 **Max Elev. (m):** 792 **Best Source of Info:** U92SMI03ABCA  
**Map UTM Zone UTM Easting UTM Northing Survey Site Name Notes # Dot ID #**  
72E13 12 436550 5531000 Wolf Island 9 155  
**Source Code Author Publisher Year Title**  
U92SMI03ABCA Smith, Bonnie & Cheryl Bradley COSEWIC 1992 Status Report on the Sand Verbena Abronia micrantha in  
Canada  
**Tripterocalyx micranthus** sand verbena SRank: S2  
+++++

**Element Code:** PDNYC0G030 **Occurrence Code #:** 007 **Survey Date:** 1987-00-00  
**Last Observed:** 1987-00-00 **First Observed:** 1987-00-00 **Actual Mapping Precision (m):** 250 **Precision Code:** S  
**Directions:** Purple Springs, 2 km NE of.  
**Min Elev. (m):** 800 **Max Elev. (m):** 800 **Best Source of Info:** U92SMI03ABCA  
**Map UTM Zone UTM Easting UTM Northing Survey Site Name Notes # Dot ID #**  
72E13 12 436900 5519675 Purple Springs 10 156  
**Source Code Author Publisher Year Title**  
U92SMI03ABCA Smith, Bonnie & Cheryl Bradley COSEWIC 1992 Status Report on the Sand Verbena Abronia micrantha in  
Canada  
**Tripterocalyx micranthus** sand verbena SRank: S2  
+++++

**Element Code:** PDNYC0G030 **Occurrence Code #:** 008 **Survey Date:** 1972-07-19  
**Last Observed:** 1972-07-19 **First Observed:** 1972-07-19 **Actual Mapping Precision (m):** 500 **Precision Code:** M  
**Directions:** Old Channel Lake, 1 km N of; Brush Flats, 1 km S of.  
**Min Elev. (m):** 655 **Max Elev. (m):** 655 **Best Source of Info:** S72JOHPMABCA03  
**Specimen Source Code Collector Herbarium Accession # Date ID OK? Observation Detail**  
S72JOHPMABCA03 Johnson, H. PM B72.39.26 1972-07-19 Y fruits, remains of flowers  
**Map UTM Zone UTM Easting UTM Northing Survey Site Name Notes # Dot ID #**  
72L02 12 525000 5564450 Old Channel Lake 50 14/110 39 10 176  
**Tripterocalyx micranthus** sand verbena SRank: S2  
+++++

**Element Code:** PDNYC0G030 **Occurrence Code #:** 009 **Survey Date:** 1985-05-28  
**Last Observed:** 1985-05-28 **First Observed:** 1985-05-28 **Actual Mapping Precision (m):** 50 **Precision Code:** S  
**Directions:** USA border, 8 km N of; Lost River Valley, E slope of.  
**General Description:** active dune along river  
**Min Elev. (m):** 899 **Max Elev. (m):** 899 **Best Source of Info:** S85WALUAABCA13  
**Specimen Source Code Collector Herbarium Accession # Date ID OK? Observation Detail**  
S85WALUAABCA13 Wallis, C. UA 098376 1985-05-28 Y flowers; "very local"  
**Map UTM Zone UTM Easting UTM Northing Survey Site Name Notes # Dot ID #**  
72E02 12 535073 5435085 Lost River 20 31  
**Source Code Author Publisher Year Title**  
R86WER01ABCA Wershler C. & C. Wallis 1986 Lost River Significant Features Assessment  
*Tripterocalyx micranthus* sand verbena SRank: S2  
+++++

**Element Code:** PDNYC0G030 **Occurrence Code #:** 010 **Survey Date:** 1985-00-00  
**Last Observed:** 1985-00-00 **First Observed:** 1985-00-00 **Actual Mapping Precision (m):** 50 **Precision Code:** S  
**Directions:** USA border, 7.5 km N of; Lost River Valley, rim of.  
**General Description:** active blowout  
**Min Elev. (m):** 899 **Max Elev. (m):** 899 **Best Source of Info:** R86WER01ABCA  
**Map UTM Zone UTM Easting UTM Northing Survey Site Name Notes # Dot ID #**  
72E02 12 536048 5434735 Lost River 33 4555  
**Source Code Author Publisher Year Title**  
R86WER01ABCA Wershler C. & C. Wallis 1986 Lost River Significant Features Assessment  
*Tripterocalyx micranthus* sand verbena SRank: S2

**Veronica catenata water speedwell**

**Natural Region:** Foothills Fescue Grassland, Mixedgrass

**Habitat:** Wetland

**Phenology:** flowers in late July and August

**Specific Search Strategies (if any):** need to search deeper water or in drier years when streams dry up; mostly in flowing water, even if moving slowly

**Element Occurrences:**

**Element Code:** PDSCR20090 **Occurrence Code #:** 002 **Survey Date:** 1972-10-15  
**Last Observed:** 1972-10-15 **First Observed:** 1972-10-15 **Precision Code:** S  
**Directions:** Highwood River junction with Bow River  
**General Description:** sand bar amongst pebbles  
**Min Elev. (m):** 3125 **Max Elev. (m):** 3125  
**Other Comments:** V. salina det. M.B. Hallworth **Best Source of Info:** S72JONUCABCA01  
**Specimen Source Code Collector Herbarium Accession # Date ID OK? Observation Detail**  
S72JONUCABCA01 Jones, R. UC 23964 1972-10-15 [10% flower]  
**Map UTM Zone UTM Easting UTM Northing Survey Site Name Notes # Dot ID #**  
82J13 12 304250 5633000 Bow River 3 1424  
**Veronica catenata** water speedwell SRank: S1S2  
+++++

**Element Code:** PDSCR20090 **Occurrence Code #:** 003 **Survey Date:** 1944-09-22  
**Last Observed:** 1944-09-22 **First Observed:** 1944-07-17 **Precision Code:** M  
**Directions:** Midnapore; Fish Creek  
**General Description:** partly submerged; upper part of stem above water; swiftly running water  
**Min Elev. (m):** 1051 **Max Elev. (m):** 1051 **Best Source of Info:** S44MCCUCABCA01  
**Specimen Source Code Collector Herbarium Accession # Date ID OK? Observation Detail**  
S44MCCUAABCA03 McCalla, W.C. UA 65190 1944-07-17 [flowers, immature fruit]  
S44MCCUAABCA04 McCalla, W.C. UA 65189 1944-09-22 [fruits]  
S44MCCUCABCA01 McCalla, W.C. UC 23963 1944-07-17 [50% flower, 50% fruit]  
S44MCCULABCA01 McCalla, W.C. UL none 1944-07-17  
S44TURUAABCA03 Turner, G.H. UA 64633 1944-07-17 [flowers]  
S44TURUAABCA04 Turner, G.H. UA 64652 1944-07-17  
S44TURUAABCA05 Turner, G.H. UA 64653 1944-07-17  
S44TURUAABCA06 Turner, G.H. UA 15857 1944-07-17  
S44TURUAABCA07 Turner, G.H. UA 64632 1944-07-17 [flowers, immature fruits]  
S44TURUCABCA02 Turner, G.H. UC 23966 1944-07-17  
**Map UTM Zone UTM Easting UTM Northing Survey Site Name Notes # Dot ID #**  
82J16 11 706250 5645800 Calgary - Midnapore 11 1705  
**Veronica catenata** water speedwell SRank: S1S2  
+++++

**Element Code:** PDSCR20090 **Occurrence Code #:** 004 **Survey Date:** 1977-07-26  
**Last Observed:** 1977-07-26 **First Observed:** 1977-07-26 **Precision Code:** S  
**Directions:** Inglewood Bird Sanctuary, NE corner  
**General Description:** standing in 6" of water in lagoon  
**Min Elev. (m):** 1030 **Max Elev. (m):** 1030  
**Other Comments:** V. SALINA SCHUR **Best Source of Info:** S77BOYUCABCA01  
**Specimen Source Code Collector Herbarium Accession # Date ID OK? Observation Detail**  
S77BOYUCABCA01 Boyle, J. UC 23962 1977-07-26 Y [flowers, immature fruits]  
**Map UTM Zone UTM Easting UTM Northing Survey Site Name Notes # Dot ID #**  
82Q01 11 710100 5657250 Calgary 17 1866  
**Veronica catenata** water speedwell SRank: S1S2  
+++++

**Element Code:** PDSCR20090 **Occurrence Code #:** 006 **Survey Date:** 1998-08-27  
**Last Observed:** 1998-08-27 **First Observed:** 1998-08-27 **Actual Mapping Precision (m):** 100 **Precision Code:** S  
**Directions:** Ross Lake, 3 km SE of; North Milk River, 3.5 km N of.  
**General Description:** moist drainage gully; slope slight and high moisture; *Veronica americana*, *Epilobium* sp.  
**Min Elev. (m):** 1280 **Max Elev. (m):** 1280 **Aspect:** SE **Best Source of Info:** U98ERN01ABCA  
**Map UTM Zone UTM Easting UTM Northing Survey Site Name Notes # Dot ID #**  
82H02 12 362350 5442700 Ross Lake 16-2-22 W4M 34 5047  
**Source Code Author Publisher Year Title**  
U98ERN01ABCA Ernst, Reg 1998 Ross Grassland Natural Area - Results of 1998 Rare Plant Survey  
**Date Source Abstract Code Observer Occurrence Data**  
1998-08-27 U98ERN01ABCA Reg Ernst 30 plants; 18 vegetative and 12 flowering  
**Veronica catenata** water speedwell SRank: S1S2

**Viola pedatifida** crowfoot violet

**Natural Region:** Northern Fescue Grassland, Foothills Fescue Grassland

**Habitat:** Grassland-Sandy

**Phenology:** flowers in May and early June

**Specific Search Strategies (if any):** shows a distinct preference for burned areas; lush sandy grasslands are preferred with some open sandy soil exposed

**Element Occurrences:**

**Element Code:** PDVIO041J0 **Occurrence Code #:** 001 **Survey Date:** 1982-05-29

**Last Observed:** 1982-05-29 **First Observed:** 1982-05-29 **Precision Code:** M

**Directions:** Buffalo Lake Narrows, S of; Mirror, 5 km SE of.

**General Description:** Grassland, level slope, well drained.

**Min Elev. (m):** 795 **Max Elev. (m):** 795 **Best Source of Info:** S82JOHCFABCA01

**Specimen Source Code Collector Herbarium Accession # Date ID OK? Observation Detail**

S82JOHCFABCA01 Johnson, J.D. CF 820081 1982-05-29 Flower

**Map UTM Zone UTM Easting UTM Northing Survey Site Name Notes # Dot ID #**

83A06 12 360250 5812650 Buffalo Lake 4 2316

**Viola pedatifida** crowfoot violet SRank: S2

+++++

**Element Code:** PDVIO041J0 **Occurrence Code #:** 002 **Survey Date:** 1970-06-15

**Last Observed:** 1970-06-15 **First Observed:** 1970-06-15 **Actual Mapping Precision (m):** 900 **Precision Code:** M

**Directions:** Little Fish Lake, 1 km W of.

**General Description:** Low-lying damp area in undisturbed Fescue grassland.

**Min Elev. (m):** 914 **Max Elev. (m):** 914 **Best Source of Info:** S70OUEUCABCA02

**Specimen Source Code Collector Herbarium Accession # Date ID OK? Observation Detail**

S70OUEUCABCA02 Owen, Rob UC 18771 1970-06-15 Y blooming

**Map UTM Zone UTM Easting UTM Northing Survey Site Name Notes # Dot ID #**

82P08 12 411900 5692100 Little Fish Lake 8 2292

**Viola pedatifida** crowfoot violet SRank: S2

+++++

**Element Code:** PDVIO041J0 **Occurrence Code #:** 003 **Survey Date:** 1992-08-11

**Last Observed:** 1992-08-11 **First Observed:** 1992-08-11 **Actual Mapping Precision (m):** 2500 **Precision Code:** M

**Directions:** Road through Dry Island Buffalo Jump Provincial Park, 1km SE of

**General Description:** dry mesic young forest of Populus tremuloides; aspen parkland region of Red Deer River valley. Dry mesic meadow of Poa-Agrostis-

Erigeron-Solidago-Virgulus-Thermopsis-Antennaria-Stipa- Agropyron.

**Other Comments:** 4 Replicates at IDM, UAC, PMAE, WAT./ 1 replicate (this prob. means this spec. at PM). **Best Source of Info:** S92MACPMABCA06

**Specimen Source Code Collector Herbarium Accession # Date ID OK? Observation Detail**

S84LEPMABCA20 Lee, P. PM B89.36.107 1984-07-05 Y

S92MACPMABCA06 Macdonald, Ian D., Getty, Mike PM B93.1.96 1992-08-11 Y

S92MACPMABCA07 Macdonald, Ian D., Getty, Mike PM B93.1.97 1992-08-11 Y

**Map UTM Zone UTM Easting UTM Northing Survey Site Name Notes # Dot ID #**

82P15 12 365650 5757500 Dry Island Buffalo Jump Provincial Park 51-57N/112-57W; SW 32-34-21-W4M 3 4266

**Viola pedatifida** crowfoot violet SRank: S2

+++++

**Element Code:** PDVIO041J0 **Occurrence Code #:** 004 **Survey Date:** 1951-06-09

**Last Observed:** 1951-06-09 **First Observed:** 1935-06-08 **Actual Mapping Precision (m):** 2500 **Precision Code:** M

**Directions:** Lacombe

**General Description:** dry prairie and open grassy slope

**Min Elev. (m):** 845 **Max Elev. (m):** 845 **Best Source of Info:** S51MCCUAABCA05

**Specimen Source Code Collector Herbarium Accession # Date ID OK? Observation Detail**

S35BOLUAABCA04 Bolton, J.L. UA 12803 1935-06-08 Y flowers

S51MCCUAABCA05 McCalla, W.C. UA 62080 1951-06-09 Y flowers, cleistogamous flowers

**Map UTM Zone UTM Easting UTM Northing Survey Site Name Notes # Dot ID #**

83A05 12 312800 5815225 Lacombe Twp 040 Rge 27 W4: NE24 9 2312

**Viola pedatifida** crowfoot violet SRank: S2

+++++

**Element Code:** PDVIO041J0 **Occurrence Code #:** 005 **Survey Date:** 1935-06-08  
**Last Observed:** 1935-06-08 **First Observed:** 1935-06-08 **Actual Mapping Precision (m):** 500 **Precision Code:** M  
**Directions:** Sturgeon River, mouth of.  
**General Description:** with grasses and small sedges  
**Min Elev. (m):** 625 **Max Elev. (m):** 625 **Best Source of Info:** S35MOSUAABCA36  
**Specimen Source Code Collector Herbarium Accession # Date ID OK? Observation Detail**  
S35MOSUAABCA36 Moss, E.H. UA 12802 1935-06-08 Y flowers  
**Map UTM Zone UTM Easting UTM Northing Survey Site Name Notes # Dot ID #**  
83H14 12 357000 5960000 Sturgeon River 1 3360  
**Viola pedatifida** crowfoot violet SRank: S2  
+++++

**Element Code:** PDVIO041J0 **Occurrence Code #:** 006 **Survey Date:** 1997-08-20  
**Last Observed:** 1997-08-20 **First Observed:** 1997-08-20 **Actual Mapping Precision (m):** 250 **Precision Code:** S  
**Directions:** Kinsella, 10 km NNW of; Lac Letendre, just E of.  
**General Description:** disturbed ground; in association with Agropyron smithi, A. subsecundum, Poa pratensis, Muhlenbergia richardsonii, Danthonia californica  
**Min Elev. (m):** 685 **Max Elev. (m):** 685 **Best Source of Info:** PNDVUJ01ABCA  
**Map UTM Zone UTM Easting UTM Northing Survey Site Name Notes # Dot ID #**  
73E04 12 462600 5881500 Lac Letendre NW 28-47-11 W4M 1 4447  
**Viola pedatifida** crowfoot violet SRank: S2  
+++++

**Element Code:** PDVIO041J0 **Occurrence Code #:** 007 **Survey Date:** 1943-06-01  
**Last Observed:** 1943-06-01 **First Observed:** 1943-05-30 **Actual Mapping Precision (m):** 2500 **Precision Code:** M  
**Directions:** Fort Saskatchewan.  
**General Description:** dry sandy knolls, virgin prairie and prairie sod  
**Min Elev. (m):** 617 **Max Elev. (m):** 617 **Best Source of Info:** S43TURUAABCA17  
**Specimen Source Code Collector Herbarium Accession # Date ID OK? Observation Detail**  
S43TURUAABCA15 Turner, G.H. UA 61303 1943-05-30 Y flowers  
S43TURUAABCA16 Turner, G.H. UA 61302 1943-05-30 Y flowers  
S43TURUAABCA17 Turner, G.H. UA 61303 1943-06-01 Y flowers  
**Map UTM Zone UTM Easting UTM Northing Survey Site Name Notes # Dot ID #**  
83H11 12 355150 5953600 Fort Saskatchewan 8 4450  
**Viola pedatifida** crowfoot violet SRank: S2  
+++++

**Element Code:** PDVIO041J0 **Occurrence Code #:** 008 **Survey Date:** 1947-05-19  
**Last Observed:** 1947-05-19 **First Observed:** 1947-05-19 **Actual Mapping Precision (m):** 250 **Precision Code:** S  
**Directions:** Fort Saskatchewan, pool elevator, near.  
**General Description:** on open prairie roadside  
**Min Elev. (m):** 625 **Max Elev. (m):** 625 **Best Source of Info:** S47TURUAABCA06  
**Specimen Source Code Collector Herbarium Accession # Date ID OK? Observation Detail**  
S47TURUAABCA06 Turner, G.H. UA 61300 1947-05-19 Y buds, flowers  
**Map UTM Zone UTM Easting UTM Northing Survey Site Name Notes # Dot ID #**  
83H11 12 353600 5953200 Fort Saskatchewan 33 4457  
**Viola pedatifida** crowfoot violet SRank: S2  
+++++

**Element Code:** PDVIO041J0 **Occurrence Code #:** 009 **Survey Date:** 1951-06-09  
**Last Observed:** 1951-06-09 **First Observed:** 1951-06-09 **Actual Mapping Precision (m):** 2500 **Precision Code:** M  
**Directions:** Red Deer and Blindman Rivers junction, 1 km NW of.  
**General Description:** lightly wooded bank  
**Min Elev. (m):** 840 **Max Elev. (m):** 840 **Best Source of Info:** S51MCCUAABCA06  
**Specimen Source Code Collector Herbarium Accession # Date ID OK? Observation Detail**  
S51MCCUAABCA06 McCalla, W.C. UA 62082 1951-06-09 Y flowers  
**Map UTM Zone UTM Easting UTM Northing Survey Site Name Notes # Dot ID #**  
83A05 12 311600 5804600 Red Deer R/Blindman R Junction 11 4463  
**Viola pedatifida** crowfoot violet SRank: S2  
+++++

**Element Code:** PDVIO041J0 **Occurrence Code #:** 010 **Survey Date:** 2000-05-25  
**Last Observed:** 2000-05-25 **First Observed:** 2000-05-25 **Actual Mapping Precision (m):** 100 **Precision Code:** S  
**Directions:** Fort Saskatchewan, S end of city; SW of new suburb of Westpark estates; ca. 1.5 km N of junction of Pointe-aux-pins  
Creek with N. Saskatchewan River  
**General Description:** aspen parkland on ridge overlooking floodplain of river; cutline under power line; grassy slope on crest of  
knoll  
**Min Elev. (m):** 617 **Max Elev. (m):** 617 **Aspect:** SW  
**Management Comments:** land belongs to City of Ft. Saskatchewan; may be appropri. for recreational trails **Best Source of Info:**  
F00GOU01ABCA  
**Specimen Source Code Collector Herbarium Accession # Date ID OK? Observation Detail**  
S00GOU01ABCA01 J Gould, G Griffiths, P Cotterill, W Richards PP 3736 2000-05-25 Y Assoc. flora: Prun vir-Amel aln-Popu trem  
shrub layer; herb layer of Anem pat-Coma umb-Cera arv-Oxyt camp & var. graminoids  
**Map UTM Zone UTM Easting UTM Northing Survey Site Name Notes # Dot ID #**  
83H11 12 350223 5950452 Fort Saskatchewan converted GPS reading for NAD 83 350162 5950679 48 6063  
**Source Code Author Publisher Year Title**  
F00GOU01ABCA Gould, A. Joyce 2000 Field Notes for 2000  
**Date Source Abstract Code Observer Occurrence Data**  
2000-05-25 F00GOU01ABCA J Gould, G Griffiths, P Cotterill, W Richards ca. 14 plants on 1st slope & addtl 20 on S slope under  
power line ; P 26-30 of plant & habitat  
***Viola pedatifida*** crowfoot violet SRank: S2

## ***Yucca glauca* soapweed**

**Natural Region:** Dry Mixedgrass

**Habitat:** Slopes-Sandy

**Phenology:** flowers late June

**Specific Search Strategies (if any):** only occurs in limited area in Canada; south-facing gravelly sandy slopes

### **Element Occurrences:**

**Element Code:** PMAGA0B0F0 **Occurrence Code #:** 001 **Survey Date:** 1999-06-29  
**Last Observed:** 1999-06-29 **First Observed:** 1984-12-06 **Actual Mapping Precision (m):** 10 **Precision Code:** S  
**Directions:** Pinhorn Grazing Reserve, headquarters of, 6 km SE of.  
**General Description:** On river "breaks" (on coulee branch of Milk River); covers about 150 m  
**Min Elev. (m):** 975 **Max Elev. (m):** 975 **Aspect:** SW  
**Other Comments:** Slide #F149.043; F149.044; F149.045; specimen housed at E.S.R.C. herbarium. **Best Source of Info:**  
F98GOU01ABCA

#### **Map UTM Zone UTM Easting UTM Northing Survey Site Name Notes # Dot ID #**

72E02 12 512073 5436984 Pinhorn candidate natural area 19 30

#### **Source Code Author Publisher Year Title**

F98GOU01ABCA Gould, Joyce 1998 Field notes: 1998 field season

I84MYE01ABCA Myers, S. 1984

I84MYE02ABCA Myers, S. 1984

I84MYE03ABCA Myers, S. 1984

U77MIL01ABCA Milner, Bruce J. Department of Botany, The University of Alberta 1977 Habitat of *Yucca glauca* Nutt. in southern

Alberta U98CSO01ABCA Julius Csotonyi 1998 E-mail Julius Csotonyi to Joice Gould

UNDTAN01ABCA Tannas, K.E. Native Species Inventory Forms

#### **Date Source Abstract Code Observer Occurrence Data**

U77MIL01ABCA about 450 individuals

UNDTAN01ABCA K. Tannas several sporadically occurring individuals; a healthy population

***Yucca glauca* soapweed SRank: S1**

+++++

**Element Code:** PMAGA0B0F0 **Occurrence Code #:** 002 **Survey Date:** 1999-06-28  
**Last Observed:** 1999-06-28 **First Observed:** 1930-06-00 **Actual Mapping Precision (m):** 10 **Precision Code:** S  
**Directions:** Onefour, 13 km SSE of; USA border.

**General Description:** about 2 km along eroded kame slopes; regosols, sandy texture, moderately alkaline; with *Muhlenbergia cuspidata*, *Bouteloua gracilis*; 61% veg cover.

**Min Elev. (m):** 845 **Max Elev. (m):** 884 **Aspect:** SE **Best Source of Info:** F98GOU01ABCA

#### **Specimen Source Code Collector Herbarium Accession # Date ID OK? Observation Detail**

S30CLAALABCA01 Clarke & Tisdale AL 409 1930-06-00

S31TISALABCA03 Tisdale, E.W. AL 486 1931-00-00

S35MOSUAABCA19 Moss, E.H. UA 5128 1935-07-13 Y [flowers]

S52BOIACONCA09 Boivin, B., W.A. Hubbard & J.F. Alex AC none 1952-06-28 Une seule colonie ( a single colony)

S52BOIUABCA04 Boivin, Bernard, W.A. Hubbard & J. F. AlexUA 22573 1952-06-28 Y single colony; [flowers]

S67ALLALABCA03 Allen, Gshaid, & Smoliak AL 2123 1967-07-00

S73GSCALABCA01 Gschaid, Smoliak, & Dalton AL 3066 1973-10-24

S73SMOALABCA04 Smoliak, Gschaid, & Allen AL 2868 1973-06-19

S77KOJCFABCA12 Kojima, S. CF 770233 1977-07-22 [fruits]

#### **Map UTM Zone UTM Easting UTM Northing Survey Site Name Notes # Dot ID #**

72E01 12 541350 5427775 Lost River 45 4546

#### **Source Code Author Publisher Year Title**

F98GOU01ABCA Gould, Joyce 1998 Field notes: 1998 field season

I79XXX02ABCA Unknown 1979

I81WER01ABCA Wershler, C. 1981

R86WER01ABCA Wershler C. & C. Wallis 1986 Lost River Significant Features Assessment

U77MIL01ABCA Milner, Bruce J. Department of Botany, The University of Alberta 1977 Habitat of *Yucca glauca* Nutt. in southern

Alberta U98CSO01ABCA Julius Csotonyi 1998 E-mail Julius Csotonyi to Joice Gould

#### **Date Source Abstract Code Observer Occurrence Data**

U77MIL01ABCA 55,000 individuals

***Yucca glauca* soapweed SRank: S1**