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June 1981

Bulletin Number 34

College of Forestry, Wildlife and Range Sciences

# Vascular Plant Species Of Concern In Idaho

by the  
Rare and Endangered Plants  
Technical Committee of the  
Idaho Natural Areas Council



*Mirabilis macfarlanei*  
Constance and Rollins

FOREST, WILDLIFE AND RANGE EXPERIMENT STATION

Director  
John H. Ehrenreich

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 University of Idaho  
Moscow, Idaho 83843

## DEDICATION

To the hundreds of plant collectors who have had the energy and patience to collect and preserve the knowledge summarized herein and to future collectors with ambition to improve upon it.

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University of Idaho Library



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Chairman: Robert Steele, USDA Forest Service

Steven J. Brunsfeld, University of Idaho

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Frederic D. Johnson, University of Idaho

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*This bulletin was compiled and  
edited by Bob Steele and Fred Johnson  
with assistance from Steve Brunsfeld*

*The recommendations and evaluation for each species  
are the responsibility of the person evaluating that taxon  
and are based on available data aided by evaluators'  
personal experience.*

*When citing individual taxa, please credit the evaluator  
named at the bottom of the page.*

*Questions on specific taxa should be directed to the  
evaluator of that taxon. Addresses are on the inside of  
the front cover.*

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## INTRODUCTION

National concern for survival of plant species first emerged as Public Law 93-205, the Endangered Species Act of 1973. This law provides for protection of endangered and threatened plants. Later, two lists of plants appeared, one proposing endangered status for certain taxa (*Federal Register*, June 16, 1976), the other proposing threatened status (*Federal Register*, July 1, 1975). These two lists included 68 taxa thought to occur in Idaho. Four members of the Idaho Rare and Endangered Plants Technical Committee then collected and assessed existing data on these 68 taxa (Henderson et al. 1977). During this project, it became evident that some listed taxa do not need endangered or threatened status and that some unlisted taxa deserve this consideration. Implementation of the Endangered Species Act by land managers also revealed a need to document which taxa are truly endangered or threatened. November 9, 1979, marked the deadline for officially designating endangered and threatened taxa from the two proposed Federal lists. As of that date, the lists were officially withdrawn and any taxon must now undergo a detailed review to be officially listed.

The *Federal Register* of December 15, 1980, contains a "review of plant taxa for listing as endangered or threatened species." Forty-seven plants noted as occurring in Idaho by the Office of Endangered Species are being reviewed for endangered or threatened status. Forty-two of the above taxa are included in this bulletin; five were not reviewed by our committee, they were added by the Office of Endangered Species, Washington, D.C., after our data were collected. Of these five taxa, three are not known to occur in Idaho, and we have no data on the other two (*Agastache cusickii* and *Howellia aquatilis*). All other species listed in the December 15, 1980 *Federal Register* are included in the annotated index.

A documented summary and analysis of current information on truly jeopardized plant taxa in Idaho is needed at both the Federal and State levels. The following evaluations consolidate opinions of those familiar with Idaho's flora regarding species of concern. Data for species also reflect information gained from numerous field studies since the publication of *Endangered and Threatened Plants of Idaho* (Henderson et al., 1977). These evaluations focus mainly on survival status of plants within the State of Idaho, but have been divided into two sections according to the level of recognition required.

The data in this bulletin are based on detailed review of 106 vascular plant taxa for consideration at the Federal level and 245 taxa for State consideration. A summary of our recommendations for the status of these 351 plants is presented (see Contents). It should be clearly understood that our recommendations herein presented do not exactly parallel those of the O.E.S. as listed in the *Federal Register* of December 15, 1980.

### Section A – Taxa of Federal Concern

The pink sheets in the front portion of this bulletin treat the 68 taxa originally listed in the *Federal Register* for Idaho. Also included are the officially designated endangered species, *Mirabilis macfarlanei* and *Astragalus yoder-williamsii*. We also have assessed the few taxa listed in the *Federal Register* for other states, that have been ascertained to be in Idaho since publication of Henderson et al. in 1977. In addition we have included some taxa that did not appear in the *Federal Registers* (1975, 1976) but merit Federal consideration for listing. Although future studies may prove otherwise, our current data base implies that these taxa may need Federal protection. Plants considered for Federal status and rejected are also listed.

### Section B – Taxa of State Concern

The green sheets in the back portion of this bulletin deal with Idaho plants which we feel merit special consideration at the State level. In general, these are wideranging taxa which are endangered, threatened, or in need of monitoring in Idaho. Plants considered for State status and rejected are also listed.

### Definitions

Our definitions of endangered and threatened follow those originally given in the Federal Register, but apply only to populations in Idaho. Thus, an endangered species is one considered to be in danger of extinction throughout all or a significant portion of its range. Loss or repeated disturbance of habitat, exploitation, disease, or predation are the common causes of contemporary extinction. Species whose numbers or habitat have been critically reduced and those confined to limited or fragile habitats susceptible to disturbance are usually considered endangered. Generally, some threat to their survival is easily identified and some form of action is required to prevent their loss.

Threatened species are those likely to become endangered within the foreseeable future.

These have populations which are decreasing, or they may occupy limited habitat that could be exploited within the foreseeable future. In all likelihood, they will become endangered if present impacts expand or if other impacts materialize in the future.

Rare species are those with small populations within the State. They may be quite restricted, often with many individuals, or they may be widely scattered in very small numbers. Rare species may be endangered or threatened or may face no foreseeable threat, depending on their ecological role and survival strategy. They have, however, an inherent potential for becoming endangered or threatened, and the Committee will continue to collect data which may indicate a change in status. As a guideline, this Committee has used less than ten locations greater than ten air miles apart as a general criterion for rare status. We invite knowledgeable individuals to suggest to the Committee plants that they feel may be rare, endangered or threatened which do not appear in the following evaluations or in the lists of taxa considered and rejected.

## METHODS

Following our evaluation of the Federal endangered and threatened lists (Henderson et al. 1977) we began compiling a species list of candidates for Idaho state status of endangered and threatened vascular plants. This initial list was derived from Wellner and Johnson (1974) and circulated among botanists familiar with various aspects of Idaho's flora. It was treated as an open list with taxa being added or deleted in light of new information accumulating from field studies.

In 1979, review comments were consolidated into a list of 182 species of concern which was redistributed to Idaho botanists for further review and field study. Again some taxa were added or deleted and the consolidated reviews formed a working list for conducting herbarium searches. Results of herbarium searches and nineteen field studies in the past two years provided the basis for analyzing survival status of taxa treated herein. Throughout this process, species considered and deleted were listed separately to avoid their being inadvertently resubmitted for consideration.

The authors chose from both the Federal and State lists those plants with which they were most familiar. In many cases they have conducted field studies involving those taxa. The remaining species were then assigned to whomever was most familiar with the geographic area in question. Joint

and specific herbarium searches were conducted, sometimes by mail. Information was then summarized, a rough draft circulated among the authors, and after agreeing on interpretations, the authors prepared this document. Many people have helped in this undertaking, and we hope all are recognized in the acknowledgments on the last page.

Difficulties arose in determining distributions of some taxa. In many instances locations cannot be pinpointed from herbarium labels. Information that was speculative or thought to be in error was discarded. As a result of our appraisal of these plant distributions, we are convinced that many taxa are merely seldom collected and that further field work will fill gaps in our knowledge for some of these populations and help complete their distribution picture.

The knowledge of the autecology and synecology of the vast majority of species is very poor. For most, we have repeated and interpreted herbarium label data which are notoriously brief in ecologic description. Of particular interest is the reaction of these plants to disturbance—fire, grazing, logging, and browsing. Again, we have tried to interpret label data, but feel that for most species these interpretations are tentative.

We offer this listing as a current display of known facts, punctuated with interpretations by the authors and a modicum of personal observation on certain plants. We hope it will aid all persons interested in the rare plants of Idaho.

## EXPLANATION OF FORMAT FOR EVALUATIONS

The data summary for each species follows the outline below. Species summaries are arranged alphabetically by genus.

### Scientific Nomenclature

Scientific nomenclature follows Hitchcock and Cronquist (1973). In a few cases, plant names in the *Federal Register* did not agree with the above reference so we added synonymy that reflects current usage. A more nearly complete treatment of synonymy is available in Hitchcock et al. (1969, 1964, 1961, 1959, 1955), or in some cases references are cited for a specific taxon.

### Location

Specific locations given mostly within Idaho reflect summarization of our herbaria search data

and field notes. General plant ranges outside of Idaho, unless otherwise credited, are mainly from Hitchcock et al. (1969, 1964, 1961, 1959, 1955) and Hitchcock and Cronquist (1973). All counties in Idaho are printed in capital letters; those from other states are in lower case.

### Land Ownership

Land ownership in many instances is an educated guess based on the evaluator's knowledge of the area. It is quite possible that some of these plants grow on ownerships not listed. It is also possible that the listed ownership is incorrect in some cases.

### Vegetation Type

The vegetation type generally denotes the major plant cover, zone or climax for the area.

### Habitat

Habitat notations attempt to reflect the actual site requirements of the plant. Some habitat notations are quoted from herbarium labels. Notations out of quotes are either a synopsis of herbarium data or reflect the experience of the evaluator with that plant.

### Hazards

The hazards given are usually the most evident form of disturbance that may jeopardize survival of that particular taxon. In some cases this evaluation was based on actual field examination by the evaluator or by colleagues. In other cases the evaluation of hazards was a subjective appraisal based on knowledge of the area and inferences from herbarium labels.

### Herbarium Data

Herbarium data show the number of different sites within a county and thus the total known sites in Idaho can be quickly determined. This is the most important information to be drawn from herbarium summaries. The number of collections in each herbarium searched is also given. This pinpoints where specimens may be examined and gives some idea of rarity by showing how many herbaria have been searched. Caution should be exercised in using these data, for a large number of collections in a herbarium does not always reflect a large number of sites, for collectors often are attracted to a locale where a rare plant is known to exist. Explanations of the various herbarium acronyms are listed inside the back cover. Plant identifications were generally

accepted as correct except for obvious errors or exceptional cases; these exceptions may be noted under remarks. It is probable that some misidentifications were inadvertently included, but we feel these are a relatively small percentage.

### Remarks

The remarks are additional information considered important by the evaluator.

### Recommendations

Recommendations reflect assessments by the authors based on their own experience and available data. These recommendations can only reflect the current data and may be changed as new information is gained. However, where a particular taxon has been thoroughly studied in the field and adequate data have been assessed, the recommendation is given as PROPOSE AS ENDANGERED (or THREATENED), thus indicating a basis for official listing. But where the taxon lacks adequate field study and data, the recommendation is given as TREAT AS ENDANGERED (or THREATENED), suggesting that further study is needed.

### References

References noted provide specific information that is unavailable in standard floristic treatments (Hitchcock et al. 1969, 1964, 1961, 1959, 1955; Hitchcock and Cronquist 1973; Cronquist et al. 1972, 1977; Peck 1961; Davis 1952).

### Evaluator

The evaluator is the author responsible for analysis and summary of that particular taxon. In most cases it is the person most familiar with that plant and any specific queries should be sent directly to that individual. Addresses are provided inside the front cover.

### Distribution Map

The map is deliberately lacking in detail to obscure exact locations of taxa that are truly endangered. Locations are available to qualified individuals upon written request. Each dot represents a single collection site as interpreted from herbarium label data. In a few cases, sites peripheral to Idaho are mapped to illustrate geographic relationships. County maps of Idaho are provided (Sections A and B) to help orient the reader to areas within the State.

## Identification

Because most plants treated herein may only be identified by using technical details, they are not illustrated here in order to avoid confusion with similar taxa. Identification of plants is based on detailed descriptions of often subtle morphological characteristics. In most cases positive identification should be made by a person with experience in both plant taxonomy and the local flora. Best current descriptions may be found in Hitchcock et al. (1969, 1964, 1961, 1959, 1955) and Cronquist et al. (1972, 1977).

## Additions to These Evaluations

We are anxious for additional participation in this committee and welcome input from people in the field. Addresses of the authors of this bulletin are inside the front cover.

We anticipate that there will be a continual flow of data which will result in periodic revision of these evaluations. As a result, this bulletin is 3-hole punched, so that it may be disassembled and revisions added at the appropriate places.



## Endangered and Threatened Taxa of Federal Concern

*Allium aaseae* Ownbey

Recommended Federal Status  
ENDANGERED

### LILIACEAE

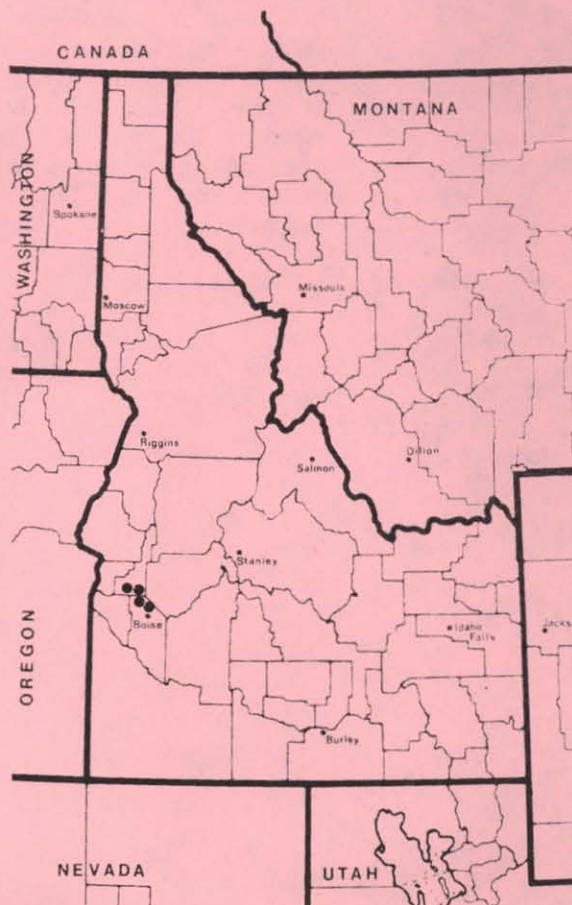
- Location** Idaho: ADA, GEM and possibly ELMORE counties, Idaho endemic
- Land Ownership** Mainly private, one site is in a Boise city park. Sites on public land have been sought in vain.
- Vegetation Type** Mostly in or near a depauperate *Purshia/Eriogonum* association within sagebrush/grass zone.
- Habitat** Usually bare sedimentary soil with fine gravel surface, most often on steep southerly aspects, 2,850 to 4,400 feet.
- Hazards** Loss of habitat for housing development and gravel pits is an immediate threat. Much of the habitat is adjacent to or within suburban areas, and some sites have been destroyed. Grazing animals can easily disturb this onion by trampling, but do not always destroy the bulb.
- Herbarium Data** Number of sites by county, Idaho only:  
ADA-9, ELMORE-1 (resembles *A. simillimum*), GEM-4  
Number of Idaho collections in herbaria searched: BOIS-8, BS-3, CIC-21, ID-2, IDF-2, IDS-0, IFGH-0, MONTU-0, NY-4, ORE-0, OSC-0, RENO-0, UTC-0, WS-1, WTU-2

**Remarks** This species appears restricted to portions of the Glenn's Ferry Formation. The plants may be abundant on proper habitat, but the sites are very restricted. It has been estimated that less than 15,000 individuals exist (Holsinger 1978). In Elmore County one site near Arrowrock Dam possibly supports intergrades between *A. simillimum* and *A. aaseae*, but no true *A. aaseae* has yet been found there.

**Recommendations** PROPOSE AS ENDANGERED. Some habitat may eventually need to be purchased to preserve the species.

**References** Hitchcock and Cronquist 1973, Packard 1978

**Evaluation by** R. Steele

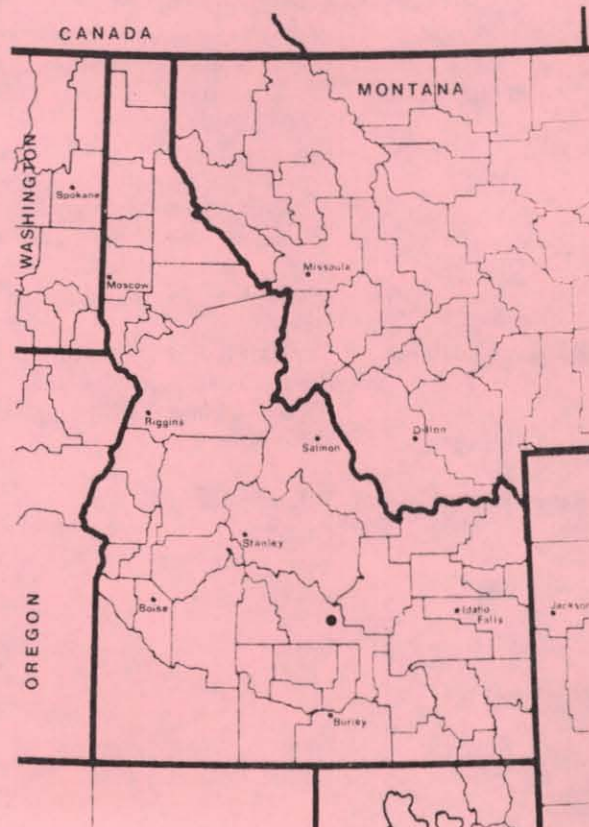


*Antennaria arcuata* Cronq.

Recommended Federal Status  
ENDANGERED

ASTERACEAE (Compositae)

<b>Location</b>	Idaho: BLAINE County Nevada: Elko County Wyoming: Fremont County
<b>Land Ownership</b>	BLM (Shoshone Dist.)
<b>Vegetation Type</b>	Sedge-grass meadows
<b>Habitat</b>	Small, bare or lichen-covered spots of soil among grasses, 5,250 ft (Idaho). On small mounds with sedges and rushes, 7,345 ft (Wyoming). In meadows on silt loam and black clay soil, 6,000 ft (Nevada).
<b>Hazards</b>	Light trespass grazing has periodically occurred on the Idaho site, but appears to have little impact. Some moderate trespass grazing has disturbed individual plants by trampling.
<b>Herbarium Data</b>	Number of sites by county, Idaho only: BLAINE-1 (type locality) Number of Idaho collections in herbaria searched: BOIS-1, BS-0, CIC-0, ID-0, IDF-0, IFGH-0, IDS-0, MRC-0, MONTU-0, NY-1, OGDf-1, ORE-0, OSC-0, RENO-0, UC-0, UTC-1, WS-1, WSCO-0, WTU-0
<b>Remarks</b>	A study of how this plant becomes established and its response to grazing impacts is needed before protective management can be applied. The previously cited (Henderson et al. 1977) location in Oregon resulted from a misidentified collection (Schultz and Schultz 1978). New locations in similar habitat have been sought in vain during several recent field surveys in Idaho. In Wyoming, its known distribution has been expanded through several recent collections and it is now being recommended for delisting in that state (Lichvar 1980).
<b>Recommendations</b>	TREAT AS ENDANGERED
<b>References</b>	Cronquist 1950, Hitchcock and Cronquist 1973, Henderson et al. 1977, Dorn 1979
<b>Evaluation by</b>	R. Steele



# TAXA OF FEDERAL CONCERN

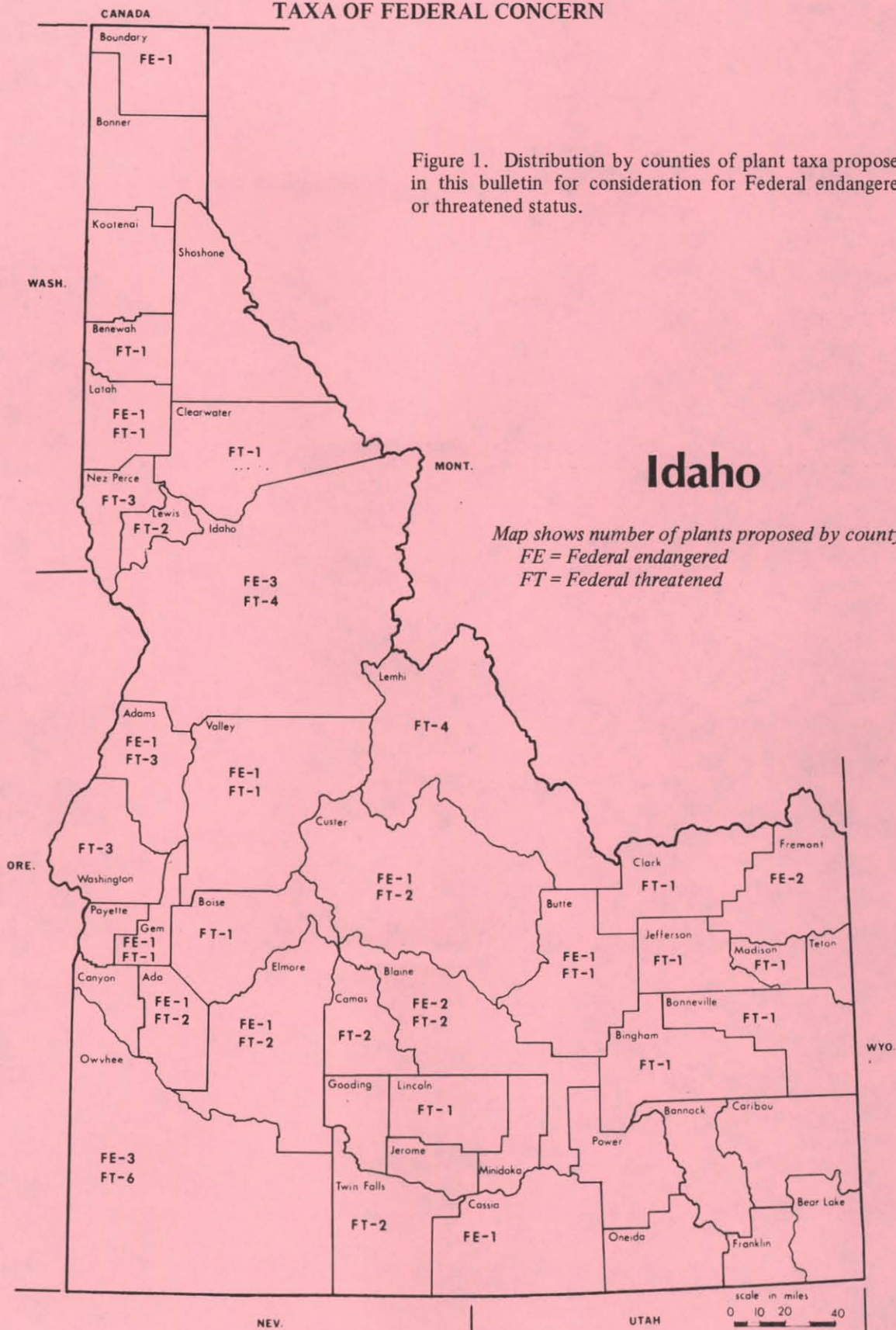


Figure 1. Distribution by counties of plant taxa proposed in this bulletin for consideration for Federal endangered or threatened status.

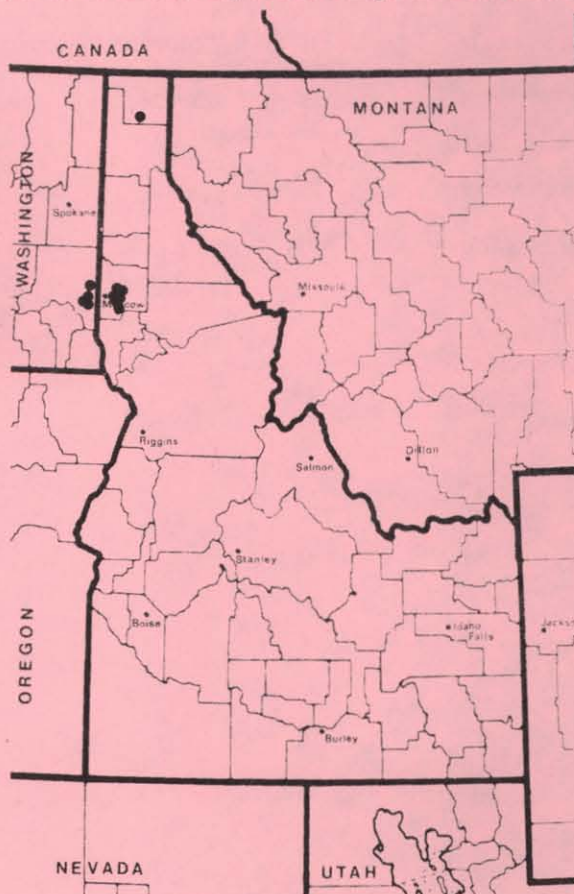


*Aster jessicae* Piper  
Syn. *A. latahensis* Hend.

Recommended Federal Status  
ENDANGERED

ASTERACEAE

Location	Idaho: BOUNDARY and LATAH counties Washington: Columbia, Whatcom, and Whitman counties
Land Ownership	Primarily (or exclusively) private ownership
Vegetation Type	Palouse Prairie, forest/prairie ecotone (Douglas-fir?) and ponderosa pine forests
Habitat	" <i>Pinus ponderosa/Symphoricarpos albus</i> h.t." disturbed by logging; "R.R. bank"; "Gravel on road edge"; "basalt talus"; dry hillside
Hazards	Effects of grazing unknown, survives logging (effect on vigor unknown). Herbicide spraying on roadsides likely detrimental.
Herbarium data	Number of sites by county, Idaho only: BOUNDARY-1, LATAH-6 Number of Idaho collections in herbaria searched: BOIS-0, BS-0, CIC-0, ID-3, IDF-1, IDS-0, IFGH-0, MONTU-0, NY-4, ORE-0, OSC-1, RENO-0, UTC-0, WS-3, WTU-3
Remarks	Piper noted in 1893 that this species was "rare" and apparently it still is. The most recent collection in Whitman County, WA, was in 1915. With Washington State University nearby, one might reasonably conclude that agricultural activities have eliminated this grassland population. A recent (1974) collection in Columbia Co., WA, is of high interest. A 1972 collection in Boundary Co., ID, is a 210-km northerly disjunct and may be misidentified. The 1970 Whatcom Co., WA, is not only a remarkable westward disjunct, but is ecologically suspicious, thus a likely misidentification. Of the 13 known locations in ID and WA, 4 are near Pullman, WA (extinct) and 6 are near Troy, ID, where it grows in forest and forest borders. Here collections have been made in 1975 and 1979.
Recommendations	TREAT AS ENDANGERED. Positive identification of the disjunct collections is imperative. The status of the Latah Co. populations should be investigated. This species should be treated as endangered; Heidel (1979) agrees.
References	Heidel 1979
Evaluation by	F. D. Johnson

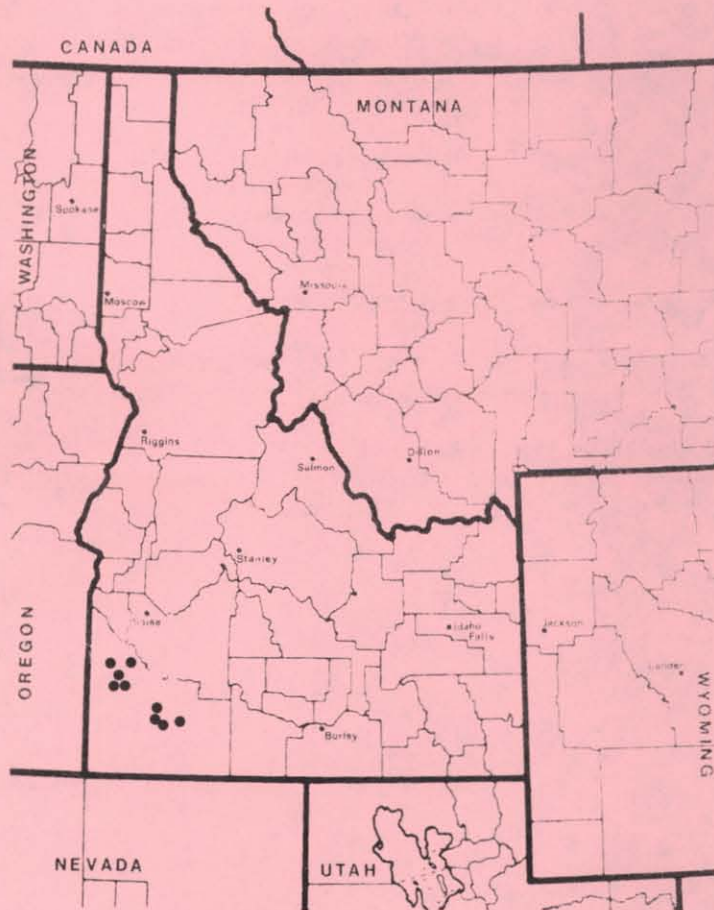


*Astragalus camptopus* Barneby

Recommended Federal Status  
THREATENED

FABACEAE (Leguminosae)

Location	Idaho: OWYHEE County, Idaho endemic
Land Ownership	BLM (Boise Dist.), private
Vegetation Type	<i>Atriplex confertifolia</i> / <i>A. spinosa</i> communities
Habitat	Arid sandy soil.
Hazards	Expanding agriculture, some mining and ORV's
Herbarium Data	Number of sites by county, Idaho only: OWYHEE-many but narrow distribution Number of Idaho collections in herbaria searched: BOIS-0, BS-0, CIC-9, ID-5, IDF-1, IDS-3, IFGH-0, MONTU-0, NY-10, ORE-0, OSC-1, RENO-1, UTC-5, WS-5, WTU-3
Remarks	This species is disappearing rapidly as its habitat is being turned into farmland. Although it has a number of populations now, it could easily be extirpated.
Recommendations	PROPOSE AS THREATENED
References	Barneby 1964
Evaluation by	P. L. Packard

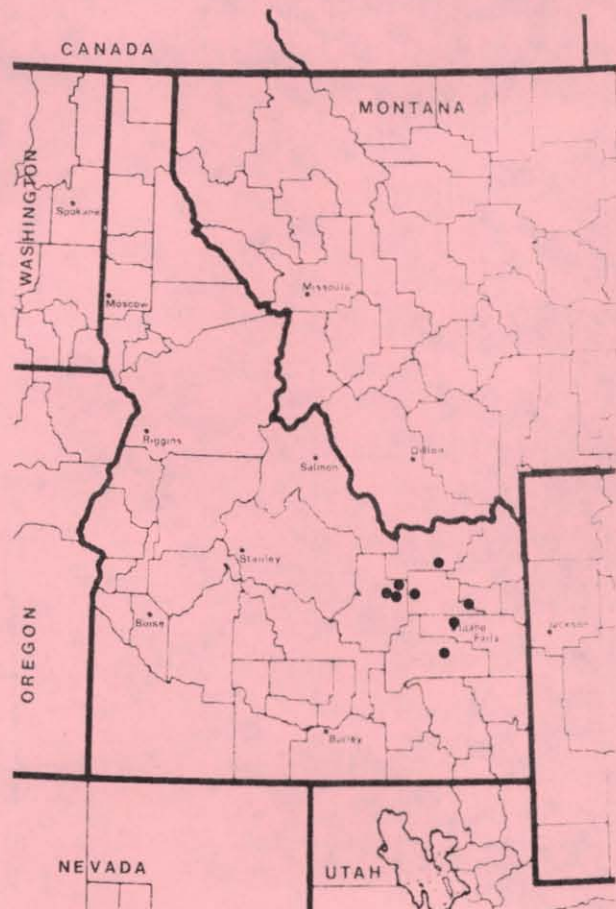


*Astragalus ceramicus* Sheld. var. *apus* Barneby

Recommended Federal Status  
THREATENED

FABACEAE (Leguminosae)

Location	Idaho: BINGHAM, BONNEVILLE, BUTTE, CLARK, JEFFERSON and MADISON counties Idaho endemic
Land Ownership	BLM (Idaho Falls Dist.), Idaho National Engineering Lab
Vegetation Type	Sagebrush/grass zone
Habitat	Sand dunes, sandy hills and sandy alluvial fans
Hazards	Range improvement programs, heavy grazing pressure, desert land entry and ORV's.
Herbarium Data	Number of sites by county, Idaho only: BINGHAM-1, BONNEVILLE-1, BUTTE-6, CLARK-1, JEFFERSON-1, MADISON-1 Number of Idaho collections in herbaria searched: BOIS-0, BS-0, CIC-0, ID-3, IDF-0, IDS-6, IFGH-0, MONTU-0, NY-3, ORE-1, OSC-0 (not taken to var., none from Idaho), RENO-0, UTC-1, WTU-2 (no var.)
Remarks	Plants are restricted to sand dunes and sand hills and are scattered where they grow. Anything affecting this type of habitat could wipe out this variety. It would appear to be part of the climax vegetation. A collection from Dawson County, Montana (Booth 523, WTU) is labeled this variety, but is likely in error since both Barneby (1964) and the Great Plains Flora Association (1977) show only the variety <i>filifolius</i> in Dawson County.
Recommendations	TREAT AS THREATENED
References	Barneby 1964 Anderson and Henderson, 1978
Evaluation by	K. E. Holte

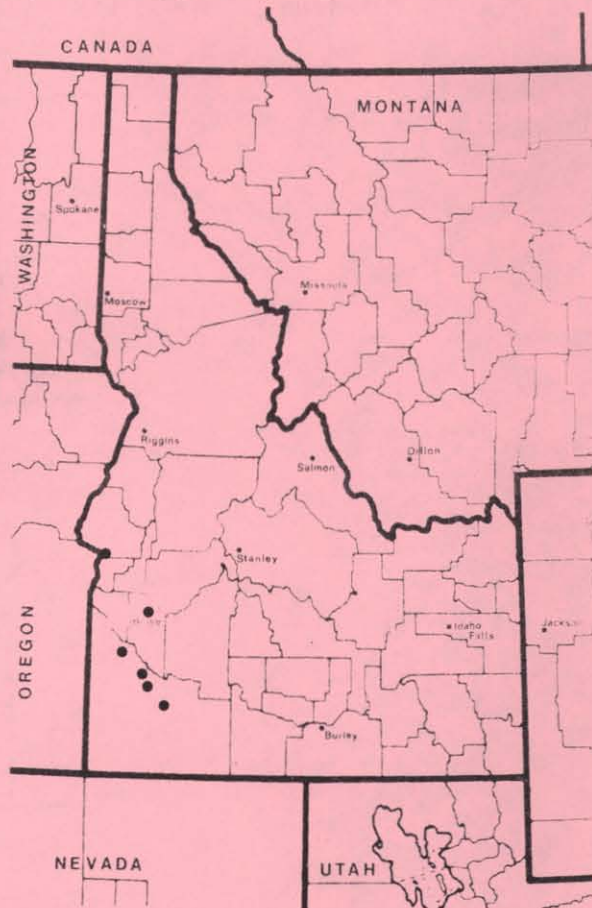


*Astragalus mulfordiae* M.E. Jones

Recommended Federal Status  
THREATENED

FABACEAE (Leguminosae)

Location	Idaho: ADA, OWYHEE and WASHINGTON counties Oregon: Malheur County
Land Ownership	BLM (Boise Dist.), private, possibly Idaho Dept. of Lands (Payette Lake and Southwest areas)
Vegetation Type	Sagebrush/grass
Habitat	Sandy or gravelly sites within sagebrush/grass zone
Hazards	Housing, agriculture, possibly grazing
Herbarium Data	Number of sites by county, Idaho only: ADA-1, OWYHEE-4, WASHINGTON-3 Number of Idaho collections in herbaria searched: BOIS-1, BS-0, CIC-2, ID-2, IDF-0, IDS-0, IFGH-0, MONTU-1, NY-5, ORE-1, OSC-0, UTC-3, WS-4, WTU-3
Remarks	This species grows on steep slopes, but the habitat is being destroyed by housing, agricultural activities and in places the plants are subject to grazing. Some sheets identified as this species are <i>A. oniciformis</i> .
Recommendations	PROPOSE AS THREATENED. The Ada County population is decreasing and the Owyhee County populations may not all be extant because they are along the Snake River in vulnerable habitat.
References	Barneby 1964
Evaluation by	P. L. Packard



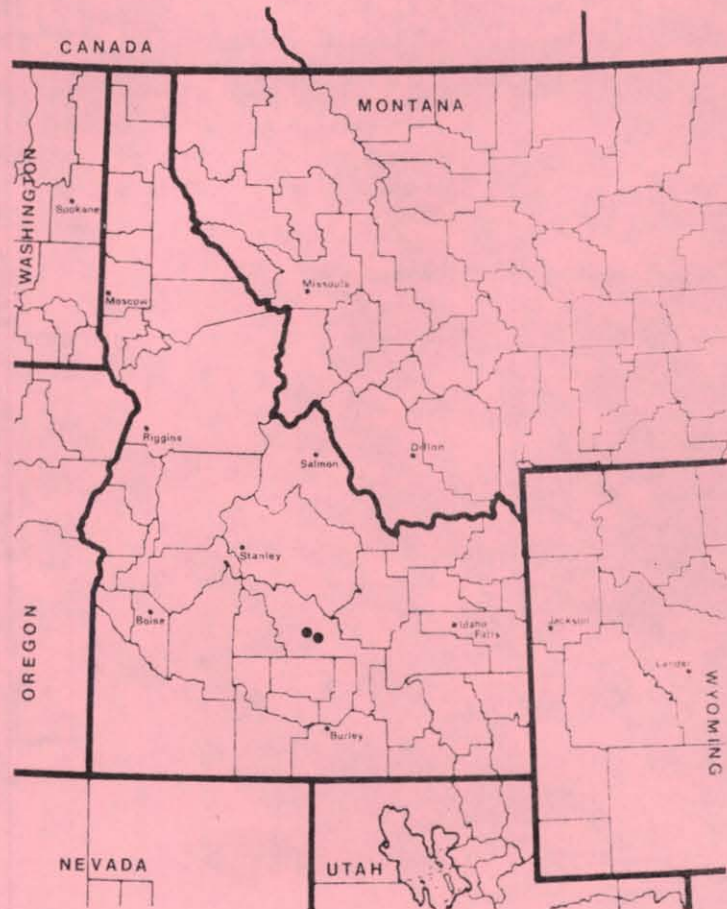


*Astragalus oniciformis* Barneby

Recommended Federal Status  
ENDANGERED

FABACEAE (Leguminosae)

- Location** Idaho: BLAINE County, Idaho endemic
- Land Ownership** Private, possibly BLM (Shosone Dist.)
- Vegetation Type** Grassy areas with brush in sagebrush/grass zone
- Habitat** Sandy soil among rocks at the toes of the foothills.
- Hazards** Agricultural expansion.
- Herbarium Data** Number of sites by county, Idaho only:  
BLAINE-3  
Number of Idaho collections in herbaria searched: BOIS-0, BS-0, CIC-0, ID-1, IDF-0, IDS-3, IFGH-0, MONTU-0, NY-1, ORE-0, OSC-0, RENO-0, UTC-0, WS-0, WTU-1
- Remarks** The last collection was in 1947, and there has been considerable expansion of agricultural land into its habitat since then. This species may be extinct.
- Recommendations** TREAT AS ENDANGERED.  
Field study is needed.
- References** Barneby 1964
- Evaluation by** P. L. Packard

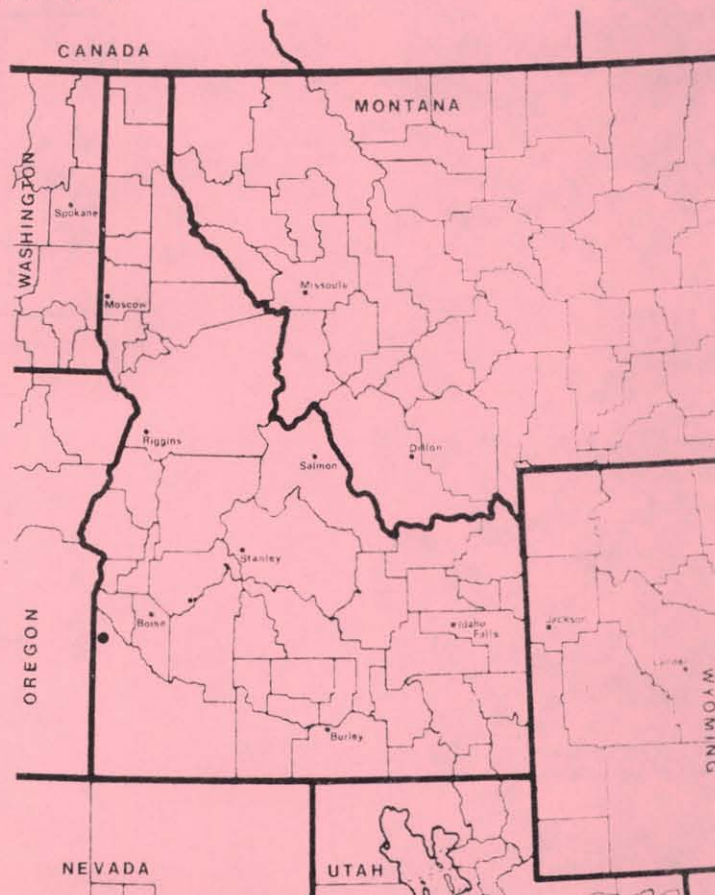


*Astragalus sterilis* Barneby

Recommended Federal Status  
ENDANGERED

FABACEAE (Leguminosae)

- Location** Idaho: OWYHEE County  
Oregon: Malheur County
- Land Ownership** Private, or possibly BLM (Boise Dist.)
- Vegetation Type** Sagebrush/grass or shrubby chenopod communities
- Habitat** Bare patches of loose volcanic ash not disintegrating into clay.
- Hazards** ORV's, roads and mining
- Herbarium Data** Number of sites by county, Idaho only:  
OWYHEE-1  
Number of Idaho collections in herbaria searched: BOIS-0, BS-0, CIC-0, ID-0, IDF-0, IDS-1, IFGH-0, MONTU-0, NY-0, ORE-0, OSC-0, RENO-0, UTC-0, WS-0, WTU-1
- Remarks** The type collection in 1948 was from Idaho. It has not been collected here since. Most of the ash in this area breaks down into clay, so this would be expected only on rare layers lacking this property. The substrate often has commercial value to mining. There are three, and possibly four, sites known in Malheur County, Oregon.
- Recommendations** TREAT AS ENDANGERED due to the commercial value of its substrate.
- References** Barneby 1964
- Evaluation by** P. L. Packard

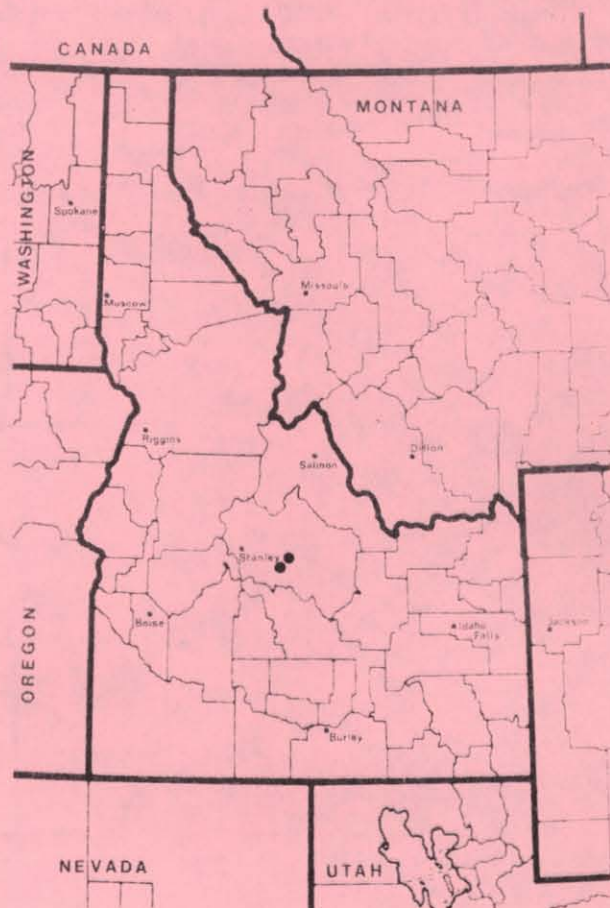


*Astragalus vexilliflexus* Sheld. var. *nubilus* Barneby

Recommended Federal Status  
THREATENED

FABACEAE (Leguminosae)

Location	Idaho: CUSTER County, Idaho endemic variety
Land Ownership	USFS (Challis N.F.)
Vegetation Type	Alpine
Habitat	Open stony ridges
Hazards	Possibly mining activity
Herbarium Data	Number of sites by county, Idaho only: CUSTER-2 Number of Idaho collections in herbaria searched: BOIS-0, BS-0, CIC-0, ID-0, IDF-0, IDS-1, IFGH-0, OGDF-0, MONTU-0, NY-0, ORE-0, OSC-0, RENO-0, UTC-1, WS-2, WTU-1
Remarks	This narrow endemic of the White Cloud Mountains may prove to not be threatened if more thoroughly sought in this poorly botanized area. For the present, however, it must be treated as such since one of the two known locations (Railroad Ridge) is subject to mining disturbances. A collection from Lemhi County (C.L. Hitchcock 25 June 1947 IDS) appears similar to var. <i>nubilus</i> .
Recommendations	TREAT AS THREATENED until more locations can be found.
References	Hitchcock and Cronquist 1973; Barneby 1956, 1964
Evaluation by	R. Steele

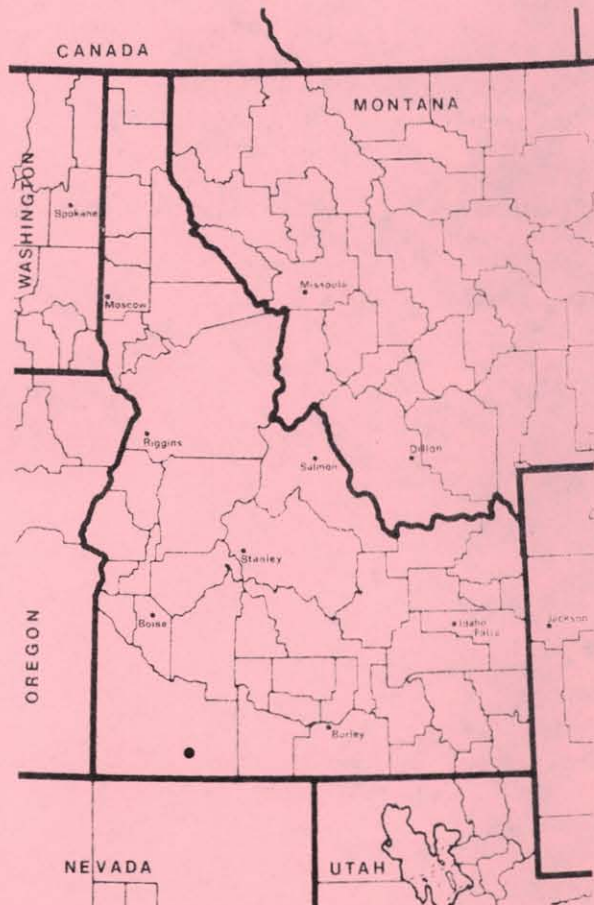


*Astragalus yoder-williamsii* Barneby

Federal Status  
ENDANGERED  
As of August 13, 1980

FABACEAE (Leguminosae)

- Location** Idaho: OWYHEE County  
Nevada: Humboldt County
- Land Ownership** BLM (Boise Dist.)
- Vegetation Type** *Atriplex/Artemisia* communities
- Habitat** By an ant hill.
- Hazards** Agricultural expansion
- Herbarium Data** Number of sites by county, Idaho only:  
OWYHEE-2  
Number of Idaho collections in herbaria searched: BOIS-0, BS-0, CIC-2, ID-0, IDF-0,  
MONTU-0, NY-0, ORE-0, OSC-0, RENO-0, WS-0, WTU-0
- Remarks** Range is not completely known. It is known from only 3 collections. The Owyhee County populations were of only a few plants.
- Recommendations** Federal ENDANGERED because of its disjunct nature, the few populations and few individuals.
- References** *Federal Register* 13 August 1980
- Evaluation by** P. L. Packard

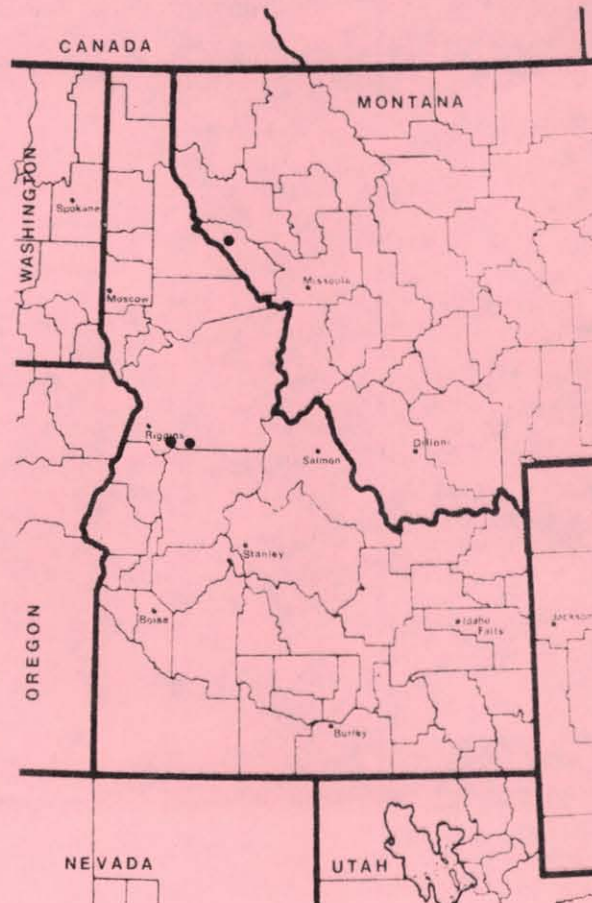


*Calamagrostis tweedyi* (Scribn.) Scribn.

Recommended Federal Status  
THREATENED

POACEAE (Gramineae)

Location	Idaho: IDAHO County Montana: Mineral County Washington: Wenatchee Mountains
Land Ownership	USFS (Payette N.F.), BLM (Coeur d'Alene Dist.)
Vegetation Type	<i>Pseudotsuga menziesii</i> / <i>Physocarpus malvaceus</i> H.T., <i>Abies grandis</i> / <i>Clintonia uniflora</i> H.T., <i>Xerophyllum tenax</i> phase, Subalpine fir zone
Habitat	Moist open sites in forest, also in burned-over clearcuts.
Hazards	Possible conflicts with grazing activities.
Herbarium Data	Number of sites by county, Idaho only: IDAHO-2 Number of Idaho collections in herbaria searched: BOIS-0, BS-0, CIC-0, ID-0, IDF-0, IDS-1, IFGH-0, MONTU-0, NY-0, ORE-0, OSC-0, RENO-0, US-1, UTC-1, WS-0, WTU-0
Remarks	More Idaho sites should be sought. Relationships with soils and grazing need study. Data by Stickney (1980) suggest that this is an early seral species in clearcuts following burning.
Recommendations	TREAT AS THREATENED until more locations are found.
References	Hitchcock and Cronquist 1973, Heidel 1979
Evaluation by	R. Steele



*Carex aboriginum* M.E. Jones

Recommended Federal Status  
ENDANGERED

CYPERACEAE

**Location** Idaho: ADAMS County

**Land Ownership** Private or possibly BLM (Boise Dist.)

**Vegetation Type** Sagebrush/grass zone

**Habitat** "Dry gumbo soil, wet in the spring," about 3,000 ft.

**Hazards** Probably subjected to agricultural and grazing disturbances.

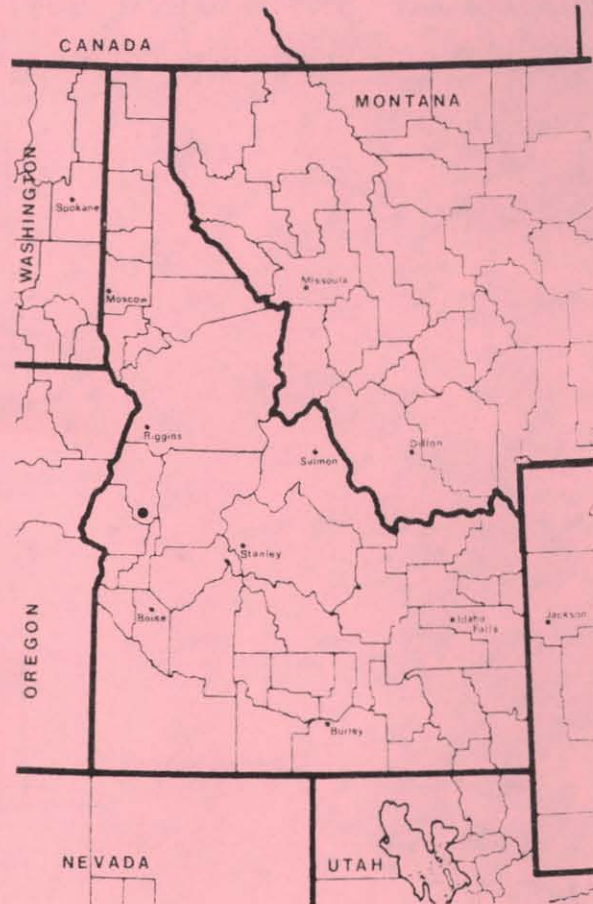
**Herbarium Data** Number of sites by county, Idaho only:  
ADAMS-1 (Known only from type collection which was incorrectly recorded as Washington Co., 2,300 ft.)  
Number of Idaho collections in herbaria searched: BOIS-0, BS-0, CIC-0, ID-0, IDF-0, IDS-0, IFGH-0, MONTU-0, MRC-0, NY-1, ORE-0, OSC-0, RENO-0, UTC-0, WS-0, WTU-0

**Remarks** This species needs field investigation and may be extinct, but the notably rich representation of the Cyperaceae in the type locality suggests that it may still exist. A collection from Cache Co., Utah, near Mendon (Holmgren 8251, BYU, UTC, UT, RENO) is labeled *C. aboriginum*, but the collector now considers this identification to be invalid. A collection from Custer County (Thompson 13989 RENO) is from a bog by Stanley Lake and is most likely misidentified since the habitat contrasts sharply with the type locality. The type locality is "Indian Valley near Salubria." Indian Valley is in Adams County at about 3,000 ft elevation and lies roughly 12 air miles east of Cambridge, Idaho. The old townsite of Salubria is in Washington County at about 2,600 ft and (contrary to Herman 1970) lies about 1.5 air miles southeast of Cambridge. Practically all of Indian Valley is gumbo soil.

**Recommendations** TREAT AS ENDANGERED

**References** Hitchcock and Cronquist 1973,  
Hermann 1970

**Evaluation by** R. Steele

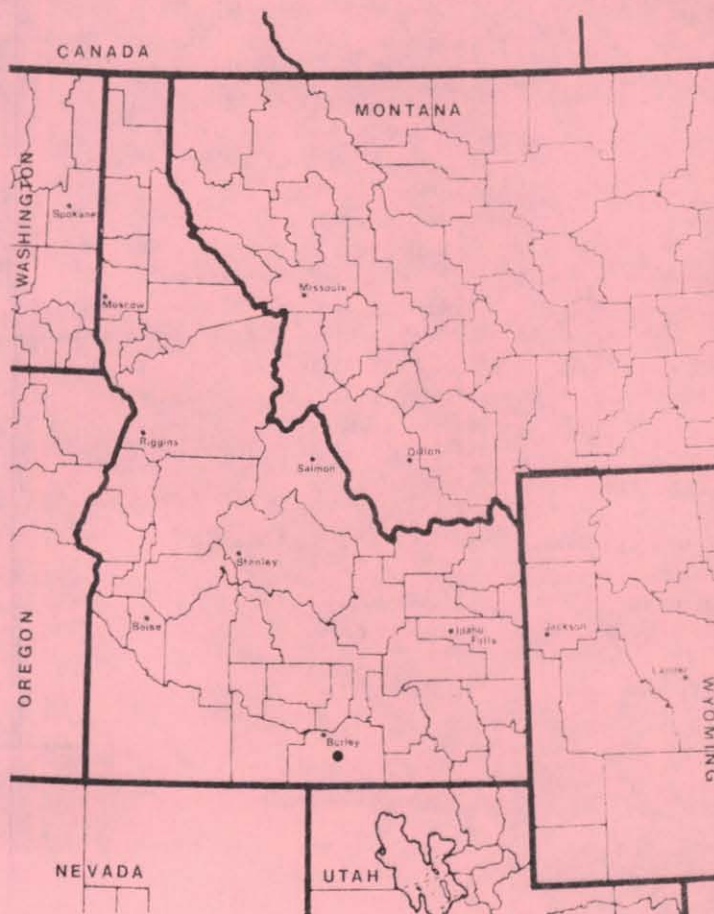


*Castilleja christii* N. Holmgren

Recommended Federal Status  
ENDANGERED

SCROPHULARIACEAE

- Location** Idaho: CASSIA County, Idaho endemic
- Land Ownership** USFS (Sawtooth N.F.)
- Vegetation Type** Upper subalpine meadow
- Habitat** *Festuca idahoensis*/*Poa sandbergii* community, 9,100 ft. on rocky ridge with quartzite and mica schist stones and boulders.
- Hazards** ORV use, any additional construction of radio relay or lookout facilities and possibly grazing animals.
- Herbarium Data** Number of sites by county, Idaho only:  
CASSIA-1  
Number of Idaho collections in herbaria searched: BOIS-0, BS-0, CIC-0, ID-1, IDF-1, IDS-0, IFGH-0, MONTU-1, NY-1, ORE-0, OSC-1, RENO-1, UTC-1, WS-2, WTU-1
- Remarks** This species, known only from type locality, has been sought in similar adjacent habitat but not found. It has survived grazing for some 80 years but its response to grazing impact remains unknown.
- Recommendations** PROPOSE AS ENDANGERED
- References** Holmgren 1973
- Evaluation by** R. Steele

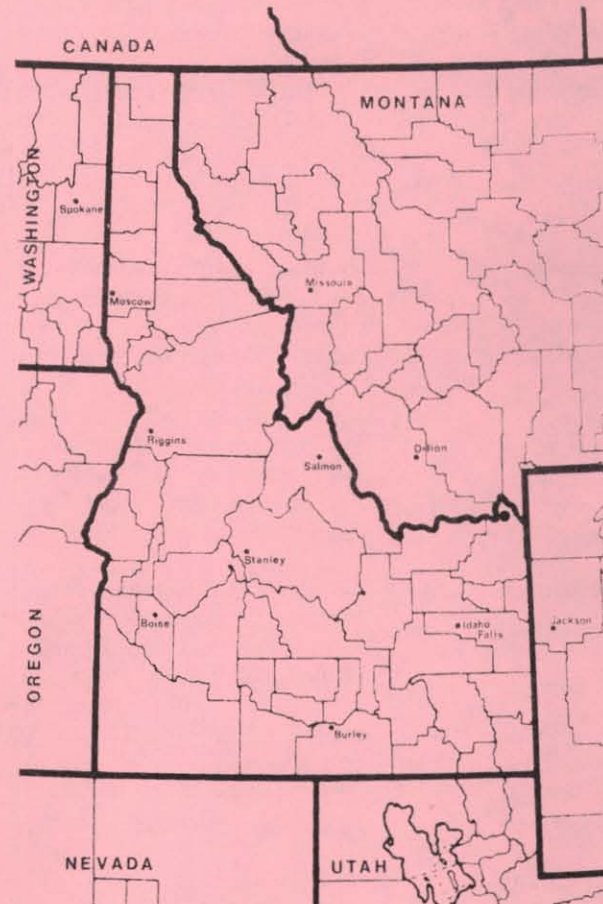


*Claytonia lanceolata* Pursh. var. *flava* (A. Nels.) C.L. Hitchc.  
 Syn. *C. flava* (A. Nels.)

Recommended Federal Status  
 ENDANGERED

PORTULACACEAE

Location	Idaho: FREMONT County, Idaho endemic variety
Land Ownership	USFS (Targhee N.F.) and private
Vegetation Type	Meadow
Habitat	Medium moist meadows
Hazards	Land development and flooding.
Herbarium Data	Number of sites by county, Idaho only: FREMONT-1 Number of Idaho collections in herbaria searched: BOIS-0, BS-0, CIC-0, ID-0, IDF-0, IDS-0, IFGH-0, MONTU-0, NY-0, ORE-0, OSC-0, RENO-0, UTC-0, WS-0, WTU-1
Remarks	Known only from Henry's Lake area. Davis (1952) says the range extends into Montana, but no collections have been found. Whitehead (Holte and Whitehead 1978) sought it for two summers but could not find it where previously collected. Douglas, Snyder-Douglas and Neilsen (1978) also searched for it without success. May be extinct.
Recommendations	TREAT AS ENDANGERED, needs further searching in field.
References	Hitchcock and Cronquist 1973
Evaluation by	K. E. Holte



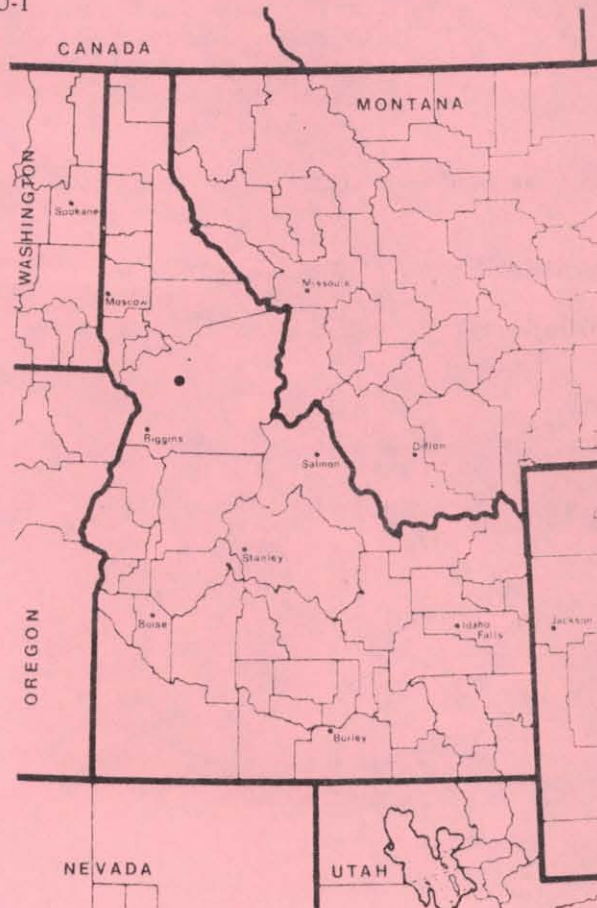


*Cypripedium calceolus* L. var. *parviflorum* (Salisb.) Fern.  
Syn. *C. parviflorum* Salisb.

Recommended Federal Status  
ENDANGERED

ORCHIDACEAE

<b>Location</b>	Idaho: possibly IDAHO and VALLEY counties British Columbia Oregon: possibly Currey and Josephine counties Utah: possibly Cache and Utah counties Washington: Okanogan and Spokane counties Wyoming: Sheridan County
<b>Land Ownership</b>	Unknown, likely on USFS (Nezperce N.F.), BLM (Boise and Coeur d'Alene dists.) or private land
<b>Vegetation Type</b>	Apparently from subalpine forest zone to mountain shrub communities and river bottoms near lower timberline.
<b>Habitat</b>	Bogs, damp woods, and wet areas in thickets
<b>Hazards</b>	Grazing and collecting, possibly recreational developments and other construction.
<b>Herbarium Data</b>	Number of sites by county, Idaho only: IDAHO-1 (identification uncertain) Number of Idaho collections in herbaria searched: BOIS-0, BS-0, CIC-0, F-0, ID-0, IDF-0, IDS-0, MO-0, MONTU-0, NY-1, ORE-0, OSC-0, PH (only type collection searched)-0, UTC-0, RENO-0, WS-0, WTU-1
<b>Remarks</b>	Although reported for Idaho, no extant populations have been confirmed. This variety may need federal protection; it is very rare in Oregon (Siddall et al. 1979) and Utah (Welsh et al. 1975) and may be extirpated in both states as well as Idaho. Possibly sighted in Valley County a few years ago.
<b>Recommendations</b>	Do not collect; photograph and report sightings to Idaho Rare and Endangered Plants Technical Committee. Federal protection should be considered in the western U.S. TREAT AS ENDANGERED.
<b>References</b>	Hitchcock and Cronquist 1973
<b>Evaluation by</b>	R. Steele



*Douglasia idahoensis* D. Henderson, sp. nov. in ed.

Recommended Federal Status  
ENDANGERED

PRIMULACEAE

**Location** Idaho: IDAHO and VALLEY counties, a central Idaho endemic

**Land Ownership** USFS (Nezperce and Payette N.F.'s)

**Vegetation Type** Subalpine fir/beargrass

**Habitat** Open, gravelly areas within forest and unstable NE slopes and ridges where soils are derived from granite or quartzite.

**Hazards** Mainly recreational impacts.

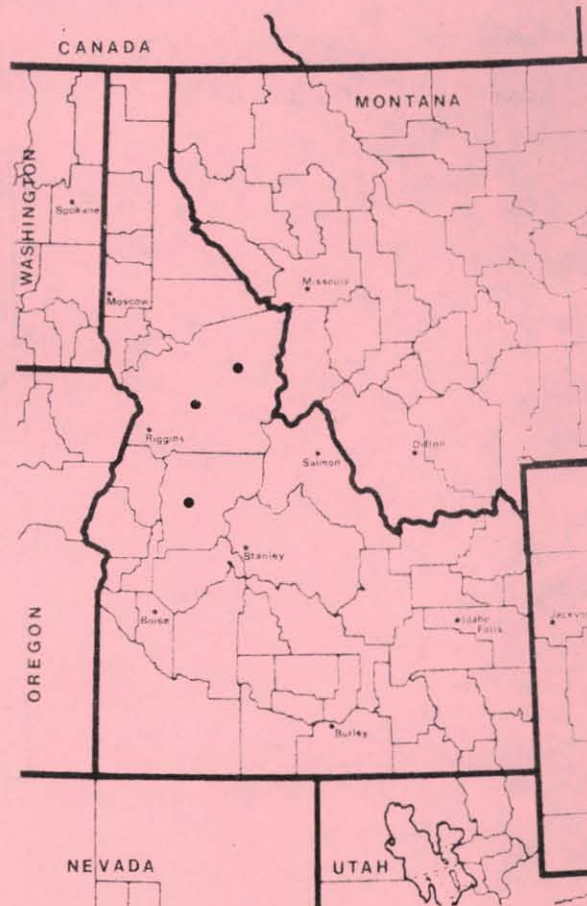
**Herbarium Data** Number of sites by county, Idaho only:  
IDAHO-2, VALLEY-1  
Number of Idaho collections in herbaria searched: BOIS-0, BS-0, CIC-0, ID-7, IDF-0, IDS-0, MONTU-0, IFGH-0, NY-3, ORE-0, OSC-0, RENO-0, UC-2, UTC-0, WS-3, WTU-2

**Remarks** This new taxon, formerly considered as *D. montana* or *D. laevigata*, is known only from three sites in central Idaho and although each has been visited recently, only the Idaho County sites appear to support viable populations. A report of this species from Boise County has not yet been confirmed.

**Recommendations** Both populations in Idaho County accessible via road and this, coupled with the fact that only about 500 to 600 individual plants have been observed, could place this species in a rather precarious position. The occurrence of these small populations in areas of expanding recreational impact could jeopardize this taxon. TREAT AS ENDANGERED.

**References** Constance 1938, Hitchcock et al. 1959 Vol 4:47

**Evaluation by** D. M. Henderson

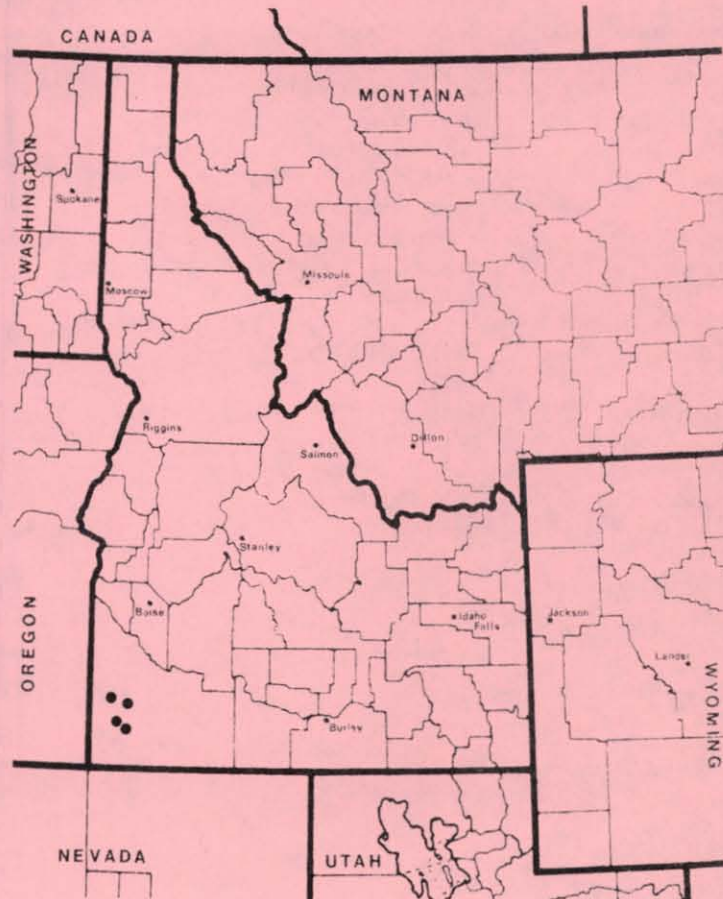


*Erigeron latus* (Nels. & Machr.) Cronq.

Recommended Federal Status  
THREATENED

ASTERACEAE (Compositae)

- Location** Idaho: OWYHEE and TWIN FALLS counties  
Nevada: Elko County
- Land Ownership** BLM (Boise Dist.), possibly private and Idaho Dept. of Lands (Southwest Area)
- Vegetation Type** Sagebrush/grass zone
- Habitat** Dry gravely thin soil over a volcanic substrate
- Hazards** Range improvement programs
- Herbarium Data** Number of sites by county, Idaho only:  
OWYHEE-5, TWIN FALLS-1  
Number of Idaho collections in herbaria searched: BOIS-0, BS-0, CIC-3, ID-0, IDF-0,  
IDS-0, IFGH-0, MONTU-0, NY-2, ORE-0, OSC-0, RENO-1, UTC-1, WS-2, WTU-2
- Remarks** This taxa intergrades with *E. nanus* to the east, but the two have different habitats.
- Recommendations** TREAT AS THREATENED. A study might further reduce this species to the Federal watch list.
- References** Cronquist 1947
- Evaluation by** P. L. Packard



*Grindelia howellii* Steyererm.

Recommended Federal Status  
THREATENED

ASTERACEAE (Compositae)

**Location** Idaho: BENEWAH County  
Montana: Missoula and Powell counties  
Bipartite endemic. (The type location is KOOTENAI County, on bluffs of the St. Maries River. The species has been rediscovered on bluffs above the St. Maries River in BENEWAH County, so the original county designation was probably incorrect.)

**Land Ownership** USFS (St. Joe N.F.), and Idaho Dept. of Lands (St. Joe Area)

**Vegetation Type** Openings in *Pinus ponderosa* and *Pseudotsuga menziesii* types

**Habitat** Dry, rocky bluffs, forested slopes, and roadsides (Montana) – generally in bare soil.

**Hazards** Trampling by cattle and humans, roadgrading, and roadside herbicide use have been recognized as threats to Montana populations (Watson 1976). These are not believed to be threats in Idaho, but have not been studied.

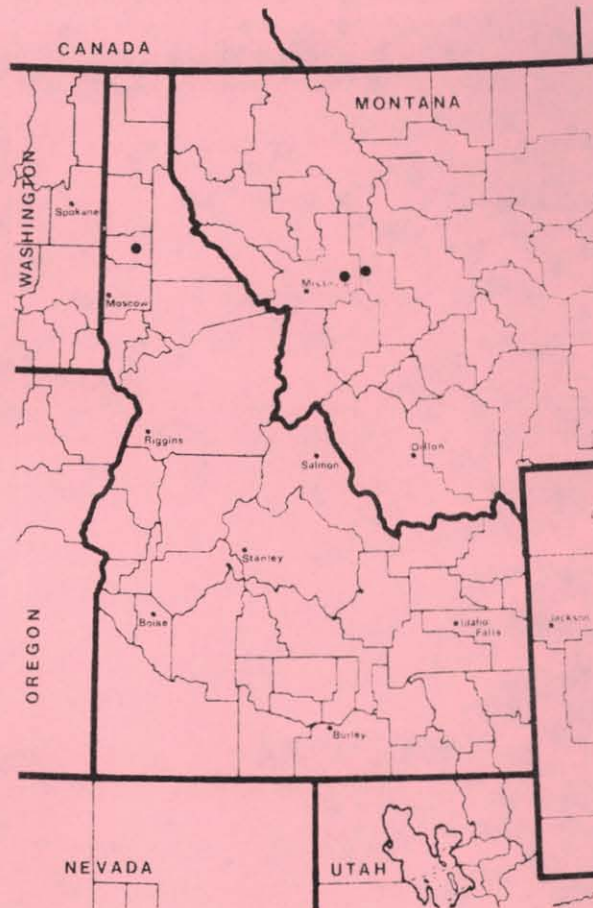
**Herbarium Data** Number of sites by county, Idaho only:  
BENEWAH-3 (in close proximity)  
Number of Idaho collections in herbaria searched: BOIS-0, BS-0, CIC-0, ID-0, IDF-2, IFGH-0, MONTU-0, NY-0, ORE-0, OSC-0, RENO-0, UTC-0, WS-0, WTU-0

**Remarks** Highly restricted distribution in Idaho. One of the three populations is on a site that was strongly overgrazed in the past. The other two sites are much less disturbed. Grazing has been terminated in the area, and it is now being managed for wildlife winter range (Ted Rieger, St. Joe N.F., pers. comm.).

**Recommendations** TREAT AS THREATENED. Search area for additional populations and monitor known populations for response to termination of cattle grazing. Initiate study of reproductive biology and ecology of the species.

**References** Watson 1976, Heidel 1979

**Evaluation by** S. J. Brunsfeld

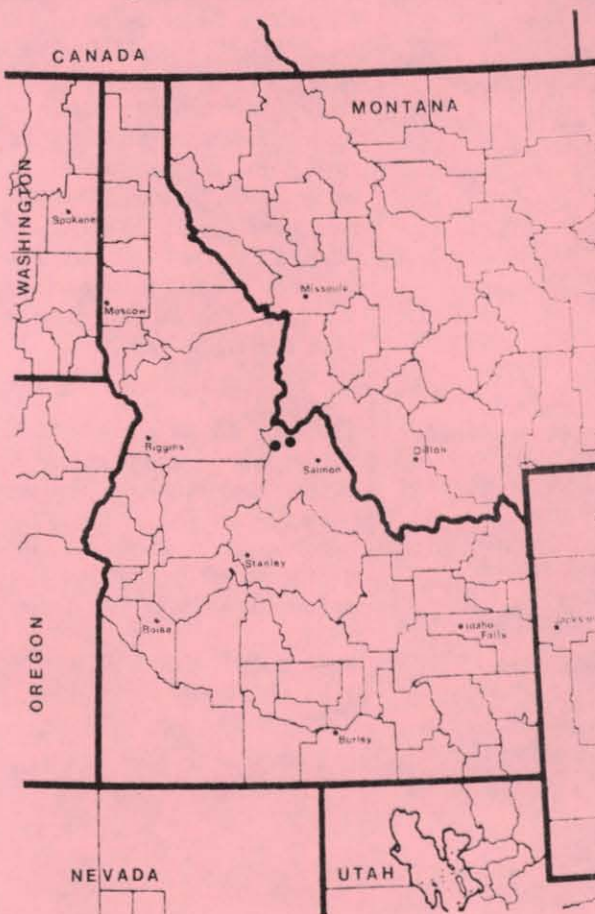


*Hackelia davisii* Cronquist

Recommended Federal Status  
THREATENED

BORAGINACEAE

Location	Idaho: LEMHI County, Idaho endemic
Land Ownership	USFS (Salmon N.F.)
Vegetation Type	<i>Pinus ponderosa</i> zone
Habitat	Moist crevices in limestone cliffs and ledges, 3,100 to 3,330 ft.
Hazards	Mainly widening of adjacent road.
Herbarium Data	Number of sites by county, Idaho only: LEMHI-3 Number of Idaho collections in herbaria searched: BOIS-0, BS-0, CIC-0, ID-2, IDF-0, IDS-2, IFGH-0, MONTU-0, NY-3, ORE-0, OSC-0, RENO-0, UTC-1, WS-2, WTU-1
Remarks	Other limestone outcrops should be sought in main Salmon and lower Middle Fork canyons for new possible locations. Dust conditions from increased use of adjacent dirt road may affect the plants' growth and reproduction.
Recommendations	TREAT AS THREATENED until a field survey is accomplished. Because of limited access, this species should be more common than the records indicate.
References	Hitchcock and Cronquist 1973
Evaluation by	R. Steele

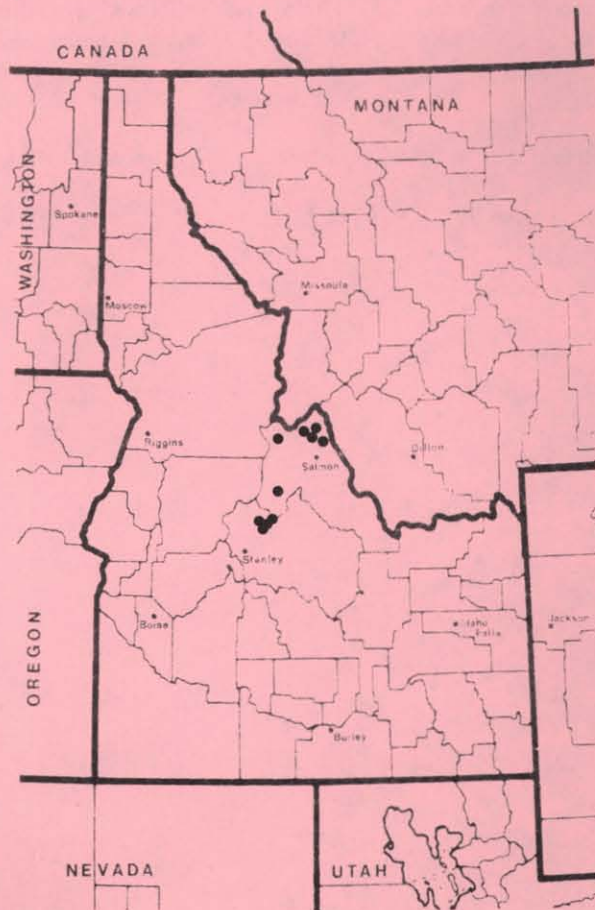


*Halimolobos perplexa* (Hend.) Rollins var. *lemhiensis* Hitchc.

Recommended Federal Status  
THREATENED

BRASSICACEAE (Cruciferae)

Location	Idaho: CUSTER and LEMHI counties, an endemic variety of northwestern Custer to northern and western Lemhi County
Land Ownership	USFS (Challis and Salmon N.F.), and possibly BLM (Salmon Dist.)
Vegetation Type	Mountain big sage/bluebunch wheatgrass, ponderosa pine/bluebunch wheatgrass, and Douglas-fir types
Habitat	Dry, unstable, gravelly or sandy slopes, roadcuts, and dredge tailings of both quartzitic and granitic substrates.
Hazards	Hazards other than road improvement are unknown at this time.
Herbarium Data	Number of sites by county, Idaho only: CUSTER-7, LEMHI-6 Number of Idaho collections in herbaria searched: BOIS-1, BS-0, CIC-1, ID-4, IDF-0, IDS-1, IFGH-0, MONTU-0, NY-3, ORE-0, OSC-0, RENO-2, UTC-2, WS-2, WTU-2
Remarks	Recently discovered in the Loon Creek drainage of Custer County, this Idaho endemic is wider ranging than originally known. Insufficient information exists, however, to assess the proper status for this rare variety.
Recommendations	TREAT AS THREATENED, re-evaluate after field studies determine total range and hazards
References	Hitchcock and Cronquist 1973, Brunsfeld et al. 1980
Evaluation by	S. J. Brunsfeld and D. M. Henderson

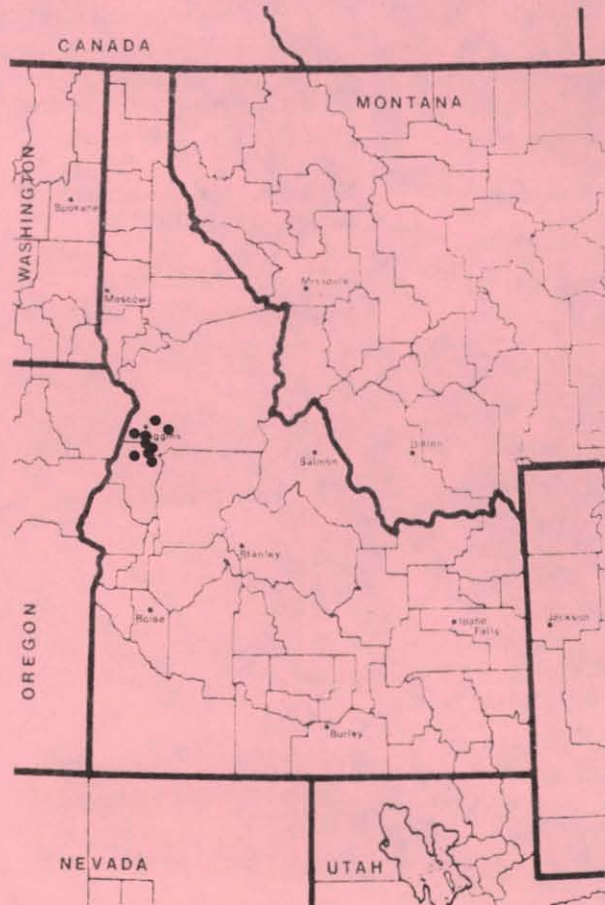


*Halimolobos perplexa* (Hend.) Rollins var. *perplexa*

Recommended Federal Status  
THREATENED

BRASSICACEAE (Cruciferae)

- Location** Idaho: ADAMS and IDAHO counties in vicinity of Little Salmon River and Riggins—a west-central Idaho endemic variety
- Land Ownership** USFS (Payette and Nezperce N.F.s), BLM (Coeur d'Alene Dist.), private, and perhaps Idaho Department of Lands (Payette Lake Area)
- Vegetation Type** Mostly ponderosa pine with Idaho fescue and/or bluebunch wheatgrass
- Habitat** Loose gravel and talus of slopes, cliffs, and roadcuts of varying parent material
- Hazards** Most of the population would be affected by road improvement, less so by logging and/or grazing.
- Herbarium Data** Number of sites by county, Idaho only:  
ADAMS-3, IDAHO-11  
Number of Idaho collections in herbaria searched: BOIS-0, BS-0, CIC-0, ID-3, IDF-1, IDS-1, IFGH-0, MONTU-0, NY-8, ORE-1, OSC-0, RENO-4, UTC-0, WS-1, WTU-4
- Remarks** With the exception of three sites, all known plants are occupying a narrow corridor of only a few miles along the Little Salmon River.
- Recommendations** TREAT AS THREATENED due to highly restricted range and potential threats posed by road improvement.
- References** Hitchcock and Cronquist 1973
- Evaluation by** D. M. Henderson

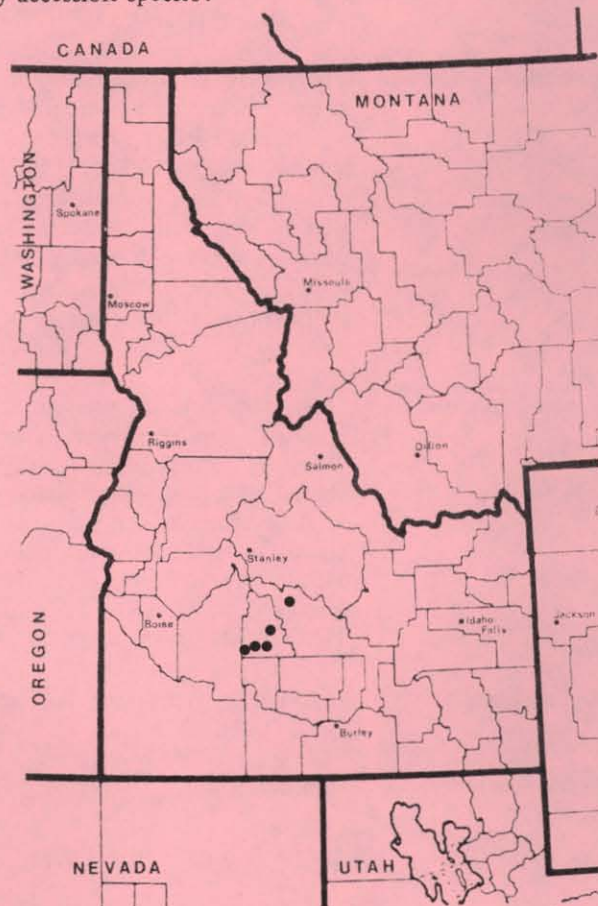


*Haplopappus insecticruris* Henderson  
Syn. *H. integrifolius* Gray ssp. *insecticruris* Hall

Recommended Federal Status  
THREATENED

ASTERACEAE (Compositae)

Location	Idaho: BLAINE and CAMAS counties, Idaho endemic
Land Ownership	Private, USFS (Sawtooth N.F.)
Vegetation Type	Sagebrush/grass
Habitat	Meadows, 5,000-6,000 ft.
Hazards	Hay and cattle production, some dry land farming and housing development.
Herbarium Data	Number of sites by county, Idaho only: BLAINE-1, CAMAS-3 Number of Idaho collections in herbaria searched: BOIS-0, BS-0, CIC-0, ID-2, IDF-0, IDS-1, IFGH-0, MONTU-0, NY-3, ORE-0, OSC-0, RENO-0, UTC-0, WS-0, WTU-0
Remarks	This species has been sought in vain during two endangered plant surveys (Eidemiller, 1976, 1977). Habitat in older collection sites may no longer exist. No recent sightings or collections are known of this fairly accessible species.
Recommendations	TREAT AS THREATENED; search for new locations. Federal listing seems appropriate
References	Hitchcock and Cronquist 1973, Lee 1968
Evaluation by	R. Steele



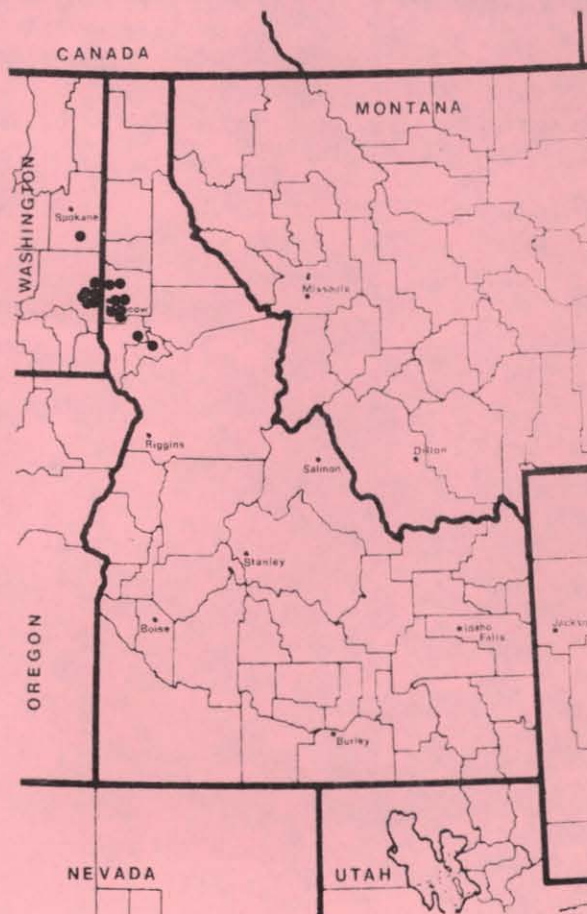


*Haplopappus liatrisformis* (Greene) St. John  
Syn. *Pyrrocoma liatrisformis* Greene

Recommended Federal Status  
THREATENED

ASTERACEAE (Compositae)

Location	Idaho: LATAH, LEWIS, and NEZPERCE counties Washington: Spokane and Whitman counties
Land Ownership	Likely all private, but possibly BLM (Coeur d'Alene Dist.) and Idaho Dept. of Lands (Coeur d'Alene Area) toward their southern boundaries.
Vegetation Type	Palouse prairie, Pacific bunchgrass
Habitat	"Virgin fescue/wheatgrass prairie," "along highway, dry soil," "open areas on the ridge top and along upper parts of the slope," "rocky slope," " <i>Festuca idahoensis</i> / <i>Symphoricarpos albus</i> habitat type"
Hazards	Agricultural impacts. Herbicide spraying should be suspected, since most of the areas are cultivated.
Herbarium Data	Number of sites by county, Idaho only: LATAH-7, LEWIS-1, NEZPERCE-1 Number of Idaho collections in herbaria searched: BOIS-0, BS-0, CIC-0, ID-6, IDF-0, IDS-0, IFGH-0, MONTU-0, NY-4, ORE-0, OSC-0, RENO-0, UTC-0, WS-1, WTU-0
Remarks	The paucity of specimens from an area near two universities is significant. Further, the last collections were in 1950 (2), 1952 (1), and 1956 (1)—none in the past 24 years until Heidel made 2 collections in Whitman Co. WA in 1979. For a discussion of synonymy see Henderson et al. 1977.
Recommendations	Sites in both states need to be revisited. The extensive range contains considerable suitable habitat. The impact of agricultural development, in particular broadleaf weed control practices, appears so negative that this species must be TREATED AS THREATENED.
References	Lee 1968, Henderson et al. 1977, Heidel 1979
Evaluation by	F. D. Johnson



*Astragalus atratus* Wats. var. *inseptus* Barneby

Recommended Federal Status  
THREATENED

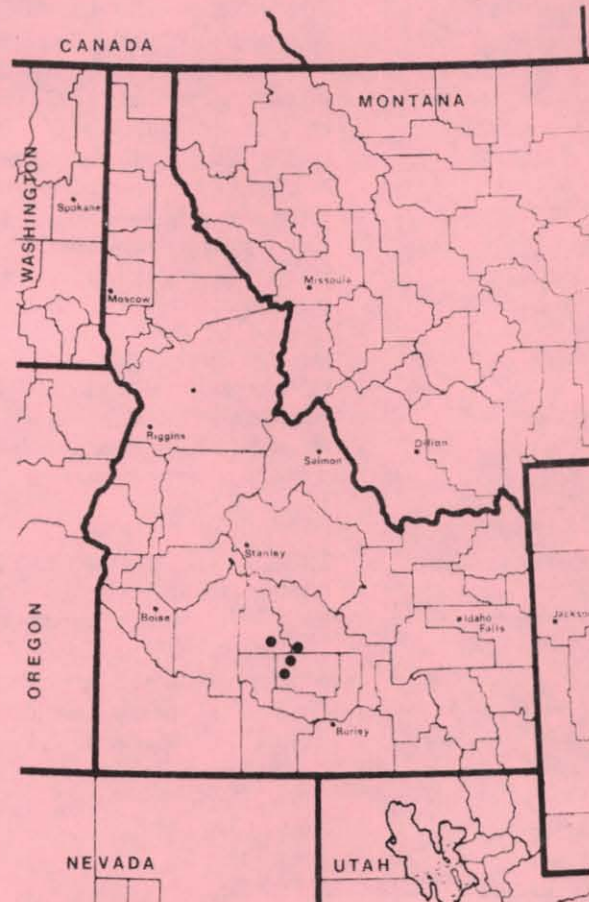
FABACEAE (Leguminosae)

- Location** Idaho: BLAINE, CAMAS, LINCOLN, possibly ELMORE and GOODING counties, Idaho endemic variety
- Land Ownership** BLM (Shoshone Dist.), possibly private and Idaho Dept. of Lands (South Central Area)
- Vegetation Type** Mosaics of *Artemisia tridentata* - *Artemisia arbuscula*
- Habitat** Thin soil over basalt, wet in the spring, but dry at other seasons
- Hazards** Range improvement programs and possibly grazing
- Herbarium Data** Number of sites by county, Idaho only:  
BLAINE-2, CAMAS-3, LINCOLN-7 (Some in common with Camas County).  
Number of Idaho collections in herbaria searched: BOIS-0, BS-0, CIC-2, ID-1, IDF-0, IDS-0, IFGH-0, NY-2, ORE-0, OSC-0, RENO-0, UTC-0, WS-0, WTU-0
- Remarks** This plant is apparently abundant some years in the Bennett Hills. Other years it doesn't seem to appear. This possibly indicates that it has a marginal existence. It is rarely collected, but may be more abundant than we now know.

- Recommendations** TREAT AS THREATENED. On the basis of present collections, it should be assumed that this species is threatened. Further study will probably reduce it to our federal watch list, but this is not justified by present knowledge.

- References** Barneby 1964

- Evaluation by** P. L. Packard



*Haplopappus radiatus* (Nutt.) Cronq.  
 Syn. *H. carthamoides* (Hook.) Gray var. *maximus* Gray

Recommended Federal Status  
 THREATENED

ASTERACEAE (Compositae)

**Location** Idaho: WASHINGTON County  
 Oregon: Baker and Malheur counties

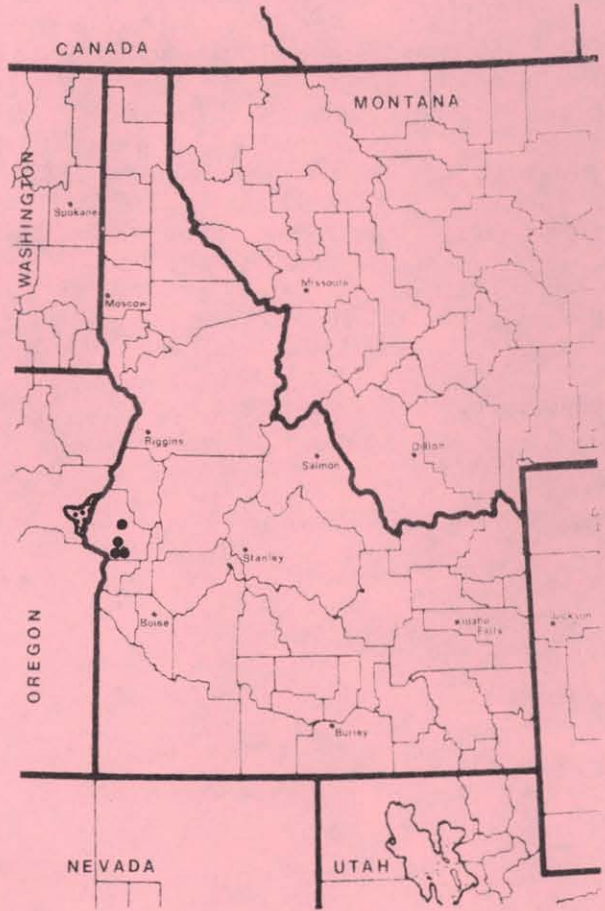
**Land Ownership** BLM (Boise Dist.), possible USFS (Payette N.F.) and Idaho Dept. of Lands (Payette Lake Area), some private

**Vegetation Type** Sagebrush/grass, possible on a few outliers of Pacific bunchgrass

**Habitat** "Steep rocky hillside"; "gravelly terrace" - along creek; "grazing modified . . . *Artemisia tridentata*/*Poa sandbergii* community . . . dominated by annuals." The native range of this plant has been intensively grazed, more in the past than now. However, Meinke (1978) feels that grazing pressure has altered the habitat so that seedlings of this plant cannot easily establish.

**Herbarium Data** Number of sites by county, Idaho only:  
 WASHINGTON - 4  
 Number of Idaho collections in herbaria searched: BOIS-1, BS-0, CIC-1, ID-1, IDF-0, IDS-0, IFGH-0, MONTU-0, NY-2, ORE-0, OSC-0, RENO-0, UTC-0, WS-1, WTU-0

**Remarks** Meinke (1978) notes 35 locations (mapped here) in Oregon including 6 study sites. He concludes that it should remain listed as endangered, although with 35 sites and little long-term trend data, this seems an extreme interpretation. The following year Meinke (1979) cites grasshopper damage and low seed production as factors important to endangerment. These phenomena are common in semi-arid environments. Johnson & Mattson (1978) searched the Snake River Canyon below Hells Canyon Dam with no success. It thus apparently avoids the principal bunchgrass formation. It is certainly rare in Idaho, but was collected in 1974 and 1978. There has been no deliberate searching in Idaho to my knowledge. Considering the relative inaccessibility of the Idaho side of Brownlee Reservoir, more might reasonably be expected.



**Recommendations** Considering the 39 known sites, TREAT AS THREATENED seems a more reasonable status.

**References** Siddall & Chambers 1978

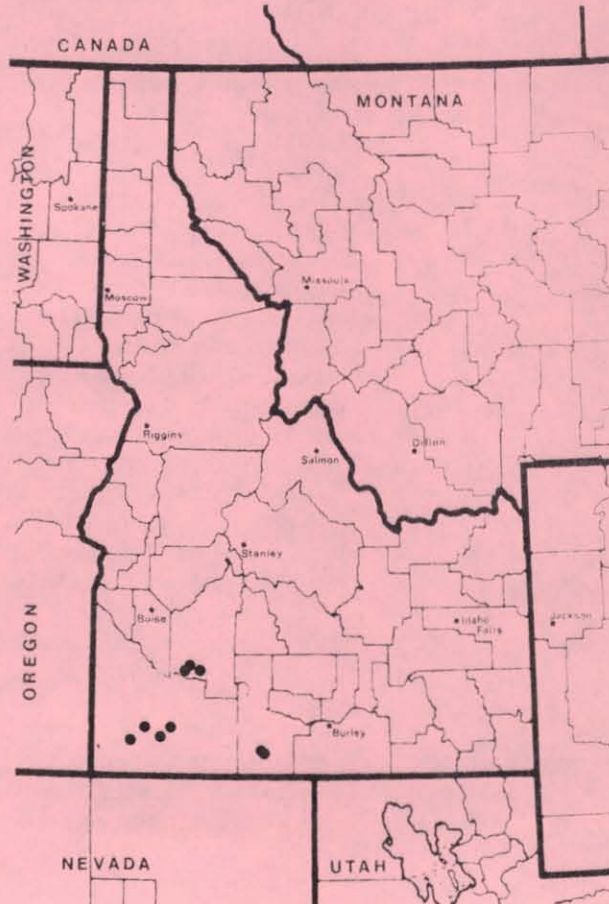
**Evaluation by** F. D. Johnson

*Lepidium davisii* Rollins

Recommended Federal Status  
THREATENED

BRASSICACEAE (Cruciferae)

- Location** Idaho: ELMORE, OWYHEE, and TWIN FALLS counties  
Oregon: Malheur County
- Land Ownership** BLM (Boise Dist.), possibly private and Idaho Dept. of Lands (Southwest and South Central Areas).
- Vegetation Type** *Atriplex-Artemisia* zone
- Habitat** Hard bottom playas
- Hazards** These playas are being used for stock watering ponds, reservoirs, and race tracks. Their location in heavily grazed areas makes them highly vulnerable to disturbance.
- Herbarium Data** Number of sites by county, Idaho only:  
ELMORE-4, OWYHEE-5, TWIN FALLS-2  
Number of Idaho collections in herbaria searched: BOIS-0, BS-0, CIC-6, ID-0, IDF-0, IDS-14, IFGH-0, MONTU-0, NY-3, ORE-0, OSC-3, RENO-0, UTC-0, WS-0, WTU-1
- Remarks** Of the 11 sites now known for this plant, only 4 are probably intact. BLM (Boise Dist.) plans 90 new reservoirs in the Owyhee EIS area (Bureau of Land Management 1980). It is feared that most sites for this species will be included in this plan.
- Recommendations** Although this species is known from 11 sites in 4 counties, it is recommended that it be PROPOSED AS THREATENED because of present and potential impact on the habitat.
- References** Hitchcock and Cronquist 1973, Rollins 1948
- Evaluation by** P. L. Packard

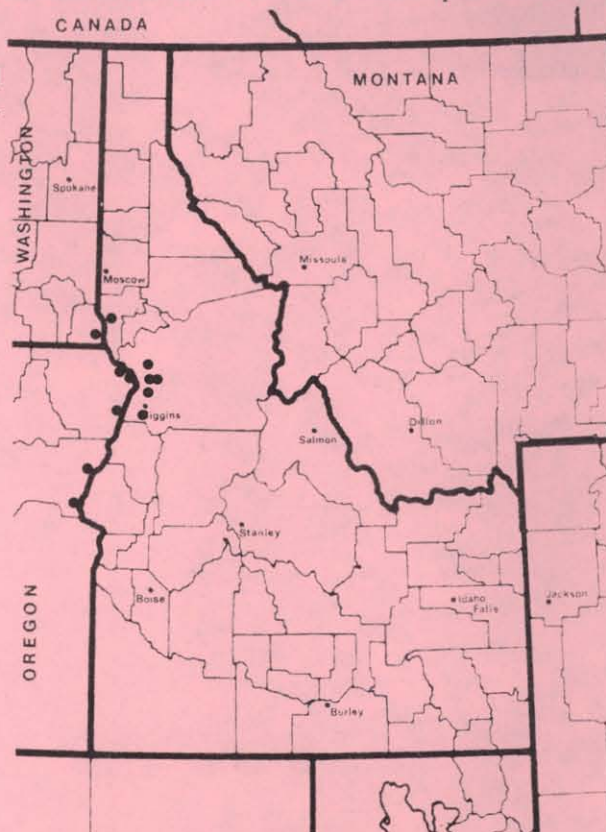


*Lomatium rollinsii* Math. & Const.

Recommended Federal Status  
THREATENED

APIACEAE (Umbelliferae)

Location	Idaho: IDAHO and NEZPERCE counties Oregon: Baker and Wallowa counties Washington: Asotin County Canyons of the Snake, lower Salmon, and Little Salmon rivers
Land Ownership	Private, BLM (Coeur d'Alene Dist.), USFS (Nezperce N.F.)
Vegetation Type	Primarily <i>Agropyron spicatum</i> / <i>Festuca idahoensis</i> , but also <i>Agropyron spicatum</i> / <i>Poa sandbergii</i>
Habitat	Mesic grassy slopes with deep soil; also on drier, rockier hillsides, sandy bars, and rarely in the crevices of rock outcrops. Ranging from 50 to 1,000 ft above river.
Hazards	Limited known range. Sensitivity to grazing has not been established. (Because the plant sets seed and withers early in the season, effects are expected to be minimal unless grazing is intense.)
Herbarium Data	Number of sites by county, Idaho only: IDAHO-5, NEZPERCE-2 Number of Idaho collections in herbaria searched: BOIS-0, BS-0, CIC-0, ID-3, IDF-5, IDS-0, IFGH-0, MONTU-0, NY-0, ORE-0, OSC-0, RENO-0, UTC-0, WS-0, WTU-7
Remarks	Improved knowledge of the plant's habitat has led to the recent discovery of several new sites. Miles of terrain still need to be searched. Because of the high diversity of <i>Lomatium</i> species in our canyons, visual inventories of <i>Lomatium rollinsii</i> should be performed with extreme caution.
Recommendations	TREAT AS THREATENED until more populations are discovered. Assess impact of grazing.
References	Hitchcock and Cronquist 1973
Evaluation by	S. J. Brunsfeld



*Mentzelia mollis* Peck

Recommended Federal Status  
ENDANGERED

LOASACEAE

**Location** Idaho: OWYHEE County  
Oregon: Malheur County

**Land Ownership** BLM (Boise Dist.), private and possibly Idaho Dept. of Lands (Southwest Area)

**Vegetation Type** *Artemisia-Atriplex* communities

**Habitat** Local areas of volcanic ash

**Hazards** Mining, range improvement, ORV's

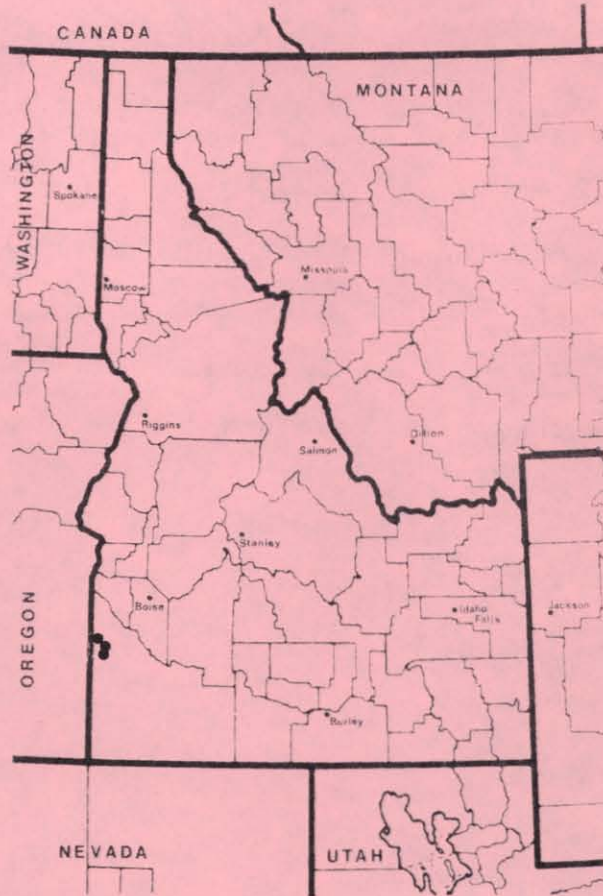
**Herbarium Data** Number of sites by county, Idaho only:  
OWYHEE-7  
Number of Idaho collections in herbaria searched: BOIS-0, BS-0, CIC-6, ID-2, IDF-0, IDS-0, IFGH-0, MONTU-0, NY-1, ORE-0, OSC-0, RENO-0, UTC-2, WS-0, WTU-2

**Remarks** The habitat is endangered. The species is restricted to this one habitat and has not been successfully germinated or grown in greenhouse or garden. Range improvement programs have disturbed several sites.

**Recommendations** PROPOSE AS ENDANGERED.  
The small range, restricted habitat and human impact on the habitat are endangering this plant.

**References** Glad 1976

**Evaluation by** P. L. Packard



*Mirabilis macfarlanei* Constance & Rollins

Federal Status  
ENDANGERED  
as of Oct. 26, 1979

NYCTAGINACEAE

**Location** Idaho: IDAHO County  
Oregon: Wallowa County  
Snake and Salmon River Canyon endemic  
At present known from two (three?) locations in Oregon, two in Idaho.

**Land Ownership** Idaho population - BLM (Coeur d'Alene Dist.), Oregon population - USFS (Wallowa-Whitman N.F.) - some private in Idaho.

**Vegetation Type** Grasslands immediately above river level

**Habitat** No habitat types noted, but the grasses, forbs, and shrubs associated are typical of these canyon bottoms.

**Hazards** May be susceptible to grazing pressure since it has very brittle stems. Insect predators were seen on two populations. An unknown fungus also is causing defoliation and possible seed loss. Picking by hikers is a very real threat since the flowers are very showy.

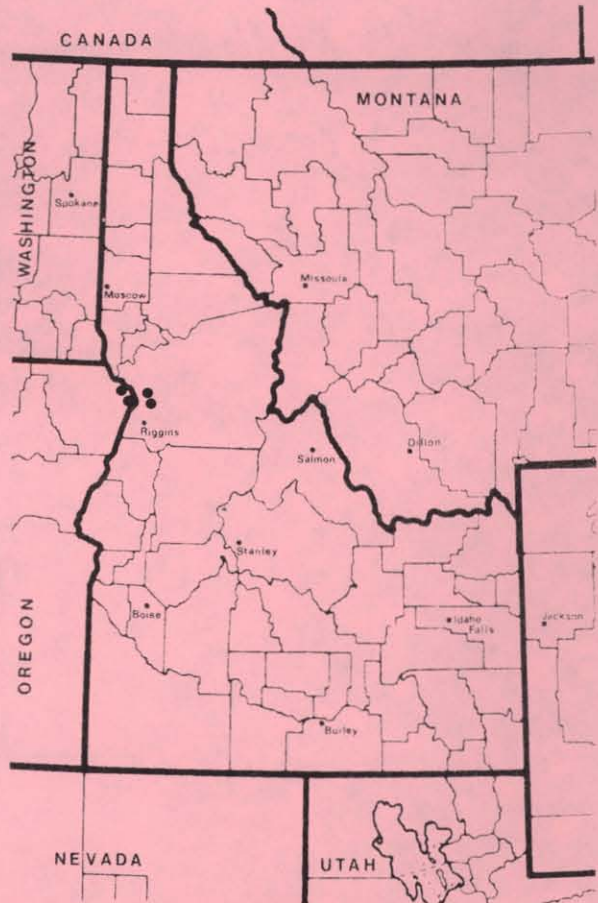
**Herbarium Data** Number of sites by county, Idaho only:  
IDAHO-2  
Number of Idaho collections in herbaria searched: BOIS-0, BS-0, CIC-0, ID-2, IDF-2, IDS-2, LAGO-1, NY-2, ORE-0, OSC-2, RENO-3, UTC-0, WS-1, WTU-1

**Remarks** This is one of Idaho's rarest plants. It was feared extinct in Idaho before rediscovery of the Salmon River population by Bonnie Heidel in 1979. It was declared endangered without declaring the critical habitat to avoid detailed maps being published. In 1980, personnel from the BLM (Coeur d'Alene Dist.) located a more extensive population on the Salmon River on BLM land. Protective steps are under way.

**Recommendations** Federal - ENDANGERED

**References** Constance and Rollins 1936, Johnson and Mattson 1978, Federal Register 26 Oct. 1979, Heidel 1979.

**Evaluation by** F. D. Johnson



*Oenothera caespitosa* Nutt. var. *psammophila* (Nels. & Macbr.) Munz.  
Syn. *O. psammophila* Nels. & Macbr.

Recommended Federal Status  
ENDANGERED

ONAGRACEAE

**Location** Idaho: FREMONT County, Idaho endemic variety

**Land Ownership** BLM (Idaho Falls Dist.), possibly Idaho Dept. of Lands (Eastern Area)

**Vegetation Type** Sagebrush/grass zone

**Habitat** Lava outcrops surrounded by sand dunes, 5,000 to 5,300 ft

**Hazards** Mainly ORVs

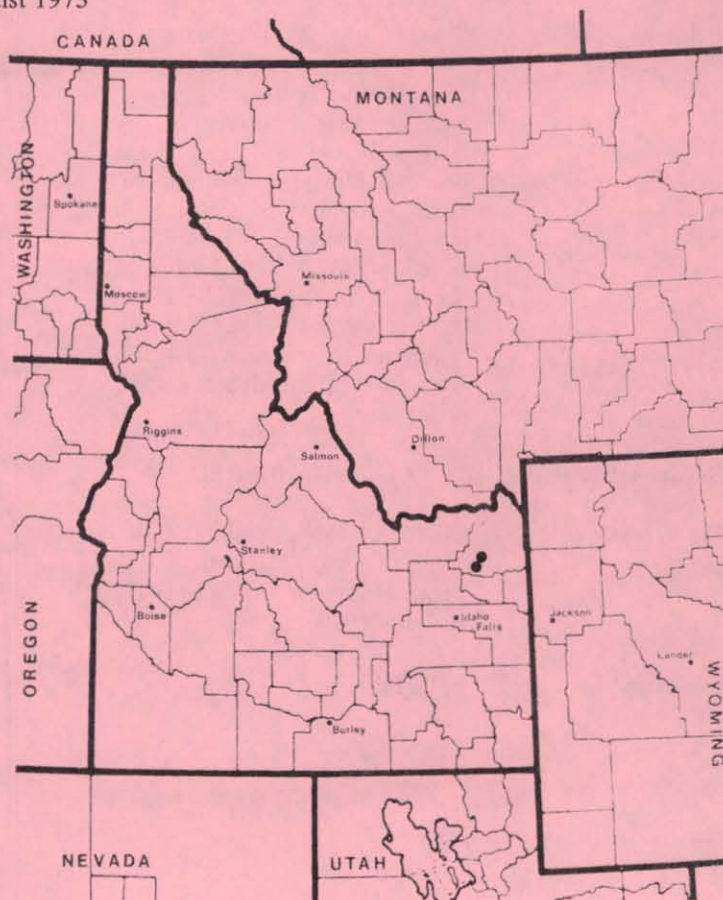
**Herbarium Data** Number of sites by county, Idaho only:  
FREMONT-1  
Number of Idaho collections in herbaria searched: BOIS-0, BS-0, CIC-0, ID-0, IDF-0, IDS-0, IFGH-0, MONTU-0, NY-on loan, ORE-0, OSC-0, RENO-1, WS-0, WTU-0

**Remarks** This plant is rarely collected but was observed in three locations well within the area of the larger dunes. Sites just beyond the main dunes area support another closely related taxon (Holte and Whitehead 1978).

**Recommendations** TREAT AS ENDANGERED

**References** Hitchcock and Cronquist 1973

**Evaluation by** K. E. Holte



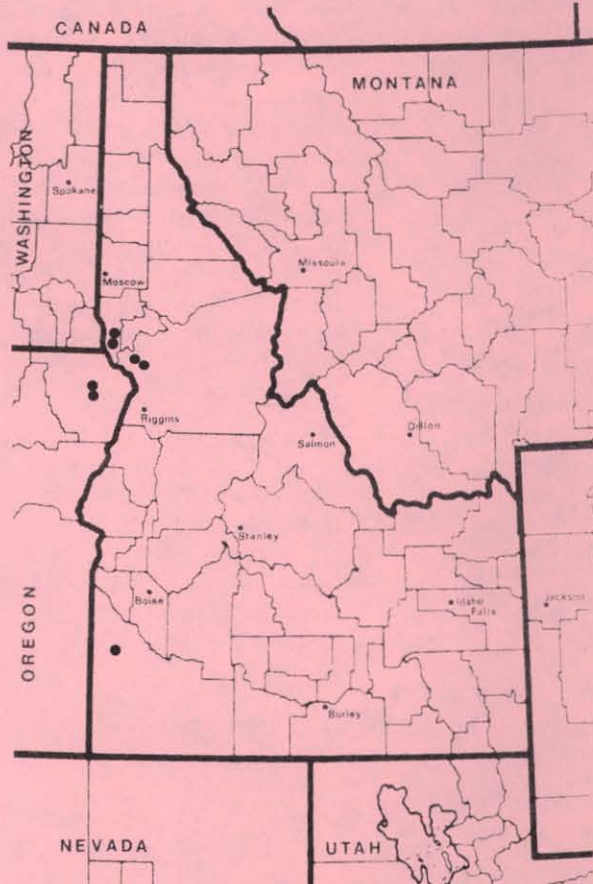


*Penstemon elegantulus* Pennell

Recommended Federal Status  
THREATENED

SCROPHULARIACEAE

<b>Location</b>	Idaho: IDAHO, NEZ PERCE and OWYHEE counties Oregon: Wallowa County
<b>Land Ownership</b>	BLM (Boise and Coeur d'Alene Dist.), northern population largely private. Intermediate sites (if located) may be on USFS (Nezperce and Payette N.F.).
<b>Vegetation Type</b>	No clear information—but apparently subalpine to mid-elevation in nonforested openings or in high elevation grasslands.
<b>Habitat</b>	“Decaying granite hillside,” “trail side,” “ridges or cliffs at edge of grassland,” “in grassland.”
<b>Hazards</b>	Uncertain. Attractive to wildflower gardeners, possibly damaged by grazing.
<b>Herbarium Data</b>	Number of sites by county, Idaho only: IDAHO-2, NEZ PERCE-2, OWYHEE-1 A collection from Kootenai Co. (ID) cannot be identified and is not counted here. Number of Idaho collections in herbaria searched: BOIS-0, BS-0, CIC-0, ID-1?, IDF-0, IDS-1, IFGH-0, NY-3, ORE-0, OSC-0, WS-1, WTU-1.
<b>Remarks</b>	The two areas, the Owyhee Mountains and slopes near the mouth of the Salmon River are unlike ecologically and phytogeographically, making this a peculiar distribution. The Wallowa County, Oregon population indicates that intermediate stations in Idaho are quite possible.
<b>Recommendations</b>	TREAT AS THREATENED until more sites are found.
<b>Evaluation by</b>	F. D. Johnson

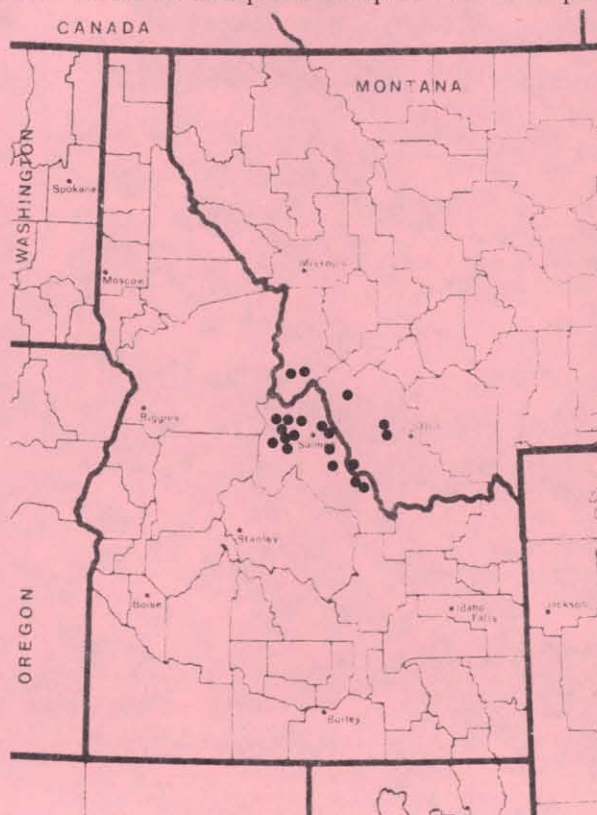


*Penstemon lemhiensis* (Keck) Keck & Cronquist  
 Syn. *P. speciosus* Dougl. ex Lindl. ssp. *lemhiensis* Keck

Recommended Federal Status  
 THREATENED

SCROPHULARIACEAE

<b>Location</b>	Idaho: LEMHI County Montana: Beaverhead, Deerlodge, and Ravalli counties
<b>Land Ownership</b>	USFS (Bitterroot, Beaverhead, and Salmon N.F.s), BLM (Salmon Dist.), and National Park Service (Big Hole Battlefield, Montana)
<b>Vegetation Type</b>	Ponderosa pine and Douglas-fir to mountain big sage/bluebunch wheatgrass
<b>Habitat</b>	Stable to semi-disturbed sites mostly on deep soils of varying parent materials on steep to gradual slopes (many road cuts), 4,000 to 7,500 ft elevation.
<b>Hazards</b>	Grazing, range improvement, road building or improvement (including roadside spraying)
<b>Herbarium Data</b>	Number of sites by county, Idaho only: LEMHI-18 Number of Idaho collections in herbaria searched: BOIS-1, BS-0, ID-16, IDF-0, IDS-0, IFGH-0, MONTU-0, NY-6, ORE-0, OSC-0, RENO-1, UTC-2, WS-0, WTU-2
<b>Remarks</b>	Until recently, this taxon was better known in Montana, where Watson (1976) evaluated four of the six known populations. A special effort was made by this evaluator during the field season of 1980, however, to ascertain the abundance and distribution within Idaho. As a result, ten additional populations were located in Lemhi County, all of which were previously unknown. Likely habitats in the northern Lemhi Range were searched but without success. A large, nearly continuous population of well over 1,000 plants of all age classes occupies a portion of the northern Salmon River Mountains with many plants inhabiting roadcuts and fills. Although this species does occupy sites within sagebrush-bunchgrass vegetation where roads are not present, many populations, particularly in the Beaverhead Mountains are restricted to road cuts. This places this species in a rather precarious position since there is direct evidence of the elimination of at least one population by a program of indiscriminate roadside spraying with herbicides. In addition, range improvement programs incorporating herbicides are known to have occurred well within the range and habitat of this taxon.
<b>Recommendations</b>	TREAT AS THREATENED. Throughout much of its range in Idaho it occupies a rather narrow band of habitats near the sagebrush/Douglas-fir ecotone. Management practices by the Forest Service and BLM in these habitats need to be re-evaluated.
<b>References</b>	Phillips 1976, Watson 1976
<b>Evaluation by</b>	D. M. Henderson



*Phacelia inconspicua* Greene

Recommended Federal Status  
ENDANGERED

HYDROPHYLLACEAE

**Location** Idaho: BUTTE County  
Nevada: Pershing County

**Land Ownership** Idaho National Engineering Lab and possibly BLM (Idaho Falls Dist.)

**Vegetation Type** Sagebrush/grass zone

**Habitat** Open sandy spots in the sagebrush/grass zone

**Hazards** No immediate threat from human activities, but there is some activity in the area. This species is apparently endangered by its rarity and annual nature.

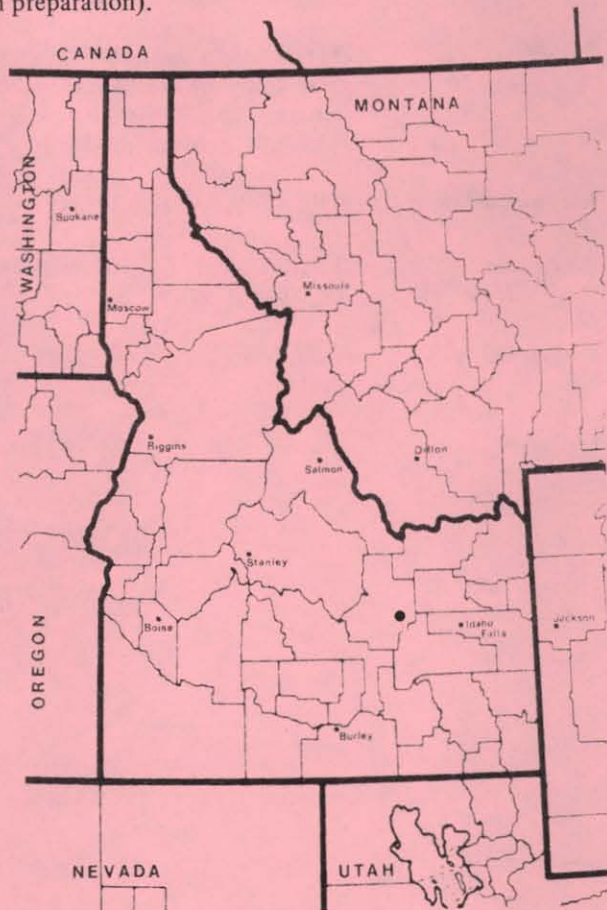
**Herbarium Data** Number of sites by county, Idaho only:  
BUTTE-1  
Number of Idaho collections in herbaria searched:  
Was not searched

**Remarks** This species is said to be known from only two collections. Only a single location is known in Idaho (Cronquist and others, in preparation).

**Recommendations** TREAT AS ENDANGERED. This species occurs on Idaho National Engineering Laboratory land, where it should be relatively simple to insure protection and where it should be monitored.

**References** Cronquist and others, in preparation

**Evaluation by** P. L. Packard



*Phlox idahonis* Wherry

Recommended Federal Status  
THREATENED

POLEMONIACEAE

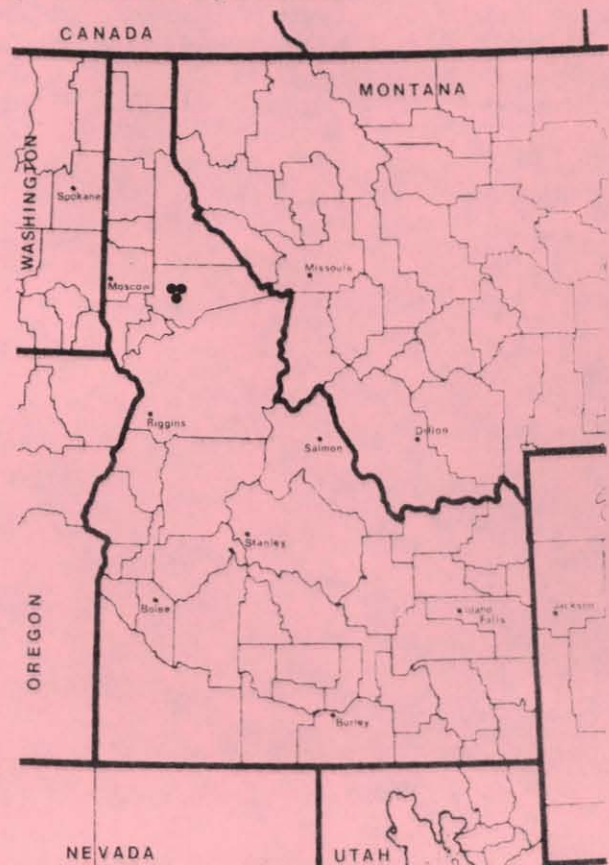
- Location** Three meadows in CLEARWATER County, all in the same township.
- Land Ownership** The Potlatch Corporation owns all 3 locations.
- Vegetation Type** Moist to moderately dry meadows in *Thuja plicata* zone. Stumps in several locations indicate formerly a light forest was present; a *Thuja plicata* climax would be expected here.
- Habitat** Grass/sedge, grass/forb and shrub dominated meadow communities, at least in part, derived meadows.
- Hazards** Apparently sensitive to grazing. It is successional in forest/meadows, hence cutting and (experimental) fire seem not to be detrimental—at least to the point of exclusion. A leaf rust reduces vigor and may occasionally inhibit flowering. Collecting by gardeners may be a threat in the future.
- Herbarium Data** Number of sites by county, Idaho only:  
Crawford (1980) mapped the known population. All collections prior to his study were from a single meadow.

**Remarks** The distribution, autecology and synecology of this species were investigated in a two-year study by Rex Crawford (1980). The Potlatch Corporation has set aside the single relatively undisturbed meadow and has agreed to whatever protection or management is necessary to maintain a healthy population. It is being monitored.

**Recommendations** TREAT AS THREATENED

**References** Johnson and Crawford 1978,  
Crawford 1980

**Evaluation by** F. D. Johnson

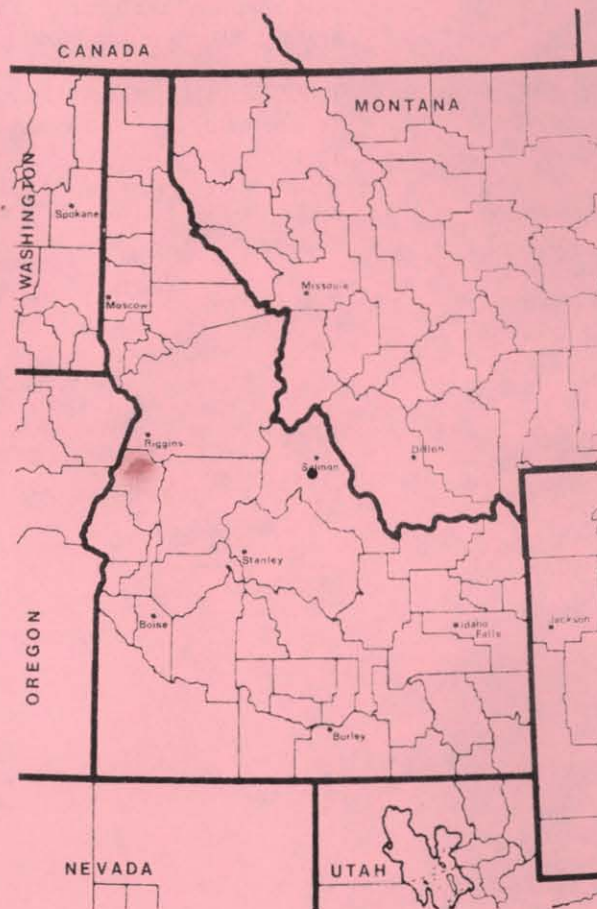


*Physaria didymocarpa* (Hook.) Gray var. *lyrata* C. L. Hitch.  
 Syn. *P. alpestris* Suksd. var. *lyrata*

Recommended Federal Status  
 THREATENED

BRASSICACEAE (Cruciferae)

- Location** Idaho: LEMHI County, Idaho endemic variety
- Land Ownership** USFS (Salmon N.F.)
- Vegetation Type** Unknown.
- Habitat** Unknown, but usually exposed loose soils and talus for the species in general.
- Hazards** Unknown, possibly road construction and improvements.
- Herbarium Data** Number of sites by county, Idaho only:  
 LEMHI-1  
 Number of Idaho collections in herbaria searched: BOIS-0, BS-0, CIC-0, ID-0, IDF-0, IDS-1, IFGH-0, MONTU-0, NY-0, ORE-0, OSC-0, RENO-0, UTC-0, WS-0, WTU-1
- Remarks** This taxon probably faces few threats since *Physarias* in general prefer loose exposed substrates and may increase on disturbed sites. An ongoing field survey should reveal what threats, if any, exist.
- Recommendations** TREAT AS THREATENED until hazards can be evaluated.
- References** Hitchcock and Cronquist 1973
- Evaluation by** R. Steele



*Primula wilcoxiana* nomen nudum

Recommended Federal Status  
THREATENED

PRIMULACEAE

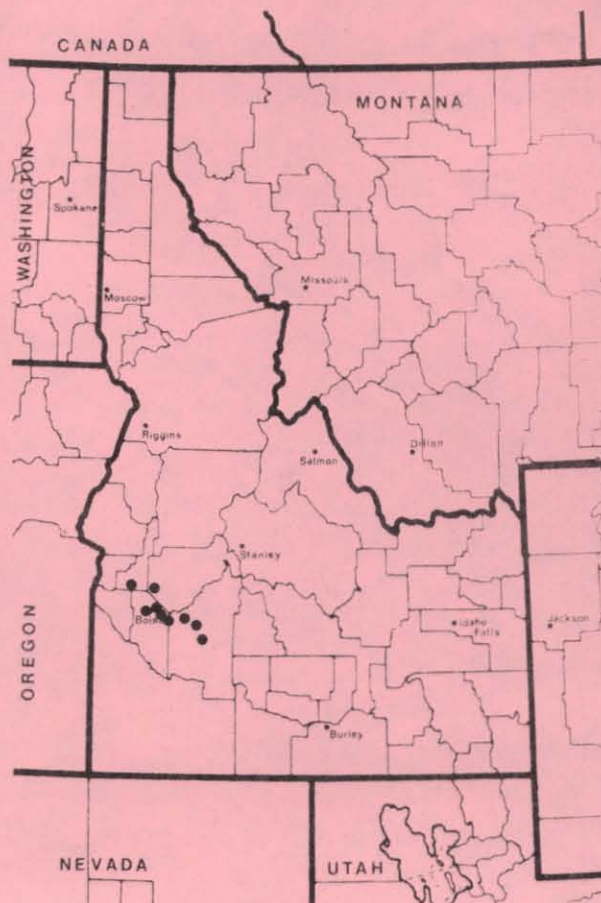
- Location** Idaho: ADA, BOISE, ELMORE and GEM counties  
Formerly CANYON County, but not known there now
- Land Ownership** BLM (Boise Dist.), private, USFS (Boise N.F.) and probably Idaho Dept. of Lands (Southwest Area)
- Vegetation Type** Sagebrush/grass zone
- Habitat** Moist, often steep hillsides in *Artemisia "xericensis"/Festuca idahoensis* and *Artemisia tridentata* ssp. *vaseyana/Festuca idahoensis* habitat types.
- Hazards** Housing development threatens nearly half of currently known sites.
- Herbarium Data** Number of sites by county, Idaho only:  
ADA-5, BOISE-1, ELMORE-5, GEM-1  
Number of Idaho collections in herbaria searched:  
BOIS-3, BS-5, CIC-12, ID-10, IDF-5, IFGH-0, MONTU-0, OSC-0, RENO-0

**Remarks** This *Primula* has been considered to be *Primula cusickiana* but appears to differ in several ways. *Primula wilcoxiana* is an unpublished name given to this form many years ago by local botanists. The taxonomy of this group is now being studied. A thorough search for new populations of this taxon is needed.

**Recommendations** TREAT AS THREATENED until its taxonomy and total range are clarified.

**References** Eidemiller 1976, Hironaka and Fosberg 1979

**Evaluation by** P. L. Packard

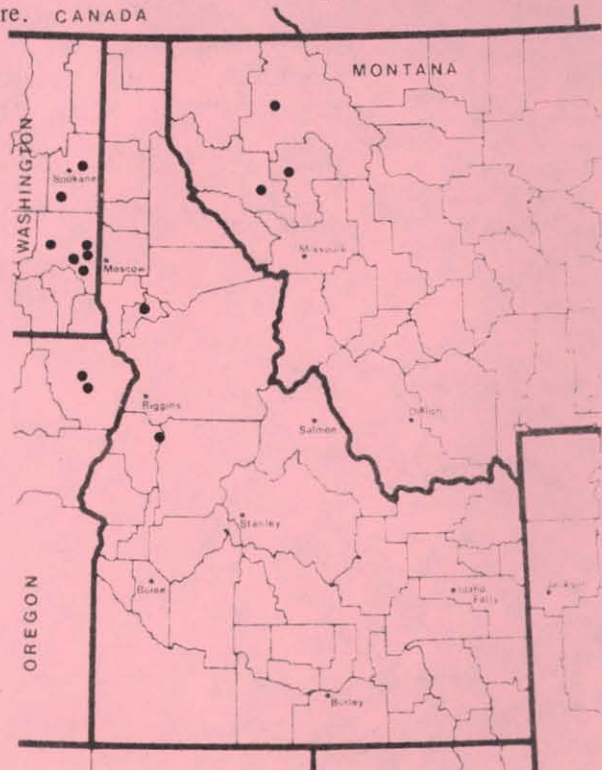


*Silene spaldingii* Wats.

Recommended Federal Status  
THREATENED

CARYOPHYLLACEAE

- Location** Idaho: ADAMS and LEWIS counties  
 Montana: Flathead Lake and Saunders County  
 Oregon: Wallowa County (extinct?)  
 Washington: Spokane and Whitman counties
- Land Ownership** Mostly private. Possibly BLM (Coeur d'Alene Dist.) and Idaho Dept. of Lands (Coeur d'Alene Area). If the Adams County location is correct, then possibly USFS (Payette N.F.).
- Vegetation Type** Palouse prairie, bunchgrass, shrub and sagebrush communities and ponderosa forest.
- Habitat** "*Symphoricarpos albus*/*Festuca idahoensis* h.t.," *Pinus ponderosa* with *Symphoricarpos albus*, "*Artemisia tridentata* h.t.," "virgin *Festuca idahoensis* prairie"
- Hazards** Possibly affected by herbicides or grazing. Nothing apparent in the way of hazards.
- Herbarium Data** Number of sites by county, Idaho only:  
 ADAMS?-1, LEWIS-1  
 Number of Idaho collections in herbaria searched: BOIS-0, BS-0, CIC-0, ID-0, IDF-0, IDS-0, IFGH-0, MONTU-0, NY-0, ORE-0, OSC-0, RENO-0, UTC-0, WS-3, WTU-0
- Remarks** Herbarium data do not support the contention that this species is confined to virgin grassland. The scattered distribution and varied habitat adds considerable confusion. The Adams County location is given for Washington state, 2 mi W of McCall. Finding no McCall in Adams Co. WA, and since the location fits Idaho, this is assumed to be an error in labeling. Heidel (1979) made 2 collections in Whitman Co. WA and recollected the Lewis Co. site. It was also collected in Montana in 1979, although Watson (1976) believes it to be endangered (extinct?) there.
- Recommendations** TREAT AS THREATENED.
- References** Siddall and Chambers 1978, Heidel 1979, Hitchcock and Maquire 1947, Watson 1976
- Evaluation by** F. D. Johnson



*Thelypodium repandum* Rollins

Recommended Federal Status  
ENDANGERED

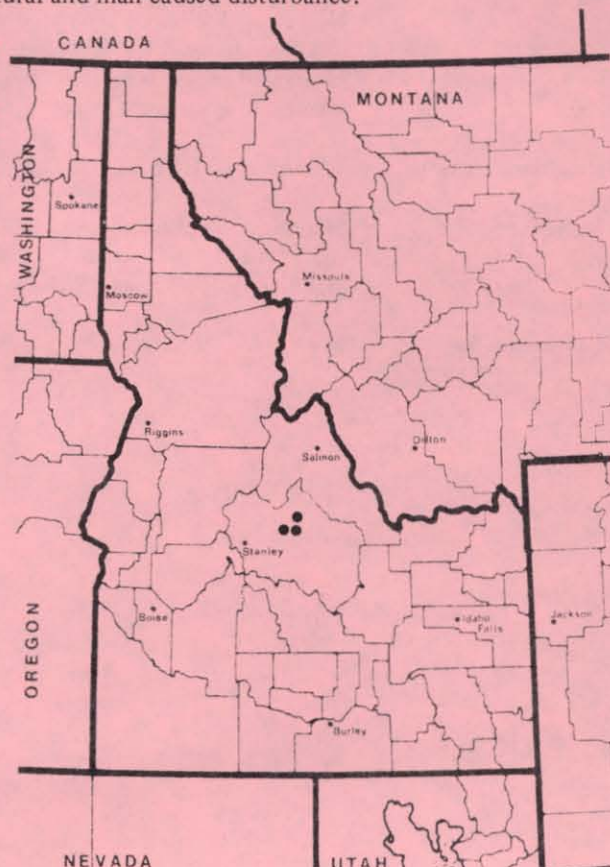
BRASSICACEAE (Cruciferae)

- Location** Idaho: CUSTER County, Idaho endemic
- Land Ownership** BLM (Salmon Dist.), USFS (Challis N.F., possibly Sawtooth N.F.), probably Idaho Dept. of Lands (Eastern Area)
- Vegetation Type** *Artemisia tridentata* ssp. *wyomingensis*/*Agropyron spicatum* and similar but unclassified range types probably unique to the Challis area.
- Habitat** Dry, often steep slopes of volcanic material (primarily light-colored ash) or basaltic talus at lower elevations. Also known from roadcuts in these substrates. Often associated with *Astragalus amblytropis*, *Enceliopsis nudicaulis*, and *Hymenopappus filifolius* var. *idahoensis*.
- Hazards** Need to be identified.
- Herbarium Data** Number of sites by county, Idaho only:  
CUSTER-8  
Number of Idaho collections in herbaria searched: BOIS-0, BS-0, CIC-0, ID-2, IDF-0, IFGH-0, IDS-1, MONTU-0, NY-2, ORE-0, OSC-0, RENO-2, UTC-1, WS-1, WTU-5
- Remarks** This species has a restricted range and is represented by a relatively small number of plants at known locations. It inhabits naturally unstable sites that are usually characterized by their highly erosive soils. A thorough study of this species is necessary, especially to ascertain its relationship to natural and man-caused disturbance.

**Recommendations** TREAT AS ENDANGERED until further study of its distribution, ecology, reproductive biology, and response to disturbance allow it to be properly reevaluated.

**References** Henderson et al. 1979

**Evaluation by** S. J. Brunsfeld



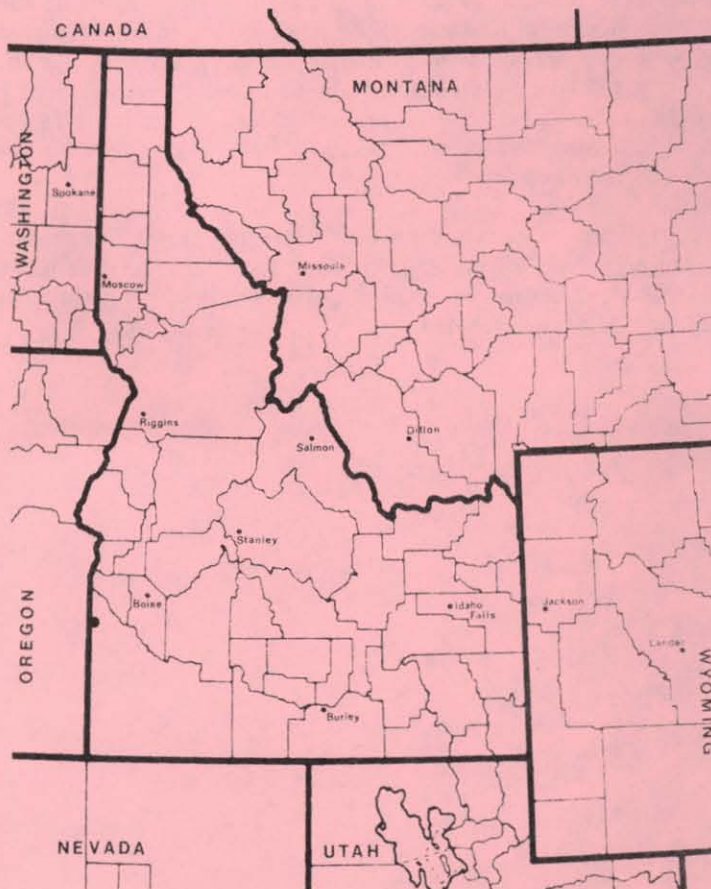


*Trifolium owyheense* Gilkey

Recommended Federal Status  
THREATENED

FABACEAE (Leguminosae)

Location	Idaho: OWYHEE County Oregon: Malheur County
Land Ownership	BLM (Boise Dist.) or private
Vegetation Type	Within sagebrush/grass or <i>Atriplex</i> communities
Habitat	On ash or ash tuff, often in soil surrounding the outcrops
Hazards	ORVs, range improvement, possibly grazing and mining
Herbarium Data	Number of sites by county, Idaho only: OWYHEE-1 Number of Idaho collections in herbaria searched: BOIS-1, BS-0, CIC-1, ID-0, IDF-0, IDS-0, IFGH-0, MONTU-0, NY-0, ORE-1, OSC-0, RENO-0, UTC-0, WS-0, WTU-0
Recommendations	Most of this species occurs on private land. It grows on or near a substrate with commercial value. For these reasons, TREAT AS THREATENED
Evaluation by	P. L. Packard



## OTHER TAXA OF INTEREST AT THE FEDERAL LEVEL

### (Federal Watch List)

The following taxa are rare generally (less than 10 locations more than 10 air miles apart), and although no threat to their survival is apparent, they do have the potential to become threatened because of their limited distribution. All of these species are either endemic to Idaho or to Idaho and an adjacent state(s). Certain land-use designations such as wild and scenic river, national recreation area, research natural area and wilderness now protect many of these taxa. Declassification of such areas that results in marked changes of land use could qualify these taxa for threatened status. Other plants such as cactus may not be rare but have some trait such as market value which predisposes them for threatened status. **None of these taxa is considered to be threatened by or sensitive to current land use trends. Nor are they to be considered sensitive under current trends as defined by USDA Forest Service Manual (Chapter 2670.5), USDI Bureau of Land Management Instruction Memo 80-722 (Sept. 8, 1980) or as intended by The Endangered Species Act of 1973 (Public Law 93-205). Thus their presence should not invoke restrictions on current land use patterns.** However, their rarity marks such plants as unusual and of value as indicators of special habitats. They are worth monitoring in case unforeseen impacts adversely affect their limited populations.

This list includes species which appeared on the Threatened list (*Federal Register*, July 1, 1975) and the Endangered list (*Federal Register*, June 16, 1976); for this list and a brief historical synopsis, see Henderson et al. 1977. Other narrow endemic plants which would merit federal listing if hazards to their survival are identified, have also been included.

*Adiantum pedatum* L. var. nov.?

Federal  
WATCH LIST

POLYPODIACEAE

Location	Idaho: IDAHO County, Seven Devils Mountains
Land Ownership	USFS (Nezperce N.F. - Seven Devils Wilderness, Hells Canyon N.R.A.)
Habitat	Among rocks in open subalpine areas from about 7900 to 9000 feet elevation.
Remarks	This is a dwarf subalpine form which has a morphology different from known varieties. D. Wagner (ORE - pers. corr.) doubts that this is "biologically identical" to the newly described coastal variety, <i>subpumilum</i> W.H. Wagner. It certainly doesn't fit the habitat. This plant was recently collected by C.A. Wellner in 1978, with two prior collections apparently all from the same general area. This plant is quite rare, but no threat is apparent.
References	Wagner and Boydston 1978
Evaluation by	F. D. Johnson.

*Allium madidum* Wats.

Federal  
WATCH LIST

LILIACEAE

Location	Idaho: ADAMS and VALLEY counties Oregon: Grant, Umatilla, Union, Wallowa and Wheeler counties
Land Ownership	USFS - (Payette N.F.); some private land, possibly Idaho Dept. of Lands (Payette Lake Area)
Habitat	Coniferous forest zones, 4000-5500 feet; "vernal wet spots in moist meadows near McCall"; "gravelly seepy slope" - Blue Mts.; "disturbed soil with annuals on edge of meadow"; "intermittent water course." I have collected it from soil overturned by pocket gophers and in a meadow heavily grazed by both cattle and sheep.
Remarks	Meinke (1978) concludes: "not currently in need of protection" and recommends "removal from federal list"; Heidel (1979) concurs. Occurrence in grazed meadows is significant, as is the Oregon population.
References	Ownbey 1950, Steele 1975, Henderson et al. 1977, Heidel 1979
Evaluation by	F. D. Johnson

*Allium tolmiei* Baker var. *persimile* Ownbey

Federal  
WATCH LIST

LILIACEAE

- Location** Idaho: ADAMS and GEM counties, Idaho endemic variety  
Oregon: Wallowa and Grant counties
- Land Ownership** Primarily USFS (Payette N.F.), probably some small private owners
- Habitat** Coniferous forest, primarily *Pseudotsuga menziesii* and *Abies grandis* climax; "rocky, sandy soil along road, open hillside"; "seasonal water course"; "on roadcut in seep area"; "sparse cover."
- Remarks** From knowledge of *Allium* and the area in general, it would seem likely that this variety is merely rare. This variety is found about midway between the variety *platyphyllum* (90 km to the north) and the variety *tolmiei* (150 km to the south). It extends west to Grant County, OR. Lacking any apparent threat, this species should be placed on a watch list. Heidel (1979) recommends threatened status.
- References** Meinke (1978) did not cover this variety, but covered the other two. Ownbey (1950).
- Evaluation by** F. D. Johnson

*Allium tolmiei* Baker ex Wats. var. *platyphyllum* (Tidestrom) Ownbey

Federal  
WATCH LIST

LILIACEAE

- Location** Idaho: IDAHO and LEWIS counties  
Oregon: Baker, Umatilla, Union, and Wallowa counties
- Land Ownership** USFS (Nezperce N.F. and Hell's Canyon NRA), private, Nez Perce Indian Reservation, possibly BLM (Coeur d'Alene Dist.), and possibly State Department of Lands (Clearwater or Payette Lake Area)
- Habitat** Open areas near Douglas-fir or ponderosa pine to canyon grasslands with bluebunch wheatgrass and Sandberg bluegrass or mountain mahogany/bluebunch wheatgrass where soils are sandy, gravelly or clayey, often on relatively steep slopes.
- Remarks** This variety occupies numerous sites in four counties of northeastern Oregon and adjacent Lewis and Idaho counties, Idaho. Meinke (1978) reports it to be rare in Baker County and in need of protection, but more data are needed on total distribution and potential threats before protection status could be recommended.
- Evaluation by** D. M. Henderson

*Artemisia papposa* Blake & Cronq.

Federal  
WATCH LIST

ASTERACEAE (Compositae)

Location	Idaho: BLAINE, CAMAS, ELMORE, GOODING, LINCOLN and OWYHEE counties Also in Nevada
Land Ownership	BLM (Boise and Shoshone Dist.), private and possibly Idaho Dept. of Lands (Southwest and South Central areas)
Habitat	Thin soil over basalt within <i>Artemisia tridentata</i> - <i>A. arbuscula</i> mosaics
Remarks	There are many sites known for this species, but it is grazed heavily and is being exterminated by range improvement programs.
Evaluation by	P. L. Packard and J. Grimes

*Astragalus amblytropis* Barneby

Federal  
WATCH LIST

FABACEAE (Leguminosae)

Location	Idaho: CUSTER and LEMHI counties, known only from low elevations along the Salmon River in vicinity of Challis and from one site in the NW Lost River Range: a narrow endemic of east-central Idaho.
Land Ownership	USFS (Challis N.F.) and BLM (Salmon Dist.)
Habitat	Wyoming big sage/bluebunch wheatgrass and salt desert shrub—nearly restricted to unstable slopes of volcanic substrate (ash, cinders) where often subject to rapid erosion.
Remarks	Potential habitats appear to be numerous, but known populations are generally composed of few individuals. Monitoring of populations to ascertain impact of present land use would be desirable. Barneby 1964, Henderson et al. 1979.
Evaluation by	D. M. Henderson

*Astragalus amnis-amissi* Barneby

Federal  
WATCH LIST

FABACEAE (Leguminosae)

- Location** Idaho: CUSTER and BUTTE counties, known from numerous canyons of the southern Lost River Range, Hawley Mountain, and the southern tip of the Lemhi Range: an endemic of east-central Idaho.
- Land Ownership** USFS (Challis N.F.) and BLM (Idaho Falls Dist.)
- Habitat** Douglas-fir/Rocky Mountain maple or mountain mahogany—ledges and crevices in near-vertical limestone rock and in stable talus at bases of cliffs
- Remarks** Known only from the type location in Pass Creek Gorge, Lost River Range until 1978 and 1979 when 15 additional major concentrations were discovered in the Lost River and Lemhi ranges. Barneby 1964, Henderson et al. 1979, Henderson et al. (in press)
- Evaluation by** D. M. Henderson

*Astragalus aquilonius* (Barneby) Barneby  
Syn. *A. wootonii* Sheld. var. *aquilonius* Barneby

Federal  
WATCH LIST

FABACEAE (Leguminosae)

- Location** Idaho: BUTTE, CUSTER, and LEMHI counties, an east-central Idaho endemic
- Land Ownership** Private, BLM (Idaho Falls and Salmon Dist.), USFS (Challis N.F.)
- Habitat** Sagebrush/bunchgrass and salt desert shrub, gravelly washes and unstable shale slopes at lower elevations
- Remarks** This species is locally abundant (Barneby 1964), but restricted to unstable habitats where subject to trampling by livestock. No clear threats at present.
- Evaluation by** D. M. Henderson

*Astragalus atratus* Wats. var. *owyheensis* (Nels. & Macbr.) M. E. Jones

Federal  
WATCH LIST

FABACEAE (Leguminosae)

Location	Idaho: OWYHEE, TWIN FALLS, and WASHINGTON counties Also in SW Oregon and NE Nevada
Land Ownership	BLM (Boise and Burley Dist.), possibly some private and Idaho Dept. of Lands (Southwest and South Central areas)
Habitat	Sagebrush/grass on open arid areas between sagebrush.
Remarks	Also occurs in Baker and Malheur counties, Oregon and Elko County, Nevada.
Evaluation by	P. L. Packard and J. Grimes

*Astragalus cusickii* Gray var. *flexilipes* Barneby

Federal  
WATCH LIST

FABACEAE (Leguminosae)

Location	Idaho: ADAMS, BUTTE (?), and IDAHO counties Idaho endemic
Land Ownership	BLM (Boise Dist.), private, USFS (Nezperce N.F.)
Habitat	Rocky or gravelly hillsides in grasslands of the lower Salmon and Little Salmon river canyons.
Remarks	Though common within its range, the narrow distribution of this taxa qualifies it as rare. A collection from Butte County (Hitchcock and Muhlick 22726 ID, WS, WTU) is from rather incongruous habitat for this taxa.
Evaluation by	R. Steele

*Astragalus purshii* Dougl. var. *ophiogenes* Barneby

Federal  
WATCH LIST

FABACEAE (Leguminosae)

- Location** Idaho: ADA, CANYON, ELMORE, GOODING, OWYHEE, and TWIN FALLS counties  
Oregon: Malheur County
- Land Ownership** BLM (Boise, Burley, and Shoshone Dist.), private and possibly Idaho Dept. of Lands (Southwest and South Central areas)
- Habitat** Grows in depauperate *Artemisia-Atriplex* communities on loose sterile soil
- Remarks** Many collections of this species are not identified to variety. Thus it may be more abundant than collection records indicate. This taxon is now known from a number of sites, but many have only small populations. Its survival needs to be monitored.
- Evaluation by** P. L. Packard and J. Grimes

*Astragalus scaphoides* M. E. Jones

Federal  
WATCH LIST

FABACEAE (Leguminosae)

- Location** Idaho: CLARK and LEMHI counties.  
Endemic to east-central Idaho and adjacent Montana.  
Montana: Beaverhead County
- Land Ownership** BLM (Salmon Dist.), USFS (Salmon and Targhee N.F.), and some private
- Habitat** Big sagebrush/bunchgrass on plains and slopes where soil is relatively thin and gravelly; parent material varying
- Remarks** Since this species is a local endemic and only one location is known in adjacent Montana, an effort should be made to establish its abundance and distribution and to assess any potential threats.
- References** Barneby 1964.
- Evaluation by** D. M. Henderson



*Calochortus macrocarpus* Dougl. var. *maculosus* Nels. & Macbr. ex Macbr.  
Syn. *C. maculosus* Nels. & Macbr.

Federal  
WATCH LIST

LILIACEAE

**Location** Idaho: IDAHO and NEZ PERCE counties, an endemic variety of the Palouse Region

**Land Ownership** Private and USFS (Nezperce N.F. - Hell's Canyon NRA), possibly some BLM (Coeur d'Alene Dist.)

**Habitat** Grasslands of the Snake River Canyon, mainly bluebunch wheatgrass/ Sandberg bluegrass on thin, rocky soils.

**Remarks** Much of this plant's habitat has either been (and continues to be) heavily grazed or has been lost by cultivation. Hitchcock and Cronquist (1973) do not recognize this taxon in their treatment of *Calochortus*. If taxonomic recognition is justified, I agree with Heidel (1979) that further study and perhaps monitoring of population trends would be justified.

**Evaluation by** D. M. Henderson

*Calochortus nitidis* Douglas  
Syn. (see "Remarks")

Federal  
WATCH LIST

LILIACEAE

**Location** Idaho: CLEARWATER, IDAHO, LATAH, LEWIS, and NEZ PERCE counties  
Washington: Whitman County "south to the Salmon/Clearwater divide (near Grangeville), west to the Seven Devils Mountains near Riggins" (Hitchcock et al. 1969)

**Land Ownership** Uncertain, but mostly private. Possibly USFS (Nez Perce N.F.), BLM (Coeur d'Alene) and Idaho Dept. of Lands (Clearwater and St. Joe areas)

**Habitat** Primarily a grassland plant, but also in ponderosa pine and Douglas-fir forests. "Cheatgrass"; "*Agropyron spicatum*/*Festuca idahoensis* h.t." (undisturbed); "rocky prairie remnant"; "open grassy slopes"

**Remarks** This plant was confused with *C. eurycarpus* until 1948 (see Henderson et al. 1977 and Hitchcock et al. 1969, pp. 769 & 773-775 for discussion). The western (Whitman Co., WA) portion of the range was searched by Hunter (1979) with no success. The Idaho portion of the range covers an extensive area, but there are but two recent collections, 1977 and 1979. But with 19 sites from 3 herbaria (ID, WS, WTU), there seems little threat. A recent collection label noted "abundant in cheatgrass."

**References** Ownby 1940, Henderson et al. 1977, Heidel 1979, Hunter 1979

**Evaluation by** F. D. Johnson

*Camassia cusickii* S. Wats.

Federal  
WATCH LIST

LILIACEAE

- Location** Idaho: ADAMS and WASHINGTON counties, an endemic of Hells Canyon and vicinity  
Oregon: Baker and Wallowa counties and one report from Crook County
- Land Ownership** Private and possibly BLM (Boise Dist.)
- Habitat** Open areas within canyon grasslands or ponderosa pine and Douglas-fir, some possibly with grand fir on "... steeply sloping hillsides to precipitous cliffs and terraces ... moist throughout the spring until mid-summer or later ... about 1,700 feet at the Snake River to nearly 6,000 feet" (Jewell 1978)
- Remarks** This is an extremely attractive plant suitable for gardens and as such as been sought for this purpose. Grazing could be affecting some populations, although many are effectively isolated from access by cattle. The vast majority of populations are in adjacent Oregon, but the same potential threats exist for the two known Idaho colonies. Careful monitoring of these plants on both sides of the Snake River would be desirable. Meinke (1978) recommends protection of the Oregon plants and considers them to be threatened. Because this is a highly local species, consideration for future placement on the federal list of endangered and threatened species may be appropriate.
- Evaluation by** D. M. Henderson

*Castilleja oresbia* Greenm.

Federal  
WATCH LIST

SCROPHULARIACEAE

- Location** Idaho: ADAMS, VALLEY, and WASHINGTON counties  
Oregon: Baker, Grant, Umatilla, and Wheeler counties
- Land Ownership** USFS (Payette N.F.) and some private
- Habitat** *Artemisia rigida*/*Poa sandbergii* and mountain shrub communities near forest zone. Exposed, sometimes eroded, scabland sites with *Artemisia rigida*, *Penstemon gairdneri* and *Lomatium nudicaule* (Phillips, 1976). *Artemisia tridentata*-*Symphoricarpos oreophilus* dominated openings in *Pinus ponderosa* forest with *Ribes cereum* and *Balsamorhiza sagittata* (Meinke, 1978). Apparently attached to *Artemisia rigida*, *Antennaria luzuloides*, and possibly other host species.
- Remarks** This species has survived an era of much heavier grazing and is now growing on portions of the Salmon River Sheep Driveway. It was also found on an old road cut. As Meinke (1978) states, "the coloration of this species is such that it is very difficult to detect in thick sagebrush"; however, when the inflorescences have extended fully and turned brown, the species is more easily observed. Under these conditions, a field survey in Adams and Washington counties showed it to be very abundant on certain *Artemisia rigida* scablands.
- Evaluation by** R. Steele

*Chaenactis cusickii* Gray

Federal  
WATCH LIST

ASTERACEAE (Compositae)

Location	Idaho: OWYHEE County Also in Malheur County, Oregon
Land Ownership	BLM (Boise Dist.) and private, possibly some Idaho Dept. of Lands (Southwest Area)
Habitat	Local areas with <i>Artemisia-Atriplex</i> communities on loose volcanic ash that breaks down into clay minerals or where this type of substrate is mixed with "normal" soil.
Remarks	One 1938 collection is from Canyon County, but the plant is apparently extinct there now; there is also a recent report from Ada County. <i>C. cusickii</i> is fairly restricted to a single habitat, but not as much as most volcanic ash plants.
Evaluation by	P. L. Packard and J. Grimes

*Chrysothamnus nauseosus* (Pall.) Britt. var. *nanus* Cronq.

Federal  
WATCH LIST

ASTERACEAE (Compositae)

Location	Idaho: Nez Perce County Mainly in Blue and Wallowa mountains of northeastern Oregon and southeastern Washington.
Land Ownership	Private, possibly BLM (Coeur d'Alene Dist.) or Idaho Dept. of Lands (Clearwater Area)
Habitat	Mainly dry basaltic ridges and cliffs
Remarks	In Idaho, this taxon is known only from two collections taken in 1927 from the Craig Mountains and its survival there has not been recently verified (Kennison 1980). Although most taxa in this genus tolerate disturbance, field study and further searching are needed.
Evaluation by	R. Steele

*Collomia debilis* (Wats.) Greene var. *camporum* Payson

Federal  
WATCH LIST

POLEMONIACEAE

Location	Idaho: IDAHO and LEMHI counties An Idaho-Montana endemic
Land Ownership	USFS (Nezperce and Salmon N. F.)
Habitat	Granitic rock slides and disturbed road banks (4,000 - 8,500 feet).
Remarks	This rare taxon is locally common in the North Fork of the Salmon River drainage. It is also reported from the head of Panther Creek and the Seven Devils Mountains and from Montana. It should be monitored.
Evaluation by	R. Steele

*Crepis bakeri* Greene ssp. *idahoensis* Babco. & Stebb.

Federal  
WATCH LIST

ASTERACEAE (Compositae)

Location	Idaho: ADA, LATAH, NEZ PERCE, and WASHINGTON counties Oregon: Baker County
Land Ownership	Private
Habitat	Dry, rocky slopes of <i>Agropyron spicatum</i> / <i>Poa sandbergii</i> , to sites with deeper soil at edge of the <i>Pinus ponderosa</i> zone.
Remarks	The identification of specimens from Ada, Washington, and Baker counties requires verification because these sites are considerably beyond the published range of the variety (Nez Perce County). Five undisputed sites are known from the vicinity of Lewiston, Idaho, and nearby drainages. Hazards to the plant are unknown.
Evaluation by	S. J. Brunsfeld

*Cryptantha propria* (Nels. & Macbr.) Pays.

Federal  
WATCH LIST

BORAGINACEAE

Location	Idaho: OWYHEE County Also in Malheur County, Oregon
Land Ownership	BLM (Boise Dist.)
Habitat	Sagebrush/grass zone on bare soil and ash
Remarks	This genus has recently been reviewed by Higgins and is being redone again by Cronquist for the Intermountain Flora. Until herbaria have been searched and collections annotated, it is recommended that this be held on a watch list.
Evaluation by	P. L. Packard and J. Grimes

*Cymopterus nivalis* S. Wats.

Federal  
WATCH LIST

APIACEAE (Umbelliferae)

Location	Idaho: CASSIA, CUSTER, and LEMHI counties Montana: Ravalli County Nevada: Nye and Elko counties
Land Ownership	USFS (Challis and Salmon N.F.)
Habitat	Dry, subalpine rangelands with <i>Artemisia frigida</i> , <i>Phlox muscoides</i> , and <i>Trisetum spicatum</i> to dry, alpine tundra with <i>Poa alpina</i> , <i>Potentilla ovina</i> , and <i>Erigeron compositus</i> . Mainly on exposed slopes and ridges in gravelly soil derived from limestone (Custer and Lemhi counties) from 9,000 ft to over 11,500 ft elevation.
Remarks	Central Idaho plants are yellow-flowered from bud through anthesis (contrary to published descriptions) and may represent a form taxonomically different from the remainder of Montana, southern Idaho, and Nevada populations.
References	Henderson et al. 1979.
Evaluation by	D. M. Henderson

*Dasynotus daubenmirei* Johnston

Federal  
WATCH LIST

BORAGINACEAE

- Location** Idaho: IDAHO County, Idaho endemic  
Just north of the junction of the Lochsa and Selway rivers.
- Land Ownership** Exclusively USFS (Clearwater N.F.)
- Habitat** Mid-elevation forests of western redcedar, grand fir, Douglas-fir, subalpine fir, and western larch. A seral species, it is favored by stand opening and soil disturbance. *Thuja plicata*/*Pachistima myrsinites* h.t., *Abies grandis*/*Pachistima* h.t., *Abies lasiocarpa*/*Pachistima* h.t.
- Remarks** The distribution, autecology, and synecology of this species were investigated in a two-year study by Rex Crawford (1980). The Fog Mountain population (Nezperce N.F.) may have been extirpated by pack stock grazing; since numerous searches for it have failed, it is not mapped. A WS collection labeled Clearwater Co. (Cronquist No. 7858) is a location error. This species should be monitored. Despite its abundance, it is confined to a few square miles. Logging increases vigor and vitality. A natural area has been proposed for a portion of the population.
- References** Johnson and Crawford 1978, Crawford 1980
- Evaluation by** F. D. Johnson

*Draba argyraea* Rydb.

Federal  
WATCH LIST

BRASSICACEAE (Cruciferae)

- Location** Idaho: BLAINE, BOISE, CUSTER, and ELMORE counties  
Idaho endemic
- Land Ownership** USFS (Boise, Challis and Sawtooth N.F.)
- Habitat** Upper subalpine zone "on rocks or in rock crevices, rarely in talus."
- Remarks** Apparently endemic to upper elevations (7,000-10,000 ft) of Sawtooth Mountains. A collection from Valley County on sandy soil (Hitchcock and Muhlick 14064, NY, RENO, UTC, WTU) has been annotated *D. sphaerocarpa* at WTU and NY. The only other collection from Valley County (Hitchcock and Muhlick 14047 NY) is also on "sandy soil" and was recently annotated *D. sphaerocarpa* (Pat Holmgren, NY, pers. comm.). At present all habitat notations for *D. argyraea* are either rock, rock crevices or talus. The proposed threatened status appears unnecessary due to inaccessibility and nature of its habitat.
- Evaluation by** R. Steele

*Eriogonum ochrocephalum* Wats. var. *nov.*

Federal  
WATCH LIST

POLYGONACEAE

Location	Idaho: OWYHEE, TWIN FALLS and WASHINGTON counties Idaho endemic (?) variety
Land Ownership	BLM (Boise and Burley Dist.), possibly some private and Idaho Dept. of Lands (Southwest and South Central areas).
Habitat	Local areas in <i>Atriplex</i> communities on bare, loose sandy soil of lacustrine origin, possibly some ash content.
Remarks	Complete information on this variety is not available, but it appears to be of very limited distribution on a single habitat. It may require some protection and should be kept on a watch list.
Evaluation by	P. L. Packard

*Eriogonum salicornoides* Gend.

Federal  
WATCH LIST

POLYGONACEAE

Location	Idaho: OWYHEE County Also in Malheur County, Oregon
Land Ownership	BLM (Boise Dist.)
Habitat	Within <i>Atriplex</i> - <i>Artemisia spinescens</i> - <i>A. tridentata</i> communities on loose ashy, bare outcrops
Remarks	Some peripheral populations appear intermediate between <i>E. salicornoides</i> and possibly <i>E. baileyi</i> . <i>E. salicornoides</i> is confined to a single type of site and possibly to only two specific habitats, one of which has some commercial value. Although it may not require protection, it should be monitored.
Evaluation by	P. L. Packard

*Eriogonum shockleyi* Wats. var. nov.

Federal  
WATCH LIST

POLYGONACEAE

Location	Idaho: ADA County
Land Ownership	BLM (Boise Dist.)
Habitat	Grows on small areas within <i>Artemisia-Atriplex</i> communities. Occurs on thin wind-scoured soil over basalt on a canyon rim.
Remarks	As far as is known, this taxon is confined to a single population of several dozen plants. There could possibly be one or two more populations in the vicinity, but as time goes by probability of finding another population decreases. This plant should be given protection, but until the variety is published, its status is uncertain.
Evaluation by	P. L. Packard and J. Grimes

*Frasera albicaulis* Dougl. var. *idahoensis* (St. John) Hitchc.  
Syn. *F. idahoensis* (St. John) Hitchc.

Federal  
WATCH LIST

GENTIANACEAE

Location	Idaho: ADAMS County Oregon: Baker, Union and Wallowa counties
Land Ownership	USFS (Payette N.F.), BLM (Boise Dist.) probably Idaho Dept. of Lands (Payette Lake Area) and some private.
Habitat	Within Douglas-fir and grand fir forest zone; open forests, dry meadow edges and basalt scab. " <i>Pseudotsuga menziesii</i> / <i>Symphoricarpos oreophilus</i> h.t.," "dry open ponderosa pine forest," "basalt scablands," "grassy slopes."
Remarks	Few herbaria have taken this species to variety. Still Meinke (1978) notes 4 new locations in Baker County, Oregon, and recommends "threatened at federal level," based on small range and restricted habitat. While the range is not great, it is adequate, and the habitats noted are not restricted in this part of Idaho. This plant is resistant to heavy grazing.
References	St. John 1941, Hitchcock & Cronquist 1973, Henderson et al. 1977, Meinke 1978
Evaluation by	F. D. Johnson



*Haplopappus aberrans* (A. Nels.) Hall

Federal  
WATCH LIST

ASTERACEAE (Compositae)

Location	Idaho: BLAINE, BOISE, and ELMORE counties Idaho endemic
Land Ownership	USFS (Boise and Sawtooth N.F.)
Habitat	Upper <i>Abies lasiocarpa</i> zone in rock crevices of granitic outcrops.
Remarks	This endemic is known from relatively few collection sites in the Sawtooth and Trinity mountains; however, the difficult access within its range suggests that it is more abundant than the records imply. The inaccessability and nature of its habitat make the proposed threatened status unnecessary.
Evaluation by	R. Steele

*Lepidium montanum* Nutt. var. *papilliferum* Hend.

Federal  
WATCH LIST

BRASSICACEAE (Cruciferae)

Location	Idaho: ADA, CANYON, ELMORE, GEM, and PAYETTE counties. Idaho endemic variety
Land Ownership	BLM (Boise Dist.), private, and possibly Idaho Dept. of Lands (Southwest Area).
Habitat	Sage/grass zone, gentle depressions (mini-playas) on saline clay to sandy soil.
Remarks	Though widely distributed in semi-desert areas of the above counties, this taxon is nowhere abundant and seldom collected. Hitchcock and Cronquist (1973) suggest that this variety may be extinct but recent sightings in several areas have verified its existence. Its apparent restriction to north of the Snake River may be an interesting subject for investigation.
Evaluation by	R. Steele

*Machaeranthera laetevirens* Greene  
Syn. *Aster leiodes* Blake

Federal  
WATCH LIST

ASTERACEAE (Compositae)

Location	Idaho: CASSIA and CUSTER counties Nevada: Elko County
Land Ownership	USFS (Challis and Sawtooth N.F.)
Habitat	Unknown at present other than high montane.
Remarks	Only two herbarium sheets available from Idaho, both collected by Davis (IDS): Livingston Mine in the White Cloud Peaks and from Mt. Harrison. More data are needed on abundance, distribution, and potential threats.
Evaluation by	D. M. Henderson

*Mentzelia torreyi* A. Gray var. *acerosa* (M. E. Jones) Barneby

Federal  
WATCH LIST

LOASACEAE

Location	Idaho: ADA, GOODING, OWYHEE and TWIN FALLS counties Idaho endemic
Land Ownership	BLM (Boise, Burley, and Shoshone Dist.), possibly some private and Idaho Dept. of Lands (Southwest and South Central areas)
Habitat	Small areas within <i>Atriplex-Artemisia</i> communities on sandy, cindery sites, oolitic limestone, or loose talus at base of basalt cliffs.
Remarks	This endemic variety has a limited distribution and occurrence and restricted habitat.
Evaluation by	P. L. Packard and J. Grimes

*Oxytropis besseyi* (Rydb.) Blank. var. *salmonensis* Barneby

Federal  
WATCH LIST

FABACEAE (Leguminosae)

- Location** Idaho: CUSTER County, a narrow endemic mostly restricted to the immediate vicinity of the Salmon River Canyon from Clayton downstream to a point a few miles north of Challis.
- Land Ownership** BLM (Salmon Dist.) and USFS (Challis N.F.)
- Habitat** Wyoming big sage with bluebunch wheatgrass and sandberg bluegrass to salt desert shrub in sandy washes or open slopes of rocky, volcanic soil.
- Remarks** This variety is apparently restricted to a narrow band of suitable habitats along a 25- to 30-mile portion of the main Salmon River near Challis. Even though it can be locally abundant in some drainages, I have not seen many populations, and there seem to be very few herbarium sheets of this taxon. If further study shows this to be an accurate picture of its true abundance and distribution, clearly this is a candidate for federal threatened status.
- Evaluation by** D. M. Henderson

*Phacelia lutea* (H. & A.) J. T. Howell var. *calva* Cronq.

Federal  
WATCH LIST

HYDROPHYLLACEAE

- Location** Idaho: OWYHEE County  
Also in Malheur County, Oregon
- Land Ownership** BLM (Boise Dist.), private
- Habitat** In *Artemisia-Atriplex* communities on exposed loose volcanic ash, possibly confined to ash that breaks down into clay minerals.
- Remarks** This variety has a highly restricted distribution and is confined to a single habitat. It may be nothing more than segregation of adaptive blocks of genes.
- Evaluation by** P. L. Packard

*Physaria geyeri* (Hook.) Gray var. *purpurea* Rollins

Federal  
WATCH LIST

BRASSICACEAE (Cruciferae)

- Location** Idaho: CUSTER and LEMHI counties  
Idaho endemic variety
- Land Ownership** USFS (Challis, Salmon and Sawtooth N.F.)
- Habitat** Sparsely vegetated, unstable slopes (natural and human-caused) of fine, gravelly talus, sand, or volcanic ash in the *Artemisia tridentata* ssp. *vaseyana* and *Pseudotsuga menziesii* zones.
- Remarks** Thirteen new populations were discovered and investigated on the Yankee Fork District of the Challis N.F. during the summer of 1980. Variety *purpurea* usually was found in mixed populations with var. *geyeri*; the two being indistinguishable except for the red pigmentation of the calyx and corolla of the var. *purpurea*. Degree of pigmentation varied in many populations, resulting in a full range of intermediates between the two taxa. Past human activities (mining, road building) created many of the habitats now occupied by the species. Continuing disturbance within the range of the taxon appears to be further increasing available habitat. The minor nature of the biological variation that this taxon represents, along with the lack of any clear threat to survival, clearly warrant the removal from federal threatened consideration. Federal Watch List status should be maintained until the remainder of the range of the variety is explored (Brunsfeld et al. 1980).
- Evaluation by** S. J. Brunsfeld

*Rubus bartonianus* Peck

Federal  
WATCH LIST

ROSACEAE

- Location** Idaho: ADAMS and IDAHO counties along Snake River  
Oregon: Wallowa County.  
Hells Canyon endemic
- Land Ownership** USFS exclusively (Nezperce and Payette N.F. in the Hells Canyon N.R.A. and Payette N.F.)
- Habitat** Shrub communities in lower bunchgrass zone, never far from Snake River. Upper edge of riparian fringe along streams, in ephemeral and seasonal streambeds that are shrub-dominated and on lower slopes in mixed shrub communities. No hazards apparent. Plant not easily damaged by recreationists; no evidence of grazing by domestic livestock or wildlife.
- Remarks** Still very few collections in herbaria. Prior to 1975, when the first Federal E&T list was published, there were but 3 known sites. In 1975 and 1976 collections were made from 2 new sites including an extensive population located in the 10 miles above (S of) Hells Canyon Dam. Field work in 1977 added several more sites when Johnson & Mattson (1978) surveyed the river corridor. They mapped 17 sites. In the stretch of river between Granite Creek (ID) and Kinney Creek (ID)—some 20 river miles—this plant is rather common, often dominating shrub communities. Despite limited herbarium collections, field data plus collections indicate this plant is thriving and is in no danger. It should be watched in case there is a change due to heavy recreational pressures or other events.
- References** Johnson & Mattson 1978
- Evaluation by** F. D. Johnson

*Silene scaposa* Robins var. *lobata* Hitchc. & Mag.

Federal  
WATCH LIST

CARYOPHYLLACEAE

- Location** Idaho: BUTTE and CLARK counties (The type locality, "Lost River Mts., near Clyde, Blaine Co., Idaho"—should be Butte Co.)  
Nevada: Eureka, Humboldt, Lander, and Nye counties  
Oregon: Harney, Lake and Malheur counties
- Land Ownership** BLM (Idaho Falls Dist.), USFS (Challis and Targhee N.F.)
- Habitat** Moist sage/grass canyon bottoms and slopes. Primarily *Artemisia tridentata* ssp. *vaseyana*/*Agropyron spicatum*, occasionally *Artemisia tridentata* ssp. *vaseyana*/*Festuca idahoensis*; often at the interface of one of the above types and *Cercocarpus ledifolius*, *Juniperus scopulorum*, *Artemisia tridentata* ssp. *tridentata* or the *Pseudotsuga menziesii* zone. One site is in the depauperate understory of *Pseudotsuga menziesii*/*Arnica cordifolia* in a dry canyon bottom (Henderson et al. 1979).
- Remarks** An easily overlooked species, which, until 1978, was known from very few locations throughout its range. Subsequent intensive searching has revealed a total of twenty sites in Idaho. Recent experience suggests that improved knowledge of the habitat will lead to the discovery of many additional populations. This would probably justify a removal from the federal Watch List in spite of an unresolved question of the plant's sensitivity to grazing. If greater abundance is not established, threatened status may be warranted.
- Evaluation by** S. J. Brunsfeld

*Tauschia tenuissima* (Geyer ex Hooker) Math. & Const.  
Recently changed from *Lomatium oregonioides* (Coul. & Rose) Math.

Federal  
WATCH LIST

APIACEAE (Umbelliferae)

- Location** Idaho: BENEWAH, CLEARWATER, and LATAH counties (type location—Santianne Creek bottoms, Coeur d'Alene Mts., KOOTENAI or SHOSHONE county?) and adjacent Washington
- Land Ownership** Private
- Habitat** Meadows and moist bottomlands along streams.
- Remarks** Known from seven widely scattered sites in Idaho. Because many of the sites have had a long history of grazing, they should be revisited to assess their condition. If populations are healthy, federal Watch List status is appropriate until a number of additional populations are discovered; if populations are depauperate and apparently being harmed by disturbance, Endangered or Threatened status may be necessary. Synonym was recently changed (Madrono 22:71-73, 1973).
- Evaluation by** S. J. Brunsfeld

*Tofieldia glutinosa* (Michx.) Pers. var. *absona* (Hitchc.) Davis

Federal  
WATCH LIST

LILIACEAE

Location	Idaho: BONNER, IDAHO, and VALLEY counties Idaho endemic variety
Land Ownership	USFS (Kaniksu, Nezperce and Payette N.F.), Idaho Dept. of Lands (Priest Lake and Payette Lake areas), possibly on other ownerships with this restricted habitat.
Habitat	Bogs in <i>Abies lasiocarpa</i> and <i>Tsuga heterophylla</i> zones. On sphagnum moss in open bogs.
Remarks	This type of community is slow in developing and on a very specialized habitat. Any activity which would promote drainage or raise water levels would jeopardize this plant. This was first collected in 1900, and described by Piper in 1901 from Priest Lake. A 1930 collection in Idaho County was followed by a 1973 Valley County and a 1977 Idaho County collection. The Valley County location contains both the variety <i>absona</i> and the more common variety <i>montana</i> . We expect more intermediate stations to be located. Mass collections are needed. Maintain on Watch List. Though very rare, the habitat is not threatened in any discernable way with present Forest Service management.
References	Johnson in Henderson et al. 1977
Evaluation by	F. D. Johnson

TAXA CONSIDERED FOR FEDERAL LISTING AND REJECTED

- Astragalus lentiginosus* Dougl. ex Hook  
var. *latus* (M.E. Jones) M.E. Jones  
- Apparently this taxon does not occur in Idaho. - P. L. Packard  
FABACEAE (Leguminosae)
- Cardamine constancei* Detl.  
- Crawford (1980) and Johnson and Crawford (1978) have shown this plant to be abundant and under no threat. Transferred to State Watch List. - F. D. Johnson  
BRASSICACEAE (Cruciferae)
- Chaenactis evermannii* Greene  
- A relatively widespread Idaho endemic that is adapted to unstable granitic soils. - R. Steele  
ASTERACEAE (Compositae)
- Cirsium brevifolium* Nutt.  
- There are at least twenty sites in Idaho. Cronquist states this to be the "typical thistle of the Palouse region" (Hitchcock et al. 1955). Why it appeared on the Federal list (*Federal Register*, July 1, 1975) remains a mystery. - F. D. Johnson  
ASTERACEAE (Compositae)
- Cirsium davisii* Cronq.  
- Grows on areas disturbed by roads, mining and agriculture. - K. E. Holte  
ASTERACEAE (Compositae)
- Corydalis caseana* Gray  
var. *hastata* (Rydb.) Hitchc.  
- Crawford (1980) and Johnson and Crawford (1978) have found this plant to be abundant, favored by disturbance, and under no threat. Transferred to State Watch List. - F. D. Johnson  
FUMARIACEAE
- Cryptantha breviflora* (Osterh.) Pays.  
- This species has been collected in Idaho and Utah from large populations that appear to be under no threat from present trends of land use (Shultz and Shultz 1978). Transferred to State Watch List. - R. Steele  
BORAGINACEAE
- Cryptantha interrupta* (Greene) Pays.  
- Known to be abundant from west-central to eastern and southern Idaho. - D. M. Henderson  
BORAGINACEAE
- Cryptantha nubigena* (Greene) Pays.  
Syn. *C. hypsophila* Johnst.  
- Occurs in several states and is known from numerous locations in Idaho. There are no present or future threats conceivable. - D. M. Henderson  
BORAGINACEAE
- Cymopterus corrugatus* M. E. Jones  
Syn. *Rhysopterus pleurijugus* Coult. & Rose  
- More abundant than previously thought; transferred to State Watch List. - P. L. Packard  
APIACEAE (Umbelliferae)
- Draba apiculata* Hitchc.  
var. *daviesiae* Hitchc.  
- There is no evidence of its occurrence in Idaho. - D. M. Henderson  
BRASSICACEAE (Cruciferae)
- Draba douglasii* Gray  
var. *douglasii*  
- This species has a wide discontinuous range with many known populations. - P. L. Packard  
BRASSICACEAE (Cruciferae)
- Draba sphaerocarpa* Macbr. & Pays.  
- A relatively widespread Idaho endemic that occurs in fairly inaccessible habitat. - R. Steele  
BRASSICACEAE (Cruciferae)
- Eriogonum thymoides* Benth.  
- More abundant than previously thought; transferred to State Watch List. - P. L. Packard  
POLYGONACEAE

- Hackelia hispida* (Gray) Johnst. BORAGINACEAE  
 - There are numerous sites in three states along the Snake River Canyon and nowhere does it appear to be in danger due to the rocky, inaccessible nature of its habitat. - D. M. Henderson
- Hymenopappus filifolius* Hook. ASTERACEAE (Compositae)  
 var. *idahoensis* Turner  
 - This variety is abundant on highly disturbed sites throughout much of east-central Idaho. Man-caused disturbance appears to favor this taxon. (Henderson et al. Madrono, in press). - D. M. Henderson
- Lesquerella carinata* Rollins BRASSICACEAE (Compositae)  
 - This species is common across east-central Idaho, especially in disturbed habitats. It also is known from Wyoming and Montana (Henderson 1978). - D. M. Henderson
- Lewisia columbiana* (Howell) Robins. PORTULACACEAE  
 var. *wallowensis* Hitchc.  
 - Common from Wallowa Mountains east across central Idaho to Montana. - D. M. Henderson
- Lomatium hendersonii* Coult. & Rose APIACEAE (Umbelliferae)  
 - Can find no evidence that this plant occurs in Idaho. - P. L. Packard
- Lomatium serpentinum* (M. E. Jones) Math. APIACEAE (Umbelliferae)  
 - Johnson and Mattson (1978) map a population on fifty river miles in Hells Canyon. Our plant surveys in Hells Canyon confirm that in April one can scarcely hike the river trail in either Oregon or Idaho and not be in sight of this colorful plant. - F. D. Johnson
- Lysimachia ciliata* L. PRIMULACEAE  
 Syn. *Steironema laevigatum* Howell, *S. ciliatum* (L.) Raf.  
 - This is a widespread species in Idaho and elsewhere which does not warrant Federal or State listing.  
 - R. Steele
- Peteria thompsonae* S. Wats. FABACEAE (Leguminosae)  
 - More abundant in other states than previously thought; transferred to State Threatened List. - P. L. Packard
- Primula cusickiana* Gray PRIMULACEAE  
 - This species, as currently treated, has a broad range in Idaho. - P. L. Packard. (See *P. wilcoxiana* on the Federal Threatened List.)
- Synthyris pinnatifida* Wats. SCROPHULARIACEAE  
 var. *canescens* (Pennell) Cronq.  
 Syn. *S. hendersonii* Pennell  
 - Known from numerous sites in central Idaho and in no danger due to the remoteness of habitat. It apparently thrives on disturbance. - D. M. Henderson
- Synthyris platycarpa* Gail & Pennell SCROPHULARIACEAE  
 - Crawford (1980) and Johnson and Crawford (1978) have shown this plant to be abundant, favored by disturbance, and under no threat. Transferred to State Watch List. - F. D. Johnson
- Trifolium plumosum* Dougl. FABACEAE (Leguminosae)  
 var. *amplifolium* Martin  
 - There are fourteen known localities in five northern Idaho counties. The areas have a history of grazing, and this plant appears resistant to and perhaps favored by some grazing. Heidel (1979) notes that no special management is needed at present. Transferred to State Watch List. - F. D. Johnson
- Waldsteinia idahoensis* Piper ROSACEAE  
 - Crawford (1980) and Crawford and Johnson (1978) have shown this plant to be abundant, favored by disturbance and under no threat. Transferred to State Watch List. - F. D. Johnson



SUMMARY OF PROBABLE LAND OWNERSHIP  
FOR TAXA OF FEDERAL CONCERN

BUREAU OF LAND MANAGEMENT

Boise District

*Artemisia papposa* FWL  
*Astragalus atratus* v. *owyheensis* FWL  
*Astragalus camptopus* F-T  
*Astragalus cusickii* v. *flexilipes* FWL  
*Astragalus mulfordiae* F-T  
*Astragalus purshii* v. *ophiogenes* FWL  
*Astragalus sterilis* F-E  
*Astragalus yoder-williamsii* F-E  
*Camassia cusickii* FWL  
*Carex aboriginum* F-E  
*Chaenactis cusickii* FWL  
*Cryptantha propria* FWL  
*Cypripedium calceolus* v. *parviflorum* F-E  
*Erigeron latus* F-T  
*Eriogonum ochrocephalum* v. *nov.* FWL  
*Eriogonum salicornoides* FWL  
*Eriogonum shockleyi* v. *nov.* FWL  
*Frasera albicaulis* v. *idahoensis* FWL  
*Haplopappus radiatus* F-T  
*Lepidium davisii* F-T  
*Lepidium montanum* v. *papilliferum* FWL  
*Mentzelia mollis* F-E  
*Mentzelia torreyi* v. *acerosa* FWL  
*Penstemon elegantulus* F-T  
*Phacelia lutea* v. *calva* FWL  
*Primula wilcoxiana* F-T  
*Trifolium owyheense* F-T

Burley District

*Astragalus atratus* v. *owyheensis* FWL  
*Astragalus purshii* v. *ophiogenes* FWL  
*Eriogonum ochrocephalum* v. *nov.* FWL  
*Mentzelia torreyi* v. *acerosa* FWL

Coeur d'Alene District

*Allium tolmiei* v. *platyphyllum* FWL  
*Calamagrostis tweedyi* F-T  
*Calochortus macrocarpus* v. *maculosus* FWL  
*Calochortus nitidis* FWL  
*Chrysothamnus nauseosus* v. *nanus* FWL  
*Cypripedium calceolus* v. *parviflorum* F-E  
*Halimolobos perplexa* v. *perplexa* F-T  
*Haplopappus liatriformis* F-T  
*Lomatium rollinsii* F-T  
*Mirabilis macfarlanei* F-E  
*Penstemon elegantulus* F-T  
*Silene spaldingii* F-T

Idaho Falls District

*Astragalus amnis-amisii* FWL  
*Astragalus aquilonius* FWL  
*Astragalus ceramicus* v. *apus* F-T  
*Oenothera caespitosa* v. *psammophila* F-E  
*Phacelia inconspicua* F-E  
*Silene scaposa* v. *lobata* FWL

Salmon District

*Astragalus amblytropis* FWL  
*Astragalus aquilonius* FWL  
*Astragalus scaphoides* FWL  
*Halimolobos perplexa* v. *lemhiensis* F-T  
*Oxytropis besseyi* v. *salmonensis* FWL  
*Penstemon lemhiensis* F-T  
*Thelypodium repandum* F-E

Shoshone District

*Antennaria arcuata* F-E  
*Artemisia papposa* FWL  
*Astragalus atratus* v. *inseptus* F-T  
*Astragalus oniciformis* F-E  
*Astragalus purshii* v. *ophiogenes* FWL  
*Mentzelia torreyi* v. *acerosa* FWL

CITY OF BOISE

*Allium aaseae* F-E

IDAHO DEPARTMENT OF LANDS

Clearwater Area

*Allium tolmiei* v. *platyphyllum* FWL  
*Calochortus nitidis* FWL  
*Chrysothamnus nauseosus* v. *nanus* FWL

Coeur d'Alene Area

*Haplopappus liatriformis* F-T  
*Silene spaldingii* F-T

Eastern Area

*Oenothera caespitosa* v. *psammophila* F-E  
*Thelypodium repandum* F-E

Payette Lake Area

*Allium madidum* FWL  
*Allium tolmiei* v. *platyphyllum* FWL  
*Astragalus mulfordiae* F-T

*Frasera albicaulis* v. *idahoensis* FWL  
*Halimolobos perplexa* v. *perplexa* F-T  
*Haplopappus radiatus* F-T  
*Tofieldia glutinosa* v. *absona* FWL

Priest Lake Area

*Tofieldia glutinosa* v. *absona* FWL

South Central Area

*Artemisia papposa* FWL  
*Astragalus atratus* v. *inseptus* F-T  
*Astragalus atratus* v. *owyheensis* FWL  
*Astragalus purshii* v. *ophiogenes* FWL  
*Erigeron latus* F-T  
*Eriogonum ochrocephalum* v. *nov.* FWL  
*Lepidium davisii* F-T  
*Mentzelia torreyi* v. *acerosa* FWL

Southwest Area

*Artemisia papposa* FWL  
*Astragalus atratus* v. *owyheensis* FWL  
*Astragalus mulfordiae* F-T  
*Astragalus purshii* v. *ophiogenes* FWL  
*Chaenactis cusickii* FWL  
*Eriogonum ochrocephalum* v. *nov.* FWL  
*Lepidium davisii* F-T  
*Lepidium montanum* v. *papilliferum* FWL  
*Mentzelia mollis* F-E  
*Mentzelia torreyi* v. *acerosa* FWL  
*Primula wilcoxiana* F-T

St. Joe Area

*Calochortus nitidis* FWL  
*Grindelia howellii* F-T

IDAHO NATIONAL ENGINEERING LAB

*Astragalus ceramicus* v. *apus* F-T  
*Phacelia inconspicua* F-E

NATIONAL PARK SERVICE

None

NEZ PERCE INDIAN RESERVATION

*Allium tolmiei* v. *platyphyllum* FWL

PRIVATE INDIVIDUALS OR CORPORATIONS

*Allium aseae* F-E  
*Allium madidum* FWL  
*Allium tolmiei* v. *persimile* FWL

*Allium tolmiei* v. *platyphyllum* FWL  
*Artemisia papposa* FWL  
*Aster jessicae* F-E  
*Astragalus aquilonius* FWL  
*Astragalus atratus* v. *inseptus* F-T  
*Astragalus atratus* v. *owyheensis* FWL  
*Astragalus camptopus* F-T  
*Astragalus cusickii* v. *flexilipes* FWL  
*Astragalus mulfordiae* F-T  
*Astragalus oniciformis* F-E  
*Astragalus purshii* v. *ophiogenes* FWL  
*Astragalus scaphoides* FWL  
*Astragalus sterilis* F-E  
*Calochortus macrocarpus* v. *maculosus* FWL  
*Calochortus nitidis* FWL  
*Camassia cusickii* FWL  
*Carex aboriginum* F-E  
*Castilleja oesbia* FWL  
*Chaenactis cusickii* FWL  
*Chrysothamnus nauseosus* v. *nanus* FWL  
*Claytonia lanceolata* v. *flava* F-E  
*Crepis bakeri* ssp. *idahoensis* FWL  
*Cypripedium calceolus* v. *parviflorum* F-E  
*Erigeron latus* F-T  
*Eriogonum ochrocephalum* v. *nov.* FWL  
*Frasera albicaulis* v. *idahoensis* FWL  
*Halimolobos perplexa* v. *perplexa* F-T  
*Haplopappus insecticruris* F-T  
*Haplopappus liatrifolius* F-T  
*Haplopappus radiatus* F-T  
*Lepidium davisii* F-T  
*Lepidium montanum* v. *papilliferum* FWL  
*Lomatium rollinsii* F-T  
*Mentzelia mollis* F-E  
*Mentzelia torreyi* v. *acerosa* FWL  
*Mirabilis macfarlanei* F-E  
*Penstemon elegantulus* F-T  
*Phacelia lutea* v. *calva* FWL  
*Phlox idahonis* F-T  
*Primula wilcoxiana* F-T  
*Silene spaldingii* F-T  
*Tauschia tenuissima* FWL  
*Trifolium owyheense* F-T

UNITED STATES FOREST SERVICE

Bitterroot National Forest

*Penstemon lemhiensis* F-T

Boise National Forest

*Draba argyrea* FWL  
*Haplopappus aberrans* FWL  
*Primula wilcoxiana* F-T

Caribou National Forest

None

Challis National Forest

*Astragalus amblytropis* FWL  
*Astragalus amnis-amisii* FWL  
*Astragalus aquilonius* FWL  
*Astragalus vexilliflexus* v. *nubilus* F-T  
*Cymopterus nivalis* FWL  
*Draba argyraea* FWL  
*Machaeranthera laetevirens* FWL  
*Oxytropis besseyi* v. *salmonensis* FWL  
*Physaria geyeri* v. *purpurea* FWL  
*Silene scaposa* v. *lobata* FWL  
*Thelypodium repandum* F-E

Clearwater National Forest

*Dasynotus daubenmirei* FWL

Coeur d'Alene National Forest

None

Kaniksu National Forest

*Tofieldia glutinosa* v. *absona* FWL

Nezperce National Forest  
(includes Hells Canyon N.R.A.)

*Adiantum pedatum* v. *nov.* FWL  
*Allium tolmiei* v. *platyphyllum* FWL  
*Astragalus cusickii* v. *flexilipes* FWL  
*Calochortus macrocarpus* v. *maculosus* FWL  
*Calochortus nitidis* FWL  
*Collomia debilis* v. *camporum* FWL  
*Cypripedium calceolus* v. *parviflorum* F-E  
*Douglasia idahoensis* F-E  
*Halimolobos perplexa* v. *perplexa* F-T  
*Lomatium rollinsii* F-T  
*Penstemon elegantulus* F-T  
*Rubus bartonianus* FWL  
*Tofieldia glutinosa* v. *absona* FWL

Payette National Forest

*Allium madidum* FWL  
*Allium tolmiei* v. *persimile* FWL  
*Calamagrostis tweedyi* F-T  
*Castilleja oresbia* FWL  
*Douglasia idahoensis* F-E  
*Frasera albicaulis* v. *idahoensis* FWL  
*Halimolobos perplexa* v. *perplexa* F-T  
*Haplopappus radiatus* F-T  
*Penstemon elegantulus* F-T  
*Rubus bartonianus* FWL  
*Silene spaldingii* F-T  
*Tofieldia glutinosa* v. *absona* FWL

Salmon National Forest

*Astragalus scaphoides* FWL  
*Collomia debilis* v. *camporum* FWL  
*Cymopterus nivalis* FWL  
*Hackelia davisii* F-T  
*Halimolobos perplexa* v. *lemhiensis* F-T  
*Penstemon lemhiensis* F-T  
*Physaria didymocarpa* v. *lyrata* F-T

Sawtooth National Forest

*Castilleja christii* F-E  
*Draba argyraea* FWL  
*Haplopappus aberrans* FWL  
*Haplopappus insecticuriis* F-T  
*Machaeranthera laetevirens* FWL  
*Thelypodium repandum* F-E

St. Joe National Forest

*Grindelia howellii* F-T

Targhee National Forest

*Astragalus scaphoides* FWL  
*Claytonia lanceolata* v. *flava* F-E  
*Silene scaposa* v. *lobata* FWL

Universities and Colleges

None

## SUMMARY OF RECOMMENDED STATUS FOR TAXA OF FEDERAL CONCERN

### FEDERAL ENDANGERED

*Astragalus yoder-williamsii*  
*Mirabilis macfarlanei*

### PROPOSE AS ENDANGERED

*Allium aaseae*  
*Castilleja christii*  
*Mentzelia mollis*

### TREAT AS ENDANGERED

*Antennaria arcuata*  
*Aster jessicae*  
*Astragalus oniciformis*  
*Astragalus sterilis*  
*Carex aboriginum*  
*Claytonia lanceolata* v. *flava*  
*Cypripedium calceolus* v. *parviflorum*  
*Douglasia idahoensis*  
*Oenothera caespitosa* v. *psammophila*  
*Phacelia inconspicua*  
*Thelypodium repandum*

### PROPOSE AS THREATENED

*Astragalus camptopus*  
*Astragalus mulfordiae*  
*Lepidium davisii*

### TREAT AS THREATENED

*Astragalus atratus* v. *inseptus*  
*Astragalus ceramicus* v. *apus*  
*Astragalus vexilliflexus* v. *nubilus*  
*Calamagrostis tweedyi*  
*Erigeron latus*  
*Grindelia howellii*  
*Hackelia davisii*  
*Halimolobos perplexa* v. *lemhiensis*  
*Halimolobos perplexa* v. *perplexa*  
*Haplopappus insecticruris*  
*Haplopappus liatridiformis*  
*Haplopappus radiatus*  
*Lomatium rollinsii*  
*Penstemon elegantulus*  
*Penstemon lemhiensis*  
*Phlox idahonis*  
*Physaria didymocarpa* v. *lyrata*  
*Primula wilcoxiana*  
*Silene spaldingii*  
*Trifolium owyheense*

### FEDERAL WATCH LIST

*Adiantum pedatum* var. *nova*  
*Allium madidum*  
*Allium tolmiei* var. *persimile*  
*Allium tolmiei* var. *platyphyllum*  
*Artemisia papposa*  
*Astragalus amblytropis*  
*Astragalus amnis-amissi*  
*Astragalus aquilonius*  
*Astragalus atratus* var. *owyheensis*  
*Astragalus cusickii* var. *flexilipes*  
*Astragalus purshii* var. *ophiogenes*  
*Astragalus scaphoides*  
*Calochortus macrocarpus* var. *maculosus*  
*Calochortus nitidis*  
*Camassia cusickii*  
*Castilleja oresbia*  
*Chaenactis cusickii*  
*Chrysothamnus nauseosus* var. *nanus*  
*Collomia debilis* var. *camporum*  
*Crepis bakeri* ssp. *idahoensis*

*Cryptantha propria*  
*Cymopterus nivalis*  
*Dasynotus daubenmirei*  
*Draba argyraea*  
*Eriogonum ochrocephalum* var. *nov.*  
*Eriogonum salicornoides*  
*Eriogonum shockleyi* var. *nov.*  
*Frasera albicaulis* var. *idahoensis*  
*Haplopappus aberrans*  
*Lepidium montanum* var. *papilliferum*  
*Machaeranthera laetevirens*  
*Mentzelia torreyi* var. *acerosa*  
*Oxytropis besseyi* var. *salmonensis*  
*Phacelia lutea* var. *calva*  
*Physaria geyeri* var. *purpurea*  
*Rubus bartonianus*  
*Silene scaposa* var. *lobata*  
*Tauschia tenuissima*  
*Tofieldia glutinosa* var. *absona*

TAXA OF STATE CONCERN

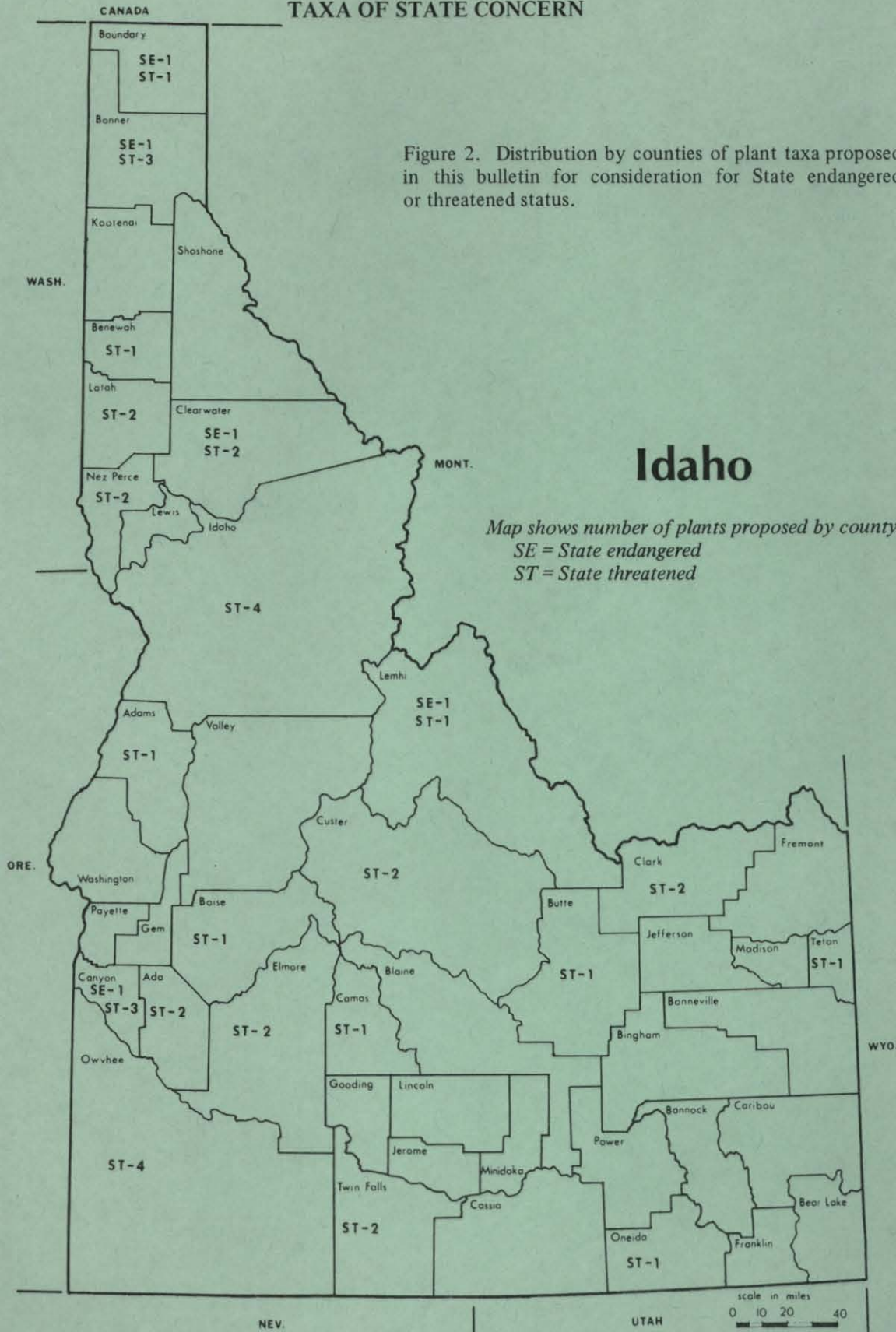


Figure 2. Distribution by counties of plant taxa proposed in this bulletin for consideration for State endangered or threatened status.



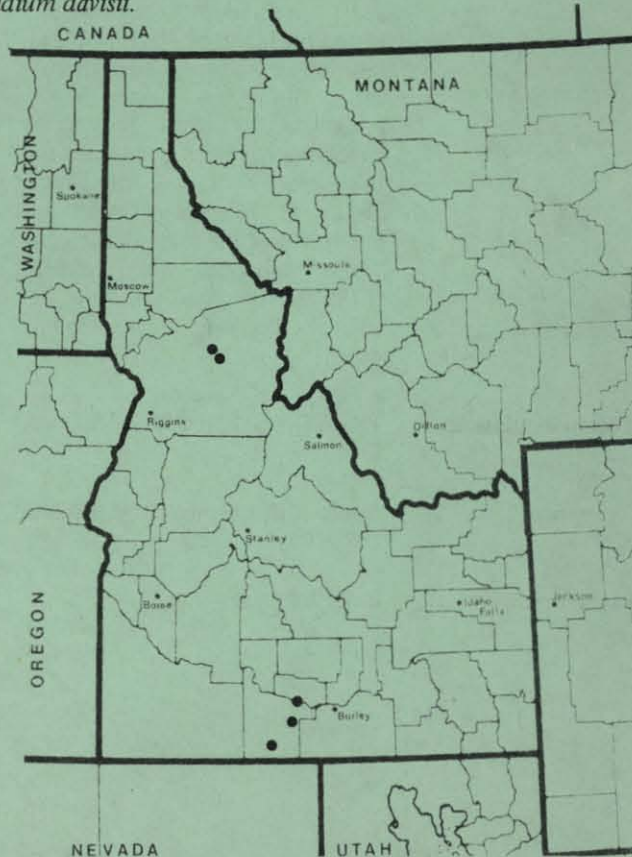
Endangered and Threatened Taxa of Idaho State Concern

*Allium anceps* Kell.

Idaho Status  
THREATENED

LILIACEAE

Location	Idaho: IDAHO and TWIN FALLS counties Also in California, Nevada, and Oregon
Land Ownership	BLM (Burley Dist.), USFS (Nezperce N.F.)
Vegetation Type	<i>Artemisia tridentata-Atriplex confertifolia</i> communities
Habitat	Bare, heavy soil, wet in early spring
Hazards	Range improvement and ORV's
Herbarium Data	Number of sites by county, Idaho only: IDAHO-2, TWIN FALLS-3 Number of Idaho collections in herbaria searched: BOIS-0, BS-0, CIC-2, ID-0, IDF-0, IDS-0, IFGH-0, NY-5, ORE-0, OSC-0, RENO-0, UTC-0, WS-0, WTU-0
Remarks	Disjunct distribution possibly indicates a species not holding its own. The Idaho County locations are quite dissimilar environmentally from those in Twin Falls County.
Recommendations	TREAT AS THREATENED because habitat in southern Idaho is favored for ORV use. It occurs on one site with <i>Lepidium davisii</i> .
Evaluation by	P. L. Packard



*Asplenium trichomanes* L.

Idaho Status  
ENDANGERED

POLYPODIACEAE

**Location** Idaho: CLEARWATER County, Pacific coastal disjunct  
Circumboreal, south to Oregon, Arizona, Texas (and in n.e. U.S.) "apparently avoiding California, Utah and Nevada"-Hitchcock et al. 1969. No specific inclusion or omission of Idaho and Montana

**Land Ownership** USFS (Clearwater N.F.)

**Vegetation Type** *Thuja plicata* forest

**Habitat** Mossy rocks near streambottom; "on limestone" (in northeastern Washington - Layser 1980)

**Hazards** Logging could alter micro-habitat.

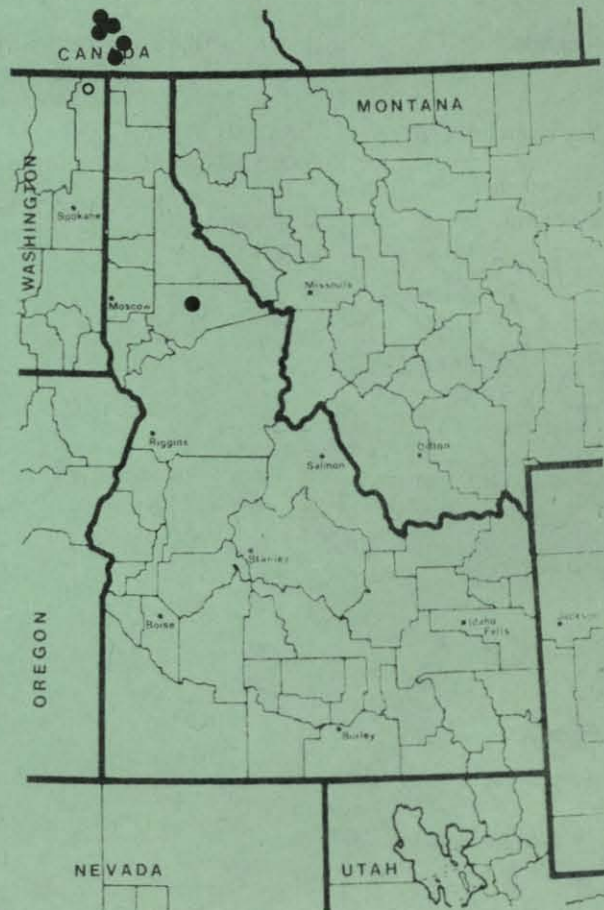
**Herbarium Data** Number of sites by county, Idaho only:  
CLEARWATER-1  
Number of Idaho collections in herbaria searched:  
BOIS-0, BS-0, CIC-0, F-0, ID-1, IDF-1, IFGH-0, IDS-0, NY-0, ORE-0, OSC-0, RENO-0, UTC-0, WTU-0

**Remarks** One collection in 1971 is in an area of coastal disjuncts. This area was marked for timber harvest. Several hours of searching a few years after harvest were fruitless. Listed for Idaho by Davis (1952), but not located in his herbarium; other floras are vague as to presence in Idaho. Extensive collecting has been conducted in this area of coastal influence. Taylor (1970) shows locations just north of the Idaho border in British Columbia, while Layser (1980) cites one location in adjacent Washington, now inundated.

**Recommendations** TREAT AS ENDANGERED in Idaho.

**References** Johnson and Steele 1978, Taylor 1970, Layser 1980.

**Evaluation by** F. D. Johnson





*Astragalus riparius* Barneby

Idaho Status  
THREATENED

FABACEAE (Leguminosae)

**Location** Idaho: LATAH and NEZ PERCE counties  
Washington: Asotin, Columbia, and Whitman counties

**Land Ownership** Private, possibly BLM (Coeur d'Alene Dist.)

**Vegetation Type** *Agropyron spicatum*/*Festuca idahoensis* and probably *Agropyron spicatum*/*Poa sandbergii*

**Habitat** Dry bluffs, canyon banks, and prairie

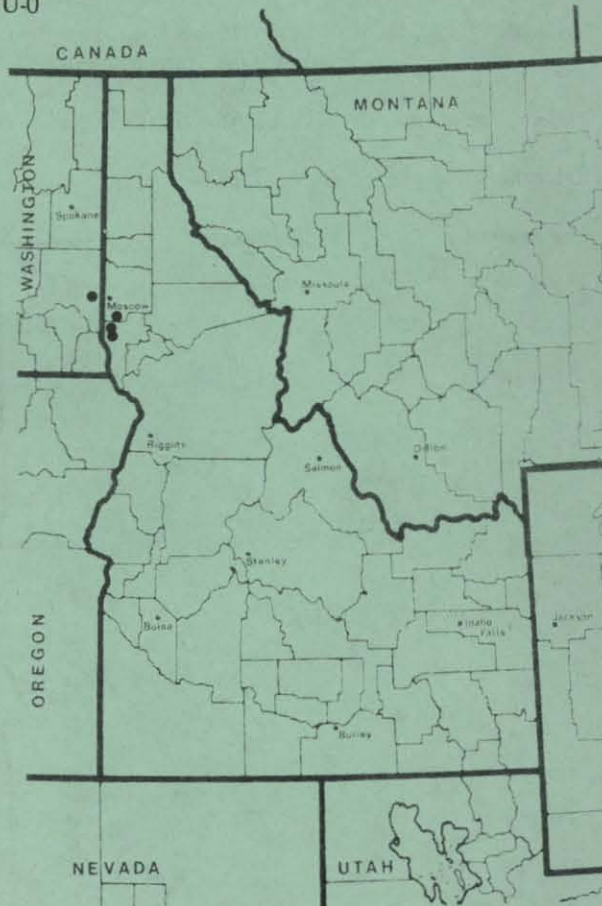
**Hazards** Agricultural practices.

**Herbarium Data** Number of sites by county, Idaho only:  
LATAH-1, NEZ PERCE-2  
Number of Idaho collections in herbaria searched:  
BOIS-0, BS-0, CIC-0, ID-0, IDF-0, IDS-0, MONTU-0, NY-1, ORE-0, OSC-0, RENO-0, UTC-1, WS-2, WTU-0

**Remarks** A moderately narrow endemic having only three sites in Idaho. At least one of the sites has probably been eliminated by agricultural expansion. Herbarium data suggest that it grows in mixed populations with *A. arrectus*. Hitchcock et al. (1961) state that it may have originated as a hybrid population, which is now established and self-perpetuating.

**Recommendations** TREAT AS THREATENED in Idaho. A study of biology of this taxon is needed, as is more information on its distribution.

**Evaluation by** S. J. Brunsfeld

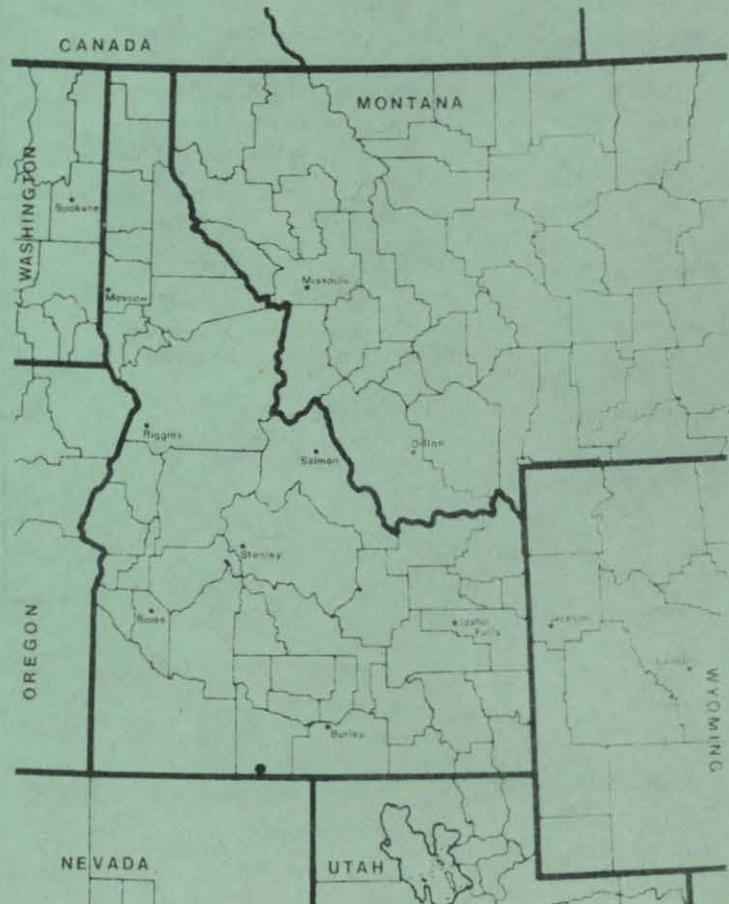


*Astragalus tetraapterus* Gray

Idaho Status  
THREATENED

FABACEAE (Leguminosae)

Location	Idaho: TWIN FALLS County Also from southeast Oregon to northwestern Arizona and Utah
Land Ownership	BLM (Burley Dist.)
Vegetation Type	Sage-grass and <i>Atriplex</i> communities
Habitat	Dry open spots among brush
Hazards	Range improvement projects
Herbarium Data	Number of sites by county, Idaho only: TWIN FALLS-1 Number of Idaho collections in herbaria searched: BOIS-0, BS-0, CIC-1, ID-0, IDF-0, MONTU-0, NY-0, ORE-0, OSC-0, RENO-0, WS-0, WTU-0
Remarks	Rare in Idaho and uncommon throughout its wide range. Disjunct distribution might indicate that the populations are diminishing.
Recommendations	TREAT AS THREATENED in Idaho, possibly threatened over its entire range.
References	Barneby 1964
Evaluation by	P. L. Packard

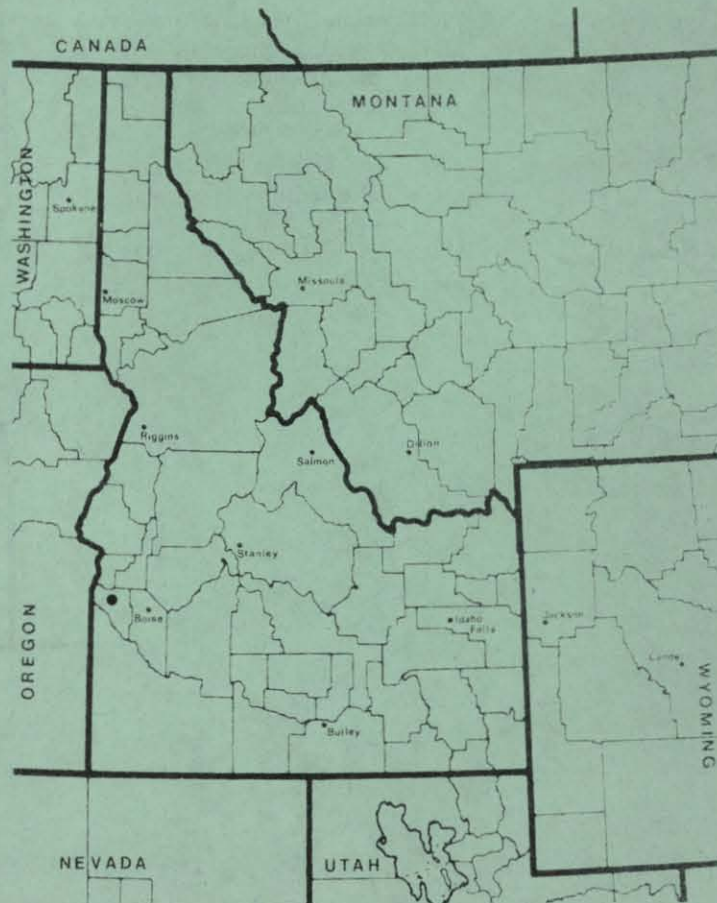


*Bacopa rotundifolia* (Michx.) Wettst.

Idaho Status  
ENDANGERED

SCROPHULARIACEAE

Location	Idaho: CANYON County Eastern North America, west to Montana
Land Ownership	City of Caldwell
Vegetation Type	Riparian
Habitat	Edge of Boise River on sand bar
Hazards	Stream channel work, gravel hauling
Herbarium Data	Number of sites by county, Idaho only: CANYON-1 Number of Idaho collections in herbaria searched: BOIS-0, BS-0, CIC-2, ID-1, IDF-0, IDS-0, IFGH-0, MONTU-0, NY-2, ORE-0, OSC-0, WS-0, WTU-0
Remarks	The area in which this plant grew has recently been rearranged by a gravel operation. This species is part of an interesting disjunct flora of eastern U.S. affinities
Recommendations	TREAT AS ENDANGERED, possibly extinct in Idaho. No population on public lands is known.
Evaluation by	P. L. Packard



*Ceanothus prostratus* Benth.

Idaho Status  
THREATENED

RHAMNACEAE

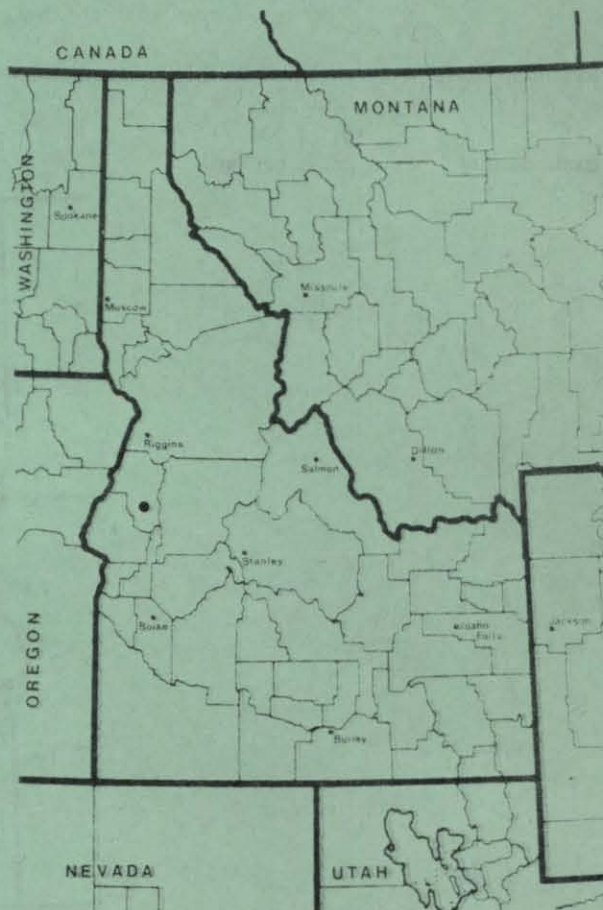
- Location** Idaho: ADAMS County, disjunct population  
Common from Washington to California and Nevada on east slopes of Cascades and Sierras
- Land Ownership** Private (possibly BLM), Boise Dist.
- Vegetation Type** *Pinus ponderosa*/*Symphoricarpos albus*; *Purshia tridentata*/*Agropyron spicatum*
- Habitat** Mainly on sites degraded by grazing animals, 3100 ft.
- Hazards** Improvement of road bisecting the population; the species apparently withstands heavy grazing.
- Herbarium Data** Number of sites by county, Idaho only:  
ADAMS-1  
Number of Idaho collections in herbaria searched:  
BOIS-1, BS-0, CIC-0, ID-1, IDF-0, IDS-0, IFGH-0, MONTU-0, NY-0, ORE-0, OSC-0, RENO-0, UTC-0, WS-0, WTU-0

**Remarks** Field surveys might reveal new locations elsewhere in Adams or Washington county. A study of why the species is not more prevalent in immediate area is also needed. Apparently the closest population to the Idaho site occurs in the Blue Mountains.

**Recommendations** TREAT AS THREATENED until more Idaho locations are found.

**References** Hitchcock and Cronquist 1973, Steele 1979

**Evaluation by** R. Steele

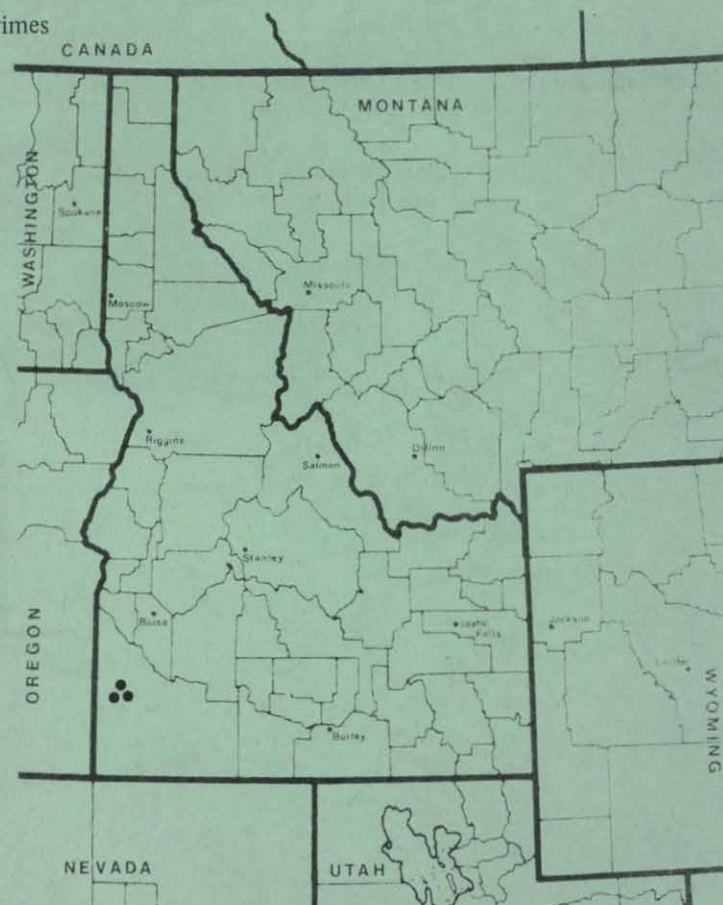


*Dimeresia howellii* Gray

Idaho Status  
THREATENED

ASTERACEAE (Compositae)

- Location** Idaho: OWYHEE County  
Also in Oregon, California, and Nevada
- Land Ownership** BLM (Boise Dist.), some private, possibly Idaho Dept. of Lands (Southwest Area)
- Vegetation Type** Low sage and other ridge top vegetation
- Habitat** Gravely, bare ridges, apparently with rhyolite or serpentine
- Hazards** Threatened by its rarity and annual nature, and possibly its ridge top habitat used by ORV's.
- Herbarium Data** Number of sites by county, Idaho only:  
OWYHEE-3  
Number of Idaho collections in herbaria searched:  
BOIS-1, BS-0, CIC-3, ID-0, IDF-0, IDS-0, IFGH-0, MONTU-0, NY-0, ORE-0,  
OSC-0, RENO-0, UTC-0, WS-0, WTU-0
- Remarks** This has a fairly wide but highly disjunct distribution. The disjunct distribution may indicate a retracting range. It has been rarely collected in this state.
- Recommendations** TREAT AS THREATENED in Idaho.
- Evaluation by** P. L. Packard and J. Grimes



*Dodecatheon hendersonii* Gray

Idaho Status  
THREATENED

PRIMULACEAE

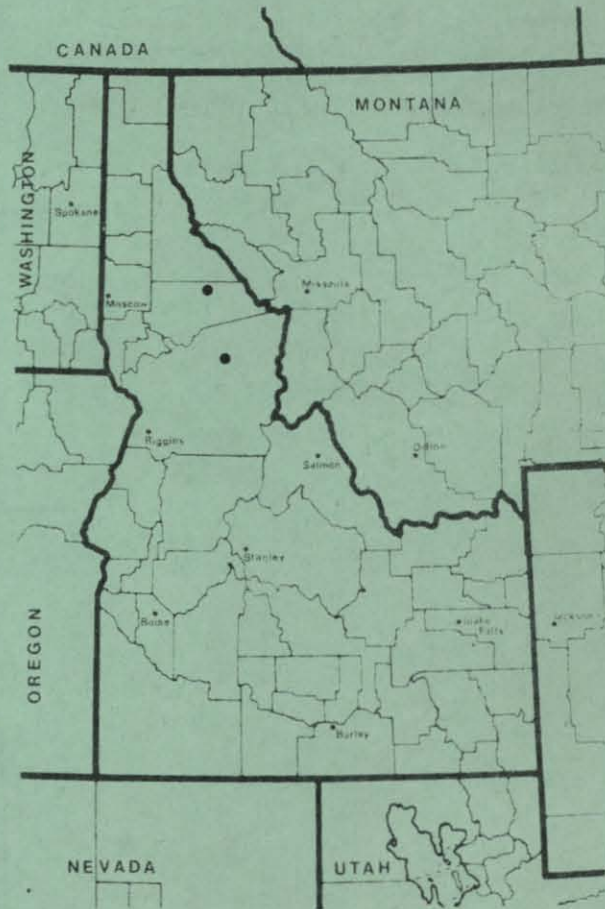
- Location** Idaho: CLEARWATER and IDAHO counties, Pacific coastal disjunct West of Cascades from Vancouver Island to southern California
- Land Ownership** USFS (Clearwater and Nez Perce N.F.)
- Vegetation Type** Lower *Thuja plicata* zone
- Habitat** *Thuja plicata*/*Adiantum pedatum* habitat type (Steele et al. 1976) with *Polystichum munitum*.
- Hazards** Campground developments or improvements, impacts from campground users.
- Herbarium Data** Number of sites by county, Idaho only:  
CLEARWATER-1, IDAHO-1  
Number of Idaho collections in herbaria searched:  
BOIS-0, BS-0, CIC-0, ID-0, IDF-2, IDS-0, IFGH-0, MONTU-0, NY-0, ORE-0, OSC-0, RENO-0, UTC-0, WS-0, WTU-0

**Remarks** One population occurs near a campground, the other near a USFS administrative site. Expansion or improvements for either facility could jeopardize these populations.

**Recommendations** TREAT AS THREATENED until more sites are found.

**References** Hitchcock and Cronquist 1973;  
Johnson and Steele 1978

**Evaluation by** R. Steele

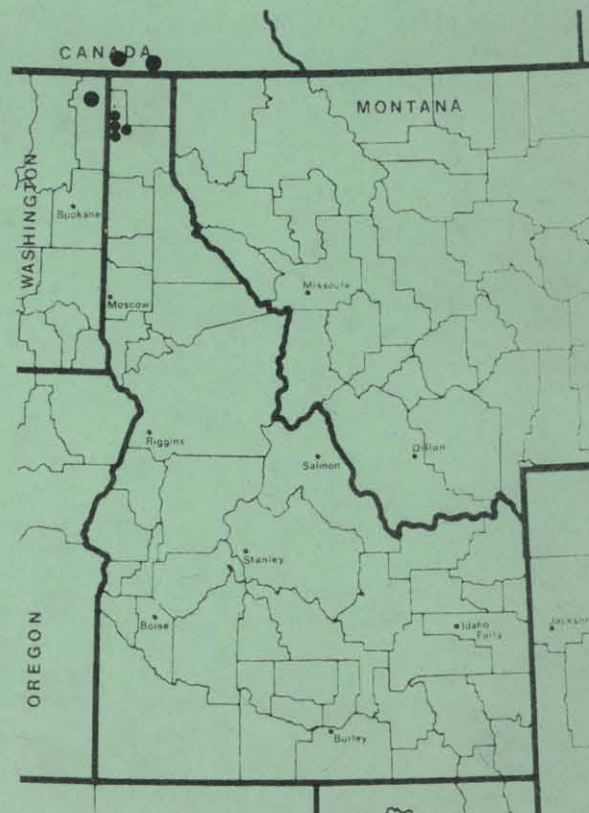


*Dryopteris cristata* (L.) Gray

Idaho Status  
THREATENED

POLYPODIACEAE

- Location** Idaho: BONNER County  
Circumboreal, s. to n. Idaho, n.w. Montana and in the east (but rarely) (Hitchcock et al. 1969)
- Land Ownership** USFS (Kaniksu N.F.), possibly Idaho Dept. of Lands (Priest Lake Area)
- Vegetation Type** In sphagnum bogs, particularly under alder, an uncommon habitat in Idaho.
- Hazards** Raising or lowering of water level, excessive recreational use, collecting for garden use.
- Herbarium Data** Number of sites by county, Idaho only:  
BONNER-4  
Number of Idaho collections in herbaria searched:  
BOIS-0, BS-0, CIC-0, ID-3, IDF-2, IDS-0, IFGH-0, MONTU-0, NY-2, ORE-0, OSC-0, RENO-0, UTC-0
- Remarks** Taylor (1970) plots only 3 locations in the Pacific Northwest, that is, none in Alaska, Yukon, Oregon or Washington. Layser (1980) notes that the only Washington site is in adjacent Pend Oreille County. This fern is rare in western North America (Hulten 1973) and is under some threat in its eastern range, being extirpated in Texas, threatened in North Carolina, rare in Alberta, Iowa, Illinois, and Tennessee, and protected by law in New York (Argus and White 1978).
- Recommendations** TREAT AS THREATENED.  
Despite four sites in Idaho, this appears to be very rare in western North America. It is an attractive fern in an area of high recreational use.
- References** Taylor 1970, Layser 1980
- Evaluation by** F. D. Johnson

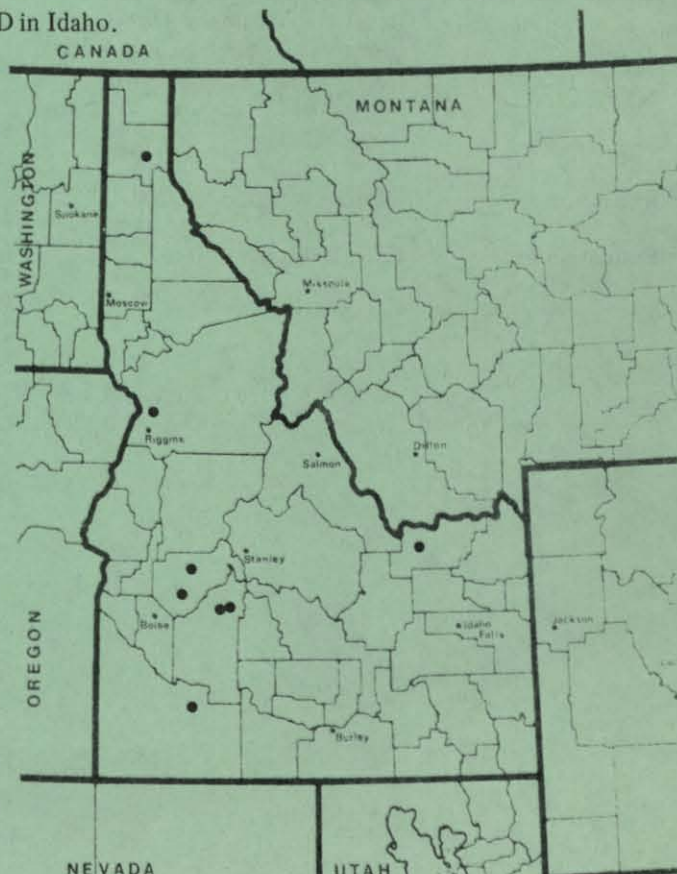


*Epipactis gigantea* Dougl.

Idaho Status  
THREATENED

ORCHIDACEAE

- Location** Idaho: BOISE, BONNER, BOUNDARY, CLARK, ELMORE, IDAHO, and OWYHEE counties. Widespread, but sporadic in occurrence elsewhere in the western U.S.
- Land Ownership** USFS (Boise and Targhee N.F.), private, and possibly BLM (Boise Dist.)
- Vegetation Type** Wet grassy areas, often with *Mimulus guttatus*, *Panicum occidentale*, and some *Distichlis spicata* var. *stricta*; or with *Eleocharis*.
- Habitat** Frequently found on the margins of warm or hot springs in wet soil of varying origin.
- Hazards** Grazing, recreational use, and development of springs
- Herbarium Data** Number of sites by county, Idaho only:  
BOISE-2, BONNER-1, BOUNDARY-1, CLARK-1, ELMORE-2, IDAHO-1, OWYHEE-1
- Number of Idaho collections in herbaria searched:  
BOIS-1, BS-0, CIC-3, ID-9, IDF-4, IDS-3, IFGH-0, MONTU-0, NY-6, ORE-0, OSC-0, RENO-0, UTC-0, WS-5, WTU-1
- Remarks** Clearly most warm and hot springs are centers of human activity and some attract livestock. If periodic monitoring of populations indicates significant decline in densities, then placement on the state list as ENDANGERED would be appropriate.
- Recommendations** TREAT AS THREATENED in Idaho.
- Evaluation by** D. M. Henderson





*Festuca subuliflora* Scribn.

Idaho Status  
THREATENED

POACEAE (Gramineae)

**Location** Idaho: IDAHO County, Pacific coastal disjunct  
West of Cascades B.C. to N.W. California

**Land Ownership** USFS (Nez Perce N.F.)

**Vegetation Type** Lower *Thuja plicata* zone

**Habitat** *Thuja plicata*/*Adiantum pedatum* habitat type (Steele et al. 1976) with *Polystichum munitum* and *Cypripedium fasciculatum*.

**Hazards** Logging activities

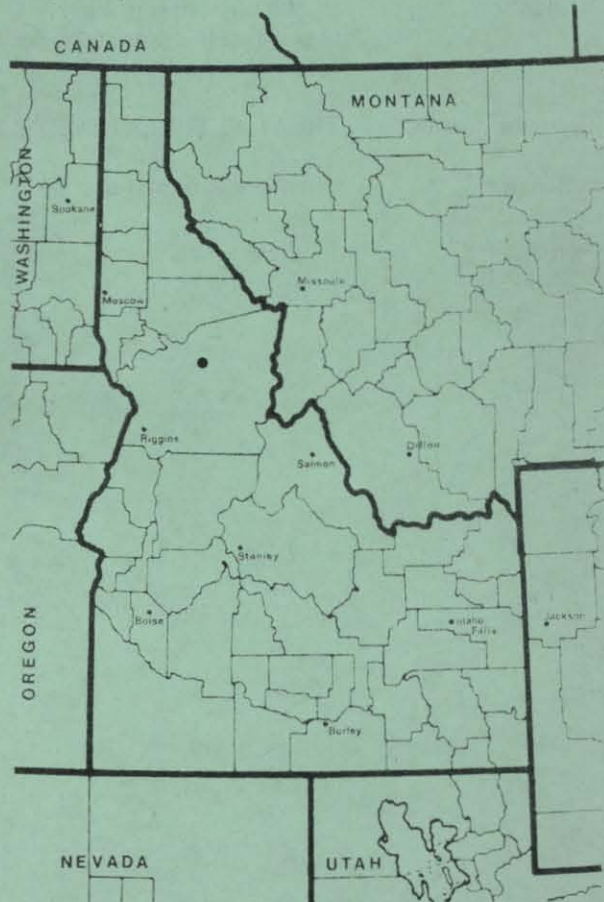
**Herbarium Data** Number of sites by county, Idaho only:  
IDAHO-1  
Number of Idaho collections in herbaria searched:  
BOIS-0, BS-0, CIC-0, ID-0, IDF-0, IDS-0, IFGH-0, MONTU-0, MRC-1, NY-0,  
ORE-0, OSC-0, UTC-0, RENO-0, WS-0, WTU-0

**Remarks** This species may exist elsewhere in the Clearwater River drainage but has not yet been sought. Since the only known population in Idaho occurs in a very accessible stand of commercial timber, threatened status at the state level is appropriate. A population may exist in Kootenai County, Idaho (Leiberg, 1212, ORE), but the identification is questionable.

**Recommendations** Search other similar habitat for this species. Until new locations are found TREAT AS THREATENED.

**References** Hitchcock and Cronquist 1973

**Evaluation by** R. Steele

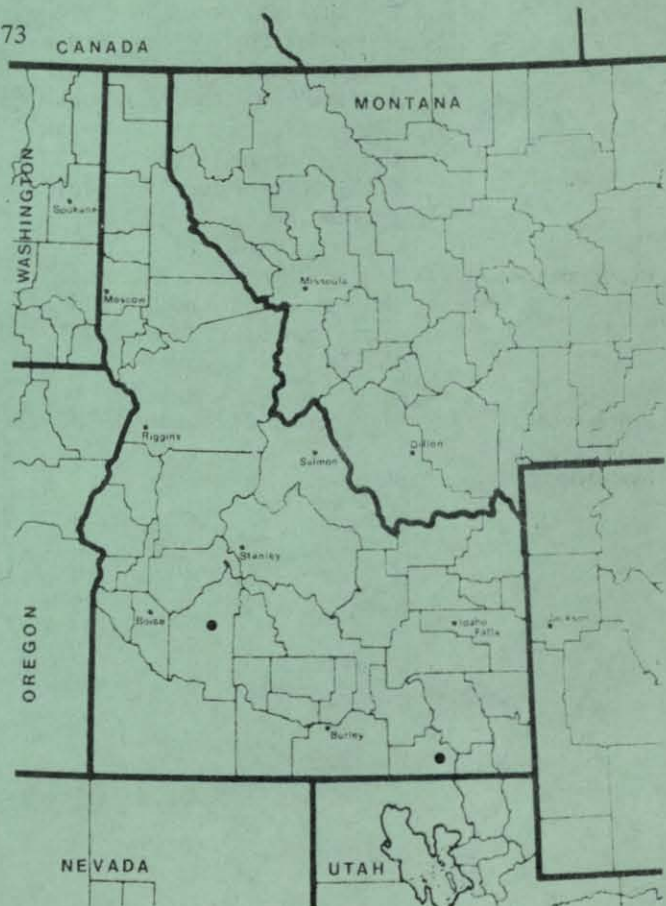


*Hydrophyllum occidentale* (S. Watson) Gray var. *watsonii* Gray

Idaho Status  
THREATENED

HYDROPHYLLACEAE

- Location** Idaho: ELMORE and ONEIDA counties  
More common in Utah, Nevada, Arizona, California and Oregon
- Land Ownership** BLM (Boise Dist.), USFS (Boise N.F.), possibly Idaho Dept. of Lands (Southwest Area)
- Vegetation Type** *Pseudotsuga menziesii* forest
- Habitat** Under conifers and in small openings with *Sorbus*, *Thalictrum*, and *Osmorhiza*
- Hazards** Road improvements and campground development, possibly grazing
- Herbarium Data** Number of sites by county, Idaho only:  
ELMORE-3, ONEIDA-1  
Number of Idaho collections in herbaria searched:  
BOIS-1, BS-0, CIC-0, ID-0, IDF-1, IDS-0, IFGH-0, MONTU-0, NY-0, ORE-0,  
OSC-0, RENO-0, UTC-0, WS-2, WTU-2
- Remarks** Of the three sites in Elmore County, one is next to a main Forest Service road, the other two are near a Forest Service campground, both may be affected by increased human activity.
- Recommendations** TREAT AS THREATENED in Idaho
- References** Hitchcock and Cronquist 1973
- Evaluation by** R. Steele



*Hypericum majus* (Gray) Britt

Idaho Status  
THREATENED

HYPERICACEAE (Guttiferae)

**Location** Idaho: BONNER County.  
Also in adjacent Pend Oreille County, Washington. B.C. to Quebec and n.e. U.S., disjunct in Colorado. A coastal Washington disjunct population is believed extinct.

**Land Ownership** Unknown—at least some private, possibly on USFS (Kaniksu N.F.) and Idaho Dept. of Lands (Priest Lake and Pend Oreille Lake areas).

**Vegetation Type** Lacustrine shoreline

**Habitat** "Slough-in marsh," "lake shoreline", "Lake Pend Oreille shore," disturbed sphagnum

**Hazards** Shoreline development. Recreation use.

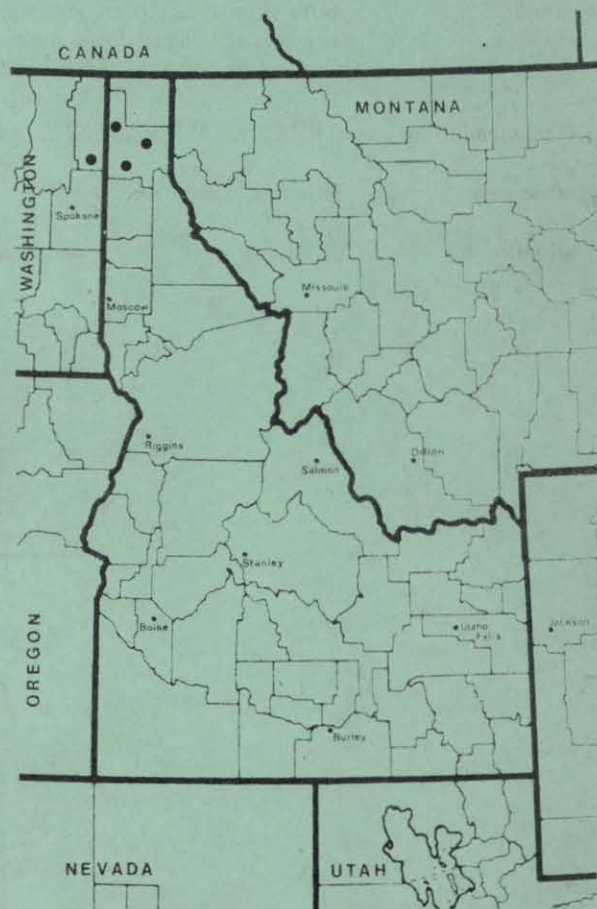
**Herbarium Data** Number of sites by county, Idaho only:  
BONNER-4  
Number of Idaho collections in herbaria searched:  
BOIS-0, BS-0, CIC-0, ID-3, IDF-1, IDS-0, IFGH-0, ORE-0, OSC-0, RENO-0, UTC-0, WS-2, WTU-0.

**Remarks** "Probably no longer growing in our area" (Hitchcock et al. 1961). This plant is very rare in western North America. First collected in Idaho in 1941, and in adjacent Washington in 1971; a new site was found in Idaho in 1979.

**Recommendations** TREAT AS THREATENED. Lakeshore habitat is very much subject to impact by recreation. Raised water levels may have eliminated some populations. There are numerous low-elevation lakes in the area, however, and searching these should be encouraged.

**References** Layser 1980

**Evaluation by** F.D. Johnson

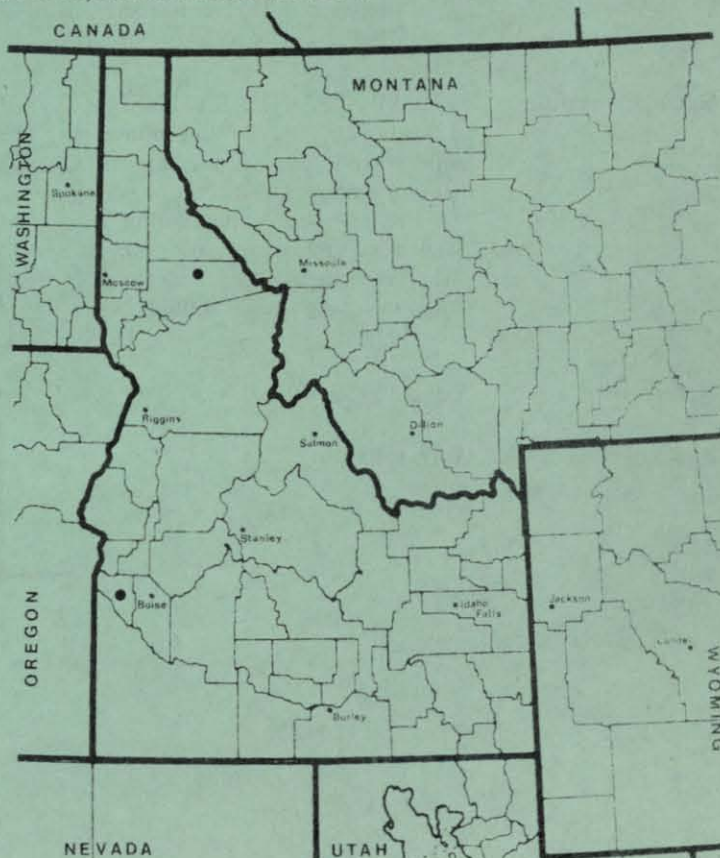


*Juncus effusus* L. var. *pacificus* Fern. & Wieg.

Idaho Status  
THREATENED

JUNCACEAE

Location	Idaho: CANYON and CLEARWATER counties, Pacific coastal disjunct Common west of Cascades to the Pacific
Land Ownership	City of Caldwell, USFS (Clearwater N.F.)
Vegetation Type	Sagebrush/grass, <i>Thuja plicata</i> zone with <i>Alnus rubra</i>
Habitat	Bog-like areas near streams and ponds
Hazards	Loss of habitat due to construction of roads or other improvements
Herbarium Data	Number of sites by county, Idaho only: CANYON-1, CLEARWATER-1 Number of Idaho collections in herbaria searched: BOIS-0, BS-0, CIC-3, ID-3, IDF-3, IDS-0, IFGH-0, MONTU-0, NY-0, ORE-0, OSC-0, RENO-0, UTC-0, WS-1, WTU-0
Remarks	Both sites in Idaho are vulnerable to construction damage; part of the Clearwater County site was destroyed by a temporary road constructed for logging. The Canyon County site was recently rearranged with a bulldozer.
Recommendations	TREAT AS THREATENED in Idaho.
References	Hitchcock and Cronquist 1973, Johnson and Steele 1978
Evaluation by	R. Steele

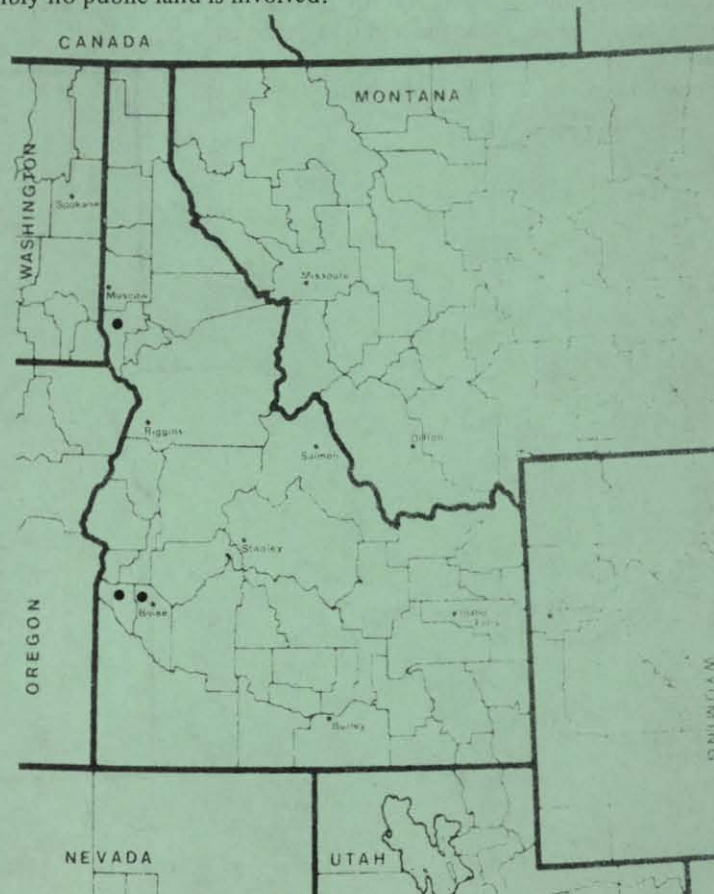


*Lindernia anagallidea* (Michx.) Pennell

Idaho Status  
THREATENED

SCROPHULARIACEAE

- Location** Idaho: ADA, CANYON and NEZ PERCE counties  
Widespread in North and South America, but infrequent in the Pacific Northwest (Hitchcock et al. 1959)
- Land Ownership** City of Caldwell and private
- Vegetation Type** Riparian
- Habitat** Beneath shrubs on river terrace
- Hazards** River channel work and gravel operations are currently being carried on at the site of the best population.
- Herbarium Data** Number of sites by county, Idaho only:  
ADA-1, CANYON-1, NEZ PERCE-1  
Number of Idaho collections in herbaria searched:  
BOIS-0, BS-0, CIC-3, ID-0, IDF-0, IDS-0, IFGH-0, MONTU-0, NY-1, ORE-0, OSC-0, WS-0, WTU-0
- Remarks** This is part of an interesting flora that occurs on the lower Boise River.
- Recommendations** TREAT AS THREATENED. The flora and habitat to which this species belongs should be preserved, but possibly no public land is involved.
- Evaluation by** P. L. Packard

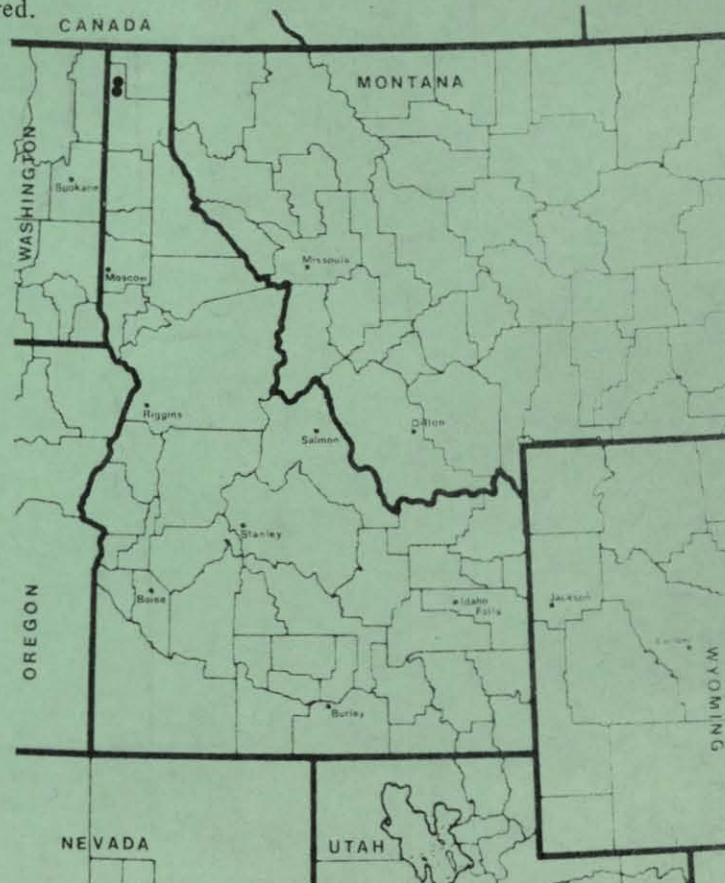


*Maianthemum dilatatum* (Wood) Nels. & Macbr.

Idaho Status  
ENDANGERED

LILIACEAE

- Location** Idaho: BONNER County.  
Principle population is west of the Cascades from Alaska to n. California. This is the only known location east of the Cascades in conterminous U.S.
- Land Ownership** Idaho Dept. of Lands (Priest Lake Area), USFS (Kaniksu N.F.)
- Vegetation Type** In *Tsuga heterophylla* climax forest
- Habitat** Subirrigated flood plain of small stream, with *Athyrium filix-femina*, beneath *Thuja plicata*.
- Hazards** Attractive garden plant. Anything that changes stream channel or alters water levels.
- Herbarium Data** Number of sites by county, Idaho only:  
BONNER-2 (1?)  
Number of Idaho collections in herbaria searched:  
BOIS-0, BS-0, CIC-0, ID-1, IDF-1, IDS-0, IFGH-0, MONTU-0, NY-0 (incomplete),  
ORE-0, OSC-0, RENO-0, UTC-0, WS-1, WTU-0
- Remarks** Collected in 1901 (location general, no habitat data) and again in 1967. Layser (1980) failed to find it during extensive collecting in similar habitat in adjacent Washington.
- Recommendations** TREAT AS ENDANGERED. Very rare, fragile habitat and an attractive plant combine to make this endangered.
- Evaluation by** F. D. Johnson



*Mimulus ringens* L.

Idaho Status  
THREATENED

SCROPHULARIACEAE

**Location** Idaho: ADA and CANYON counties  
Widespread in eastern North America

**Land Ownership** City of Caldwell, private

**Vegetation Type** Riparian

**Habitat** Riparian vegetation near edge of river

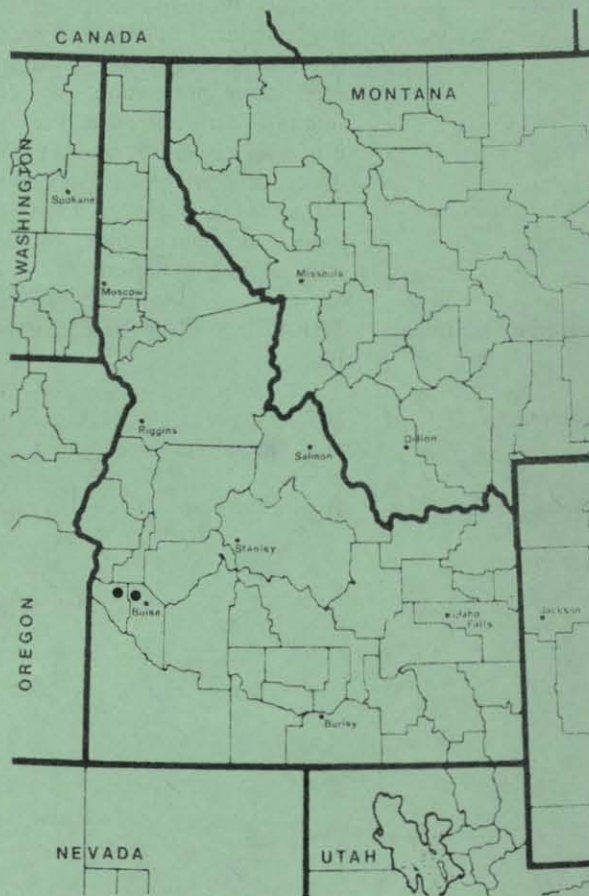
**Hazards** River channel alterations and gravel operations are occurring at the site of the best population.

**Herbarium Data** Number of sites by county, Idaho only:  
ADA-1, CANYON-1  
Number of Idaho collections in herbaria searched:  
BOIS-0, BS-0, CIC-1, ID-2, IDF-0, IDS-0, IFGH-0, MONTU-0, NY-0, ORE-0, OSC-0, WS-1, WTU-0

**Remarks** The Canyon County population may not be extant. This species may be introduced, but its presence with a number of disjunct species of similar geographic and ecologic affinities makes this unlikely.

**Recommendations** This is probably a part of our native vegetation. TREAT AS THREATENED so that if a population is found on public land, it can be protected.

**Evaluation by** P. L. Packard



*Papaver kluanensis* D. Love  
 Syn. *P. radicatum* Rottb.

Idaho Status  
 ENDANGERED

PAPAVERACEAE

**Location** Idaho: LEMHI County, disjunct from Arctic and boreal regions of North America

**Land Ownership** USFS (Challis N.F.)

**Vegetation Type** Alpine with *Poa rupicola*, *Saxifraga debilis*, and *Arabis lemmonii*

**Habitat** Ledges and cracks in quartzitic rock, 11,400 to 11,600 ft elevation

**Hazards** Main threat is in its large, attractive flowers inviting collection.

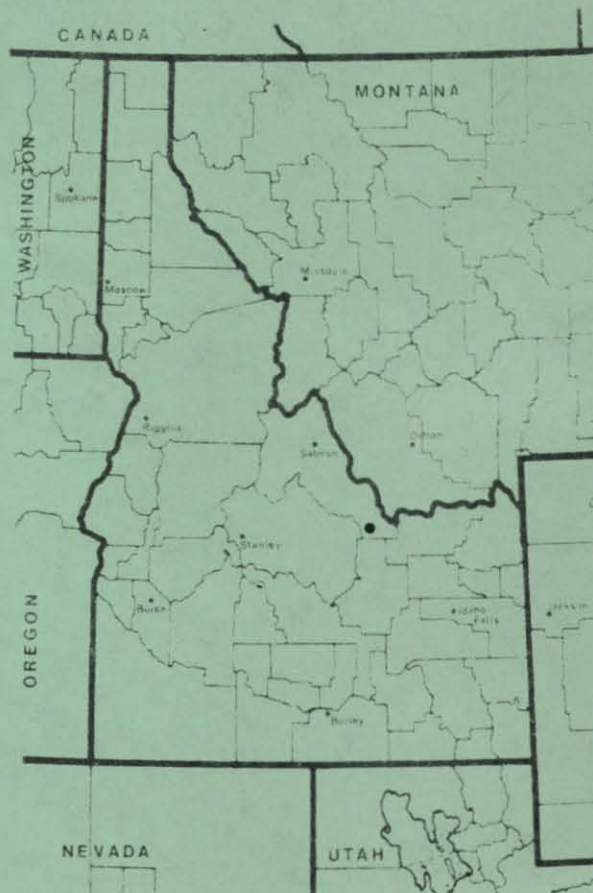
**Herbarium Data** Number of sites by county, Idaho only:  
 LEMHI-1  
 Number of Idaho collections in herbaria searched:  
 BOIS-0, BS-0, CIC-0, ID-1, IDF-0, IDS-0, IFGH-0, MONTU-0, NY-1, ORE-0,  
 OSC-0, RENO-0, UTC-0, WS-0, WTU-0

**Remarks** A rather thorough search of alpine habitats from 1973 to present has disclosed but a single, very small population on one summit. Although this site is reasonably isolated, there is evidence of foot traffic, and the actions of a single, thoughtless individual could easily eliminate most of the population.

**Recommendations** TREAT AS ENDANGERED in Idaho.

**References** Henderson et al. 1979, Henderson et al. (in press)

**Evaluation by** D. M. Henderson





*Petaria thompsonae* S. Wats.

Idaho Status  
THREATENED

FABACEAE (Leguminosae)

**Location** Idaho: OWYHEE County  
More common in Utah, Nevada and Arizona

**Land Ownership** BLM (Boise Dist.) and private

**Vegetation Type** *Atriplex-Artemisia* zone

**Habitat** Dry, open places

**Hazards** Agricultural expansion, range improvement, grazing, recreation, ORV's

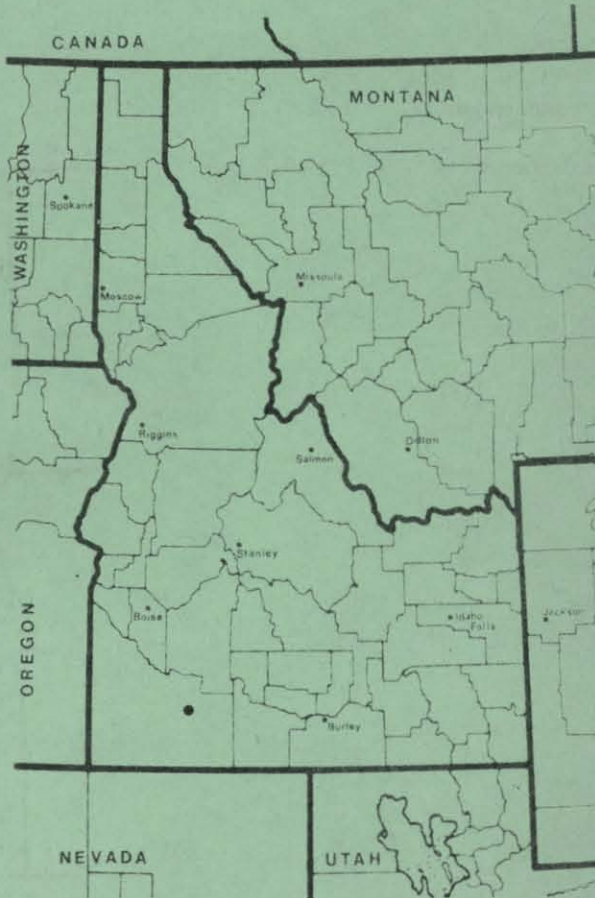
**Herbarium Data** Number of sites by county, Idaho only:  
OWYHEE-3(4?)  
Number of Idaho collections in herbaria searched:  
BOIS-1, BS-0, CIC-2, ID-3, IDF-1, IDS-1, IFGH-0, MONTU-0, NY-4, ORE-0,  
OSC-1, UTC-1, WS-1, WTU-0

**Remarks** This is described as having a Utah distribution that is "restricted in disjunct populations." The Nevada distribution is understood to be similar. Both states recommend removal from the federal list. Disjunct distributions generally indicate retracting populations.

**Recommendations** The Idaho populations need protection. TREAT AS THREATENED.

**References** Welsh, Atwood & Reveal 1975

**Evaluation by** P. L. Packard

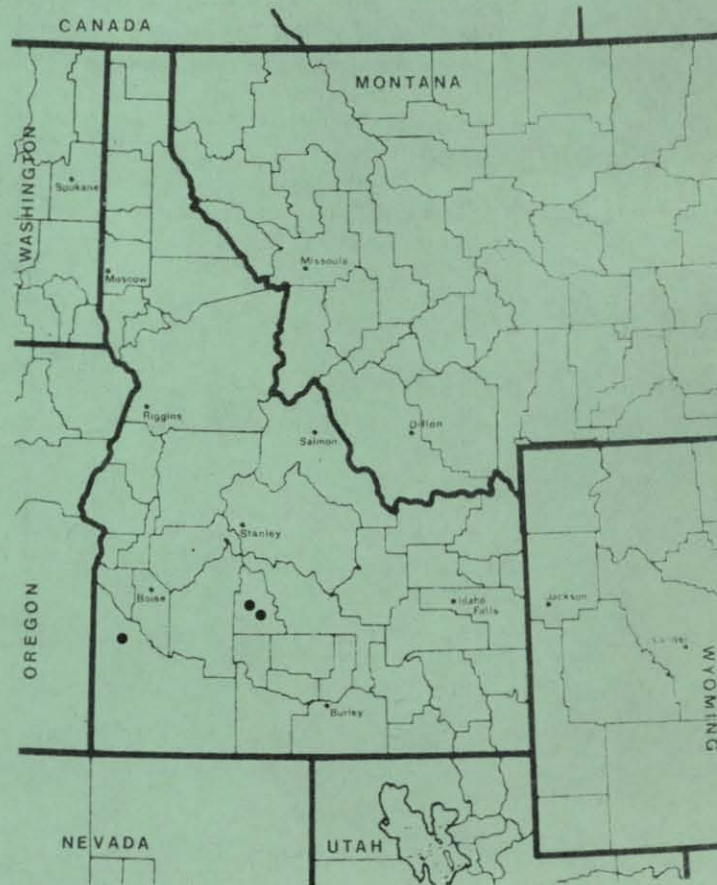


*Phacelia minutissima* Hend.

Idaho Status  
THREATENED

HYDROPHYLLACEAE

Location	Idaho: CAMAS and OWYHEE counties Also in Oregon and Nevada
Land Ownership	BLM (Boise and Shoshone Dist.), possibly private
Vegetation Type	<i>Artemisia tridentata</i> and <i>Populus tremuloides</i> communities
Habitat	Under shrubs or trees in moist places at moderate elevations
Hazards	Threatened by its rarity and annual nature
Herbarium Data	Number of sites by county, Idaho only: CAMAS-1, OWYHEE-1 Number of Idaho collections in herbaria searched: BOIS-0, BS-0, CIC-1, ID-1, IDF-0, IDS-1, IFGH-0, MONTU-0, NY-2, ORE-0, OSC-0, RENO-0, UTC-0, WS-0,
Remarks	This species is known from only four disjunct locations.
Recommendations	TREAT AS THREATENED.
Evaluation by	P. L. Packard



PRIMULACEAE

**Location** Idaho: BUTTE, CLARK, CUSTER, LEMHI, and TETON counties  
Widespread in Rocky Mountains from northern Canada south to Utah and Colorado

**Land Ownership** BLM (Idaho Falls Dist.), private, and possibly Idaho Dept. of Lands (Eastern Area)

**Vegetation Type** Moist alkaline meadows with *Carex*, *Distichlis spicata* var. *stricta*, and *Spartina gracilis* bordered by Wyoming big sagebrush communities.

**Habitat** Deep, moist, alkaline soils of broad, low valley bottoms, often where hummocky—restricted to streambanks and streamside meadows.

**Hazards** Trampling from livestock and recreationists, and campground developments.

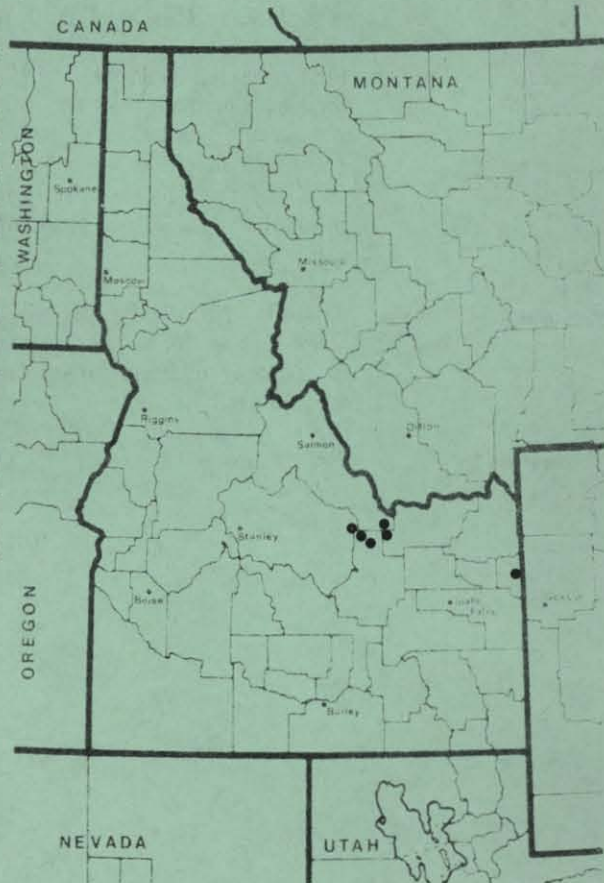
**Herbarium Data** Number of sites by county, Idaho only:  
BUTTE-1, CLARK-1, CUSTER-1, LEMHI-1, TETON-1  
Number of Idaho collections in herbaria searched:  
BOIS-0, BS-0, CIC-0, ID-7, IDF-0, IDS-2, IFGH-0, MONTU-0, NY-3, ORE-0, OSC-1, RENO-0, UTC-0, WS-1, WTU-1

**Remarks** The five Idaho counties listed above encompass only three populations, two of which are restricted to narrow, streamside corridors of Birch Creek and the Little Lost River, where grazing and recreation pressure are heavy. Additionally, the east-central Idaho populations are composed entirely of white-flowered plants, possibly deserving taxonomic recognition as distinct, a problem currently under investigation by this author.

**Recommendations** TREAT AS THREATENED in Idaho. If studies indicate taxonomic recognition is justified, placement on the Federal List may be appropriate.

**References** Andersen and Henderson 1978

**Evaluation by** D. M. Henderson



*Psoralea physodes* Dougl.

Idaho Status  
THREATENED

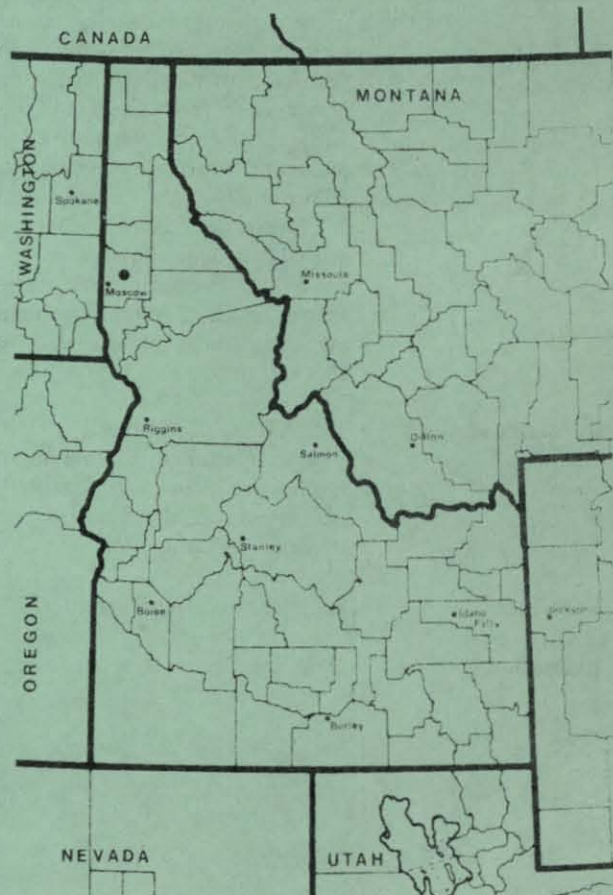
FABACEAE (Leguminosae)

- Location** Idaho: LATAH County.  
Principal population is west of the Cascades from Washington to California. This is the only known location east of the Cascades.
- Land Ownership** College of Forestry, Wildlife and Range Sciences, University of Idaho Experimental Forest, perhaps private land if other populations exist.
- Vegetation Type** Lower coniferous forest zone, near ecotone with grasslands.
- Habitat** *Pseudotsuga menziesii*/*Symphoricarpos albus* habitat type in planted *Pinus ponderosa* about 30 years old.
- Hazards** Area was grazed in the past. This species may be fire resistant. Recreational impact is the most apparent hazard. Often a successional species west of Cascades.
- Herbarium Data** Number of sites by county, Idaho only:  
LATAH-1  
Number of Idaho collections in herbaria searched:  
BOIS-0, BS-0, CIC-0, ID-1, IDF-1, IDS-0, IFGH-0, MONTU-0, NY-0, ORE-0, OSC-1, RENO-1, UTC-0, WS-2, WTU-0

**Remarks** First collected by Piper in 1898, then by Christ in 1944 and still a vigorous population in 1976. All three collections are assumed from the same location, though the earlier data do not pinpoint site.

**Recommendations** TREAT AS THREATENED. Very rare in Idaho. Population is located adjacent to picnic area. Study is needed.

**Evaluation by** F. D. Johnson



*Ribes sanguineum* Pursh.

Idaho Status  
THREATENED

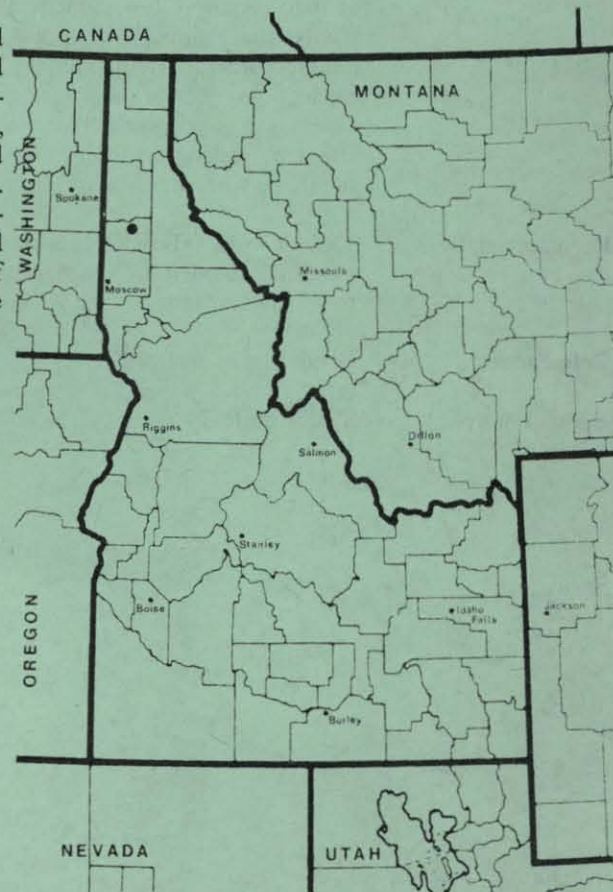
GROSSULARIACEAE (Saxifragaceae)

- Location** Idaho: BENEWAH County.  
The principle distribution is west of the Cascade/Sierra axis from British Columbia to central California. This is the only known population east of the Cascades. The Idaho population is in an area with several other coastal disjuncts.
- Land Ownership** Private
- Vegetation Type** *Pseudotsuga menziesii* and *Abies grandis* potential climax forests at their lower elevations
- Habitat** Secondary succession; open sapling and pole size trees with shrub patches and grassy swards between.
- Hazards** Resistant to grazing. Effect of fire unknown. Taking of plants for garden specimens is the most probable threat.
- Herbarium Data** Number of sites by county, Idaho only:  
BENEWAH-1  
Number of Idaho collections in herbaria searched:  
BOIS-0, BS-0, CIC-0, ID-1, IDF-14, IFGH-0, MONTU-0, NY-0, ORE-0, OSC-0, RENO-0, UTC-0, WS-0, WTU-0

**Remarks** The Idaho population was found in 1975. Two weeks of field work in 1976 confirmed a population of fifty-odd individuals, all confined to one steep-sided gulch in a few hundred acres. The extreme slopes offered protection from both cattle and people. But its rarity in view of what appears to be ample suitable habitat is yet to be explained.

**Recommendations** TREAT AS THREATENED.

**Evaluation by** F. D. Johnson



*Salix farriae* Ball

Idaho Status  
THREATENED

SALICACEAE

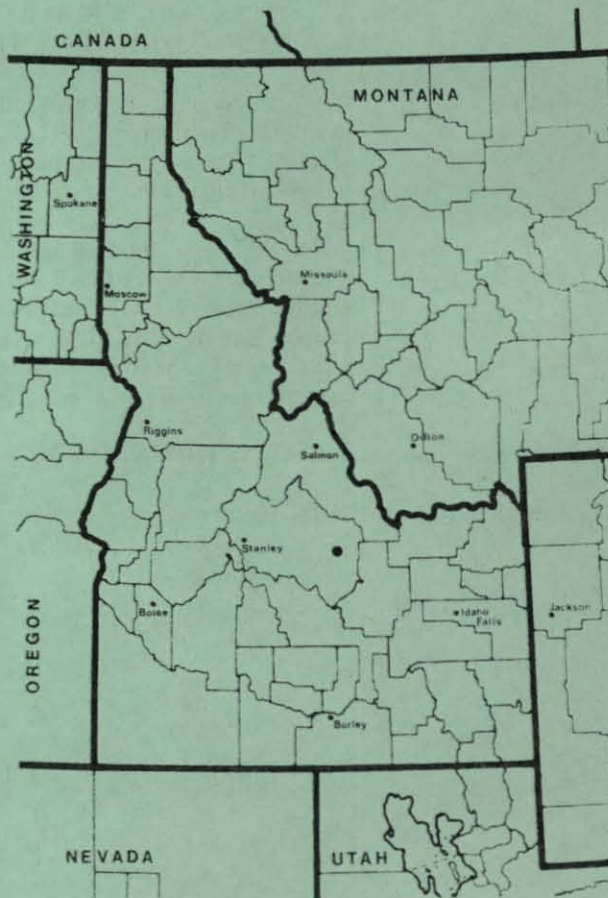
- Location** Idaho: CUSTER County  
(Known only from the West Fork of the Pahsimeroi River.) Range extends north through Canada to Alaska.
- Land Ownership** USFS (Challis N.F.)
- Vegetation Type** Unclassified; probably a *Deschampsia cespitosa* type.
- Habitat** Moist to wet subalpine meadows from 9,000 to 9,300 ft, associated with *Deschampsia cespitosa*, *Poa alpina*, and *Salix brachycarpa*.
- Hazards** Grazing and trampling by cattle may adversely affect the species.
- Herbarium Data** Number of sites by county, Idaho only:  
CUSTER-3  
Number of Idaho collections in herbaria searched:  
BOIS-0, BS-0, CIC-0, ID-3, IDF-0, IDS-1, MONTU-0, NY-1, ORE-0, OSC-0, RENO-0, UTC-1, WS-1, WTU-1

**Remarks** Two of the known populations contain relatively few individual plants, and a third, larger population is heavily frequented by cattle. No change in grazing allotments is proposed, but the effect of grazing on this species should be studied.

**Recommendations** TREAT AS THREATENED. Monitor populations' tolerance to grazing impacts.

**References** Henderson et al. 1979

**Evaluation by** S. J. Brunfeld

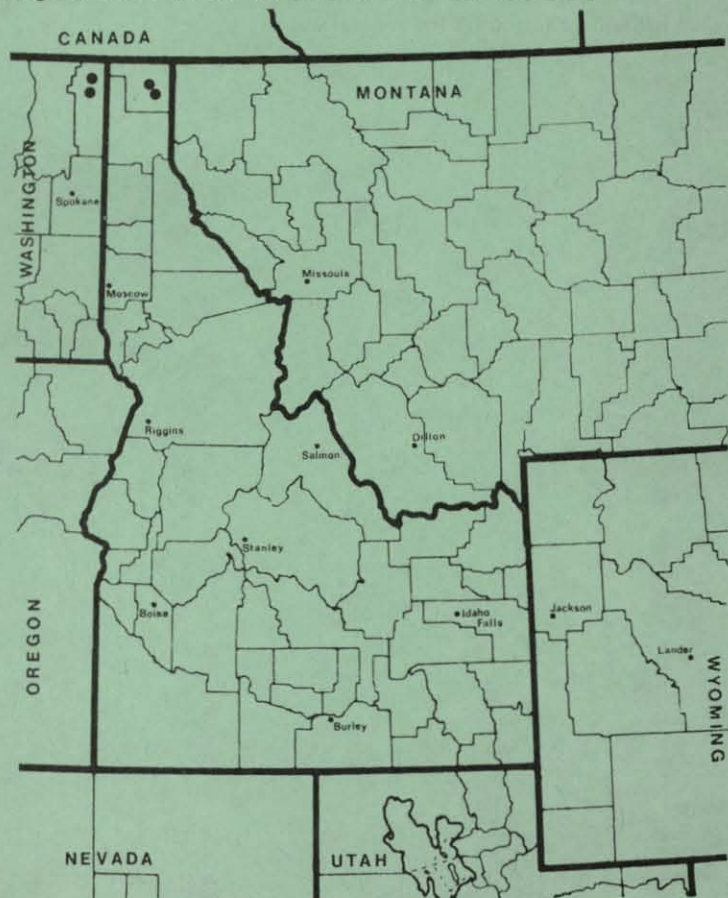


*Viburnum opulus* L. var. *americanum* Ait.

Idaho Status  
ENDANGERED

CAPRIFOLIACEAE

- Location** Idaho: BOUNDARY County.  
A circumboreal species, this is the North American variety. Extends south through much of the northeast, disjunct in South Dakota and Wyoming and s. to n. Idaho and Pend Oreille County, Washington, and to the Columbia Gorge west of the Cascades.
- Land Ownership** Private, mostly on land administered by the Army Corps of Engineers.
- Vegetation Type** Riverine along Kootenai River.
- Habitat** Riverbanks and sloughs
- Hazards** The entire area has been diked for flood control since the only two collections were made. It may be extinct in Idaho.
- Herbarium Data** Number of sites by county, Idaho only:  
BOUNDRY-1 (2?)  
Number of Idaho collections in herbaria searched:  
BOIS-0, BS-0, CIC-0, F-0, ID-0, IDF-0, IDS-0, IFGH-0, MO-0, MONTU-0, NY-2,  
ORE-0, OSC-0, PH (only type collection searched)-0, RENO-0, UTC-0, WS-0, WTU-0
- Remarks** This distribution is closely parallel to that of *Corylus cornuta*.
- Recommendations** ENDANGERED by diking and flood control works. May be extinct in Idaho.
- Evaluation by** F. D. Johnson



## OTHER TAXA OF INTEREST AT THE IDAHO STATE LEVEL

### (State Watch List)

Most of the following taxa are rare in Idaho (generally less than 10 locations more than 10 air miles apart), with larger populations outside the state. Although no threat to their survival is apparent, they do have the potential to become threatened because of their limited distribution. Some are very rare, often collected only once or a few times and frequently not at all in recent years. Often we know little or nothing of their habitat requirements and less of possible hazards. A few are suspected to be extinct in Idaho and cannot be evaluated. Other plants, such as cactus, may not be rare but have some trait such as market value which predisposes them for threatened status, hence their populations should be monitored. **None of these taxa is considered sensitive under current trends as defined by USDA Forest Service Manual (Chapter 2670.5), USDI Bureau of Land Management Instruction Memo 80-722 (Sept. 8, 1980) or as intended by the Endangered Species Act of 1973 (Public Law 93-205).** Thus their presence should not invoke restrictions on current land use patterns. However, their rarity marks such plants as unusual, particularly in terms of their value as indicators of special habitats. They are worth monitoring in case unforeseen impacts adversely affect their limited populations.

Plants known to be endemic to Idaho (or on the border with other states) which merit placement on a watch list will be found on the federal watch list.



*Achillea millefolium* L. var. *californicum* (Pollard) Jeps.

State  
WATCH LIST

ASTERACEAE (Compositae)

- Location** Idaho: CLEARWATER County.  
Pacific coastal disjunct. One collection only.
- Land Ownership** USFS (Clearwater N.F.)
- Habitat** *Thuja plicata* climax, early successional. In an area of coastal disjuncts.
- Remarks** Virtually no collections in the 14 herbaria searched take the species to variety. A. Cronquist (Hitchcock et al. 1955) is skeptical of varieties in this species, intergrades are common, but four varieties are keyed. More attention to varietal morphology may establish this as a definite disjunct.
- Evaluation by** F. D. Johnson

*Agrostis oregonensis* Vasey

State  
WATCH LIST

POACEAE (Gramineae)

- Location** Idaho: BONNER, ELMORE, IDAHO, and SHOSHONE counties  
"Vancouver Island to California and western Nevada, mostly in the Cascades and west, also in north-central Idaho"
- Land Ownership** USFS (Boise, Clearwater, and St. Joe N.F.), and possibly BLM (Coeur d'Alene Dist.) and private
- Habitat** "Stream margins, wet meadows, and boggy places in the mountains." One of our sites is in a *Thuja plicata*/*Pachistima myrsinites* habitat type.
- Remarks** Known from only five sites in Idaho, but may often be missed by collectors because it is "not readily distinguishable from (the common) *A. idahoensis*" (Hitchcock et al. 1969). The identity of specimens from Elmore County should be verified because these sites are out of range, and seemingly out of habitat. Hazards to the species are unknown, thus it should be on the Watch List.
- Evaluation by** S. J. Brunsfeld

*Allium validum* Watson

State  
WATCH LIST

LILIACEAE

- Location** Idaho: ELMORE and IDAHO counties  
Occurs on east slope of Cascades and Sierras from British Columbia to California. Also in eastern Oregon and northeastern Nevada.
- Land Ownership** USFS (Boise and Nezperce N.F.)
- Habitat** Near bogs and springs in *Abies lasiocarpa* zone.
- Remarks** This onion occurs locally in the Selway drainage and the Trinity Peaks area of Idaho. It is rare in this state, known only from four sites, yet it does not appear to be threatened here or in Oregon (Meinke, 1978). Substantial increases in road construction and recreational impacts may eventually jeopardize the two Idaho populations.
- Evaluation by** R. Steele

*Allotropa virgata* T. & G.

State  
WATCH LIST

ERICACEAE

- Location** Idaho: IDAHO County  
More common west of Cascades from British Columbia to California.
- Land Ownership** USFS (Nezperce and Payette N.F.)
- Habitat** Occurs in *Abies grandis* - *Thuja plicata* forests, *Pinus contorta* communities and *Abies lasiocarpa*/*Xerophyllum tenax* associations. It grows in shaded areas associated with deep litter or buried, partially decomposed logs.
- Remarks** This rare plant is known from five areas in Idaho. Its occurrence here is disjunct from the main population in western portions of British Columbia, Washington, Oregon, and California. It also occurs rarely in Montana.
- Evaluation by** R. Steele

*Astragalus cusickii* Gray var. *cusickii*

State  
WATCH LIST

FABACEAE (Leguminosae)

- Location** Idaho: ADAMS, IDAHO, and WASHINGTON counties  
Also in eastern Oregon and southeastern Washington
- Land Ownership** BLM (Boise Dist.), Idaho Dept. of Lands (Payette Lake Area), USFS (Nezperce and Payette N.F.)
- Habitat** Ponderosa pine/bunchgrass, sagebrush/bunchgrass, *Agropyron spicatum*/*Poa sandbergii*
- Remarks** More common in Oregon; confined mainly to the Hells Canyon area in Idaho.
- Evaluation by** R. Steele and F. Johnson

*Astragalus jejunus* S. Wats.

State  
WATCH LIST

FABACEAE (Leguminosae)

- Location** Idaho: BEAR LAKE County  
Also occurs in Nevada, Utah, and Wyoming
- Habitat** Sagebrush/grass on bare slopes, possibly lacustrine, with *Eriogonum brevicaule*
- Remarks** This may be abundant in eastern Bear Lake County (Shultz and Shultz 1978)
- Evaluation by** P. L. Packard and J. Grimes

*Astragalus paysonii* (Rydb.) Barneby

State  
WATCH LIST

FABACEAE (Leguminosae)

- Location** Idaho: BONNEVILLE and IDAHO counties
- Land Ownership** USFS (Caribou and Nezperce N.F.)
- Habitat** Found in *Pseudotsuga menziesii*, *Pinus contorta*, *Abies grandis*, and *Abies lasiocarpa* forests often associated with recent fires or logging (Shultz and Shultz 1978, Zamora 1975).
- Remarks** This species is known from the Red River Ranger Station and Fog Mountain areas of Idaho County and the Palisades Reservoir area of Bonneville County. This is a unique distribution pattern for a species that is rarely found in Idaho. It is somewhat more common in Wyoming.
- Evaluation by** R. Steele

*Astragalus platytropis* Gray

State  
WATCH LIST

FABACEAE (Leguminosae)

- Location** Idaho: BUTTE, CUSTER, and LEMHI counties  
Also in Montana, Nevada, Oregon, Utah, and California
- Land Ownership** USFS (Challis and Salmon N.F.) and BLM (Idaho Falls Dist.)
- Habitat** Mountain and Wyoming big sage/Idaho fescue and bluebunch wheatgrass—dry, rocky soil of slopes and ridges from near alpine to lower slopes, most often on limestone.
- Remarks** Although distributed among five states, this species appears to be extremely rare in Idaho; even though it could be easily overlooked, careful searching often discloses no more than three or four widely-scattered plants at a site. Barneby 1964, Henderson et al. 1979.
- Evaluation by** D. M. Henderson

*Astragalus vallis* M. E. Jones

State  
WATCH LIST

FABACEAE (Leguminosae)

- Location** Idaho: ADAMS and WASHINGTON counties  
Also in adjacent Oregon.
- Land Ownership** BLM (Boise Dist.), private, USFS (Payette N.F.), and possibly Idaho Dept. of Lands (Payette Lake Area)
- Habitat** Sagebrush/grass or brush on steep brushy hillsides in bare areas.
- Remarks** Rare (Barneby 1964), population should be monitored.
- Evaluation by** P. L. Packard

*Berberis nervosa* Pursh.

State  
WATCH LIST

BERBERIDACEAE

Location	Idaho: BONNER, BOUNDARY, LATAH, and KOOTENAI counties West of the Cascades from s. British Columbia to c. California
Land Ownership	USFS (Clearwater and Kaniksu N.F.), private
Habitat	Beneath closed canopy coniferous forest in the grand fir-cedar-hemlock zones, generally in the vicinity of other coastal disjuncts.
Remarks	This plant is not uncommon in the few locations that it has been found. It is an indicator of coastal conditions. Monitoring may be wise.
Evaluation by	F. D. Johnson

*Blechnum spicant* (L.) With.

State  
WATCH LIST

POLYPODIACEAE

Location	Idaho: CLEARWATER, KOOTENAI, and LATAH counties "Primarily w. of Cascades," circumboreal, "also in n. Idaho"
Land Ownership	USFS (Clearwater, St. Joe, possibly Coeur d'Alene N.F.), private, BLM (Coeur d'Alene Dist.), Idaho Dept. of Lands (Clearwater, Pend Oreille Lake and St. Joe areas)
Habitat	Conifer forests, lower elevation, apparently under 3,000 ft, "heavy timber," "woods," " <i>Thuja plicata</i> / <i>Polystichum munitum</i> "; two collections have <i>Adiantum pedatum</i> as an associate.
Remarks	Only recent collections are two in Clearwater County. It does occur in areas of valuable timber and the reaction to timber harvest is not known, but for a "deep woods" fern, likely reaction is negative. Widely scattered with an abundance of seemingly suitable habitat. Monitoring is wise.
Evaluation by	F. D. Johnson

*Botrychium lunaria* (L.) Swartz var. *onondagense* (Underw.) House

State  
WATCH LIST

OPHIOGLOSSACEAE

- Location** Idaho: BOUNDARY County  
"Cooler parts of the Northern Hemisphere" (for the species)
- Land Ownership** Unknown, possibly USFS (Kaniksu N.F.) and Idaho Dept. of Lands (Pend Oreille Lake Area)
- Habitat** *Thuja plicata* forest. "Deep duff in heavy cedar grove."
- Remarks** The varieties of this species are not clearly delimited. Hitchcock et al. (1969) state "for practical purposes, we suggest that until this group is better understood, all our material . . . be treated . . . under the earliest varietal name that seems to apply, var. *onondagense*." Very rare and little known of habitat requirements. A rather complete habitat description for both var. *onondagense* and *lunaria* appears in Gruber, et al. (1979).
- Evaluation by** F. D. Johnson

*Bouteloua gracilis* (H.B.K.) Lag. ex Steud.

State  
WATCH LIST

POACEAE (Gramineae)

- Location** Idaho: CLARK and LEMHI counties  
Disjunct from mixed prairie of central North America
- Land Ownership** Uncertain from label data: one location on U.S. Sheep Experiment Station and a second in Clark County on either BLM (Idaho Falls Dist.) or private; the Lemhi County location probably private land.
- Habitat** Mostly with big sagebrush/bunchgrass in well-developed soil of varying parent material.
- Remarks** The two population centers represent interesting western outliers of this species and are included here as novelties only. Additional populations are likely to be encountered. No data on hazards are available at this time.
- Evaluation by** D. M. Henderson

*Campanula scabrella* Engelm.

State  
WATCH LIST

CAMPANULACEAE

Location	Idaho: ADAMS, IDAHO, and LEMHI counties Bipartite distribution—Cascades and central Idaho to western Montana
Land Ownership	USFS (Nez Perce, Payette, and Salmon N.F.)
Habitat	Talus slopes, exposed rocky ridges, and rock crevices at high elevations.
Remarks	Known from three locations in Idaho. There are no apparent threats to the survival of these populations.
Evaluation by	S. J. Brunsfeld

*Cardamine constancei* Detl.

State  
WATCH LIST

BRASSICACEAE (Cruciferae)

Location	Idaho: SHOSHONE, CLEARWATER, IDAHO, and NEZ PERCE counties Idaho endemic
Land Ownership	Private, some on USFS (Nezperce and Clearwater N.F.) and some likely on: USFS (St. Joe and Coeur d'Alene N.F.), Idaho Dept. of Lands (Coeur d'Alene Area), and BLM (Coeur d'Alene District)
Habitat	Lower elevation <i>Thuja plicata</i> forests in partial shade, frequently in moist ground.
Remarks	An uncommon Idaho endemic associated with relict coastal vegetation. Intensive stream-bottom use may some day be a problem so this species should be monitored (Johnson and Crawford 1978, Crawford 1980).
Evaluation by	F. D. Johnson

*Carex aenea* Fern.

State  
WATCH LIST

CYPERACEAE

<b>Location</b>	Idaho: FREMONT, IDAHO, and KOOTENAI counties, a North American boreal species
<b>Land Ownership</b>	USFS (Coeur d'Alene, Nezperce, and Targhee N.F.), private
<b>Habitat</b>	Moist meadows, streambanks, and edges of cultivated fields, low elevations to montane.
<b>Remarks</b>	Hazards unknown at this time.
<b>Evaluation by</b>	D. M. Henderson

*Carex buxbaumii* Wahl.

State  
WATCH LIST

CYPERACEAE

<b>Location</b>	Idaho: BLAINE, BONNER, and CUSTER counties, southern disjunct from a circum-boreal distribution
<b>Land Ownership</b>	USFS (Sawtooth NRA), State Dept. of Lands (Pend Oreille Lake Area), and possibly some private
<b>Habitat</b>	Wet meadows and streambanks, swampy areas, adjacent to coniferous forest of varying composition.
<b>Remarks</b>	Hazards are unknown at this time.
<b>Evaluation by</b>	D. M. Henderson



*Carex californica* Bailey

State  
WATCH LIST

CYPERACEAE

Location	Idaho: IDAHO County Coastal disjunct—west of the Cascades from northern Washington to northern California, and disjunct in northern Idaho.
Land Ownership	USFS (Clearwater and possibly Nez Perce N.F.)
Habitat	Wet to dry meadows and “brushy slopes.”
Remarks	Our two known locations fall within Crawford’s (1980) fourth “zone of environmental moderation surrounding the Lochsa-Selway Rivers.” The species should be sought further within this rather large zone. Threats to the survival of this species have not been identified.
Evaluation by	S. J. Brunsfeld

*Carex flava* L.

State  
WATCH LIST

CYPERACEAE

Location	Idaho: BOISE County, a southern disjunct from a circumboreal distribution
Land Ownership	USFS (Boise N.F.)
Habitat	Wet meadow or bog communities near edges of lakes and streams
Remarks	One population known for Idaho. Hazards unknown at this time.
Evaluation by	D. M. Henderson

*Carex rupestris* Allioni

State  
WATCH LIST

CYPERACEAE

- Location** Idaho: LEMHI County  
Circumpolar species extending south in North America to Quebec, and in the Rocky Mountains to Colorado.
- Land Ownership** USFS (Challis N.F., but also possible on Targhee, Salmon or Sawtooth N.F.)
- Habitat** Dry, rocky alpine ridges and relatively flat gravelly tundra above 9,700 ft elevation.
- Remarks** Soon to be reported for Idaho, where it was previously unknown (Henderson et al. in press). Discovered at two locations in the Lemhi Range in 1977. No threat to the species has been identified.
- Evaluation by** S. J. Brunsfeld

*Carex sitchensis* Prescott

State  
WATCH LIST

CYPERACEAE

- Location** Idaho: ADAMS, BONNER, BOUNDARY, and OWYHEE counties  
Coastal Alaska to California, in and west of the Cascades, and in (northern) Idaho, "the range perhaps continuous across southern B.C. and adjacent Washington."
- Land Ownership** USFS (Kaniksu and Payette N.F.), BLM (Boise Dist.), and private, likely on other USFS, BLM, and Idaho Dept. of Lands holdings.
- Habitat** In shallow water or very wet soil, as in marshes, wet meadows, streamsides, and lake shores.
- Remarks** Currently known from six locations in Idaho. Closely resembles the common *C. aquatilis*, and so perhaps often overlooked. Activities such as the draining of wetlands could threaten this species' habitat, but no actual threats have yet been recognized.
- Evaluation by** S. J. Brunsfeld

*Carex straminiformis* Bailey

State  
WATCH LIST

CYPERACEAE

- Location** Idaho: CUSTER, LEMHI, and SHOSHONE counties  
Also in Washington, Oregon, Utah, Nevada, and Montana
- Land Ownership** USFS (Challis, Coeur d'Alene and Salmon N.F.)
- Habitat** Rocky hillsides and rock crevices in sedge-grass communities of the upper subalpine zone.
- Remarks** This sedge is widespread in Idaho, but known from only five locations.
- Evaluation by** R. Steele

*Carex tumulicola* Mackenzie

State  
WATCH LIST

CYPERACEAE

- Location** Idaho: BANNOCK and SHOSHONE counties  
Also west of Cascades from Washington to California
- Land Ownership** USFS (Caribou and Coeur d'Alene N.F.), Indian Reservation (Fort Hall)
- Remarks** Due to the poor representation of sedges in Idaho collections and the widespread locations of this species such as Washington, Oregon, and California, it probably occurs elsewhere in the state, but has not been identified. Needs further study. Sedges are frequently overlooked because of the difficulty of identifying them.
- Evaluation by** K. E. Holte

*Cleomella plocasperma* Wats.

State  
WATCH LIST

CAPPARIDACEAE

Location	Idaho: OWYHEE County Also in California, Oregon, Nevada, and Utah
Land Ownership	BLM (Boise Dist.), private
Habitat	<i>Atriplex</i> communities, often near hot springs on alkaline soil, frequently some disturbances. Also in sandy places or at edges of salt grass meadows.
Remarks	This appears on the Welsh, Atwood & Reveal (1975) list for Utah as "restricted and rare, possibly threatened." But it probably does not require protection in Idaho because of its weedy tendencies.
Evaluation by	P. L. Packard

*Collomia heterophylla* Hook.

State  
WATCH LIST

POLEMONIACEAE

Location	Idaho: BENEWAH, CLEARWATER, IDAHO, and KOOTENAI counties. Lower elevations west of the Cascades and in northern Idaho.
Land Ownership	BLM (Coeur d'Alene Dist.), USFS (Clearwater and likely Nezperce N.F.), Idaho Dept. of Lands (Coeur d'Alene Lake and Clearwater areas)
Habitat	In disturbed soil, openings in <i>Thuja plicata</i> or <i>Abies grandis</i> forests, trailsides.
Remarks	This annual is a Pacific coastal disjunct, known from a few sites near red alder habitats. No hazards are apparent, certainly none from land use practices. Still it is a rare disjunct so should be monitored.
Evaluation by	F. D. Johnson

*Cornus nuttallii* Aud.

State  
WATCH LIST

CORNACEAE

Location	Idaho: IDAHO County Common west of the Cascades from British Columbia to southern California
Land Ownership	USFS (Nezperce N.F.), private
Habitat	Lower elevations of <i>Thuja plicata</i> zone in vicinity of Lowell, Idaho. Found in mature forest and open brushfields.
Remarks	Locally common, but very narrow distribution in Idaho (Roper, 1970).
Evaluation by	R. Steele

*Corydalis caseana* Gray  
var. *hastata* (Rydb.) Hitch.

State  
WATCH LIST

FUMARIACEAE

Location	Idaho: CLEARWATER, IDAHO, LATAH and SHOSHONE counties Idaho endemic variety Clearwater, upper St. Maries and upper Palouse River drainages
Land Ownership	Private (Potlatch Corporation, Diamond International likely), USFS (Clearwater and Nezperce N.F.), Idaho Dept. of Lands
Habitat	Primarily <i>Thuja plicata</i> zone—middle elevations. Generally in <i>T. plicata</i> climax forests. Also in lower <i>Abies lasiocarpa</i> zone. Strictly riparian, in small streams or on margins; also near springs and/or lake margins (rarely), 3000 to 5500 ft.
Remarks	The work of Crawford (1980) has shown this plant to have no obvious threats; usual stream disturbances seem beneficial. It is a restricted endemic in a rather unusual habitat so monitoring is wise.
Evaluation by	F. D. Johnson

*Coryphantha missouriensis* (Sweet) Britt. & Rose

State  
WATCH LIST

CACTACEAE

**Location** Idaho: BUTTE, CLARK, CUSTER and LEMHI counties  
Also from Manitoba to Kansas.

**Land Ownership** BLM (Idaho Falls and Salmon Dist.), private

**Habitat** Dry, gravelly ridges and flats in sage/grass zone

**Remarks** Though under no immediate threat, this species may eventually be exploited by cactus collectors.

**Evaluation by** R. Steele

*Coryphantha vivipera* (Nutt.) Britt. & Brown

State  
WATCH LIST

CACTACEAE

**Location** Idaho: ADA, CASSIA, and LEMHI counties  
Ranges from Alberta to southeastern Oregon, Colorado, and Kansas

**Land Ownership** Private, USFS (Salmon and Sawtooth N.F.)

**Habitat** Dry, rocky slopes in sage/grass zone.

**Remarks** This species is presently widespread in Idaho, but may be exploited by cactus collectors.

**Evaluation by** R. Steele

*Cryptantha breviflora* (Osterh.) Payson

State  
WATCH LIST

BORAGINACEAE

**Location** Idaho: BEAR LAKE County  
Also in Utah

**Land Ownership** USFS (Caribou N.F.)

**Habitat** Confined to heavy clay soils in sage/grass zone.

**Remarks** Although more common in the Uinta Basin of Utah, this species is rare in Idaho, where it is known only from the vicinity of Montpelier Reservoir. This large population appears to be under no threat from present trends of land use (Shultz and Shultz 1978).

**Evaluation by** R. Steele

*Cryptantha simulans* Greene

State  
WATCH LIST

BORAGINACEAE

**Location** Idaho: BOISE, LATAH, and OWYHEE counties  
Also from central Washington to California

**Land Ownership** USFS (Boise N.F.), private

**Habitat** Sandy areas and dry roadsides in sage/grass and *Pinus ponderosa* zones.

**Remarks** Though widely distributed in Idaho, it is quite rare and known only from four collections within the state.

**Evaluation by** R. Steele

*Cuscuta denticulata* Engelm.

State  
WATCH LIST

CUSCUTACEAE

- Location** Idaho: CLARK County  
A Great Basin species typically of Nevada, Utah, and California.
- Land Ownership** BLM (Idaho Falls Dist.)
- Habitat** Wyoming big sagebrush, salt desert shrub (the Idaho site is on dry, gravelly soil of limestone alluvium)
- Remarks** This species was collected once in 1965 by Hitchcock, Spellenberg, Sutherland, and Kern 10 miles southeast of Blue Dome. Efforts in the past several years to recollect this species have been unsuccessful.
- Evaluation by** D. M. Henderson

*Cymopterus corrugatus* M. E. Jones  
Syn. *Rhysopterus plurijugus* Coult. & Rose

State  
WATCH LIST

APIACEAE (Umbelliferae)

- Location** Idaho: CANYON and OWYHEE counties  
Also in Nevada and Oregon
- Land Ownership** BLM (Boise Dist.), Nature Conservancy, private
- Habitat** Grows in *Artemisia tridentata* - *Atriplex confertifolia* zone on dry barren sites of sand or loose volcanic ash—diatomite to thin soil over basalt.
- Remarks** The habitat is vulnerable to expanding agriculture in part of its Idaho range and should be put on a watch list so it can be monitored.
- Evaluation by** P. L. Packard and J. Grimes



*Cypripedium fasciculatum* Dougl.

State  
WATCH LIST

ORCHIDACEAE

- Location** Idaho: BENEWAH, CLEARWATER, IDAHO and LATAH counties  
Widely scattered from Washington Cascades through the northern Rockies, south to Colorado. Nowhere common.
- Land Ownership** USFS (Clearwater, Nezperce, and St. Joe N.F.), possibly on BLM (Coeur d'Alene Dist.) or Idaho Dept. of Lands (Clearwater Area).
- Habitat** Beneath closed-canopy *Thuja plicata* and associated conifers.
- Remarks** Until recently, only a few locations were known, then concentrations were found in coastal disjunct areas (Steele 1971, Crawford 1980). Still the plant is rare and, from all indications it is nowhere common. It should be monitored.
- Evaluation by** F. D. Johnson

*Dodecatheon dentatum* Hook.

State  
WATCH LIST

PRIMULACEAE

- Location** Idaho: BENEWAH, CLEARWATER, and SHOSHONE counties  
"Southern British Columbia south in Cascades to northern Oregon, also in central Idaho"  
(actually, northern Idaho)
- Land Ownership** USFS (Clearwater and St. Joe N.F.), Corps of Engineers (Dworshak Reservoir), BLM (Coeur d'Alene Dist.), and private.
- Habitat** On mossy rocks, usually under western redcedar or less commonly Douglas-fir, in the vicinity of other coastal disjuncts.
- Remarks** This is the only white shooting star in northern Idaho. It is apparently quite restricted, yet very easily differentiated from other Dodecatheons. Its moss substrate on the rocks can be easily dislodged by any form of trampling. This species should be monitored.
- Evaluation by** F. D. Johnson

*Eatonella nivea* Gray

State  
WATCH LIST

ASTERACEAE (Compositae)

- Location** Idaho: CUSTER, ELMORE, and OWYHEE counties  
A Great Basin species disjunct north of the Snake River Plain.
- Land Ownership** BLM (Boise and Salmon Dist.), possibly private
- Habitat** Sagebrush/bunchgrass to wheatgrass/bluegrass or other range communities on sandy or gravelly, thin soil, often on basalt.
- Remarks** This species is probably in no jeopardy due primarily to the nature of its habitat. Rosentreter (1979), however, feels that recreational activities, including off-road vehicles, could be a problem with some populations.
- Evaluation by** D. M. Henderson

*Eburophyton austinae* (Gray) Heller

State  
WATCH LIST

ORCHIDACEAE

- Location** Idaho: BENEWAH and IDAHO counties  
Also west of Cascades from Washington to southern California.
- Land Ownership** USFS (Clearwater N.F.), and private
- Habitat** Under mature *Thuja plicata* and *Abies grandis* forest.
- Remarks** Presently known from the lower Lochsa - upper Middle Fork Clearwater area and from the lower St. Joe River. Rarely encountered.
- Evaluation by** R. Steele

*Elaeagnus commutata* Bernh.

State  
WATCH LIST

ELAEAGNACEAE

- Location** Idaho: BONNEVILLE, CUSTER, JEFFERSON, and MADISON counties  
Along the South Fork Snake River and a small disjunct population along the Salmon River in Custer County. Western Wyoming, scattered in western Montana. Southern British Columbia north and eastward.
- Land Ownership** Probably both BLM (Idaho Falls Dist.) and USFS (Targhee N.F.), and some private.
- Habitat** A riverine flood plain shrub in Idaho. Southern population under *Populus angustifolia*, the northern disjunct beneath *Populus trichocarpa*.
- Remarks** A shrub of boreal affinities; this is apparently the southern limit of the species in western North America. Since a large portion of the habitat is either BLM or USFS, protection from extensive floodplain development is likely. The area has been proposed as an endangered wildlife habitat by the USDI Fish & Wildlife Service. It should be monitored.
- Evaluation by** F. D. Johnson

*Epilobium obcordatum* Gray

State  
WATCH LIST

ONAGRACEAE

- Location** Idaho: BLAINE, CUSTER, ELMORE, and LEMHI counties  
Also in Oregon, California, and Nevada
- Land Ownership** USFS (Boise, Salmon, and Sawtooth N.F.)
- Habitat** Talus slopes and rock ledges near alpine or subalpine meadows.
- Remarks** Known from the Big Horn Crags, White Cloud, and Sawtooth Mountains in Idaho.
- Evaluation by** R. Steele

*Epilobium watsonii* Barneby var. *parishii* (Trel.) C. L. Hitchc.  
Syn. Uncertain (see discussion)

State  
WATCH LIST

ONAGRACEAE

**Location** Idaho: CUSTER and IDAHO counties  
Apparently uncommon throughout much of the western U.S.

**Land Ownership** USFS (Payette N.F. and Hells Canyon NRA)

**Habitat** Largely unknown but apparently confined to riparian and other wet areas.

**Remarks** This taxon is currently under investigation by Peter H. Raven, Missouri Botanical Garden, and our disposition will await Dr. Raven's findings.

**Evaluation by** D. M. Henderson

*Erigeron humilis* Graham

State  
WATCH LIST

ASTERACEAE (Compositae)

**Location** Idaho: BUTTE, CUSTER, and LEMHI counties  
Circumpolar, in North America extending south to northwestern Montana and Idaho.

**Land Ownership** USFS (Challis N.F., possibly on Targhee, Sawtooth, and Salmon N.F.)

**Habitat** Moist to wet meadows at high elevations—above 9,600 ft (Henderson et al. 1979)

**Remarks** The first report of this species in Idaho is currently in press (Henderson et al.). Since 1978, five locations in the Lost River and Lemhi ranges have been discovered. Because of the plant's short stature and remote habitat, any threats to its survival are unlikely. The populations should be monitored.

**Evaluation by** S. J. Brunsfeld

*Erigeron radicans* Hook.

State  
WATCH LIST

ASTERACEAE (Compositae)

Location	Idaho: CUSTER and LEMHI counties Disjunct from the Rocky Mountains of southern Alberta
Land Ownership	USFS (Challis, Salmon, and Targhee N.F.)
Habitat	Dry, rocky ridges and flat tundra near or above timberline (Henderson et al. 1979)
Remarks	Soon to be reported for Idaho, where it was previously unknown (Henderson et al. in press). Six sites in the Lost River, Lemhi, and Beaverhead ranges have been discovered. No threats to their survival have been identified, but the populations should be monitored.
Evaluation by	S. J. Brunsfeld

*Eriogonum desertorum* (Maguire) R. J. Davis

State  
WATCH LIST

POLYGONACEAE

Location	Idaho: CASSIA County Also in Nevada.
Land Ownership	USFS (Sawtooth N.F.)
Habitat	On mountain peaks at about 8,000 ft
Remarks	In Idaho, known only from Black Pine Mountains; no threat evident.
Evaluation by	R. Steele

*Eriogonum shockleyi* S. Wats. var. *shockleyi*

State  
WATCH LIST

POLYGONACEAE

- Location** Idaho: BANNOCK and OWYHEE counties  
Also in California, Nevada, Oregon, and Utah
- Habitat** Within shadscale communities on outcrops of oolitic limestone, or gravel.
- Remarks** This has only recently been reported from Idaho. It has an anomalous distribution here as far as is known. Idaho has three known peripheral populations of this species. Peripheral populations may be the source of new varieties as is apparently happening here. For this reason such populations should be monitored.
- Evaluation by** P. L. Packard and J. Grimes

*Eriogonum thymoides* Benth.

State  
WATCH LIST

POLYGONACEAE

- Location** Idaho: BLAINE, CAMAS, ELMORE, LINCOLN, and WASHINGTON counties  
Also in Washington and Oregon.
- Land Ownership** BLM (Boise and Shoshone Dist.) and possibly Idaho Dept. of Lands (Southwest and South Central areas).
- Habitat** Sagebrush/grass zone on thin, rocky soil over basalt and scablands.
- Remarks** There are a number of populations of this, but the disjunct distribution probably indicates a retracting range. There are a number of factors that are impacting it somewhat, but its tolerance to disturbance is unknown. This species needs some monitoring.
- Evaluation by** P. L. Packard and J. Grimes

*Gaultheria hispidula* (L.) Muhl.  
Syn. *Chiogenes hispidula* T. & G. ex Torr.

State  
WATCH LIST

ERICACEAE

- Location** Idaho: BONNER County (likely in northwestern BOUNDARY County)  
Boreal species extending into conterminous U.S. only in northern Idaho.
- Land Ownership** Apparently all USFS (Kaniksu N.F.), but Idaho Dept. of Lands (Priest Lake Area) is likely.
- Habitat** Sphagnum bogs
- Remarks** This was first collected in 1901, and then in 1948 and 1978; in 1979 Jan Spingath, during bog research, found three new locations. Now with six sites and numerous bogs still uninvestigated, this species has no apparent threat in Idaho, but it should be monitored, for these bogs are very fragile.
- Evaluation by** F. D. Johnson

*Gentiana propinqua* Richards  
Syn. *Gentianella propinqua* (Richards) Gillett

State  
WATCH LIST

GENTIANACEAE

- Location** Idaho: CUSTER County, known only from the upper West Fork of the Pahsimeroi River, Lost River Range - a southern disjunct of North American boreal regions.
- Land Ownership** USFS (Challis N.F.)
- Habitat** Subalpine to near-alpine grassy meadows and slopes with *Deschampsia cespitosa* and *Poa alpina*.
- Remarks** There are no apparent threats to survival in Idaho. Henderson et al. 1979.
- Evaluation by** D. M. Henderson

*Gentiana tenella* Rottb.  
Syn. *Gentianella tenella* (Rottb.) Borner

State  
WATCH LIST

GENTIANACEAE

**Location** Idaho: CUSTER County  
A circumboreal disjunct known only from the upper West Fork of the Pahsimeroi River,  
Lost River Range

**Land Ownership** USFS (Challis N.F.)

**Habitat** Subalpine to near-alpine grassy meadows and slopes with *Deschampsia cespitosa* and  
*Poa alpina*.

**Remarks** There are no apparent threats to survival in Idaho. Henderson et al. 1979.

**Evaluation by** D. M. Henderson

*Glyptopleura marginata* D. C. Eaton

State  
WATCH LIST

ASTERACEAE (Compositae)

**Location** Idaho: ADA, CANYON, OWYHEE and TWIN FALLS counties  
Also in California, Nevada, Oregon, and Utah.

**Land Ownership** BLM (Boise and Burley Dist.), private, possibly Idaho Dept. of Lands (Southwest and  
South Central areas)

**Habitat** In *Atriplex - Artemisia* communities on dry, sandy, poorly vegetated places, sometimes in  
loose ash.

**Remarks** During the 1979 field season, 8 botanists were working in the part of the state where  
this species occurs. It was seen only once. It is highly infrequent and is vulnerable because  
of its ash habitat which occurs in lower elevations of the landscape. This widespread but  
infrequent plant could easily be lost in Idaho and should receive consideration. But be-  
cause of its infrequent appearance, it would be difficult to inventory in only one season.

**Evaluation by** P. L. Packard and J. Grimes



*Gymnosteris nudicaulis* (H. & A.) Green

State  
WATCH LIST

POLEMONIACEAE

- Location** Idaho: ADA, BINGHAM, BLAINE, BUTTE, CANYON, CLARK, ELMORE, GEM, GOODING, LINCOLN, OWYHEE, POWER, and TWIN FALLS counties  
Also in Baker and Malheur counties, Oregon and Ormsby County, Nevada
- Land Ownership** BLM (Boise, Burley, Idaho Falls and Shoshone Dist.), private and probably Idaho Dept. of Lands (Southwest, South Central and Eastern areas).
- Habitat** Sage/grass zone, often on basaltic or lava rock in sandy to clay loam soil.
- Remarks** This annual was collected much more frequently in the early to mid-1900's than in the past ten years. Expanding agricultural development and perhaps superior competition of *Bromus tectorum* may be reducing this once extensive population.
- Evaluation by** R. Steele

*Hymenoxys richardsonii* (Hook.) Cockerell

State  
WATCH LIST

ASTERACEAE (Compositae)

- Location** Idaho: CASSIA County  
(Widespread east and south of Idaho)
- Land Ownership** Private, possibly BLM (Burley Dist.)
- Habitat** Dry, open slopes (the CASSIA County population with sagebrush and Utah juniper).
- Remarks** One known site in Idaho. Field reconnaissance is clearly indicated to establish abundance, distribution, and to assess potential threats.
- Evaluation by** D. M. Henderson

*Ivesia baileyi* S. Wats

State  
WATCH LIST

ROSACEAE

- Location** Idaho: ELMORE and OWYHEE counties  
Also in southeastern Oregon and Nevada
- Land Ownership** BLM (Boise Dist.), USFS (Boise N.F.)
- Habitat** Found on moist sites of basaltic cliffs along rivers in sagebrush/grass zone. Often occurs in areas of higher humidity caused by water falls and rapids.
- Remarks** This plant generally grows on canyon walls near large rivers, but can also grow in dry canyons. Increased dam building and the resulting reservoirs could eventually jeopardize this species. However, annual waterflow in most of these rivers appears inadequate to attract major dam construction under present cost-benefit ratios.
- Evaluation by** R. Steele

*Ivesia tweedyi* Rydb.

State  
WATCH LIST

ROSACEAE

- Location** Idaho: BOUNDARY, IDAHO, and SHOSHONE counties, disjunct from Wenatchee Mtns., Washington.  
Washington: Yakima to Chelan counties
- Land Ownership** USFS (Nezperce, St. Joe, and probably Clearwater N.F.)
- Habitat** Mostly rocky outcrops of varying substrate within subalpine fir and whitebark pine communities.
- Remarks** Seven locations known in Idaho. There are no apparent threats known at this time.
- Evaluation by** D. M. Henderson

*Lesquerella paysonii* Rollins

State  
WATCH LIST

BRASSICACEAE (Cruciferae)

**Location** Idaho: CARIBOU County  
Also in Wyoming and Utah.

**Land Ownership** USFS (Caribou N.F.)

**Habitat** Grows on rocky slopes of limestone and gypsum soils near upper tree line (Shultz and Shultz 1978).

**Remarks** More common in adjacent Wyoming, no threats evident.

**Evaluation by** K. E. Holte

*Lewisia columbiana* (Howell) Robins. var. *columbiana*

State  
WATCH LIST

PORTULACACEAE

**Location** Idaho: BONNER County (one site)  
Washington: widespread from Columbia River Gorge north along east side of Cascades to British Columbia

**Land Ownership** Idaho Dept. of Lands (Priest Lake Area), USFS (Kaniksu N.F.)

**Habitat** Granitic outcrop among arborvitae/hemlock/grand fir with *Sedum*, *Orobanche*, and *Cryptogramma*

**Remarks** One known location for this variety in Idaho. Plants abundant with no immediate threats to survival known.

**Evaluation by** D. M. Henderson

*Lewisia kelloggii* Brandg.

State  
WATCH LIST

PORTULACACEAE

Location	Idaho: CUSTER, ELMORE, and VALLEY counties, a Sierran disjunct California: Plumas to Mariposa counties
Land Ownership	USFS (Sawtooth NRA, Boise and Payette N.F.)
Habitat	Apparently from open, gravelly areas and talus within Douglas-fir to similar gravelly habitats near and above timberline where moist early in the spring.
Remarks	There are only three known locations for this taxon in Idaho. Field checking to establish abundance and distribution and to ascertain present or potential threats would be desirable.
Evaluation by	D. M. Henderson

*Lomatium dissectum* (Nutt.) Math. & Const. var. *dissectum*

State  
WATCH LIST

APIACEAE (Umbelliferae)

Location	Idaho: NEZ PERCE County Disjunct from its chief distribution west of the east base of the Cascades, from southern British Columbia to northern California.
Land Ownership	Private, but possible on BLM (Coeur d'Alene Dist.) and Idaho Dept. of Lands (Clearwater Area)
Habitat	One single site is described as a "prairie hillside."
Remarks	We have one known collection site near Lake Waha. This area should be revisited to search for additional populations, and to identify potential threats to the survival of this variety in Idaho. If threats are identified, it should be placed on the state Endangered list.
Evaluation by	S. J. Brunfeld

*Lomatogonium rotatum* (L.) Fries ex Nyman

State  
WATCH LIST

GENTIANACEAE

- Location** Idaho: unknown (see discussion under remarks)  
Apparently widespread in boreal regions of North America and Asia
- Land Ownership** Unknown
- Habitat** Wet, alkaline meadows of montane situations.
- Remarks** This boreal disjunct has been reported for Idaho, but the herbarium record remains unknown to me at this time. *Swertia perennis*, a species of very similar morphology, is fairly common in montane moist alkaline meadows of east-central Idaho.
- Evaluation by** D. M. Henderson

*Lupinus uncialis* Wats.

State  
WATCH LIST

FABACEAE (Leguminosae)

- Location** Idaho: OWYHEE County  
Also in Harney and Malheur counties, Oregon and in Nevada
- Land Ownership** BLM (Boise Dist.)
- Habitat** Sage/grass zone, in barren loose basaltic cinders
- Remarks** This tiny desert annual was recently discovered in Idaho by Roger Rosentreter. Because of its small size and annual nature, it may be more abundant than is presently known. However, the one Idaho site should be monitored until other locations are found.
- Evaluation by** R. Steele

*Carex hendersonii* Bailey

State  
WATCH LIST

CYPERACEAE

- Location** Idaho: CLEARWATER and IDAHO counties  
Coastal disjunct—west of the Cascades from Washington to California and in the drainages of the Clearwater, Lochsa, and Selway rivers in Idaho.
- Land Ownership** USFS (Clearwater, Nez Perce, and St. Joe N.F.), BLM (Coeur d'Alene Dist.), Idaho Dept. of Lands (Clearwater and St. Joe areas), and private
- Habitat** Boggy or spring places to moist forests (*Thuja plicata*/*Dryopteris* spp., *Thuja plicata*/*Adiantum pedatum*, and *Thuja plicata*/*Pachistima myrsinites* habitat types). This species characterizes one of the coastal zones found in northern Idaho river canyon bottoms (Steele 1971, Johnson and Steele 1978).
- Remarks** Crawford's (1980) maps of the total known extent of the *Carex hendersonii* zone show a range of over forty river miles where the species is known or expected to occur. There appear to be no current threats to the species, although dam building in the area would probably necessitate a change to Endangered status. The restricted habitat and this species' indicator value combine to make placement on the Watch List reasonable.
- Evaluation by** S. J. Brunsfeld

*Carex proposita* Mackenzie

State  
WATCH LIST

CYPERACEAE

- Location** Idaho: BLAINE, CUSTER, and ELMORE counties  
Also in Montana and Wenatchee Mountains, Washington.
- Land Ownership** USFS (Boise, Challis, and Sawtooth N.F., and Sawtooth NRA)
- Habitat** Various talus communities from mid-montane Douglas-fir forests to high alpine slopes and ridges.
- Remarks** A bipartite disjunct whose abundance and distribution are not yet fully understood. Because of its habitat, it is unlikely that any serious threats will develop. Since it is known from Beaverhead County, Montana, it is likely that it will be found in Lemhi County, Idaho, as well.
- Evaluation by** D. M. Henderson

*Lychnis apetala* L. var. *montana* (Wats.) Hitchc.

State  
WATCH LIST

CARYOPHYLLACEAE

<b>Location</b>	Idaho: LEMHI County Circumpolar species extending south in the Rocky Mtns. to Colorado.
<b>Land Ownership</b>	USFS (Challis N.F.)
<b>Habitat</b>	Moist <i>Geum rossii</i> tundra, on quartzitic substrate at 10,000 ft, associated with <i>Erigeron humilis</i> (Henderson et al. 1979).
<b>Remarks</b>	Known to us only from Bell Mtn. in the Lemhi Range, although reported for Idaho by Hitchcock and Cronquist (1973). The basis of this report is unknown and has not been revealed by our herbarium searches. Because of the inaccessibility of its habitat, no hazards to this species are currently thought to exist. However, with but a single location it should be monitored.
<b>Evaluation by</b>	S. J. Brunsfeld

*Lycopodium inundatum* L.

State  
WATCH LIST

LYCOPODIACEAE

<b>Location</b>	Idaho: BONNER County. Circumboreal, south to southern Washington (west of Cascades) Northern Idaho and northwest Montana
<b>Land Ownership</b>	USFS (Kaniksu N.F.), some private
<b>Habitat</b>	Sphagnum bogs
<b>Remarks</b>	Four collections, three possibly from same bog; the southern location was collected in 1923, others from 1951-1970. Quite rare and in a fragile habitat, but numerous bogs in the area, most unexplored. It should be monitored.
<b>Evaluation by</b>	F. D. Johnson

*Lycopodium sitchense* Rupr.

State  
WATCH LIST

LYCOPODIACEAE

- Location** Idaho: BONNER and IDAHO counties.  
Boreal in American and east Asia, scattered distribution in Oregon, Washington, Montana, Idaho. Nowhere common in the northwest U.S.
- Land Ownership** USFS (Kaniksu and Nezperce N.F.), possibly on BLM (Coeur d'Alene Dist.), and Idaho Dept. of Lands (Priest Lake, Pend Oreille Lake, and Clearwater areas).
- Habitat** Lakeside and streamside in mid-and upper elevation coniferous forests.
- Remarks** Quite rare, but apparently abundant habitat in the widely scattered range. It should be monitored.
- Evaluation by** F. D. Johnson

*Machaerocarpus californicus* (Torr.) Small  
Syn. *Damasonium californicus* Torr.

State  
WATCH LIST

ALISMATACEAE

- Location** Idaho: CAMAS and OWYHEE counties  
Also in California, Nevada, and Oregon.
- Land Ownership** BLM (Boise and Shoshone Dist.) and private.
- Habitat** Aquatic habitats in ditches, marshes, and playas.
- Remarks** This monotypic genus is uncommon and confined to a habitat subject to frequent use and alteration. In Idaho it is essentially known from two locations, but at present these habitats are not under great pressure. It is somewhat seral, but apparently has limited distributional ability. The Idaho populations should be monitored.
- Evaluation by** P. L. Packard



*Mertensia bella* Piper

State  
WATCH LIST

BORAGINACEAE

- Location** Idaho: CLEARWATER and IDAHO counties  
Also in southwestern Oregon.
- Land Ownership** USFS (Clearwater and Nezperce N.F.)
- Habitat** Occurs locally in the *Thuja plicata* zone along roadsides, cut-over areas, and in forests.
- Remarks** In Idaho, this species is known from relatively few areas in the Clearwater River drainage. It is more common in southwestern Oregon (Crawford 1980).
- Evaluation by** R. Steele

*Muhlenbergia glomerata* (Willd.) Trin.  
and *Muhlenbergia racemosa* (Michx.) B.S.P.

State  
WATCH LIST

POACEAE (Gramineae)

- Location** Idaho: BINGHAM, BONNER, and FREMONT counties  
Widespread across Canada and U.S.
- Land Ownership** Idaho Dept. of Lands (Pend Oreille Lake Area), Fort Hall Indian Reservation (Bingham County), and private or BLM (Idaho Falls Dist.) (Fremont County)
- Habitat** Wet meadows and bogs to various dry habitats including some cultivated lands.
- Remarks** These two grasses are very difficult to separate morphologically and are not always treated as separate species (Hitchcock et al. 1969). However, Pohl and Mitchell (1965) present ample evidence for the recognition of the diploid *M. glomerata*, found in wet meadows and bogs, as distinct from the tetraploid *M. racemosa* of more mesic to dry habitats. We apparently have both species, although rarely encountered. Apparent threats are unknown at this time.
- Evaluation by** D. M. Henderson

*Nemacladus rigidus* Curran

State  
WATCH LIST

CAMPANULACEAE

Location	Idaho: OWYHEE County Also in California, Nevada, and Oregon.
Land Ownership	BLM (Boise Dist.), or private
Habitat	In <i>Atriplex</i> - <i>Artemisia</i> zone on loose, sandy, cindery or ashy outcrops, cracks in basalt or in dried mud.
Remarks	This is an exceedingly infrequent annual, known to have been collected in Idaho only twice. Annuals are unpredictable in their occurrence, making them difficult to inventory or monitor.
Evaluation by	P. L. Packard

*Oryzopsis webberi* (Thurb.) Benth. ex Vasey

State  
WATCH LIST

POACEAE (Gramineae)

Location	Idaho: BONNEVILLE, CASSIA, and CLARK counties Numerous locations in Nevada, California, and Oregon.
Land Ownership	Mostly on BLM land (Idaho Falls and Burley Dist.)
Habitat	Apparently in rocky, gravelly, or sandy soils of sagebrush/bunchgrass vegetation on flats and low hills.
Remarks	Occurs sporadically on rangelands of four states which may be explained by the suggestion in Hitchcock et al. (1969) that this is an intergeneric hybrid with <i>Stipa</i> .
Evaluation by	D. M. Henderson

*Oxalis trilliifolia* Hook

State  
WATCH LIST

OXALIDACEAE

- Location** Idaho: BONNER County. Principal population is west of the Cascades from Washington to northern California. This is the only known location east of the Cascades.
- Land Ownership** Probably private, but may be on Idaho Dept. of Lands (Priest Lake Area). Possibly USFS (Kaniksu N.F.)
- Habitat** *Tsuga heterophylla* forest zone. "Dense cedar woods in pockets under trees." West of Cascades—"moist woods and meadows."
- Remarks** Collected but once in 1944. Recreational and cabin site disturbance in the probable location may have extirpated the population. It is at least very rare and may be extinct. Locate this plant and monitor.
- Evaluation by** F. D. Johnson

*Oxytheca dendroidea* Nutt.

State  
WATCH LIST

POLYGONACEAE

- Location** Idaho: BINGHAM, BUTTE, ELMORE, and FREMONT counties  
Also in California, Nevada, Oregon, and Washington.
- Land Ownership** BLM (Boise and Idaho Falls Dist.), possibly private, and Idaho Dept. of Lands (Southwest, South Central, and Eastern areas).
- Habitat** Sagebrush/grass zone on active sand dunes (only in this part of its range).
- Remarks** This is a widespread plant and in the general part of its range it is quite aggressive. The Idaho populations grow on active sand and lack this characteristic. Their prospects for survival are tenuous, only two populations are probably extant. The Idaho populations possibly represent a different ecotype and may need protection.
- Evaluation by** P. L. Packard and B. Ertter

*Saxifraga tolmiei* T. & G. var. *ledifolia* (Greene) Engl. & Irmsch

State  
WATCH LIST

SAXIFRAGACEAE

- Location** Idaho: IDAHO and VALLEY counties  
A disjunct variety from California.
- Land Ownership** USFS (Payette N.F.), possibly Idaho Dept. of Lands (Payette Lake Area)
- Habitat** Granitic talus in spruce-fir or moist subalpine vegetation.
- Remarks** This variety has an interesting distribution, being disjunct and possibly relict. It does not require protection at this time, but should be noted so that future hiking trails or roads can be routed around it.
- Evaluation by** P. L. Packard

*Scheuchzeria palustris* L.

State  
WATCH LIST

SCHEUCHZERIACEAE (Juncaginaceae)

- Location** Idaho: BONNER County  
Circumboreal, extending south to northern California, northeastern Washington, northern Idaho, northwestern Montana, and east into the Lake states.
- Land Ownership** Private and USFS (Kaniksu N.F.), possibly Idaho Dept. of Lands (Priest Lake Area)
- Habitat** Bogs in coniferous forests. In Idaho, in *Tsuga heterophylla* zone. "In peat bog," "in *Carex* belt around lake."
- Remarks** Despite nine collections, there are only two locations. But like a number of bog species in this vicinity, this may reflect a lack of collectors willing to put up with wet feet and mosquitoes. There are a goodly number of bogs in the area. Despite its rarity, the bog habitats are not being disturbed, and there are numerous unexplored bogs. It should be monitored. Rumley (1956) describes in detail one of the two locations.
- Evaluation by** F. D. Johnson

*Scirpus cyperinus* (L.) Kunth

State  
WATCH LIST

CYPERACEAE

Location	Idaho: KOOTENAI and LATAH counties Widespread from Newfoundland to Florida, Minnesota, Missouri, Texas, and occasionally to British Columbia
Land Ownership	BLM (Coeur d'Alene Dist.) and USFS (St. Joe N.F.)
Habitat	Grows along rivulets and other wet areas in <i>Thuja-Tsuga</i> zone.
Remarks	Rarely collected in Idaho.
Evaluation by	R. Steele

*Sedum lanceolatum* Torr. var. *rupicolum* (G. N. Jones) C. L. Hitchc.  
Syn. *S. rupicolum* G. N. Jones

State  
WATCH LIST

CRASSULACEAE

Location	Idaho: IDAHO and SHOSHONE counties Washington: Kittitas and Chelan counties
Land Ownership	USFS (St. Joe N.F.), private and possibly BLM (Coeur d'Alene Dist.)
Habitat	Details unknown, but does occur in dry, open, rocky sites with grand fir, Douglas-fir and mountain hemlock, across a wide variety of parent rock types, generally at higher elevations.
Remarks	According to Clausen (1975) <i>S. rupicolum</i> G.N. Jones is restricted to the Wenatchee Mountains of Washington. Hitchcock et al. (1964) suggest that the Idaho plants closely approach this taxon. Clausen maintains that the Idaho plants should be referred to as <i>Sedum borschii</i> R.T. Clausen. That the western Idaho plants do not fit well into any category is amply elucidated by Heidel (1979) and further studies in the taxonomy and ecology of the western Idaho plants are indicated.
Evaluation by	D. M. Henderson

*Selaginella douglasii* (Hook. & Grey.) Spring

State  
WATCH LIST

SELAGINELLACEAE

- Location** Idaho: CLEARWATER, IDAHO, and NEZ PERCE counties  
Confined to the Columbia River Gorge and northern Idaho.
- Land Ownership** Private, BLM (Coeur d'Alene Dist.), USFS (Clearwater, Nezperce, Payette N.F.)
- Habitat** Mossy rocks, often but not always, streamside, generally under low-elevation western redcedar or grand fir forests.
- Remarks** This unique *Selaginella* was until recently thought to have a small disjunct population in Idaho. We've found that Idaho perhaps has the major population, with a disjunct in the Columbia River Gorge (Oregon and Washington). Nonetheless, it is rare and confined to the immediate canyon bottoms where roads, dams and other human activities are maximum. Thus, it should be monitored. Depending on its rarity in Oregon and Washington, this could be elevated to the Federal Watch List.
- Evaluation by** F. D. Johnson

*Stellaria calycantha* (Ledeb.) Bong. var. *calycantha*

State  
WATCH LIST

CARYOPHYLLACEAE

- Location** Idaho: BONNER, IDAHO, and KOOTENAI counties  
Circumpolar species extending south into our mountains. This is a northern variety "possibly not quite within our range."
- Land Ownership** USFS (Kaniksu, Nezperce, and St. Joe N.F.), BLM (Coeur d'Alene Dist.), Idaho Dept. of Lands (Priest Lake Area)
- Habitat** Moist places.
- Remarks** A poorly defined variety in a taxonomically difficult genus. All three known Idaho collections need to be confirmed by an expert, as will any future collections.
- Evaluation by** S. J. Brunsfeld

*Stellaria simcoei* (Howell) Hitchc.  
Syn. *S. borealis* var. *simcoei*, *S. washingtoniana*

State  
WATCH LIST

CARYOPHYLLACEAE

**Location** Idaho: BOUNDARY, CAMAS, SHOSHONE and VALLEY counties  
Cascade and Olympic Mountains, Washington to California, east to Idaho, western  
Montana and northeastern Wyoming.

**Land Ownership** USFS (Kaniksu, Sawtooth, and St. Joe N.F.), Idaho Dept. of Lands (Priest Lake Area),  
BLM (Coeur d'Alene Dist.)

**Habitat** "Mostly at higher elevations along streams and in meadows."

**Remarks** A small and easily overlooked plant known from five locations in Idaho. Much more  
field investigation is needed in these often-ignored moist habitats.

**Evaluation by** S. J. Brunsfeld

*Stipa pinetorum* M. E. Jones

State  
WATCH LIST

POACEAE (Gramineae)

**Location** Idaho: CLARK and CUSTER counties  
Widespread throughout western U.S.

**Land Ownership** BLM (Idaho Falls Dist.) and USFS (Challis and Targhee N.F.)

**Habitat** Sagebrush/bunchgrass through various forest types to alpine, generally where soils are  
dry and rocky, from about 5,000 ft to over 10,000 ft elevation.

**Remarks** Four populations known for Idaho—little data on abundance, distribution, and potential  
threats.

**Evaluation by** D. M. Henderson

*Stipa viridula* Trin.

State  
WATCH LIST

POACEAE (Gramineae)

- Location** Idaho: CLARK, ELMORE, and OWYHEE counties  
Widespread through much of western North America.
- Land Ownership** BLM (Boise Dist.), USFS (Boise and Targhee N.F.)
- Habitat** Big sagebrush/bunchgrass on dry slopes and flats of lower elevations.
- Remarks** Four populations known for the state—abundance, distribution, and possible threats mostly unknown at this time.
- Evaluation by** D. M. Henderson

*Streptopus streptopoides* (Ledeb.) Frye & Rigg var. *brevipes* (Baker) Fassett

State  
WATCH LIST

LILIACEAE

- Location** Idaho: BONNER or BOUNDARY counties.  
A circumboreal species, this is the North American variant of the species. It extends south to northern Washington and northern Idaho.
- Land Ownership** USFS (Kaniksu N.F.), Idaho Dept. of Lands (Priest Lake Area)
- Habitat** "Mature timber," (in this area either *Tsuga heterophylla* and/or *Thuja plicata* would be the most likely overstory).
- Remarks** This plant is very rare; its successional status is assumed to be near-climax. While there are ample forests of this type, we know nothing of its micro-habitat. It should be monitored. The only collection was made in 1925. This area was, until recently, very remote. Similar habitat a few miles south, however, has been reasonably well collected. Layser (1980) recently collected it in adjacent Washington.
- Evaluation by** F. D. Johnson



*Synthyris platycarpa* Gail & Pennell

State  
WATCH LIST

SCROPHULARIACEAE

Location	Idaho: IDAHO and CLEARWATER counties Idaho endemic
Land Ownership	USFS (Nezperce and Clearwater N.F.), possibly some Idaho Dept. of Lands (Coeur d'Alene Area)
Habitat	In openings, clearcuts and also beneath climax forests of <i>Thuja plicata</i> , <i>Abies grandis</i> and <i>A. lasiocarpa</i>
Remarks	While Crawford (1980) has demonstrated that this species is under no threat, it is a narrow endemic and should be monitored.
Evaluation by	F. D. Johnson

*Teucrium canadense* L. var. *occidentale* (Gray) McClintock & Epling

State  
WATCH LIST

LAMIACEAE (Labiatae)

Location	Idaho: ADA, CANYON, and WASHINGTON counties Throughout most of the U.S. and adjacent parts of Canada and Mexico, apparently wanting from Idaho and Montana, but occasionally collected in Oregon, Washington, and British Columbia (Hitchcock, et al. 1959).
Land Ownership	Most likely all private.
Habitat	Riparian zone along major rivers.
Remarks	Only three collections of this species are known from Idaho.
Evaluation by	P. L. Packard

*Thelypteris nevadensis* (Baker) Clute ex Morton

State  
WATCH LIST

POLYPODIACEAE

- Location** Idaho: CLEARWATER County  
The principle range of this species is west of the Cascades from southern Washington to central California. This is the only known location east of the Cascades. Taylor (1970) maps one site in Columbia River Gorge area, remainder, all west.
- Land Ownership** USFS (Clearwater N.F.)
- Habitat** Climax *Thuja plicata* forest. Seepage area with *Equisetum sylvaticum*.
- Remarks** A single population was found by R. Steele in 1971. While doing research in the area, extensive searching was done for other locations with no success. Nonetheless, the similarity of this fern to small *Athyrium filix-femina* suggests that more *Thelypteris* may be in the vicinity (Johnson & Steele 1978). We must assume this plant to be very rare, and thus it requires monitoring.
- Evaluation by** F. D. Johnson

*Trientalis arctica* Fisch.

State  
WATCH LIST

PRIMULACEAE

- Location** Idaho: BONNER and likely BOUNDARY counties  
Alaska south to central Oregon, east to Alberta.
- Land Ownership** USFS (Kaniksu N.F.), Idaho Dept. of Lands (Priest Lake Area)
- Habitat** On hummocks in sphagnum bogs often with *Gaultheria hispidula* or *Vaccinium oxycoccos*.
- Remarks** Known from very few locations in Idaho, and possibly less in Washington and Montana. Two known sites are quite heavily used for gathering cranberries in autumn. A very fragile habitat and rarity combine to warrant monitoring.
- Evaluation by** F. D. Johnson

*Trientalis latifolia* Hook.

State  
WATCH LIST

PRIMULACEAE

Location	Idaho: CLEARWATER and LATAH counties More common west of Cascades from British Columbia to California, also in Alberta.
Land Ownership	Private, USFS (Clearwater N.F.)
Habitat	Grows under timber in <i>Thuja plicata</i> forest.
Remarks	Occurs in Idaho as a Pacific coastal disjunct.
Evaluation by	R. Steele

*Trifolium haydenii* Porter

State  
WATCH LIST

FABACEAE (Leguminosae)

Location	Idaho: BUTTE, CLARK, FREMONT, and LEMHI counties. Also in adjacent Montana and Wyoming.
Land Ownership	USFS (Challis, Salmon, and Targhee N.F.)
Habitat	Numerous forest types to alpine, nearly always on dry, gravelly soil, especially limestone, from 7,000 ft to over 11,000 ft elevation.
Remarks	This species is locally common, but its occurrence is sporadic throughout eastern Idaho. At present, there are no known threats to its existence. Henderson 1978.
Evaluation by	D. M. Henderson

*Trifolium microdon* Hook. & Arn.

State  
WATCH LIST

FABACEAE (Leguminosae)

- Location** Idaho: ADAMS and OWYHEE counties  
More common west of Cascades from British Columbia to California.
- Land Ownership** BLM (Boise Dist.)
- Habitat** In meadows and sandy to rocky soil.
- Remarks** This is an unlikely distribution, and the collections need to be verified. No monitoring attempts should be made until the collections are examined.
- Evaluation by** P. L. Packard and J. Grimes

*Trifolium multipedunculatum* Kennedy

State  
WATCH LIST

FABACEAE (Leguminosae)

- Location** Idaho: IDAHO County  
The principle range of this species is east of the Cascades in Washington and Oregon. This is the only known location in Idaho.
- Land Ownership** One or more of the following—USFS (Nezperce N.F.), BLM (Coeur d'Alene Dist.), or Idaho Dept. of Lands (Payette Lake Area).
- Habitat** "Dry slopes and subalpine ridges" (Hitchcock et al. 1961). "Basalt outcrop" at 8000 ft.
- Remarks** This plant is present in the Wallowa Mountains, Oregon, some 80 km to the west across Hells Canyon. Basalt at this elevation is very rare in Idaho, and the site is quite inaccessible. Further examination of basalt at this elevation could be fruitful. This could be exceptionally rare.
- Evaluation by** F. D. Johnson

*Trifolium plumosum* Dougl.  
var. *amplifolium* Martin

State  
WATCH LIST

FABACEAE (Leguminosae)

Location	Idaho: IDAHO, NEZ PERCE, LEWIS, CLEARWATER and WASHINGTON counties Idaho endemic variety
Land Ownership	Uncertain. Private, primarily, one collection from USFS (Clearwater N.F.) and several peripheral to USFS (Nezperce and Payette N.F.), possibly Idaho Dept. of Lands
Habitat	In middle elevation grasslands (2000 to 4000 ft) and in open <i>Pinus ponderosa</i> forests
Remarks	Much more widespread than indicated in Hitchcock et al. (1961) or Hitchcock and Cronquist (1973). However, assessment of actual hazards has never been undertaken and since most of the population appears to be on private land, it should be monitored.
Evaluation by	F. D. Johnson

*Vaccinium oxycoccos* L.

State  
WATCH LIST

ERICACEAE

Location	Idaho: BONNER County Circumboreal. South in North America to Oregon and Idaho, in the west.
Land Ownership	Mostly USFS (Kaniksu N.F.), but also two known private ownerships. Idaho Dept. of Lands (Priest Lake Area) is possible.
Habitat	In coniferous forest, in Idaho <i>Tsuga heterophylla</i> zone, but microsites are frost pockets with <i>Abies lasiocarpa</i> . On sphagnum mats, usually at lake/pond margins; "Carex/peat mat," "on floating sphagnum island."
Remarks	Only nine sites, and five of these are vague in location. A fragile habitat dictates that monitoring would be wise, since three sites are known to be used by cranberry pickers.
Evaluation by	F. D. Johnson

*Veratrum californicum* Durand var. *caudatum* (Heller) Hitchc.

State  
WATCH LIST

LILIACEAE

- Location** Idaho: CLEARWATER and IDAHO counties.  
Sightings reported from ADAMS, LATAH and VALLEY counties.  
West of the Cascades in Washington and Oregon, "only very occasionally east of the Cascades."
- Land Ownership** USFS (Clearwater and Nezperce N.F.), BLM (Coeur d'Alene Dist.) and Idaho Dept. of Lands (Clearwater Area).
- Habitat** In meadows, mid-elevation conifer forests. Usually just above areas with strong coastal influence.
- Remarks** While not uncommon in certain areas, it is limited to areas of present (or past) strong coastal influence (Crawford 1980). Heavy use of meadows could alter this habitat with unknown effects on this coastal species. It should be monitored.
- Evaluation by** F. D. Johnson

*Viola sempervirens* Greene

State  
WATCH LIST

VIOLACEAE

- Location** Idaho: CLEARWATER and KOOTENAI counties  
Common west of Cascades from British Columbia to California.
- Land Ownership** USFS (Clearwater N.F.), US Army Corp of Engineers (Dworshak Reservoir)
- Habitat** Lower *Thuja plicata* zone with *Alnus rubra* in *Thuja plicata*/*Adiantum pedatum* h.t.
- Remarks** This disjunct from west of the Cascades occurs along the North Fork of the Clearwater River from Governor Creek to Marquette Creek (Johnson & Steele 1978). It has survived fire and elk impacts and does not appear to be threatened by present land management trends. However, a change in management policy that would result in more construction of roads and recreation sites could threaten this population. A collection site in Kootenai County (Reek 38202 WS) has not been relocated.
- Evaluation by** R. Steele

*Waldsteinia idahoensis* Piper

State  
WATCH LIST

ROSACEAE

<b>Location</b>	Idaho: IDAHO and CLEARWATER counties Idaho endemic
<b>Land Ownership</b>	Almost entirely USFS (Clearwater and Nezperce N.F.)
<b>Habitat</b>	Lower <i>Abies lasiocarpa</i> , <i>Thuja plicata</i> , and <i>Abies grandis</i> zones, often but not exclusively riparian, generally beneath conifers
<b>Remarks</b>	Crawford's work (1980) has shown this plant to be benefitted by some types of disturbance and reasonably common. Nonetheless it is a localized endemic and should be monitored.
<b>Evaluation by</b>	F. D. Johnson

## TAXA CONSIDERED FOR IDAHO STATE LISTING AND REJECTED

Nomenclature follows Hitchcock and Cronquist (1973). The person's name following species and family indicates the source of recommendation.

<i>Agropyron scribneri</i>	POACEAE (Gramineae)	D. M. Henderson
<i>Allium bisceptrum</i>	LILIACEAE	F. D. Johnson
<i>Allium douglasii</i> var. <i>columbiana</i>	LILIACEAE	F. D. Johnson
<i>Anelsonia eurycarpa</i>	BRASSICACEAE (Cruciferae)	D. M. Henderson
<i>Anemone drummondii</i> var. <i>drummondii</i>	RANUNCULACEAE	S. J. Brunsfeld
<i>Anemone piperi</i> (double-flowered form)	RANUNCULACEAE	F. D. Johnson
<i>Aquilegia coerulea</i> var. <i>coerulea</i>	RANUNCULACEAE	D. M. Henderson
<i>Arabis crucisetosa</i>	BRASSICACEAE (Cruciferae)	F. D. Johnson
<i>Arenaria rossii</i> var. <i>apetala</i>	CARYOPHYLLACEAE	D. M. Henderson
<i>Arenaria rubella</i>	CARYOPHYLLACEAE	D. M. Henderson
<i>Artemisia douglasiana</i>	ASTERACEAE (Compositae)	F. D. Johnson
<i>Artemisia longiloba</i>	ASTERACEAE (Compositae)	P. L. Packard
<i>Artemisia packardiae</i>	ASTERACEAE (Compositae)	P. L. Packard
<i>Astragalus adanus</i>	FABACEAE (Leguminosae)	R. Steele
<i>Astragalus arrectus</i>	FABACEAE (Leguminosae)	S. J. Brunsfeld
<i>Astragalus iodanthus</i> var. <i>vipereus</i>	FABACEAE (Leguminosae)	P. L. Packard
<i>Astragalus nudisiliquus</i>	FABACEAE (Leguminosae)	P. L. Packard
<i>Atriplex idahoense</i>	CHENOPODIACEAE	P. L. Packard
<i>Bolandra oregana</i>	SAXIFRAGACEAE	F. D. Johnson
<i>Botrychium virginianum</i>	OPHIOGLOSSACEAE	F. D. Johnson



<i>Calamagrostis koelerioides</i>	POACEAE (Gramineae)	K. E. Holte
<i>Caltha leptosepala</i> var. <i>sulphurea</i>	RANUNCULACEAE	D. M. Henderson
<i>Calypto bulbosa</i>	ORCHIDACEAE	R. Steele
<i>Carex elynoides</i>	CYPERACEAE	S. J. Brunsfeld
<i>Carex eurycarpa</i>	CYPERACEAE	R. Steele
<i>Carex multicosata</i>	CYPERACEAE	R. Steele
<i>Carex scoparia</i>	CYPERACEAE	D. M. Henderson
<i>Carex subnigricans</i>	CYPERACEAE	D. M. Henderson
<i>Carex sychnocephala</i>	CYPERACEAE	S. J. Brunsfeld
<i>Castilleja longispica</i>	SCROPHULARIACEAE	K. E. Holte
<i>Cheilanthes feei</i>	POLYPODIACEAE	F. D. Johnson
<i>Chrysothamnus parryi</i> var. <i>a</i>	ASTERACEAE (Compositae)	D. M. Henderson
<i>Chrysothamnus parryi</i> var. <i>b</i>	ASTERACEAE (Compositae)	D. M. Henderson
<i>Cirsium magnificum</i>	ASTERACEAE (Compositae)	K. E. Holte
<i>Claytonia megarhiza</i> var. <i>bellidifolia</i>	PORTULACACEAE	P. L. Packard
<i>Corydalis caseana</i> var. <i>cusickii</i>	FUMARIACEAE	R. Steele
<i>Cryptantha salmonensis</i>	BORAGINACEAE	D. M. Henderson
<i>Cryptantha scoparia</i>	BORAGINACEAE	D. M. Henderson
<i>Cyperus schweinitzii</i>	CYPERACEAE	S. J. Brunsfeld
<i>Cypripedium montanum</i>	ORCHIDACEAE	R. Steele
<i>Draba oreibata</i>	BRASSICACEAE (Cruciferae)	D. M. Henderson
<i>Dryopteris arguta</i>	POLYPODIACEAE	F. D. Johnson
<i>Elymus ambiguus</i>	POACEAE (Gramineae)	D. M. Henderson
<i>Enceliopsis nudicaulis</i>	ASTERACEAE (Compositae)	D. M. Henderson
<i>Equisetum sylvaticum</i>	EQUISETACEAE	F. D. Johnson
<i>Erigeron asperugineus</i>	ASTERACEAE (Compositae)	S. J. Brunsfeld
<i>Erigeron disparipilus</i>	ASTERACEAE (Compositae)	P. L. Packard

<i>Erigeron engelmannii</i> var. <i>davisii</i>	ASTERACEAE (Compositae)	K. E. Holte
<i>Erigeron evermannii</i>	ASTERACEAE (Compositae)	R. Steele
<i>Eriogonum</i> sp. nov.	POLYGONACEAE	D. M. Henderson
<i>Eritrichium nanum</i>	BORAGINACEAE	D. M. Henderson
<i>Gilia spicata</i>	POLEMONIACEAE	D. M. Henderson
<i>Glossopetalon nevadense</i>	CELASTRACEAE	R. Steele
<i>Habenaria orbiculata</i>	ORCHIDACEAE	F. D. Johnson
<i>Haplopappus greenei</i>	ASTERACEAE (Compositae)	R. Steele
<i>Hydrophyllum fendleri</i> var. <i>albifrons</i>	HYDROPHYLLACEAE	F. D. Johnson
<i>Juncus colvillei</i>	JUNCACEAE	R. Steele
<i>Juncus interior</i>	JUNCACEAE	S. J. Brunfeld
<i>Kelseya uniflora</i>	ROSACEAE	D. M. Henderson
<i>Langloisia punctata</i>	POLEMONIACEAE	D. M. Henderson
<i>Lathyrus bijugatus</i>	FABACEAE (Leguminosae)	F. D. Johnson
<i>Leptodactylon watsonii</i>	POLEMONIACEAE	P. L. Packard
<i>Lewisia pygmaea</i> var. <i>nevadensis</i>	PORTULACACEAE	D. M. Henderson
<i>Ligusticum verticillatum</i>	APIACEAE (Umbelliferae)	F. D. Johnson
<i>Lomatium idahoense</i>	APIACEAE (Umbelliferae)	R. Steele
<i>Lupinus lyalli</i> ssp. <i>repandens</i>	FABACEAE (Leguminosae)	P. L. Packard
<i>Luzula piperi</i>	JUNCACEAE	R. Steele
<i>Lycopodium complanatum</i>	LYCOPODIACEAE	R. Steele
<i>Malacothrix torreyi</i>	ASTERACEAE (Compositae)	P. L. Packard
<i>Mentzelia torreyi</i> var. <i>torreyi</i>	LOASACEAE	P. L. Packard
<i>Nemophila kirtleyi</i>	HYDROPHYLLACEAE	F. D. Johnson
<i>Oenothera pallida</i> var. <i>idahoensis</i>	ONAGRACEAE	P. L. Packard
<i>Oryzopsis swallenii</i>	POACEAE (Gramineae)	D. M. Henderson
<i>Panicum dichotomiflorum</i>	POACEAE (Gramineae)	P. L. Packard

<i>Penstemon flavescens</i>	SCROPHULARIACEAE	F. D. Johnson
<i>Penstemon glandulosus</i> var. <i>glandulosus</i>	SCROPHULARIACEAE	R. Steele
<i>Penstemon minidokanus</i>	SCROPHULARIACEAE	R. Steele
<i>Penstemon perpulcher</i>	SCROPHULARIACEAE	R. Steele
<i>Penstemon pumilus</i>	SCROPHULARIACEAE	D. M. Henderson
<i>Penstemon triphyllus</i>	SCROPHULARIACEAE	F. D. Johnson
<i>Phacelia idahoensis</i>	HYDROPHYLLACEAE	F. D. Johnson
<i>Phacelia incana</i>	HYDROPHYLLACEAE	D. M. Henderson
<i>Phlox albomarginata</i>	POLEMONIACEAE	D. M. Henderson
<i>Phlox colubrina</i>	POLEMONIACEAE	D. M. Henderson
<i>Physaria oregana</i>	BRASSICACEAE (Cruciferae)	D. M. Henderson
<i>Physocarpus capitatus</i>	ROSACEAE	F. D. Johnson
<i>Plectritis ciliosa</i>	VALERIANACEAE	F. D. Johnson
<i>Poa alpina</i>	POACEAE (Gramineae)	D. M. Henderson
<i>Poa lettermanii</i>	POACEAE (Gramineae)	D. M. Henderson
<i>Polypodium hesperium</i>	POLYPODIACEAE	F. D. Johnson
<i>Ranunculus oresterus</i>	RANUNCULACEAE	R. Steele
<i>Ribes cereum</i> var. <i>colubrinum</i>	GROSSULARIACEAE	F. D. Johnson
<i>Rubus nivalis</i>	ROSACEAE	F. D. Johnson
<i>Rubus pedatus</i>	ROSACEAE	F. D. Johnson
<i>Rubus ursinus</i>	ROSACEAE	F. D. Johnson
<i>Sagittaria latifolia</i>	ALISMATACEAE	S. J. Brunsfeld
<i>Saxifraga debilis</i>	SAXIFRAGACEAE	D. M. Henderson
<i>Shepherdia argentea</i>	ELEAGNACEAE	R. Steele
<i>Stenanthium occidentale</i>	LILIACEAE	F. D. Johnson
<i>Symphoricarpos mollis</i>	CAPRIFOLIACEAE	F. D. Johnson
<i>Synthyris pinnatifida</i> var. <i>pinnatifida</i>	SCROPHULARIACEAE	K. E. Holte
<i>Tonella floribunda</i>	SCROPHULARIACEAE	F. D. Johnson
<i>Townsendia condensata</i>	ASTERACEAE (Compositae)	D. M. Henderson

<i>Townsendia leptotes</i>	ASTERACEAE (Compositae)	D. M. Henderson
<i>Vaccinium ovalifolium</i>	ERICACEAE	F. D. Johnson
<i>Viola canadensis</i> var. <i>rugulosa</i>	VIOLACEAE	F. D. Johnson
<i>Zauschneria garrettii</i>	ONAGRACEAE	K. E. Holte

SUMMARY OF PROBABLE LAND OWNERSHIP FOR  
TAXA OF IDAHO STATE CONCERN

BUREAU OF LAND MANAGEMENT

Boise District

*Astragalus vallis* SWL  
*Carex sitchensis* SWL  
*Ceanothus prostratus* S-T  
*Cleomella plocasperma* SWL  
*Cymopterus corrugatus* SWL  
*Dimeresia howellii* S-T  
*Eatonella nivea* SWL  
*Epipactis gigantea* S-T  
*Eriogonum thymoides* SWL  
*Glyptopleura marginata* SWL  
*Gymnosteris nudicaulis* SWL  
*Hydrophyllum occidentale* v. *watsonii* S-T  
*Ivesia baileyi* SWL  
*Lupinus uncialis* SWL  
*Machaerocarpus californicus* SWL  
*Nemacladus rigidus* SWL  
*Oxytheca dendroidea* SWL  
*Pediocactus simpsonii* v. *robustior* SWL  
*Peraphyllum ramosissimum* SWL  
*Peteria thompsonae* S-T  
*Phacelia minutissima* S-T  
*Phacelia procera* SWL  
*Stipa viridula* SWL  
*Trifolium microdon* SWL

Burley District

*Allium anceps* S-T  
*Astragalus tetrapterus* S-T  
*Glyptopleura marginata* SWL  
*Gymnosteris nudicaulis* SWL  
*Hymenoxys richardsonii* SWL  
*Oryzopsis webberi* SWL

Coeur d'Alene District

*Agrostis oregonensis* SWL  
*Astragalus riparius* S-T  
*Blechnum spicant* SWL  
*Cardamine constancei* SWL  
*Carex hendersonii* SWL  
*Collomia heterophylla* SWL  
*Cypripedium fasciculatum* SWL  
*Dodecatheon dentatum* SWL  
*Lomatium dissectum* v. *dissectum* SWL  
*Lycopodium sitchense* SWL  
*Pediocactus simpsonii* v. *robustior* SWL  
*Scirpus cyperinus* SWL  
*Sedum lanceolatum* v. *rupicolum* WL  
*Selaginella douglasii* SWL  
*Stellaria calycantha* v. *calycantha* SWL

*Stellaria simcoei* SWL  
*Trifolium multipedunculatum* SWL  
*Veratrum californicum* v. *caudatum* SWL

Idaho Falls District

*Astragalus platytropis* SWL  
*Bouteloua gracilis* SWL  
*Coryphantha missouriensis* SWL  
*Cuscuta denticulata* SWL  
*Elaeagnus commutata* SWL  
*Gymnosteris nudicaulis* SWL  
*Muhlenbergia glomerata* SWL  
*Muhlenbergia racemosa* SWL  
*Oryzopsis webberi* SWL  
*Oxytheca dendroidea* SWL  
*Primula incana* S-T  
*Stipa pinetorum* SWL

Salmon District

*Coryphantha missouriensis* SWL  
*Eatonella nivea* SWL

Shoshone District

*Eriogonum thymoides* SWL  
*Gymnosteris nudicaulis* SWL  
*Machaerocarpus californicus* SWL  
*Phacelia minutissima* S-T

CITY OF CALDWELL

*Bacopa rotundifolia* S-E  
*Juncus effusus* v. *pacificus* S-T  
*Lindernia anagallidea* S-T  
*Mimulus ringens* S-T

FORT HALL INDIAN RESERVATION

*Carex tumulicola* SWL  
*Muhlenbergia glomerata* SWL  
*Muhlenbergia racemosa* SWL

IDAHO DEPARTMENT OF LANDS

Clearwater Area

*Blechnum spicant* SWL  
*Carex hendersonii* SWL  
*Collomia heterophylla* SWL  
*Cypripedium fasciculatum* SWL  
*Lomatium dissectum* v. *dissectum* SWL  
*Lycopodium sitchense* SWL

*Psilocarphus tenellus* SWL  
*Veratrum californicum* v. *caudatum* SWL

Coeur d'Alene Area

*Cardamine constancei* SWL  
*Collomia heterophylla* SWL

Eastern Area

*Gymnosteris nudicaulis* SWL  
*Oxytheca dendroidea* SWL  
*Primula incana* S-T

Payette Lake Area

*Astragalus vallis* SWL  
*Pellaea bridgesii* SWL  
*Saxifraga tolmiei* v. *ledifolia* SWL  
*Trifolium multipedunculatum* SWL

Pend Oreille Lake Area

*Blechnum spicant* SWL  
*Botrychium lunaria* v. *onondagense* SWL  
*Carex buxbaumii* SWL  
*Hypericum majus* S-T  
*Lycopodium sitchense* SWL  
*Muhlenbergia glomerata* SWL  
*Muhlenbergia racemosa* SWL

Priest Lake Area

*Dryopteris cristata* S-T  
*Gaultheria hispidula* SWL  
*Hypericum majus* S-T  
*Lewisia columbiana* v. *columbiana* SWL  
*Lycopodium sitchense* SWL  
*Maianthemum dilatatum* S-E  
*Oxalis trilliifolia* SWL  
*Petasites sagittatus* SWL  
*Ribes howellii* SWL  
*Rubus spectabilis* SWL  
*Sanicula marilandica* SWL  
*Scheuchzeria palustris* SWL  
*Stellaria calycantha* v. *calycantha* SWL  
*Stellaria simcoei* SWL  
*Streptopus streptopoides* v. *brevipes* SWL  
*Trientalis arctica* SWL  
*Vaccinium oxycoccos* SWL

South Central Area

*Eriogonum thymoides* SWL  
*Glyptopleura marginata* SWL  
*Gymnosteris nudicaulis* SWL  
*Oxytheca dendroidea* SWL

Southwest Area

*Dimeresia howellii* S-T  
*Eriogonum thymoides* SWL  
*Glyptopleura marginata* SWL  
*Gymnosteris nudicaulis* SWL  
*Hydrophyllum occidentale* v. *watsonii* S-T  
*Oxytheca dendroidea* SWL

St. Joe Area

*Blechnum spicant* SWL  
*Carex hendersonii* SWL

NATIONAL PARK SERVICE

None

NATURE CONSERVANCY

*Cymopterus corrugatus* SWL

PRIVATE INDIVIDUALS OR CORPORATIONS

*Agrostis oregonensis* SWL  
*Astragalus riparius* S-T  
*Astragalus vallis* SWL  
*Berberis nervosa* SWL  
*Blechnum spicant* SWL  
*Bouteloua gracilis* SWL  
*Cardamine constancei* SWL  
*Carex aenea* SWL  
*Carex buxbaumii* SWL  
*Carex hendersonii* SWL  
*Carex sitchensis* SWL  
*Ceanothus prostratus* S-T  
*Cleomella plocasperma* SWL  
*Cornus nuttallii* SWL  
*Corydalis caseana* v. *hastata* SWL  
*Coryphantha missouriensis* SWL  
*Coryphantha vivipara* SWL  
*Cryptantha simulans* SWL  
*Cymopterus corrugatus* SWL  
*Dimeresia howellii* S-T  
*Dodecatheon dentatum* SWL  
*Eatonella nivea* SWL  
*Eburophyton austinae* SWL  
*Elaeagnus commutata* SWL  
*Epipactis gigantea* S-T  
*Glyptopleura marginata* SWL  
*Gymnosteris nudicaulis* SWL  
*Hymenoxys richardsonii* SWL  
*Hypericum majus* S-T  
*Lindernia anagallidea* S-T  
*Lomatium dissectum* v. *dissectum* SWL  
*Lycopodium inundatum* SWL  
*Machaerocarpus californicus* SWL  
*Mimulus ringens* S-T  
*Muhlenbergia glomerata* SWL

*Muhlenbergia racemosa* SWL  
*Nemacladus rigidus* SWL  
*Oxalis trilliifolia* SWL  
*Oxytheca dendroidea* SWL  
*Pediocactus simpsonii* v. *robustior* SWL  
*Peraphyllum ramosissimum* SWL  
*Peteria thompsonae* S-T  
*Phacelia minutissima* S-T  
*Phacelia procera* SWL  
*Primula incana* S-T  
*Psilocarphus tenellus* SWL  
*Psoralea physodes* S-T  
*Rhinanthus crista-galli* SWL  
*Ribes sanguineum* S-T  
*Rubus spectabilis* SWL  
*Sanicula marilandica* SWL  
*Scheuchzeria palustris* SWL  
*Sedum lanceolatum* v. *rupicolum* SWL  
*Selginella douglasii* SWL  
*Teucrium canadense* v. *occidentale* SWL  
*Trientalis latifolia* SWL  
*Vaccinium oxycoccos* SWL  
*Viburnum opulus* v. *americanum* S-E

## UNITED STATES FOREST SERVICE

### Boise National Forest

*Agrostis oregonensis* SWL  
*Allium validum* SWL  
*Carex flava* SWL  
*Carex proposita* SWL  
*Cryptantha simulans* SWL  
*Epilobium obcordatum* SWL  
*Epipactis gigantea* S-T  
*Hydrophyllum occidentale* v. *watsonii* S-T  
*Ivesia baileyi* SWL  
*Lewisia kelloggii* SWL  
*Pellaea bridgesii* SWL  
*Stipa viridula* SWL

### Caribou National Forest

*Astragalus paysonii* SWL  
*Carex tumulicola* SWL  
*Cryptantha breviflora* SWL  
*Lesquerella paysonii* SWL

### Challis National Forest

*Astragalus platytropis* SWL  
*Carex proposita* SWL  
*Carex rupestris* SWL  
*Carex stramineiformis* SWL  
*Erigeron humilis* SWL  
*Erigeron radicans* SWL  
*Gentiana propinqua* SWL  
*Gentiana tenella* SWL  
*Lychnis apetala* v. *montana* SWL

*Papaver kluanensis* S-E  
*Polystichum kruckebergii* SWL  
*Salix farriarum* S-T  
*Saxifraga adscendens* v. *oregonensis* SWL  
*Saxifraga cernua* SWL  
*Stipa pinetorum* SWL  
*Trifolium haydenii* SWL

### Clearwater National Forest

*Achillea millefolium* v. *californicum* SWL  
*Agrostis oregonensis* SWL  
*Asplenium trichomanes* S-E  
*Berberis nervosa* SWL  
*Blechnum spicant* SWL  
*Cardamine constancei* SWL  
*Carex californica* SWL  
*Carex hendersonii* SWL  
*Collomia heterophylla* SWL  
*Corydalis caseana* v. *hastata* SWL  
*Cypripedium fasciculatum* SWL  
*Dodecatheon dentatum* SWL  
*Dodecatheon hendersonii* S-T  
*Eburophyton austiniiae* SWL  
*Ivesia tweedyi* SWL  
*Juncus effusus* v. *pacificus* S-T  
*Mertensia bella* SWL  
*Polypodium glycyrrhiza* SWL  
*Selaginella douglasii* SWL  
*Synthyris platycarpa* SWL  
*Thelypteris nevadensis* SWL  
*Trientalis latifolia* SWL  
*Veratrum californicum* v. *caudatum* SWL  
*Viola sempervirens* SWL  
*Waldsteinia idahoensis* SWL

### Coeur d'Alene National Forest

*Blechnum spicant* SWL  
*Carex aenea* SWL  
*Carex stramineiformis* SWL  
*Carex tumulicola* SWL

### Kaniksu National Forest

*Berberis nervosa* SWL  
*Botrychium lunaria* v. *onondagense* SWL  
*Carex sitchensis* SWL  
*Dryopteris cristata* S-T  
*Gaultheria hispidula* SWL  
*Hypericum majus* S-T  
*Lewisia columbiana* v. *columbiana* SWL  
*Lycopodium inundatum* SWL  
*Lycopodium sitchensense* SWL  
*Maianthemum dilatatum* S-E  
*Oxalis trilliifolia* SWL  
*Petasites sagittatus* SWL  
*Ribes howellii* SWL  
*Rubus spectabilis* SWL

*Sanicula marilandica* SWL  
*Scheuchzeria palustris* SWL  
*Stellaria calycantha* v. *calycantha* SWL  
*Stellaria simcoei* SWL  
*Streptopus streptopoides* v. *brevipes* SWL  
*Trientalis arctica* SWL  
*Vaccinium oxycoccos* SWL

Nezperce National Forest  
(includes Hells Canyon N.R.A.)

*Allium anceps* S-T  
*Allium validum* SWL  
*Allotropa virgata* SWL  
*Astragalus paysonii* SWL  
*Campanula scabrella* SWL  
*Cardamine constancei* SWL  
*Carex aenea* SWL  
*Carex californica* SWL  
*Carex hendersonii* SWL  
*Collomia heterophylla* SWL  
*Cornus nuttallii* SWL  
*Corydalis caseana* v. *hastata* SWL  
*Cypripedium fasciculatum* SWL  
*Dodecatheon hendersonii* S-T  
*Epilobium watsonii* v. *parishii* SWL  
*Festuca subuliflora* S-T  
*Ivesia tweedyi* SWL  
*Lycopodium sitchense* SWL  
*Mertensia bella* SWL  
*Polystichum kruckebergii* SWL  
*Psilocarphus tenellus* SWL  
*Ribes wolfii* SWL  
*Selaginella douglasii* SWL  
*Stellaria calycantha* v. *calycantha* SWL  
*Synthesis platycarpa* SWL  
*Trifolium multipedunculatum* SWL  
*Veratrum californicum* v. *caudatum* SWL  
*Waldsteinia idahoensis* SWL

Payette National Forest

*Allotropa virgata* SWL  
*Astragalus vallaris* SWL  
*Campanula scabrella* SWL  
*Carex sitchensis* SWL  
*Epilobium watsonii* v. *parishii* SWL  
*Lewisia kelloggii* SWL  
*Pellaea bridgesii* SWL  
*Phacelia procera* SWL  
*Polygonum newberryi* SWL  
*Ribes wolfii* SWL  
*Sanicula graveolens* SWL  
*Saxifraga foliolosa* v. *foliolosa* SWL  
*Saxifraga tolmiei* v. *ledifolia* SWL  
*Selaginella douglasii* SWL

Salmon National Forest

*Astragalus platytropis* SWL  
*Campanula scabrella* SWL  
*Carex rupestris* SWL  
*Carex stramineiformis* SWL  
*Coryphantha vivipara* SWL  
*Epilobium obcordatum* SWL  
*Erigeron humilis* SWL  
*Erigeron radicans* SWL  
*Phacelia lyallii* SWL  
*Saxifraga cernua* SWL  
*Trifolium haydenii* SWL

Sawtooth National Forest  
(includes Sawtooth N.R.A.)

*Carex buxbaumii* SWL  
*Carex proposita* SWL  
*Carex rupestris* SWL  
*Coryphantha vivipara* SWL  
*Epilobium obcordatum* SWL  
*Erigeron humilis* SWL  
*Eriogonum desertorum* SWL  
*Lewisia kelloggii* SWL  
*Pediocactus simpsonii* v. *robustior* SWL  
*Saxifraga adscendens* v. *oregonensis* SWL  
*Stellaria simcoei* SWL

St. Joe National Forest

*Agrostis oregonensis* SWL  
*Blechnum spicant* SWL  
*Carex hendersonii* SWL  
*Cypripedium fasciculatum* SWL  
*Dodecatheon dentatum* SWL  
*Ivesia tweedyi* SWL  
*Scirpus cyperinus* SWL  
*Sedum lanceolatum* v. *rupicolum* SWL  
*Stellaria calycantha* v. *calycantha* SWL  
*Stellaria simcoei* SWL

Targhee National Forest

*Carex aenea* SWL  
*Carex rupestris* SWL  
*Elaeagnus commutata* SWL  
*Epipactis gigantea* S-T  
*Erigeron humilis* SWL  
*Erigeron radicans* SWL  
*Saxifraga cernua* SWL  
*Stipa pinetorum* SWL  
*Stipa viridula* SWL  
*Trifolium haydenii* SWL



UNITED STATES ARMY CORPS OF ENGINEERS

Dworshak Reservoir

*Dodecatheon dentatum* SWL

*Viola sempervirens* SWL

Kootenai River

*Viburnum opulus* v. *americanum* S-E

UNITED STATES SHEEP EXPERIMENT STATION

*Bouteloua gracilis* SWL

UNIVERSITIES AND COLLEGES

University of Idaho Experimental Forest

*Psoralea physodes* S-T

SUMMARY OF STATUS FOR TAXA OF IDAHO STATE CONCERN

PROPOSE AS ENDANGERED

None

TREAT AS ENDANGERED

*Asplenium trichomanes*  
*Bacopa rotundifolia*  
*Maianthemum dilatatum*  
*Papaver kluanensis*  
*Viburnum opulus* v. *americanum*

PROPOSE AS THREATENED

None

TREAT AS THREATENED

*Allium anceps*  
*Astragalus riparius*  
*Astragalus tetrapterus*  
*Ceanothus prostratus*  
*Dimeresia howellii*  
*Dodecatheon hendersonii*  
*Dryopteris cristata*  
*Epipactis gigantea*  
*Festuca subuliflora*  
*Hydrophyllum occidentale* v. *watsonii*  
*Hypericum majus*  
*Juncus effusus* v. *pacificus*  
*Lindernia anagallidea*  
*Mimulus ringens*  
*Peteria thompsonae*  
*Phacelia minutissima*  
*Primula incana*  
*Psoralea physodes*  
*Ribes sanguineum*  
*Salix farriae*

## STATE WATCH LIST

- Achillea millefolium* var. *californicum*  
*Agrostis oregonensis*  
*Allium validum*  
*Alloctropa virgata*  
*Astragalus cusickii* var. *cusickii*  
*Astragalus jejunus*  
*Astragalus paysonii*  
*Astragalus platytropis*  
*Astragalus vallis*  
*Berberis nervosa*  
*Blechnum spicant*  
*Botrychium lunaria* var. *onondagense*  
*Bouteloua gracilis*  
*Campanula scabrella*  
*Cardamine constancei*  
*Carex aenea*  
*Carex buxbaumii*  
*Carex californica*  
*Carex flava*  
*Carex hendersonii*  
*Carex proposita*  
*Carex rupestris*  
*Carex sitchensis*  
*Carex stramineiformis*  
*Carex tumulicola*  
*Cleomella plocasperma*  
*Collomia heterophylla*  
*Cornus nuttallii*  
*Corydalis caseana* var. *hastata*  
*Coryphantha missouriensis*  
*Coryphantha vivipara*  
*Cryptantha breviflora*  
*Cryptantha simulans*  
*Cuscuta denticulata*  
*Cymopterus corrugatus*  
*Cypripedium fasciculatum*  
*Dodecatheon dentatum*  
*Eatonella nivea*  
*Eburophyton austiniiae*  
*Elaeagnus commutata*  
*Epilobium obcordatum*  
*Epilobium watsonii* var. *parishii*  
*Erigeron humilis*  
*Erigeron radicans*  
*Eriogonum desertorum*  
*Eriogonum shockleyi* var. *shockleyi*  
*Eriogonum thymoides*  
*Gaultheria hispidula*  
*Gentiana propinqua*  
*Gentiana tenella*  
*Glyptopleura marginata*  
*Gymnosteris nudicaulis*  
*Hymenoxys richardsonii*  
*Ivesia baileyi*  
*Ivesia tweedyi*  
*Lesquerella paysonii*  
*Lewisia columbiana* var. *columbiana*  
*Lewisia kelloggii*  
*Lomatium dissectum* var. *dissectum*  
*Lomatogonium rotatum*  
*Lupinus uncialis*  
*Lychnis apetala* var. *montana*  
*Lycopodium inundatum*  
*Lycopodium sitchense*  
*Machaerocarpus californicus*  
*Mertensia bella*  
*Muhlenbergia glomerata*  
*Muhlenbergia racemosa*  
*Nemacladus rigidus*  
*Oryzopsis webberi*  
*Oxalis trilliifolia*  
*Oxytheca dendroidea*  
*Pediocactus simpsonii* var. *robustior*  
*Pellaea bridgesii*  
*Peraphyllum ramosissimum*  
*Petasites sagittatus*  
*Phacelia lyallii*  
*Phacelia procera*  
*Polygonum newberryi*  
*Polypodium glycyrrhiza*  
*Polystichum kruckebergii*  
*Psilocarphus tenellus*  
*Rhinanthus crista-galli*  
*Ribes howellii*  
*Ribes wolfii*  
*Rubus spectabilis*  
*Salix glauca*  
*Sanicula graveolens*  
*Sanicula marilandica*  
*Saxifraga adscendens* var. *oregonensis*  
*Saxifraga cernua*  
*Saxifraga foliolosa* var. *foliolosa*  
*Saxifraga tolmiei* var. *ledifolia*  
*Scheuchzeria palustris*  
*Scripus cyperinus*  
*Sedum lanceolatum* var. *rupicolum*  
*Selaginella douglasii*  
*Stellaria calycantha* var. *calycantha*  
*Stellaria simcoeii*  
*Stipa pinetorum*  
*Stipa viridula*  
*Streptopus streptopoides* var. *brevipes*  
*Synthyris platycarpa*  
*Teucrium canadense* var. *occidentale*  
*Thelypteris nevadensis*  
*Trientalis arctica*  
*Trientalis latifolia*  
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*Trifolium microdon*  
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*Trifolium plumosum* var. *amplifolium*  
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*Veratrum californicum* var. *caudatum*  
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*Waldsteinia idahoensis*

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## ANNOTATED INDEX TO SCIENTIFIC NAMES

**Recommended Status:**

FE - Federal Endangered  
 FT - Federal Threatened  
 FWL - Federal Watch List  
 FRJ - Federal Rejected

SE - State Endangered  
 ST - State Threatened  
 SWL - State Watch List  
 SRJ - State Rejected

(Synonyms are in parentheses)

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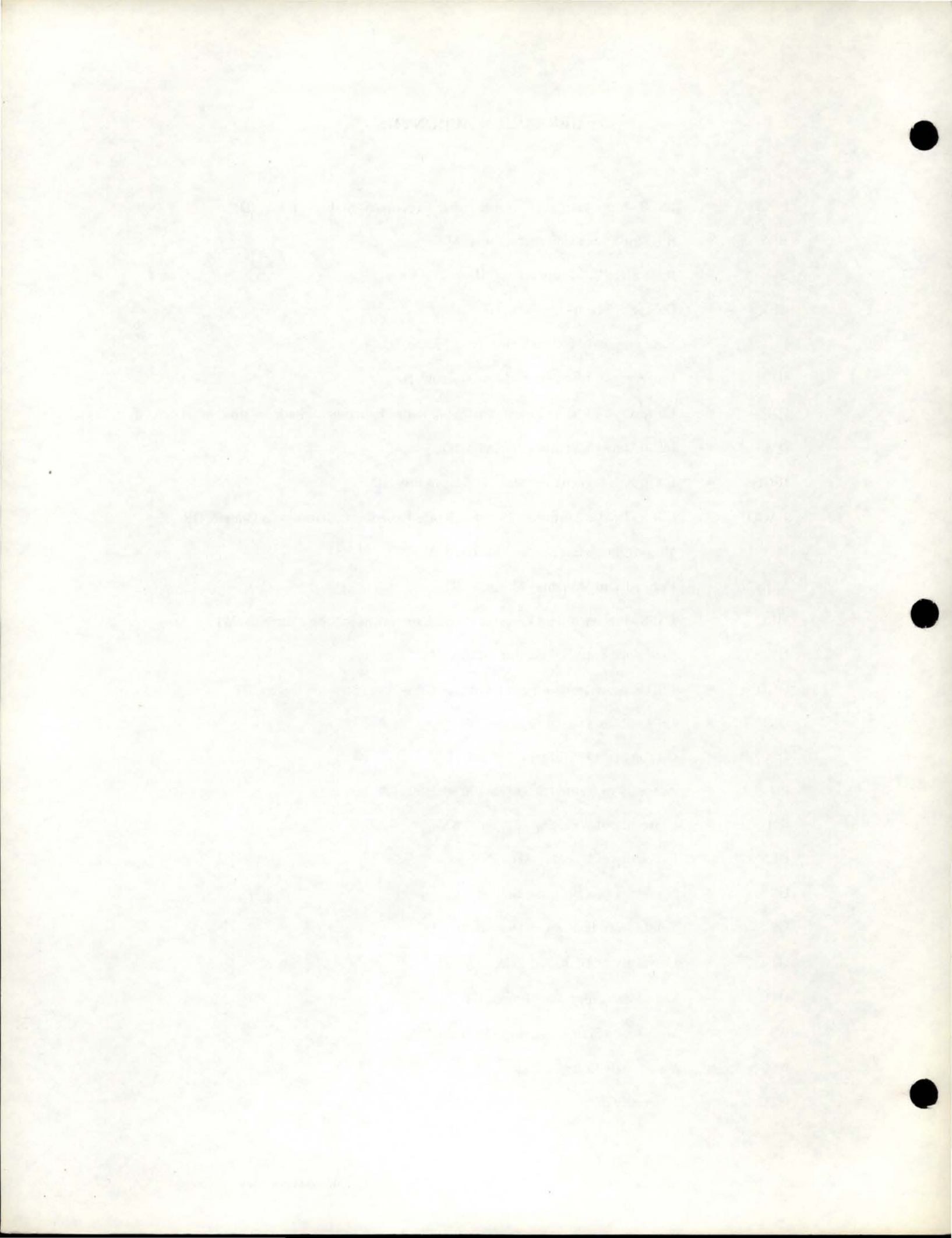
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## HERBARIUM ACRONYMS

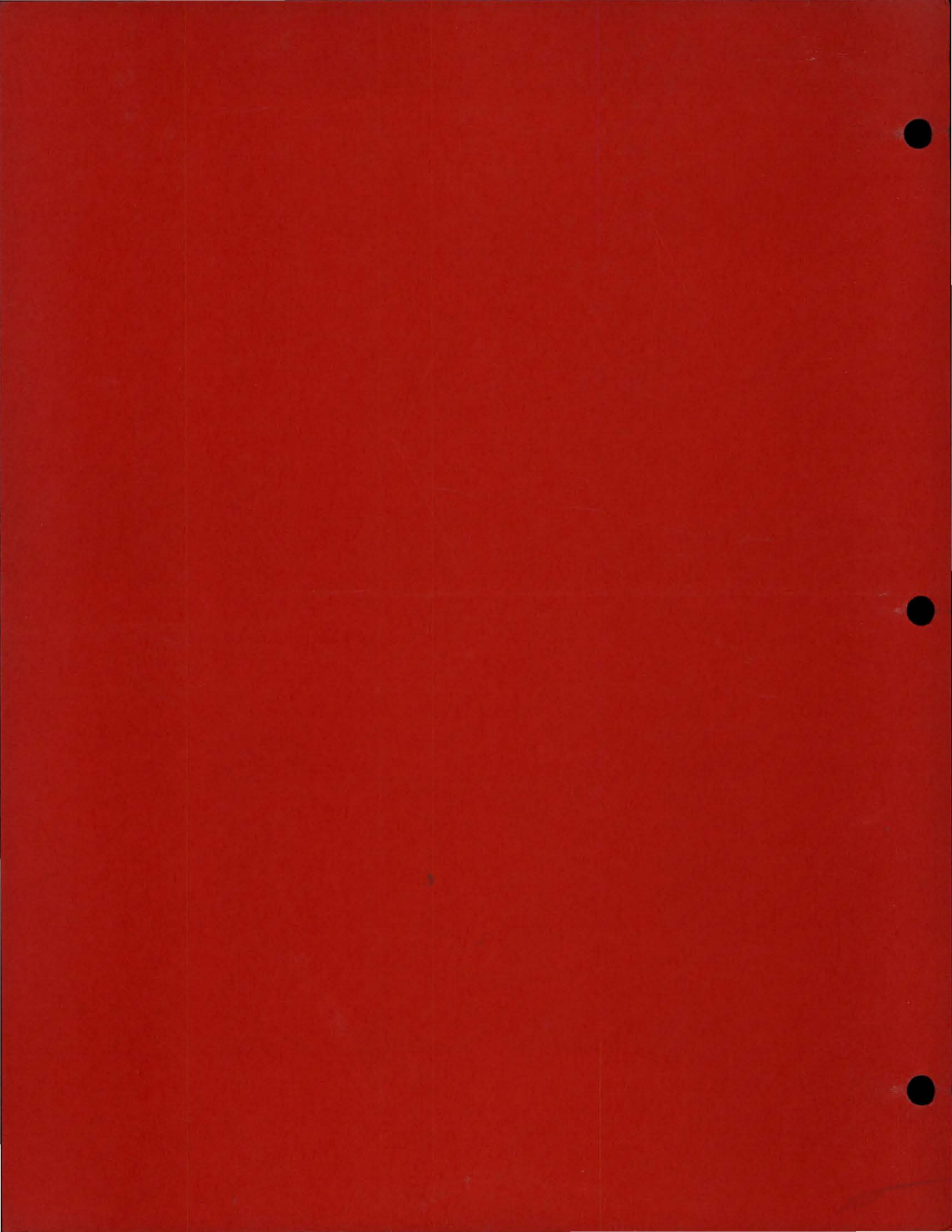
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BRY	=	Brigham Young University, Provo, UT
BS	=	Boise State University - Boise, ID
CIC	=	College of Idaho - Caldwell, ID
F	=	Field Museum of Natural History - Chicago, IL
ID	=	University of Idaho Herbarium - Moscow, ID
IDF	=	University of Idaho - Forest, Wildlife & Range Experiment Station - Moscow, ID
IDS	=	Idaho State University - Pocatello, ID
IFGH	=	Idaho Fish & Game Herbarium - Garden City, ID
LAGO	=	USFS - Pacific Northwest Forest & Range Experiment Station - La Grande, OR
MO	=	Missouri Botanical Garden - St. Louis, MO
MONTU	=	University of Montana - Missoula, MT
MRC	=	USFS - Intermountain Forest & Range Experiment Station - Missoula, MT
NY	=	New York Botanical Garden - Bronx, NY
OGDF	=	USDA Intermountain Forest & Range Experiment Station - Ogden, UT
ORE	=	University of Oregon - Eugene, OR
OSC	=	Oregon State University - Corvallis, OR
PH	=	Academy of Natural Sciences - Philadelphia, PA
RM	=	University of Wyoming - Laramie, WY
RENO	=	University of Nevada - Reno, NV
UC	=	University of California, Berkeley, CA
US	=	Smithsonian Institution - Washington, DC
UT	=	University of Utah, Salt Lake City, UT
UTC	=	Utah State University - Logan, UT
WS	=	Washington State University - Pullman, WA
WSCO	=	Weber State College - Ogden, UT
WTU	=	University of Washington - Seattle, WA



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*Pediocactus simpsonii* (Engelm.) Britt. & Brown var. *robustior* Coult.

State  
WATCH LIST

CACTACEAE

<b>Location</b>	Idaho: CASSIA, IDAHO, NEZ PERCE, and OWYHEE counties Ranges from eastern Washington to Nevada, Utah, Wyoming, and Colorado
<b>Land Ownership</b>	BLM (Coeur d'Alene and Boise Dist.), private, and USFS (Sawtooth N.F.)
<b>Habitat</b>	Dry, rocky slopes in grassland and sagebrush/grass zones.
<b>Remarks</b>	At present, this species is widespread in Idaho but may be exploited by cactus collectors.
<b>Evaluation by</b>	R. Steele

*Pellaea bridgesii* Hook.

State  
WATCH LIST

POLYPODIACEAE

<b>Location</b>	Idaho: ADAMS, ELMORE, and VALLEY counties Also in Oregon and California
<b>Land Ownership</b>	USFS (Boise and Payette N.F.), Idaho Dept. of Lands (Payette Lake Area)
<b>Habitat</b>	Grows mainly in crevices of granitic rocks in <i>Abies lasiocarpa</i> zone.
<b>Remarks</b>	Occurs in Idaho as a disjunct of Sierran California.
<b>Evaluation by</b>	R. Steele

*Peraphyllum ramosissimum* Nutt.

State  
WATCH LIST

ROSACEAE

- Location** Idaho: WASHINGTON County  
More common in Oregon, California, Nevada, Utah, and Colorado.
- Land Ownership** Not known, probably BLM (Boise Dist.) or private.
- Habitat** On dry slopes, either brushy or open, in sagebrush/grass and brush zone below the forest. Not typical of habitat occupied by this species in most of adjacent Malheur County.
- Remarks** This plant is fairly abundant in one drainage on the Oregon side of the Snake River; its limited occurrence on the Idaho side possibly illustrates dispersal problems within the species. The Idaho population is of interest because of the information it may provide on life history of the species and on geologic and climatic history. It merits listing for that reason and for its rarity in Idaho.
- Evaluation by** P. L. Packard

*Petasites sagittatus* (Banks) Gray

State  
WATCH LIST

ASTERACEAE (Compositae)

- Location** Idaho: BONNER (likely BOUNDARY) counties  
Boreal south to east of the Cascades in northeastern Washington to western Montana.
- Land Ownership** USFS (Kaniksu N.F.), Idaho Dept. of Lands (Priest Lake Area)
- Habitat** Swamps, very wet marshes, and streamside flood plains. In coniferous forests of grand fir/cedar/hemlock zone.
- Remarks** Known from very few sites in northern Idaho, very little habitat data and little in the way of specific locations. There are no visible threats to its existence as well as numerous unexplored bogs, so that monitoring this species is sufficient for now.
- Evaluation by** F. D. Johnson

*Phacelia lyallii* (Gray) Rydb.

State  
WATCH LIST

HYDROPHYLLACEAE

Location	Idaho: LEMHI County Also in Montana, British Columbia, and Alberta.
Land Ownership	USFS (Salmon N.F.)
Habitat	Subalpine to alpine habitats with <i>Oxyria digyna</i> and <i>Claytonia megarhiza</i> var. <i>bellidifolia</i> ; on talus where some degree of stability exists.
Remarks	There appear to be no clear threats to the five known populations in Idaho. Henderson et al. 1979.
Evaluation by	D. M. Henderson

*Phacelia procera* Gray

State  
WATCH LIST

HYDROPHYLLACEAE

Location	Idaho: ADAMS and WASHINGTON counties Also in Washington, Oregon, and California.
Land Ownership	BLM (Boise Dist.), private, USFS (Payette N.F.)
Habitat	Found mainly on disturbed open sites in <i>Pinus ponderosa</i> , <i>Pseudotsuga</i> and <i>Abies grandis</i> zones.
Remarks	Occurs in Idaho as eastern extension of Oregon population.
Evaluation by	R. Steele

*Polygonum newberryi* Small

State  
WATCH LIST

POLYGONACEAE

- Location** Idaho: VALLEY County  
Common in Olympic and Cascade mountains to northern Sierra Nevada.
- Land Ownership** Probably USFS (Payette N.F.)
- Habitat** Alpine to subalpine, often talus.
- Remarks** The Idaho population is known only from the first collection (Thompson 13744, WTU, IDF) and exact location is unknown. Casual observation may be mistaking this species for the common *P. phytolaccaefolium*. This species should be located and its jeopardy assessed. Hitchcock and Cronquist (1973).
- Evaluation by** R. Steele

*Polypodium glycyrrhiza* D.C. Eat.

State  
WATCH LIST

POLYPODIACEAE

- Location** Idaho: CLEARWATER County.  
The principal population is west of the Cascades from Alaska to central California. This is the only known location east of the Cascades. Lang (1969) and Taylor (1970) confirm this interpretation.
- Land Ownership** USFS (Clearwater N.F.)
- Habitat** Climax *Thuja plicata* forests at lower elevations (1700 ft), on mossy rocks, generally streamside.
- Remarks** *Polypodium glycyrrhiza* and *P. hesperium* hybridize freely. This area contains both species and apparent hybrids. This is an area of numerous coastal relicts (Johnson & Steele 1978). There is ample habitat, and the mixed population is reasonably abundant in a restricted corridor of canyon bottom; nonetheless, monitoring is indicated.
- Evaluation by** F. D. Johnson

*Polystichum kruckebergii* Wagner

State  
WATCH LIST

POLYPODIACEAE

- Location** Idaho: CUSTER and IDAHO counties  
Widespread in the West (British Columbia, Washington, Idaho, Montana, Oregon, California, and Utah), but rare throughout its range (Wagner 1979).
- Land Ownership** USFS (Challis and Nezperce N.F.), quite possibly on other USFS and BLM land as well as the scattered Idaho Dept. of Lands holdings.
- Habitat** Cliff crevices and talus slopes, often on serpentine.
- Remarks** Known from two, widely separated sites in Idaho. Due to its habitat, no threats to the species' survival are currently believed to exist. If a threat is identified, State Endangered status will be warranted.
- Evaluation by** S. J. Brunsfeld

*Psilocarphus tenellus* Nutt.

State  
WATCH LIST

ASTERACEAE (Compositae)

- Location** Idaho: IDAHO and LATAH counties  
Disjunct from principal distribution in California, southwest Oregon, and Columbia River Gorge
- Land Ownership** Private, possibly Idaho Dept. of Lands (Clearwater Area), USFS (Nezperce N.F.)
- Habitat** "Dried beds of vernal pools and in other open, moist or vernal moist places." Idaho sites are: from a trail through a forested zone (probably Douglas-fir) in sandy soil, and in shallow soil over basaltic rock (probably a grassland).
- Remarks** Known from only two sites in Idaho. This slender annual is easily overlooked and will probably prove to be more common when it is sought by collectors. No threats to its survival are anticipated. It is rare enough to require being monitored.
- Evaluation by** S. J. Brunsfeld

*Rhinanthus crista-galli* L.

State  
WATCH LIST

SCROPHULARIACEAE

- Location** Idaho: LATAH County  
Circumboreal, south to southwestern Oregon, Colorado, and New York.
- Land Ownership** Private
- Habitat** "Meadows, fields, and moist slopes" – our collection from "dry woods."
- Remarks** Not reported for Idaho by Davis (1952) or Hitchcock and Cronquist (1973). There exists, however, one 1898 collection from "Troy, Idaho" (Piper 2905 WS). Attempts should be made to re-collect the species and identify its habitat. If still extant, it may deserve State Endangered status.
- Evaluation by** S. J. Brunsfeld

*Ribes howellii* Greene

State  
WATCH LIST

GROSSULARIACEAE (Saxifragaceae)

- Location** Idaho: BONNER and BOUNDARY counties.  
Principal population is Cascade Mountains from southern British Columbia to northern Oregon. This area is the only known population east of the Cascades.
- Land Ownership** USFS (Kaniksu N.F.), Idaho Dept. of Lands (Priest Lake Area)
- Habitat** Subalpine forest of *Abies lasiocarpa*, *Tsuga mertensiana* and *Picea engelmannii*. *Abies lasiocarpa*/*Menziesia ferruginea* h.t., near climax, beneath stand and in skid roads.
- Remarks** Although rare, the population I examined was very vigorous, plants were quite abundant and many plants were in the center of an old skid road. It should be monitored, and the extent of the population determined.
- Evaluation by** F. D. Johnson

*Ribes wolfii* Rothr.  
Syn. *R. mogollonicum*

State  
WATCH LIST

GROSSULARIACEAE (Saxifragaceae)

- Location** Idaho: IDAHO and VALLEY counties  
Disjunct from the southern Rocky Mountains.
- Land Ownership** USFS (Nezperce and Payette N.F.)
- Habitat** "Among rocks along stream bed," "in the mountains" – i.e., ecologic data almost entirely lacking.
- Remarks** Known from only two sites in Idaho. The Seven Devils site (from which specimens have been confirmed by Hitchcock) should be revisited to gain ecological data. This will enable field investigators to search for additional populations which undoubtedly exist. Threats to this species are not known or expected.
- Evaluation by** S. J. Brunsfeld

*Rubus spectabilis* Pursh.

State  
WATCH LIST

ROSACEAE

- Location** Idaho: BONNER County  
The principal population is west of the Cascades from Alaska to northern California. This is the only reported location east of the Cascades.
- Land Ownership** Private, USFS (Kaniksu N.F.), and Idaho Dept. of Lands (Priest Lake Area) are all possible.
- Habitat** Likely *Thuja plicata* or *Tsuga heterophylla* climax. This is a wet-site species west of the Cascades, and there is abundant similar habitat in northern Idaho.
- Remarks** Piper collected the single specimen in 1901. The habitat and presence of other coastal disjuncts make the collection entirely feasible. Two years ago, we advertized locally with color photos to see if anyone could lead us to a plant—no response. The area, in 1901, was quite remote. Since that time there has been extensive recreational and homesite development. With many collectors in the area, a showy flower and no collections, it seems possible that this plant is extinct in Idaho. Locate this plant and monitor.
- Evaluation by** F. D. Johnson

*Salix glauca* L.  
Syn. *S. glaucops* Andersson

State  
WATCH LIST

SALICACEAE

**Location** Idaho: FREMONT County near Henry's Lake (A. Cronquist in Hitchcock et al. 1964); ADAMS, BONNEVILLE, CUSTER, and IDAHO counties (C. Ball in Davis 1952)  
Circumboreal, extending south in the Rocky Mountains to New Mexico

**Land Ownership** Uncertain

**Habitat** "Moist places or open slopes at moderate to more often high elevations in the mountains."  
Ball's plants come from streamsides and moist meadows.

**Remarks** Cronquist apparently disagreed with Ball's interpretation of this taxon. My observations at Ball's Custer County locality (Forks of the Pahsimeroi River) led me to support Cronquist's view. Analysis of existing specimens and additional field studies are needed to further clarify this problem. If Henry's Lake proves to be the only location in Idaho, then Threatened status, at the state level, may be warranted.

**Evaluation by** S. J. Brunsfeld

*Sanicula graveolens* Poepp

State  
WATCH LIST

APIACEAE (Umbelliferae)

**Location** Idaho: IDAHO and VALLEY counties  
Widespread in the West.

**Land Ownership** Possibly USFS (Payette N.F.)

**Habitat** Bare, rocky slopes in montane forest.

**Remarks** This species is rarely collected in Idaho and should be considered in future land use plans.

**Evaluation by** P. L. Packard



*Sanicula marilandica* L.

State  
WATCH LIST

APIACEAE (Umbelliferae)

- Location** Idaho: BONNER and KOOTENAI counties  
Range extends south to New Mexico, north to eastern British Columbia and east.
- Land Ownership** Private and USFS (Kaniksu N.F.), possibly Idaho Dept. of Lands (Priest Lake Area)
- Habitat** Moist, low ground, such as meadows and marsh edges, to *Tsuga heterophylla*/*Pachistima* forests.
- Remarks** Known from five locations in northern Idaho. May be threatened by anything altering its moist habitat, but no such threatening activity has yet been identified.
- Evaluation by** S. J. Brunsfeld

*Saxifraga adscendens* L. var. *oregonensis* (Raf.) Breit.

State  
WATCH LIST

SAXIFRAGACEAE

- Location** Idaho: BLAINE and CUSTER counties  
Central and northern Rockies.
- Land Ownership** USFS (Challis and Sawtooth N.F.)
- Habitat** Moist, alpine rock crevices and gravelly meadows and seeps in subalpine forests.
- Remarks** Very rare in Idaho. Only a few plants seen at each of five known locations. More searching of the remote, high elevation peaks of east-central and central Idaho is needed. Possible threats to the species have not been identified.
- Evaluation by** S. J. Brunsfeld

*Saxifraga cernua* L.  
Syn. *S. simulata* Small

State  
WATCH LIST

SAXIFRAGACEAE

**Location** Idaho: BUTTE, CUSTER, and LEMHI counties  
Circumboreal, south to the northern Cascades and in the Rocky Mountains to New Mexico

**Land Ownership** USFS (Challis, Salmon and probably Targhee N.F.)

**Habitat** Moist rock crevices and gravelly meadows; usually over 10,000 ft in elevation (Henderson et al. 1979).

**Remarks** Known from five localities in the Lemhi and Lost River ranges. Because of the nature of its habitat, no threats to the survival of this species are foreseen.

**Evaluation by** S. J. Brunsfeld

*Saxifraga foliolosa* R. Br. var. *foliolosa*

State  
WATCH LIST

SAXIFRAGACEAE

**Location** Idaho: IDAHO County  
Disjunct from Alaska, also in Colorado.

**Land Ownership** USFS (Payette N.F.)

**Habitat** Spruce-fir zone on open slopes at fairly high altitudes, thin soil pockets in granite.

**Remarks** The main distribution of this species lies in the vicinity of the Arctic Circle. The Idaho population is apparently a relict of a former glacial period and should be noted in future land use plans.

**Evaluation by** P. L. Packard