

Field Guide to the Special Status Plants
of the Bureau of Land Management
Twin Falls District,
Jarbidge Field Office Area

BLM

Idaho State Office

Idaho Technical Bulletin 2006-01

BLM/ID/GI-06/009+1150



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Special Status Plants of the
Bureau of Land Management
Twin Falls District, Jarbidge Field Office Area**



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June 2006*

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INTRODUCTION

This collection of information includes all known to occur or expected to occur special status plant species in the Jarbidge Resource Area of the Twin Falls District, Idaho BLM. It was compiled for use by field personnel and contains photographs, line drawings, and general location maps, when available.

The Bureau of Land Management (BLM) manages special status species under the policy established in the BLM Manual (Section 6840) in addition to requirements set forth under the Endangered Species Act. State laws protecting species applies to all BLM programs and actions to the extent that they are consistent with the Federal Land Policy and Management Act (FLPMA). An annual Memorandum of Understanding between the Idaho Department of Fish and Game and the BLM State Director sets forth a list of special status species which BLM will manage for. Species are ranked by BLM Type which is as follows:

Type 1. Threatened, Endangered, Proposed and Candidate Species

These species are listed by the FWS as threatened or endangered, or they are proposed or candidates for listing under the Endangered Species Act.

Type 2. Rangewide/Globally Imperiled Species – High Endangerment

These species that have a high likelihood of being listed in the foreseeable future due to their global rarity and significant endangerment factors.

Type 3. Rangewide/Globally Imperiled Species – Moderate Endangerment

These are species that are globally rare with moderate endangerment factors. Their global rarity and inherent risks associated with rarity make them imperiled species.

Type 4. Species of Concern

These are species that are generally rare in Idaho with small populations or localized distribution and currently have low threat levels. However, due to the small populations and habitat area, certain future land uses in close proximity could significantly jeopardize these species.

Type 5. Watch List

Watch list species are not considered BLM sensitive species and associated sensitive species policy guidance does not apply. Watch list species include species that may be added to the sensitive species list depending on new information concerning threats and species biology or statewide trends.

The following are brief accounts of the sensitive plants in the Jarbidge Resource Area. Because the Jarbidge Resource Area includes a portion of the State of Nevada, plants listed by the Nevada BLM as special status species which occur or may occur within the Jarbidge Resource Area are also included in this document.

Distribution by Vegetation Type and Habitat

*found in specialized habitats within these communities

Aspen/tall forb and false hellebore/forb

Phacelia minutissima

Mountain big sagebrush

*Astragalus yoder-williamsii

*Primula cusickiana

Low sagebrush

Allium anceps

Astragalus yoder-williamsii

Erigeron latus

Eriogonum lewisii

Ipomopsis polycladon

Pediocactus simpsonii

*Penstemon janishiae

Wyoming sagebrush

Astragalus tetrapteris

Chaenactis stevioides

*Cymopterus acaulis greeleyorum

Erigeron latus

Nemacladus rigidus

Pediocactus simpsonii

*Lepidium papilliferum

Texosporium sancti-jacobi

Wyoming sagebrush-shadscale

Astragalus newberryi castoreus

Chaenactis stevioides

*Cymopterus acaulis greeleyorum

Eatonella nivea

*Eriogonum shockleyi (both varieties)

Ipomopsis polycladon

Nemacladus rigidus

Pediocactus simpsonii

Playa (large hard-bottomed)

Lepidium davisii

Lepidium papilliferum

Rhyolitic canyon walls or base of cliffs

Leptodactylon glabrum

Springs and/or transition zones

Phacelia minutissima

Salt desert shrub

Astragalus newberryi castoreus

Catapyrenium congestum

*Cleomella plocasperma

Cymopterus acaulis greeleyorum

Eatonella nivea

Eriogonum ochrocephalum calcareum

*Eriogonum shockleyi (both varieties)

Ipomopsis polycladon

Glyptopleura marginata

Nemacladus rigidus

Peteria thompsoniae

*Penstemon janishiae

Greasewood

Cleomella plocasperma

Glyptopleura marginata

Riparian/Wetland

Epipactis gigantea

Teucrium canadense occidentale

Horsebrush

Chaenactis stevioides

Ipomopsis polycladon

Indian ricegrass

Chaenactis stevioides

Cymopterus acaulis greeleyorum

Needle-&-thread/Indian ricegrass

Astragalus purshii ophiogenes

Black sagebrush (calcareous sites)

Aspicilia fruticulosa

Meadow

Phacelia minutissima

Mountain mahogany
Primula cusickiana

Rabbitbrush/disturbed Wyoming big
sagebrush sites
Texosporium sancti-jacobi

Distribution by Soil Characteristics and Hydrology

Coarse sand

Astragalus purshii ophiogenes
 Chaenactis stevioides
 Ipomopsis polycladon
 Glyptopleura marginata
 Nemacladus rigidus

Fine alluvial sand

Astragalus purshii ophiogenes
 Eatonella nivea
 Ipomopsis polycladon
 Nemacladus rigidus

Lakebed sediment badlands

Astragalus newberryi castoreus
 Cymopterus acaulis greeleyorum
 Eriogonum shockleyi (both varieties)
 Glyptopleura marginata
 Peteria thompsoniae
 Penstemon janishiae

Volcanic ash

Aspicilia fruticulosa
 Cymopterus acaulis greeleyorum
 Glyptopleura marginata
 Peteria thompsoniae
 Penstemon janishiae

Oolitic limestone

Eriogonum shockleyi (both varieties)

Rhyolitic cliffs and talus

Leptodactylon glabrum

Playa or natric areas

Allium anceps
 Lepidium davisii
 Lepidium papilliferum

Calcareous hot or cold springs

Epipactis gigantea

Sandy or tuffaceous soils

Astragalus tetrapteris

Gravelly desert "pavement"

Eriogonum shockleyi (both varieties)
 Glyptopleura marginata
 Pediocactus simpsonii

Clay

Cleomella plocasperma?
 Eriogonum ochrocephalum calcareum
 Penstemon janishiae
 Primula cusickiana

Silt loam

Ipomopsis polycladon

Loam

Astragalus yoder-williamsii
 Primula cusickiana

Thin soil over basalt

Erigeron latus
 Pediocactus simpsonii

Volcanic cinder

Astragalus yoder-williamsii
 Eatonella nivea
 Erigeron latus
 Glyptopleura marginata
 Nemacladus rigidus
 Peteria thompsoniae
 Pediocactus simpsonii

Streambanks

Epipactis gigantea
 Teucrium canadense occidentale

Clay loam

Primula cusickiana
 Texosporium sancti-jacobi

Barren or slightly natric sites

Catapyrenium congestum
 Eriogonum lewisii

Seasonally wet areas

Allium anceps

Phacelia minutissima

Primula cusickiana

Moist bottom-lands

Teucrium canadense occidentale

Thin soil over granitic rock

Astragalus yoder-williamsii

Erigeron latus

Scientific Name: *Allium anceps* Kellogg

Symbol: ALAN

Common Name: Two-headed onion

Family (Common Name): Liliaceae (Lily Family)

Status: Idaho BLM Sensitive Type 3

Flowering Period: (early April) May through June (July)

Habitat: heavy barren soils of volcanic origin in or around seasonally wet playas, swales, and other low places, or thin, rocky soil in the sagebrush zone; sites are usually flat to gently sloping, and sparsely vegetated; 1500-1600 m elevations

Associates: *Artemisia arbuscula*, *Eriogonum microthecum*, *Astragalus calycosus*

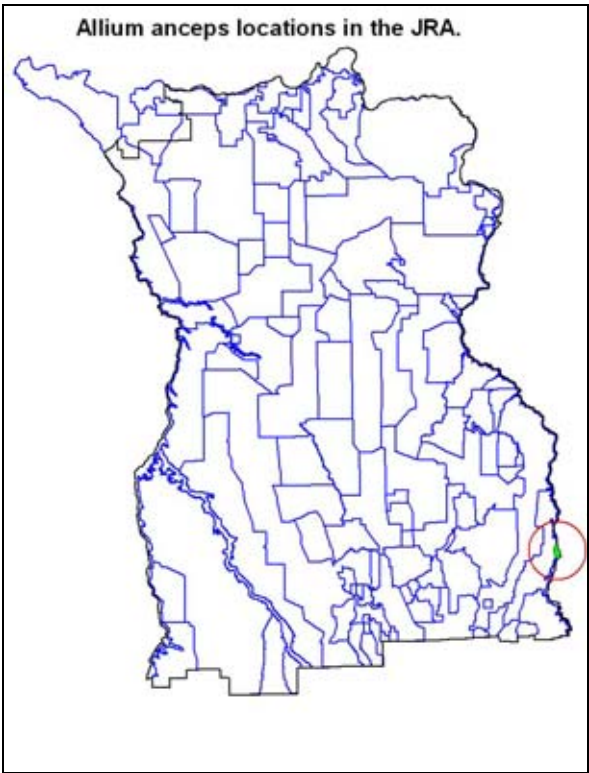
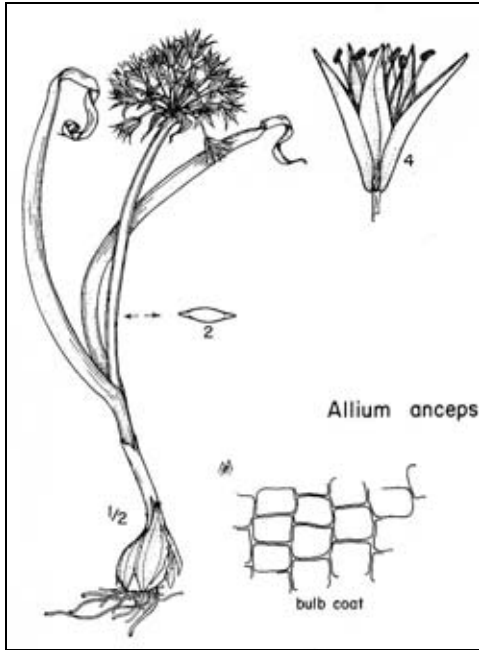
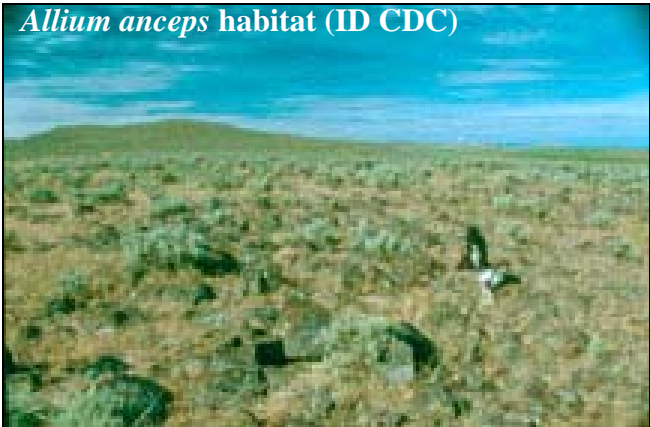
Distribution: may occur in se JRA; most known Idaho populations are in Twin Falls County, one occurrence is also known from Jerome County north of the Snake River, populations in Owyhee and Cassia counties should also be expected; widespread in Nevada, extending into se Oregon, ne California, and southern Idaho

Key Characteristics: flattened stems; pair of relatively narrow, more-or-less sickle-shaped leaves; slender, lance-linear shaped tepals mostly more than 4 times as long as wide; and stamens equaling or shorter than the tepals; perennial forbs with broadly egg-shaped underground bulbs having a thick, yellowish, cellular-patterned coat; bulbs give rise to a flattened, minutely scabrous-margined stem about 10-15 cm tall, each with a pair of sickle-shaped, scabrous-margined leaves 4-6 mm wide and up to twice as long as the scape, the leaves fall off the plant at maturity; stems are terminated by an umbel containing 15-25 pinkish-colored flowers that have a diffuse green midrib, slender, lance-linear-shaped tepals are 6-10 mm long and attached to the umbel by pedicels roughly three times as long as the tepals

Flora: Intermountain Flora Volume 6, page 520

Threats: range development projects, livestock trampling, exotic species





Scientific Name: *Aspicilia fruticulosa* (Eversm.) Flagey

Symbol: ASFR11

Common Name: Coral lichen, tumbleweed lichen, rim lichen

Family (Common Name): Lecanoaceae (Lecanora Family)

Status: Idaho BLM Sensitive Type 5

Flowering Period: fertile early-spring.

Habitat: areas of high soil pH (calcareous soils) and calcareous badlands of volcanic ash deposits in black sagebrush or badland communities; vagrant lichens often do best in slight depressions where liquid water collects and may keep the lichens hydrated for long periods; usually found among shrubs less than 0.5 m tall; 6290 feet (1917 meters)

Associates: in Nevada often in *Artemisia nova* and *Sphaeromeria argentea* habitats

Distribution: Elko (?), Humboldt, and Washoe (?) counties, Nevada; also in CO, ID, MT, OR, UT, WY, Asia, and Africa. Potential habitat throughout Columbia Plateau Ecoregion where grazing is light

Key Characteristics: fruticose soil lichen; olive, brown, or greenish; branching very compact, dichotomous, the branches short, thick, blunt, and tipped with pale spots

Flora: Field Key to the Soil Lichens of Central and Eastern Oregon (McCune and Rosentreter 2001)

Threats: Very sensitive to livestock trampling and other ground disturbances





Aspicilia fruticulosa

Scientific Name: *Astragalus newberryi* A. Gray var. *castoreus* M.E. Jones

Symbol: ASNEC

Common Name: Newberry's milkvetch

Family (Common Name): Fabaceae (Pea Family)

Status: Idaho BLM Sensitive Type 4

Flowering Period: April through May (early July)

Habitat: foothills, bluffs, and badlands within sagebrush and pinyon-juniper communities of the Great Basin; (1025) 1250-2400 (3020) m elevations

Associates: sagebrush

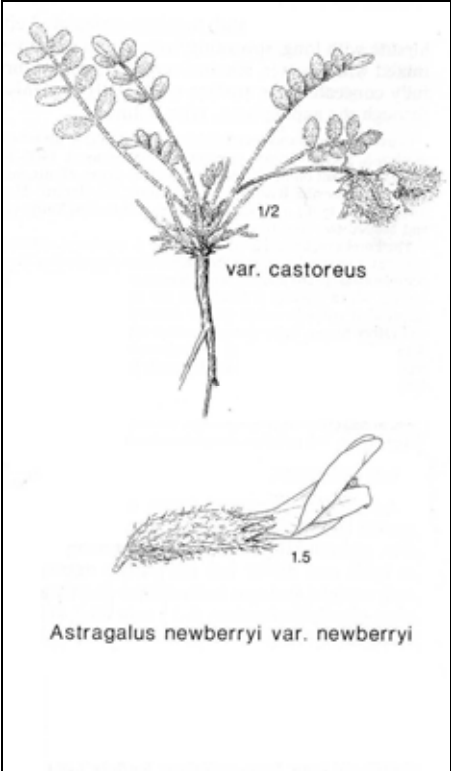
Distribution: may occur in the se JRA; Salmon Falls Creek Valley is northern extension of range; reported in Twin Falls County, Idaho

Key Characteristics: low, stemless perennial; pinnately compound leaves, each leaflet pubescent; flowers are pink-purple with pale pink or whitish margins; closely resembles wooly-pod milkvetch, Newberry's has a hard turbinate crown thatched with stipules and stiff persistent leaf-stalks, whereas, wooly-pod lacks a turbinate crown

Flora: Intermountain Flora Volume 3B, page 129

Threats: unknown





Scientific Name: *Astragalus purshii* Dougl. Ex Hook. var. *ophiogenes* (Barneby)
Barneby

Symbol: ASPUO

Common Name: Snake River milkvetch

Family (Common Name): Fabaceae (Pea Family)

Status: Idaho BLM Sensitive Type 4

Flowering Period: late April through June

Habitat: often on barren sites growing in loosely aggregated, frequently moving sand and gravel deposits on bluffs, talus, dunes, and volcanic ash beds; 700-1075 m elevations

Associates: *Artemisia tridentata*, *Oryzopsis hymenoides*, *Stipa comata*, *Atriplex canescens*

Distribution: known along the north boundary, JRA; Snake River Corridor and surrounding uplands from Gooding and Twin Falls counties to Owyhee County in sw Idaho; Malheur Co., Oregon

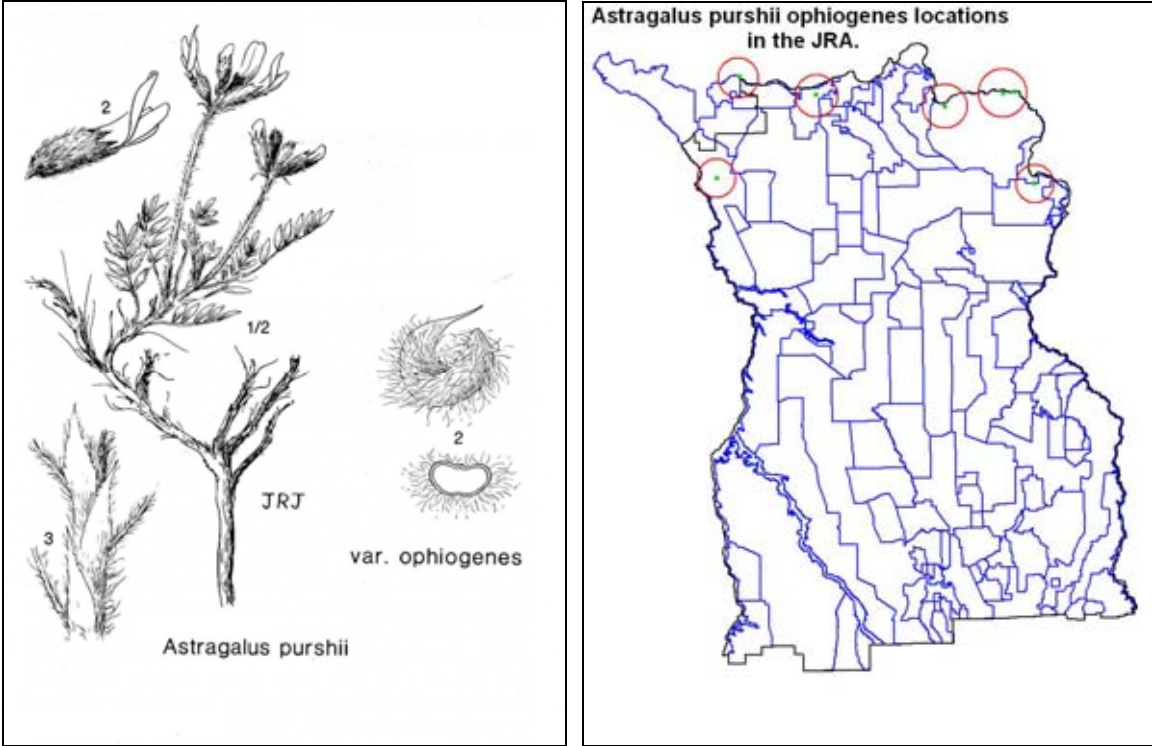
Key Characteristics: tufted, acaulescent perennial form; flowers pink, racemes mostly 5-11 flowered; calyx less than 9 mm long, strongly incurved, 8-13 mm long, hairy; leaves pinnately compound, leaflets of larger leaves 9-15(17); pods small (8-13 mm long), abruptly and strongly incurved at or above the middle and usually shallowly and obscurely sulcate ventrally, pillose or both pillose and tomentulose

Flora: Intermountain Flora Volume 3B, page 135

Threats: land exchanges, off highway vehicle use, range development projects, and livestock trailing; impacts from livestock may include direct mortality, due to trampling, or the secondary impact of degradation of habitat



Astragalus purshii ophiogenes habitat



Scientific Name: *Astragalus tetrapterus* Gray

Symbol: ASTE10

Common Name: Four-winged milkvetch

Family (Common Name): Fabaceae (Pea Family)

Status: Idaho BLM Sensitive Type 3

Flowering Period: late April to early July

Habitat: gullied bluffs, barren knolls, stabilized dunes, and open valley floors, mostly in loose sandy or tuffaceous soils at elevations of 1675-1970 m

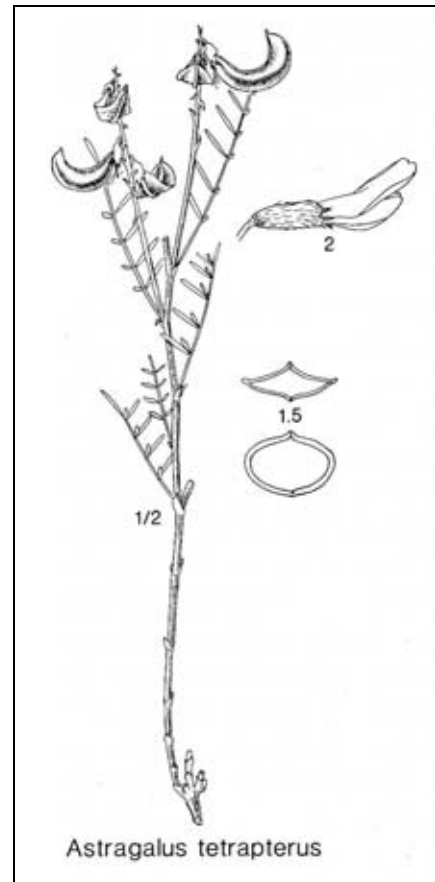
Associates: in sagebrush climax or pinyon-juniper woodland

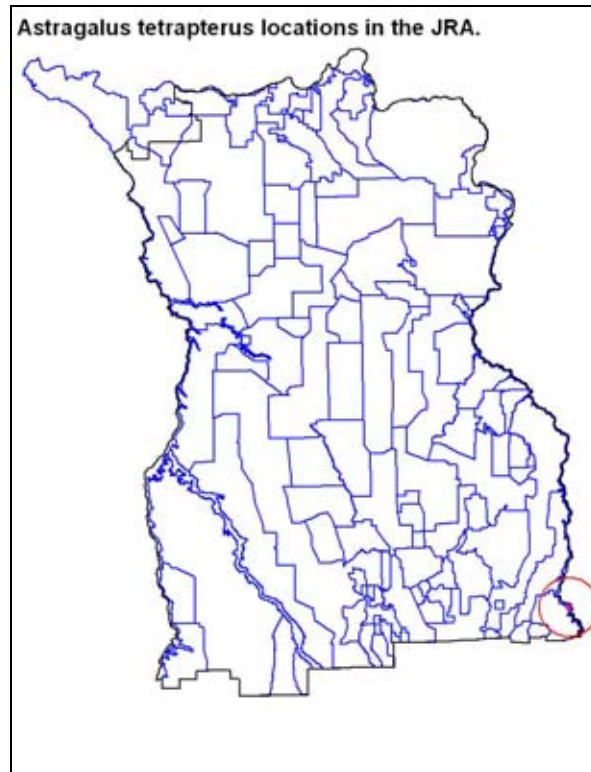
Distribution: may occur in se, JRA; widely discontinuously dispersed in the Great Basin from c. Harney Co, Oregon e. through Owyhee Desert to Twin Falls Co, Idaho, s. in Nevada to n. Washoe, n. Nye, and c. Lincoln cos.

Key Characteristics: singular pod which becomes four-sided when ripe

Flora: Intermountain Flora Volume 3B, page 148

Threats: livestock trampling





Scientific Name: *Astragalus yoder-williamsii* Barneby

Symbol: ASYO

Common Name: Owhyee milkvetch

Family (Common Name): Fabaceae (Pea Family)

Status: Idaho BLM Sensitive Type 3; Nevada BLM Sensitive

Flowering Period: May to early August; most frequent survey months are June-July

Habitat: occurs in Idaho primarily on flat to very gentle slopes predominately in swale positions supporting healthy mountain big sagebrush dominated communities; elevations range from about 1575 to 2225 m.

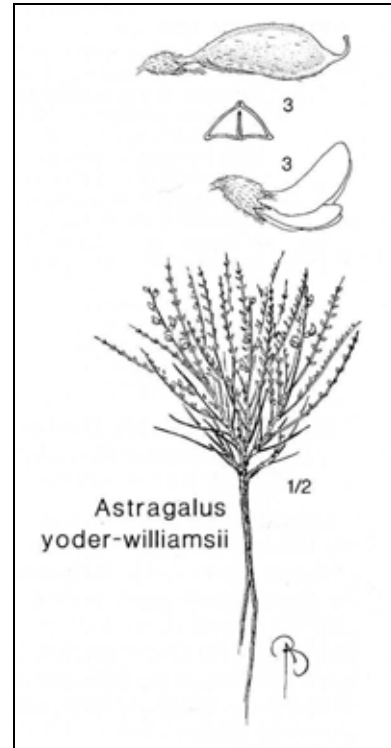
Associates: often mixed with *Artemisia arbuscula*; other associates include *A. tridentata vaseyana*, *Chrysothamnus nauseosus consimilis*, *Poa sandbergii*, *Agropyron spicatum*, *Stipa thurberiana*, *S. comata*, *Festuca idahoensis*, *Elymus cinereus*

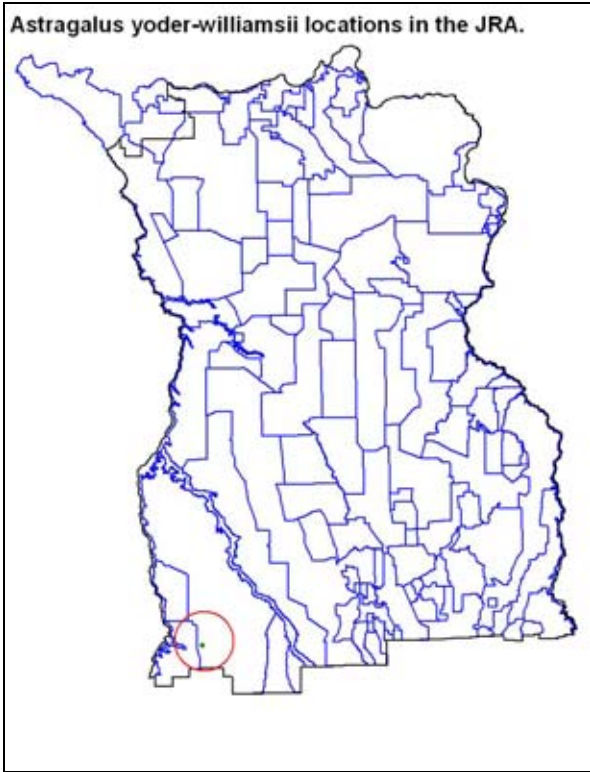
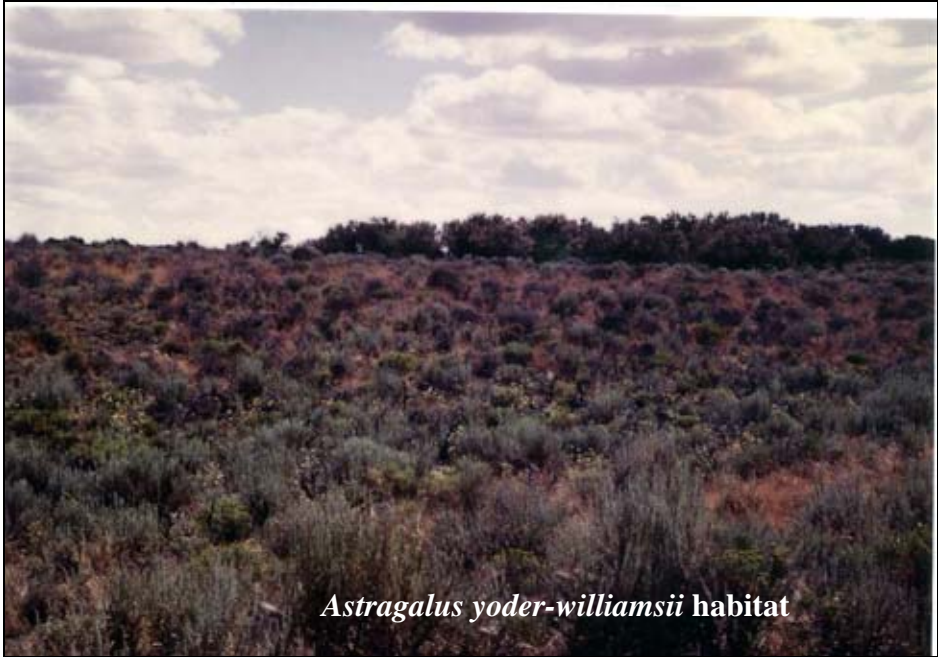
Distribution: reported in the Diamond A area, JRA; Owyhee Co, Idaho, and Elko and Humboldt cos., Nevada

Key Characteristics: flowers whitish, 4.5-6.2 mm long; leaf stalks stiff and straight, grass-like; leaflets minute; pods distinctive, 3-sided, small, 4-7 mm long; plants dwarf

Flora: Intermountain Flora Volume 3B, page 96

Threats: includes mineral exploration and development, road maintenance and off-road vehicle use, trampling by livestock and feral horses, habitat degradation due to overgrazing, range development projects, and competition from invasive weeds





Scientific Name: *Catapyrenium congestum* Bruess & McCune

Symbol: CACO78

Common Name: Earth lichen

Family (Common Name): Verrucariaceae (Verrucaria Family)

Status: Idaho BLM Sensitive Type 4

Flowering Period: NA

Habitat: sagebrush or shadscale steppe; restricted to barren, slightly natric soil sites;

Associates: *Poa sandburgii*, *Phlox hoodii*, *Castilleja*, *Stipa comata*, *Chrysothamnus*

Distribution: known in the Loveridge Gulch and Salmon Falls Creek Canyon (Lily Grade), JRA; Great Basin

Key Characteristics: squamulose lichen, medium-dark brown in color; squamules <2 mm diameter, densely clustered, often forming hemispherical mounds; reproduction by perithecium that appear as small black dots on the surface of the squamules

Flora: Field Key to the Soil Lichens of Central and Eastern Oregon (McCune and Rosentreter 2001)

Threats: livestock trampling, salt block placement



Scientific Name: *Chaenactis stevioides* Hook&Arn.

Symbol: CHST

Common Name: Desert pincushion

Family (Common Name): Asteraceae (Sunflower Family)

Status: Idaho BLM Sensitive Type 4

Flowering Period: (April) May through June

Habitat: occurs on open, usually sandy sites at elevations to 1900 m; tolerates alkaline sites

Associates: in salt desert shrub sites and *Artemisia tridentata wyomingensis*, *Tetradymia*, *Atriplex canescens*, *Oryzopsis hymenoides* communities

Distribution: known near CJ Strike Reservoir, JRA; Idaho populations are known from Ada, Elmore, Owyhee cos.; w Colorado, sw Wyoming, w and s Oregon, s California, Baja California, Arizona, n Sonora and w New Mexico

Key Characteristics: annual or winter annual; pappus scales 4, involucre 5-9(10) mm high, corollas 4-9 mm long; involucre bracts green, acute to obtuse; principle leaves pinnatifid or bipinnatifid

Flora: Intermountain Flora Volume 5, page 119

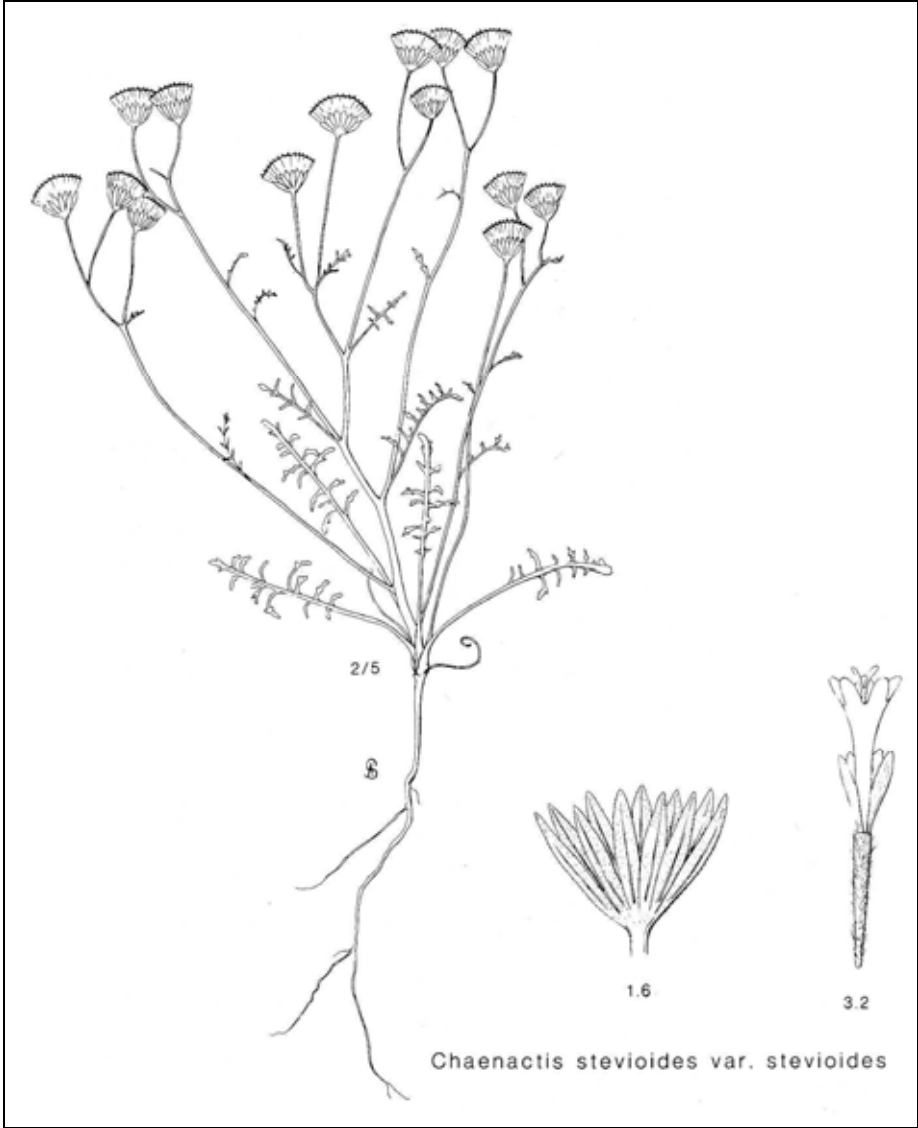
Threats: include competition with introduced annuals, livestock grazing, and off-road vehicles

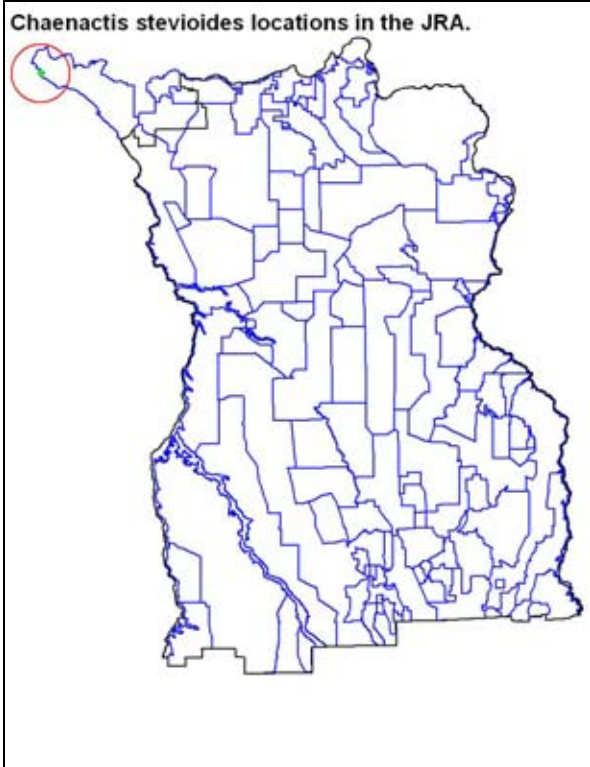




Chaenactis stevioides habitat







Scientific Name: *Cleomella plocasperma* S. Wats Grimes & Packard

Symbol: CLPL2

Common Name: Alkali cleomella

Family (Common Name): Capparaceae (Caper Family)

Status: Idaho BLM Sensitive Type 3

Flowering Period: May-July (September)

Habitat: wet alkaline meadows, greasewood flats, thermal springs; 800-1400 m elev.

Associates: Greasewood/saltgrass association

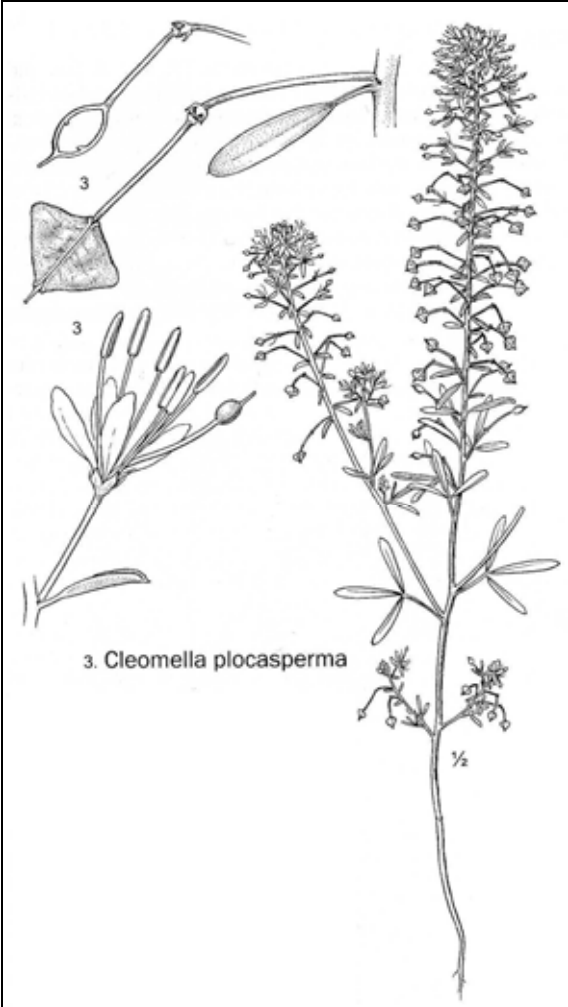
Distribution: historic in the Bruneau Valley, JRA; Great Basin to Oregon, Idaho, Utah

Key Characteristics: annual herb with diffuse, strongly ascending branches, 15-40cm tall; malodorous, glabrous; linear leaflets of the alternate, 3-foliate leaves are 7-18mm long and 1-3mm wide; numerous, small yellow flowers in terminal racemes, petals 3.5-7 mm; receptacle spreading in fruit, <6mm, fruit rhomboid with two conical valves, stipe at least as long as the capsule

Flora: Intermountain Flora Volume 2B, page 169

Threats: livestock trampling





Scientific Name: *Cymopterus acaulis* (Pursh) Raf. var. *greeleyorum* Grimes & Packard

Symbol: CYACG

Common Name: Greeley's wavewing

Family (Common Name): Apiaceae (Carrot Family)

Status: Idaho BLM Sensitive Type 3

Flowering Period: March to April; fruiting into early June

Habitat: occupies sites which undergo a lot of soil movement; the sand is loosely held together, while the deposits that have weathered clay shrink and swell greatly; known to occur on sandy loam or clay soils, brown and white volcanic ash

Associates: within *Artemisia tridentata wyomingensis*, desert shrub, and *Oryzopsis hymenoides* zones

Distribution: known along the northern boundary, JRA; Elmore and Owyhee cos., Idaho; Malheur Co., Oregon

Key Characteristics: restricted habitat; flowers and stamens yellow; leaves dark green, shiny, ultimate segments are larger than those of the typical variety

Flora: Intermountain Flora Volume 3a, page 392

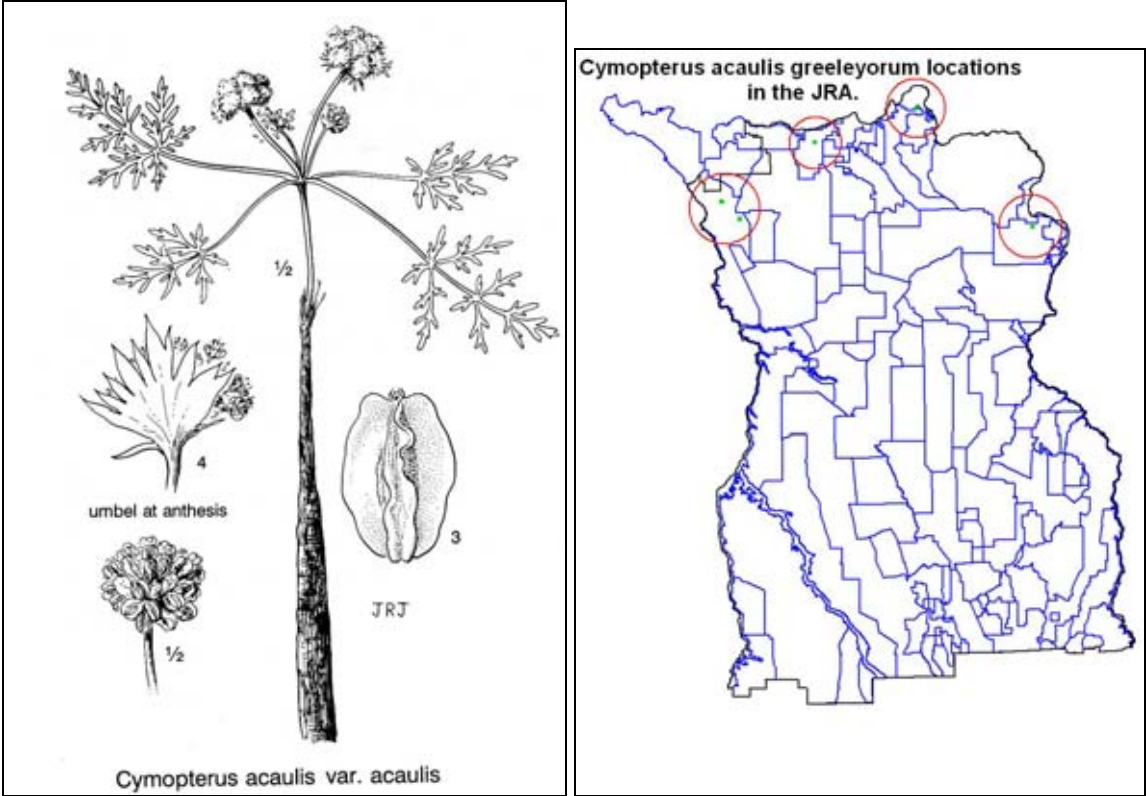
Threats: include off highway vehicle use and livestock grazing; impacts from livestock may include direct mortality due to trampling and degradation of habitat





Cymopterus acaulis greeleyorum habitat





Scientific Name: *Eatonella nivea* (DC Eaton) A. Gray

Symbol: EANI

Common Name: White eatonella

Family (Common Name): Asteraceae (Sunflower Family)

Status: Idaho BLM Sensitive Type 4

Flowering Period: early April through June (early July)

Habitat: occurs on dry sandy or volcanic soils in salt desert shrub habitats on barren sites surrounded by sagebrush; at 763 to 1900 m elevations

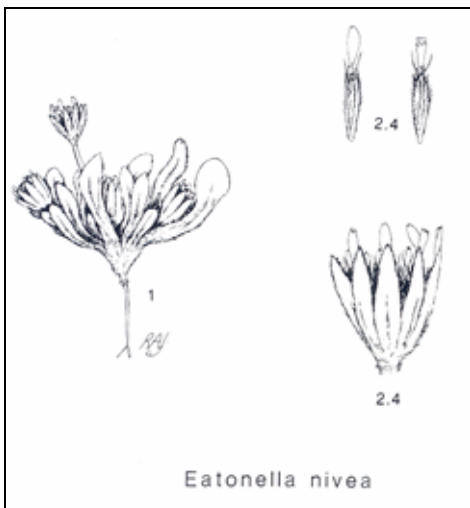
Associates: *Artemisia tridentata tridentata*, *Purshia tridentata*, *Salvia dorrii*

Distribution: expected in the JRA; Lemhi, Custer, Elmore, and Owyhee cos., Idaho; the central Idaho populations are disjunct along the Salmon River; se Oregon, c and w Nevada, and Inyo Co., California

Key Characteristics: depressed (1-2 cm tall) white-woolly annual; flowers white to pinkish or purplish; plant woolly at base; branches from the base forming small tufts; leaves numerous, entire, spatulate to ovate

Flora: Intermountain Flora Volume 5, page 110; Flora of the Pacific Northwest, page 510

Threats: include off road vehicles, grazing impacts, and spring livestock trampling



Eatonella nivea habitat



Scientific Name: *Epipactis gigantea* Dougl. Ex Hook

Symbol: EPGI

Common Name: Chatterbox orchid

Family (Common Name): Orchidaceae (Orchid Family)

Status: Idaho BLM Sensitive Type 3

Flowering Period: April to early August

Habitat: occurs in calcareous hot or cold springs from 800-2000 m elevations

Associates: *Mimulus*, *Eleocharis*, and *Carex*

Distribution: known in the Bruneau River Canyon and may occur in the Bruneau Hill area, JRA; known from Adams, Boise, Bonner, Boundary, Camas, Clark, Custer, Elmore, Gooding, Idaho, Jerome, Lemhi, Madison, Owyhee, Twin Falls, and Valley cos., Idaho; British Columbia to Baja California, and most of w NA to the Rocky Mountains and South Dakota to n Sonora, Mexico

Key Characteristics: rhizomatous orchid with one to many stems; flowers brownish-purple; plants up to 3 feet tall; leaves numerous, clasping, elliptical, broad

Flora: Intermountain Flora Volume 6, page 549; Flora of the Pacific Northwest, page 701

Threats: include development and human disturbance of hot or cold springs and seeps, and livestock grazing and trampling







Scientific Name: *Erigeron latus* (A Nelson & JF Macbride) Cronquist

Symbol: ERLA14

Common Name: Broadleaf fleabane

Family (Common Name): Asteraceae (Sunflower Family)

Status: Nevada BLM Sensitive

Flowering Period: June through July

Habitat: occurs on rocky soil derived from lava on shallow, relatively barren, ephemerally saturated, otherwise dry, gravelly to sandy soils or bedrock on flats and slopes of volcanic scablands or benches, mostly rhyolitic or basaltic in composition

Associates: in the sagebrush steppe and juniper zones with *Artemisia arbuscula* and *A. tridentata*; *Haplopappus acaulis*, *Eriogonum*, and sometimes *Juniperus*

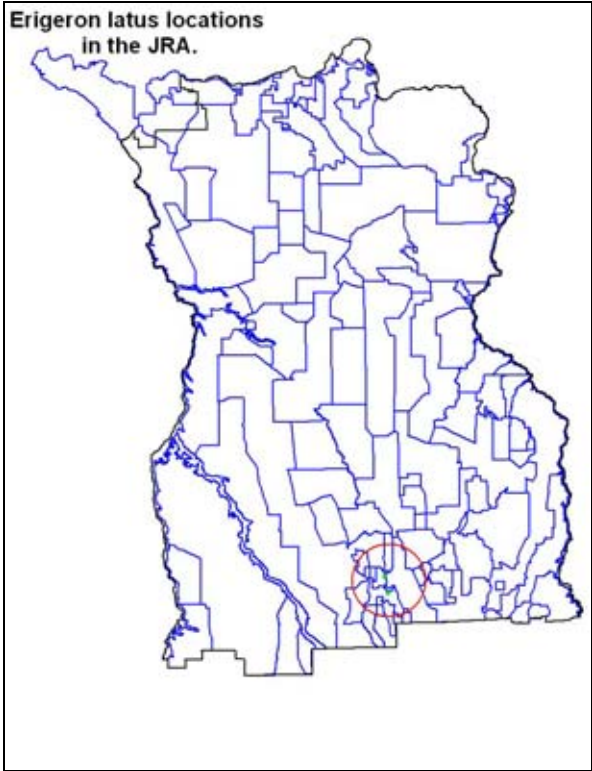
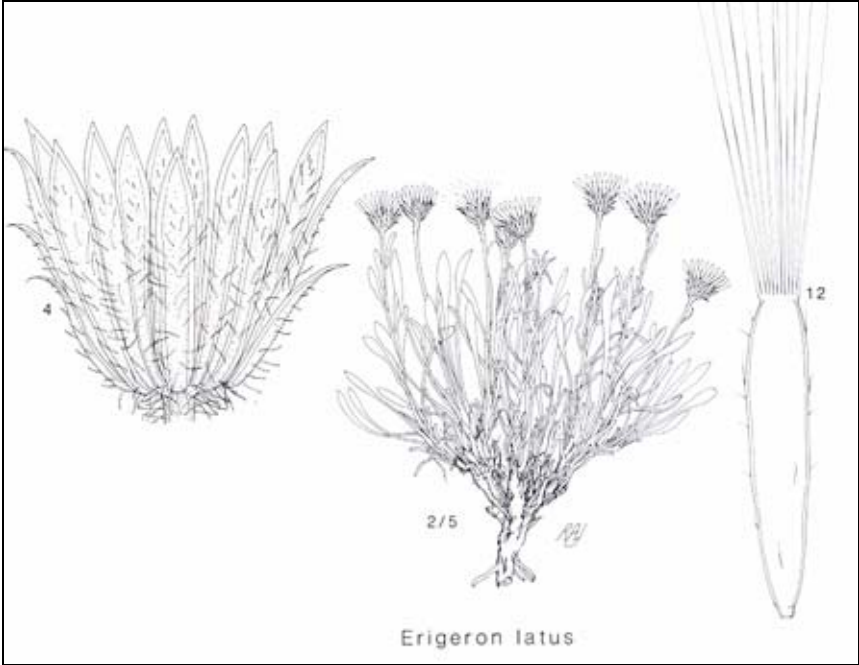
Distribution: known in the Three Creek area, JRA; Elko Co., Nevada; Cassia, Owyhee, and Twin Falls cos., Idaho.

Key Characteristics: flowers pink to purple, heads solitary; plant is 3-8 cm tall; leaves mostly basal, spatulate; herbage with glandular hairs

Flora: Intermountain Flora Volume 5, page 332

Threats: livestock grazing does not directly threaten this species, but habitat destruction by related roads and water developments has occurred to a small degree, silt block placement





Scientific Name: *Eriogonum lewisii* Reveal

Symbol: ERLE13

Common Name: Lewis buckwheat

Family (Common Name): Polygonaceae (Buckwheat Family)

Status: Nevada BLM Sensitive

Flowering Period: June through September (October); most frequent survey months are July-October

Habitat: occurs on dry, exposed, relatively barren and undisturbed, rocky residual soils on convex ridge-line knolls and crests underlain by siliceous carbonate rocks, on flat to moderately steep slopes of all aspects, but with the densest stands on southerly aspects; at elevations from 1972 to 2963 m

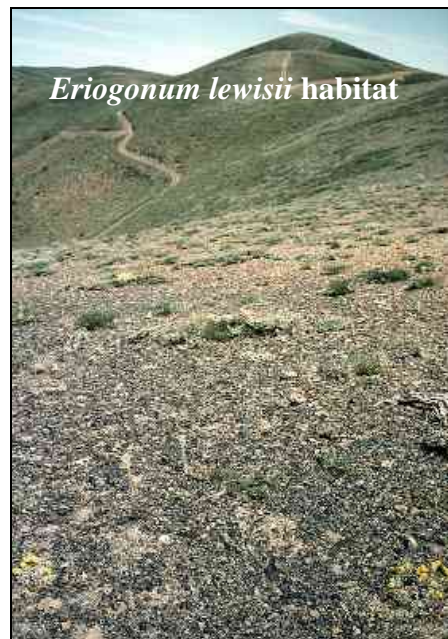
Associates: co-dominating with *Artemisia arbuscula* and *Sitanion hystrix*; *Chrysothamnus viscidiflorus*, *Cryptantha interrupta*, *Chaenactis douglasii*, and *Stanleya viridiflora*.

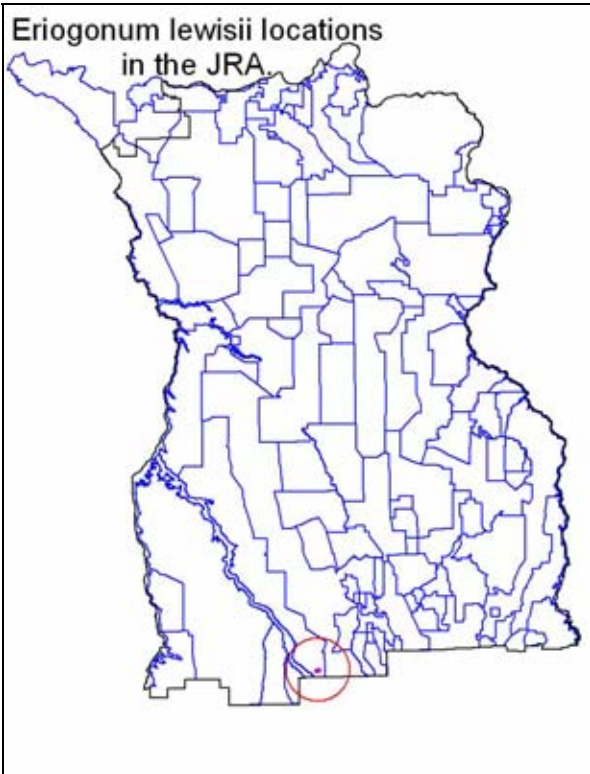
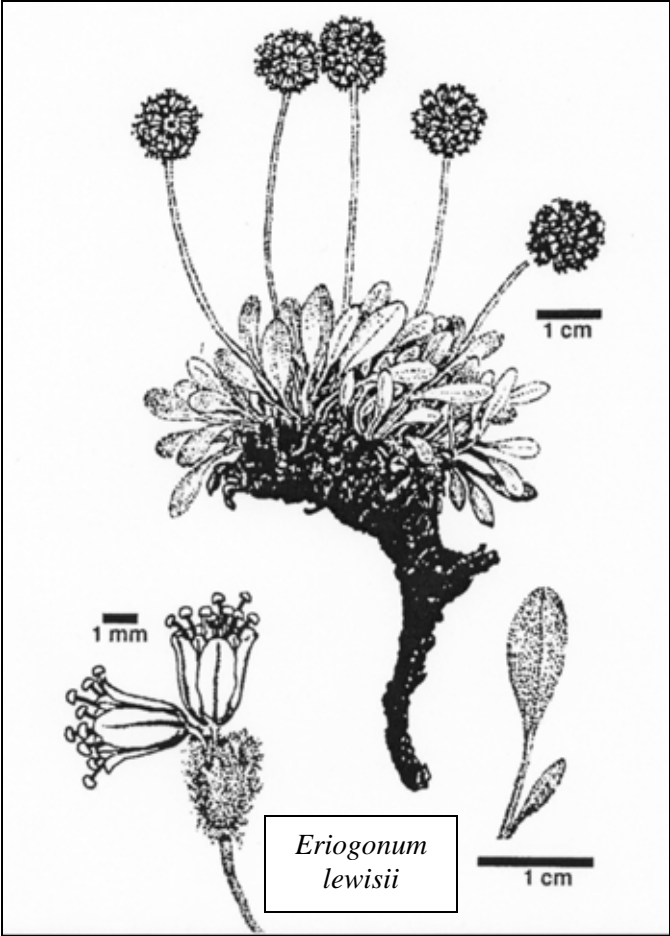
Distribution: reported in extreme s-c, JRA; n-c Elko and n Eureka cos., Nevada; expected in extreme s Idaho and possibly in nw Utah

Key Characteristics: perennial forming compact mats; smooth hairless yellowish flowers 2-3 mm long forming a tight ball at the tip of each leafless, unbranched stem, the 6 flower parts about equal in size and shape; sparse cobwebby hairs on the stem and on the 3-6 thick, rigid flower cups; greenish-gray, entire, broadly elliptic to rounded leaf blades less than 15 mm long and 8 mm wide with flat or slightly curled edges; similar to *Eriogonum desertorum*, from which it is distinguished mainly by smaller leaves, and somewhat smaller flowering stems;

Flora: NA

Threats: include mineral exploration and development, development of roads and electronic sites, off-road vehicle travel, livestock, grazing and related development projects, fire and fire suppression activities





Scientific Name: *Eriogonum ochrocephalum* S. Wats. var. *calcareum* (Stokes) Peck

Symbol: EROCC

Common Name: Calcareous buckwheat

Family (Common Name): Polygonaceae (Buckwheat Family)

Status: Idaho BLM Sensitive Type 3

Flowering Period: May through August (September)

Habitat: occurs on rolling, sparsely vegetated, clay hills at 640 to 1000 m elevations

Associates: *Atriplex canescens*, *A. confertifolia*, *Grayia spinosa*, *Stanleya pinnata*;
sometimes occurs with *Penstemon janishiae*

Distribution: known in n JRA; Elmore, Owyhee, Payette, Twin Falls, and s Washington cos., Idaho; Baker and Malheur cos., Oregon

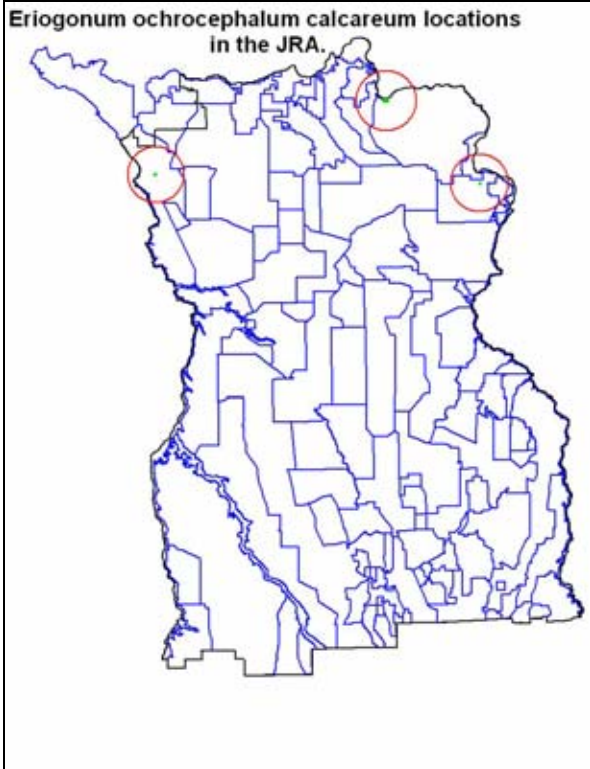
Key Characteristics: plants mat forming; leaf blades lanceolate to elliptic or oblong (1-3.5 x 0.5-1.5 cm); scapes 1-3.5 dm, glabrous or slightly floccose; involucre turbinate (3-4.5(6) x 2.5-3(4) mm), tube sparsely floccose to glabrous; flowers 1.5-3 mm, glabrous; achenes 1.5-3 mm

Flora: None

Threats: include off highway vehicle use, livestock trampling







Scientific Name: *Eriogonum shockleyi* S. Wats. var. *packardiae* Reveal

Symbol: ERSHP

Common Name: Packard's cowpie buckwheat

Family (Common Name): Polygonaceae (Buckwheat Family)

Status: Idaho BLM Sensitive Type 3

Flowering Period: May through July

Habitat: Oolitic limestone outcrops, sandy loess over basalt, and cobbly desert pavement over deep sandy-loam; in shadscale, mixed desert shrub and sagebrush communities; elevations from 760-1300 m; this species is endemic to sw Idaho along the Snake River and a few tributaries in Ada and Owyhee cos.

Associates: *Tetradymia glabrata*, *Eurotia lanata*, *Atriplex confertifolia*, *Oryzopsis hymenoides*, *Stipa comata*, and *Langloisia*

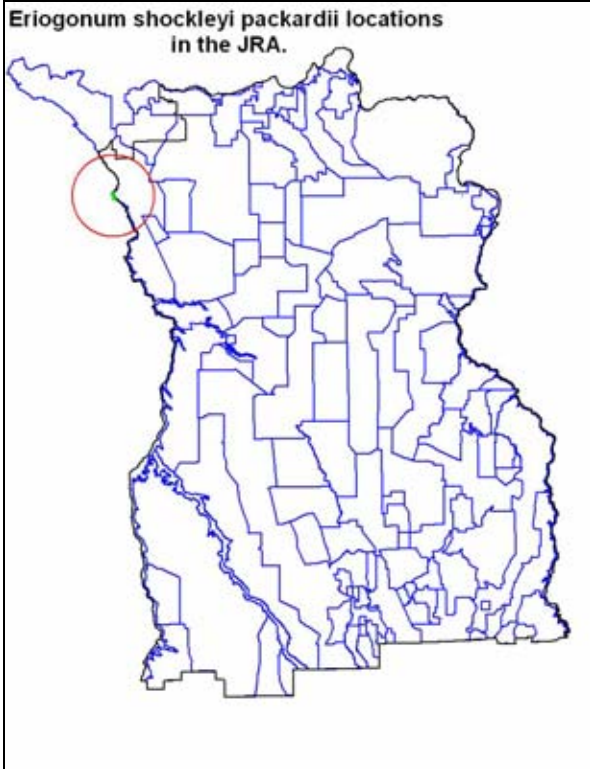
Distribution: known in the Bruneau Arm Allotment; Elmore, Gooding, Owyhee, and Twin Falls cos., Idaho; Inyo Co., California across c Nevada to w Utah

Key Characteristics: matted, compact perennial; flowers creamy white; leaves small with whitish cast; flowering stems at anthesis <10 mm long (mostly < 5mm); flowering stems short, hardly visible, the inflorescences sitting directly on or within the cushion; leaf blades elliptic, short and narrow, 2-5 mm long x 1-3 mm wide; petioles <4 mm long

Flora: None

Threats: mining of oolitic limestone; off-road vehicle use, wildfires, fire line construction and other fire suppression activities, livestock trailing, and range development projects





Scientific Name: *Eriogonum shockleyi* S. Wats. var. *shockleyi*

Symbol: ERSHS, ERSHP

Common Name: Matted cowpie buckwheat

Family (Common Name): Polygonaceae (Buckwheat Family)

Status: Idaho BLM Sensitive Type 3

Flowering Period: May through July

Habitat: occurs on sparsely vegetated sandy-loams, cobbly desert pavement, and gravelly calcrete on lacustrine sediments; in shadscale, mixed desert shrub and sagebrush communities; elevations from 760-1300 m; Idaho is the northern limit for this species and populations here are considered disjunct from the Nevada population

Associates: *Artemisia tridentata*, *Atriplex canescens*, *Chrysothamnus viscidiflorus*, *Phlox hoodii*, *Oryopsis hymenoides*

Distribution: known in n JRA; Elmore, Gooding, Owyhee, and Twin Falls cos., Idaho; Inyo Co., California across c Nevada to w Utah;

Key Characteristics: matted, compact perennial; flowers creamy white; leaves small with whitish cast; flowering stems at anthesis >10 mm long; flowering stems obviously extending above the cushion; leaf blades obovate, oblanceolate, elliptic, or spatulate, 3-10 mm long x 2-5 mm wide; petioles >4 mm long; matted, compact perennial; flowers creamy white; leaves small with whitish cast

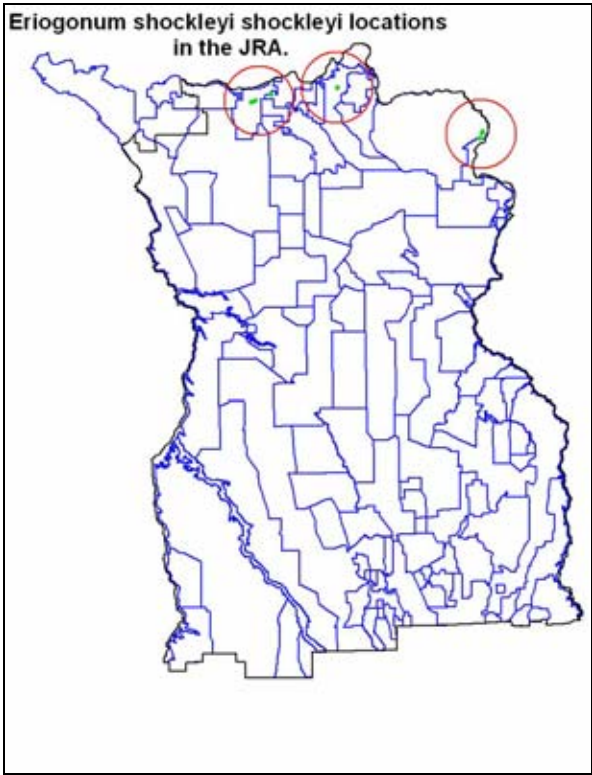
Flora: None

Threats: include off-road vehicle use, wildfires, fire line construction, livestock trailing, range projects, fire breaks, and mining of oolitic limestone





Eriogonum shockleyi shockleyi habitat



Scientific Name: *Glyptopluera marginata* DC Eaton in King

Symbol: GLMA2

Common Name: White-margined wax plant

Family (Common Name): Asteraceae (Sunflower Family)

Status: Idaho BLM Sensitive Type 4

Flowering Period: May through June

Habitat: occurs on dry, sandy-gravelly or loose ash soils; at elevations from 800-1200 m

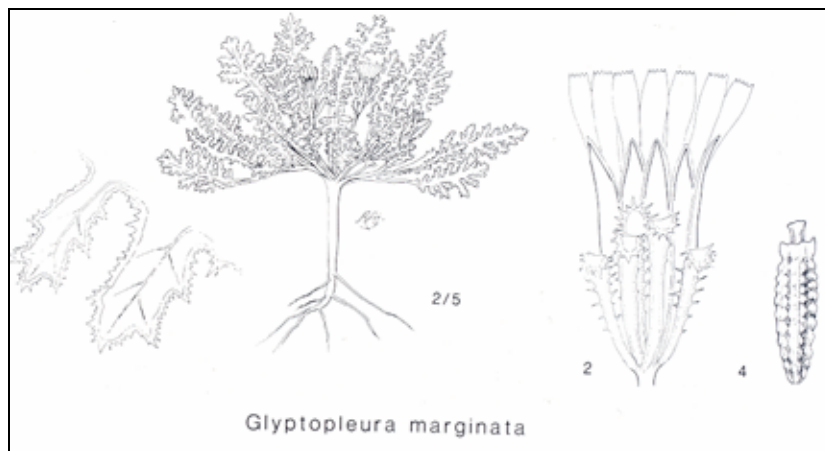
Associates: in *Atriplex canescens*, *Sarcobatus*, *Chrysothamnus*, *Grayia spinosa*, *Eurotia lanata*, and sagebrush communities

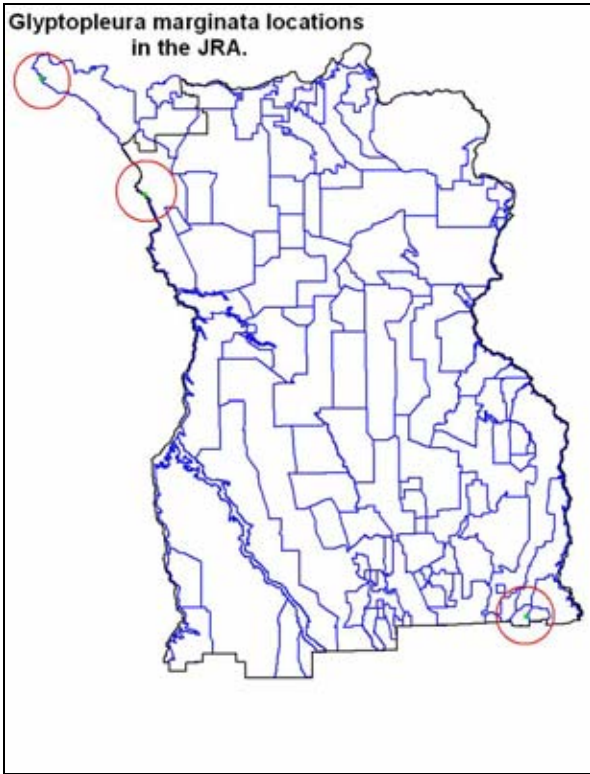
Distribution: known in nw and se JRA; Elmore, Owyhee, and Twin Falls cos., Idaho; se Oregon, s through w Nevada to San Bernardino Co. and the White Mtns of California, e through Elko and White Pine cos., Nevada to scattered counties in Utah

Key Characteristics: dwarf, tufted winter annual with milky juice; flowers white or pale yellow, drying to pink; leaves crowded, pinnately lobed or toothed with a white, waxy margin

Flora: Intermountain Flora Volume 5, page 442

Threats: include off-road vehicles, increased agricultural development, range development projects, and heavy recreational use in the Hot Springs area





Scientific Name: *Ipomopsis polycladon* (Torr.) V. Grant; syn. *Gilia polycladon*

Symbol: IPPO2

Common Name: Spreading gilia

Family (Common Name): Polemoniaceae (Phlox Family)

Status: Idaho BLM Sensitive Type 3

Flowering Period: April through June

Habitat: occurs in dry, open areas on sandy to silty soils; desert shrub communities of shadscale, horsebrush, and sagebrush; elevations from 800 to 1500 m

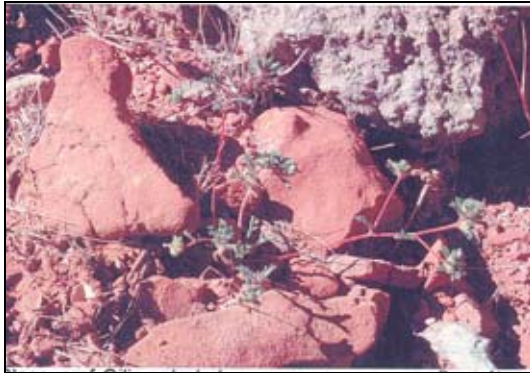
Associates: *Atriplex confertifolia*, *Malacothrix*

Distribution: known in the Bruneau Hill area, JRA; Butte, Elmore, Owyhee, and Power cos., Idaho; California, Nevada, Utah, and Colorado, s to Texas, Arizona, and n Mexico

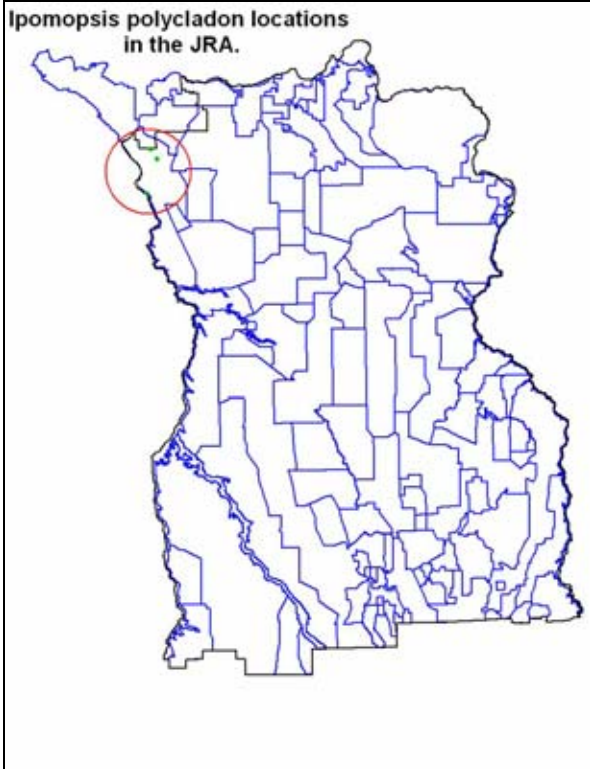
Key Characteristics: easily identified by its prostrate, rigid, subnaked, divaricate branches and terminal, leafy-bracted flower-clusters

Flora: Intermountain Flora Volume 2B, page 262

Threats: no threats have been identified for this species







Scientific Name: *Lepidium davisii* Rollins

Symbol: LEDA2

Common Name: Davis peppergrass

Family (Common Name): Brassicaceae (Mustard Family)

Status: Idaho BLM Sensitive Type 3; Nevada BLM Sensitive

Flowering Period: May through June, fruiting July-August

Habitat: barren, internally drained, vernal wet with standing water, hard-bottomed playas between 800 and 1600 m elevations

Associates: barren areas within the big sagebrush-shadscale vegetation zone, may have a few scattered shadscale or silver sage growing in playas

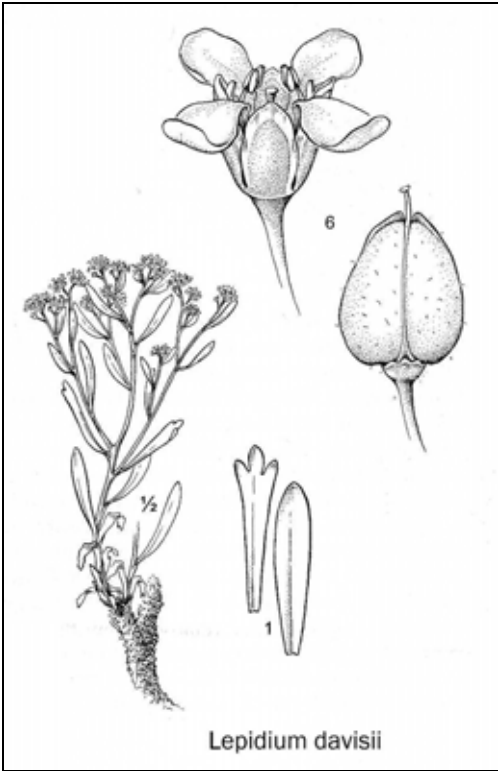
Distribution: known in the 71 Desert, Diamond A, and Winter Camp areas, JRA; Ada, Elmore, Owyhee, and Twin Falls counties, Idaho; Malheur Co, Oregon and n Elko Co, Nevada

Key Characteristics: white, 4-petaled flowers; leaves somewhat fleshy, entire or with 1-3 apical teeth; plant can become quite “woody”; only found in playas; very numerous stems from a much-branched caudex

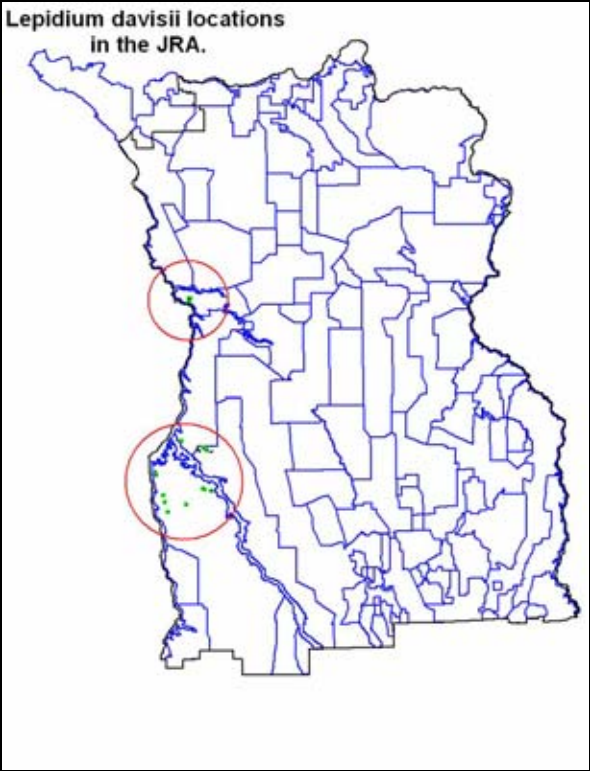
Flora: Intermountain Flora Volume 3B, page 262

Threats: include direct disturbance and habitat alteration from livestock use, stock pond development in playas (which is the most critical threat), OHV use, salt block placement, and increased erosion into playas from degradation of the surrounding habitat





Lepidium davisii



Scientific Name: *Lepidium papilliferum* (Hends.) A. Nels. & Macbr.

Symbol: LEPA17

Common Name: Slickspot peppergrass

Family (Common Name): Brassicaceae (Mustard Family)

Status: Idaho BLM Sensitive Type 1; Proposed Endangered

Flowering Period: May through June (July)

Habitat: bare slickspot soils within Wyoming sagebrush habitat at 400-1600m

Associates: typically in barren slickspots, may have perennials or exotic annuals present

Distribution: known in the Inside Desert, Juniper Draw, Juniper Butte, Juniper Ranch, and Poison Butte Allotments, historic in the Crawfish Allotment, may occur in suitable habitat throughout the JRA; Ada, Canyon, Elmore, Gem, Owyhee, and Payette cos, Idaho

Key Characteristics: flowers white, 4 petals; leaves pinnate, densely papillose-puberulent, the hairs appearing somewhat flattened; stamen stalks bearded; annual to biennial species, usually forms rounded clumps to 4 dm and the ovate to ovate-elliptic 2.5-3 mm long glabrous silicles have a very narrowly winged up-turned margin

Flora: Intermountain Flora Volume 2B, page 259; Cruciferae of North America

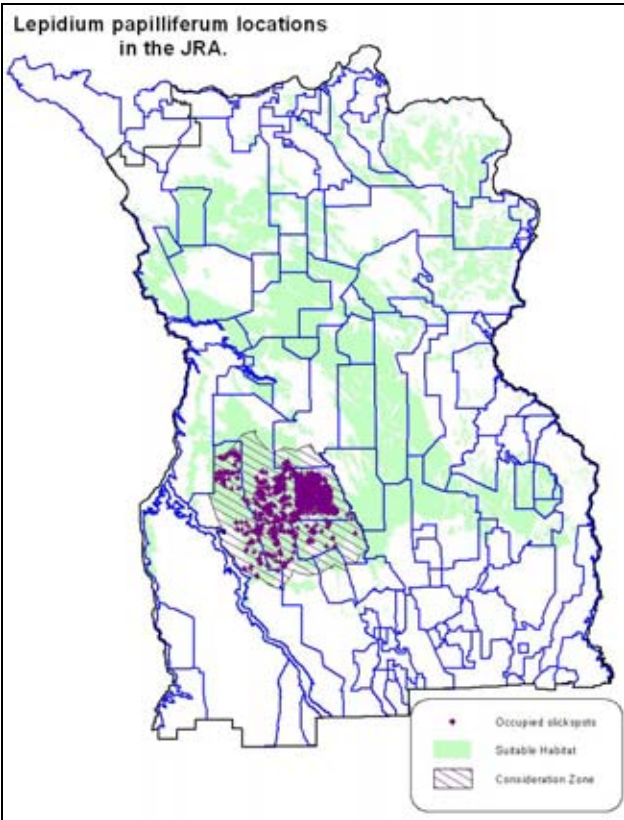
Threats: include degradation of slickspots and surrounding area habitat, from livestock trampling, fire, and weed invasion





Lepidium papilliferum
habitat





Scientific Name: *Leptodactylon glabrum* Patterson & Yoder-Williams

Symbol: LEGL6

Common Name: Bruneau River prickly phlox

Family (Common Name): Polemoniaceae (Phlox Family)

Status: Idaho BLM Sensitive Type 3; Nevada BLM Sensitive

Flowering Period: April through July

Habitat: vertical or under-hanging rhyolitic canyon walls, rock ledges and cliffs at 864-1444 m elevations

Associates: sparsely vegetated rock walls

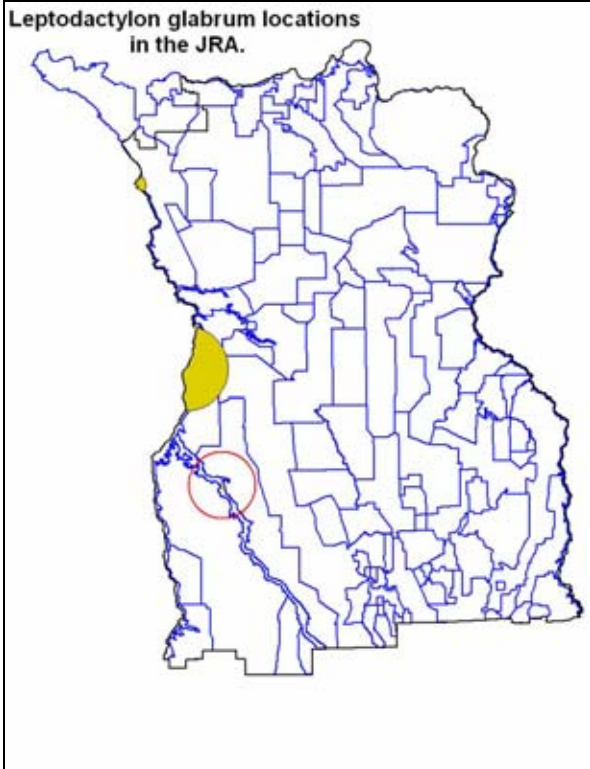
Distribution: known in the Bruneau River Canyon, JRA; restricted to the Bruneau and Jarbidge Rivers and their tributaries in Owyhee Co, Idaho and Humboldt Co, Nevada

Key Characteristics: white to cream colored flowers; matted growth form that can be very large; prickly, filiform-linear leaves (only 0.5 mm wide); restricted habitat

Flora: None

Threats: decline in pollinators and damming the river





Scientific Name: *Nemacladus rigidus* Curran

Symbol: NERI

Common Name: Rigid threadbush

Family (Common Name): Campanulaceae (Bellflower Family)

Status: Idaho BLM Sensitive Type 4

Flowering Period: May through June (July)

Habitat: occurs on loose, sandy, cindery or ashy outcrops, cracks in basalt, or in dried mud at elevations from 800-1200 m

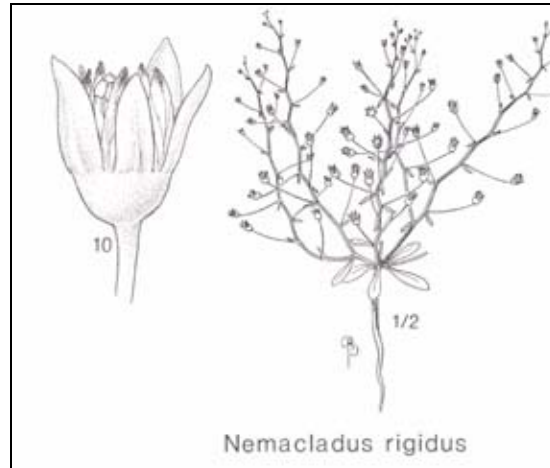
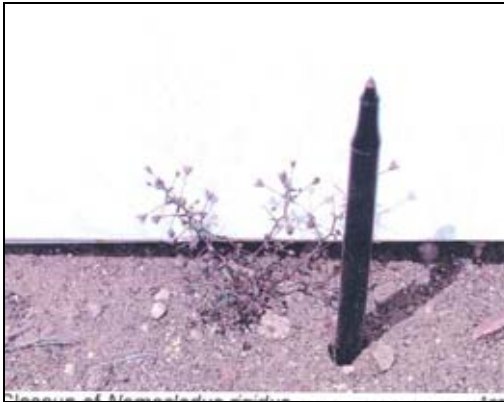
Associates: known from the shadscale-sagebrush zone

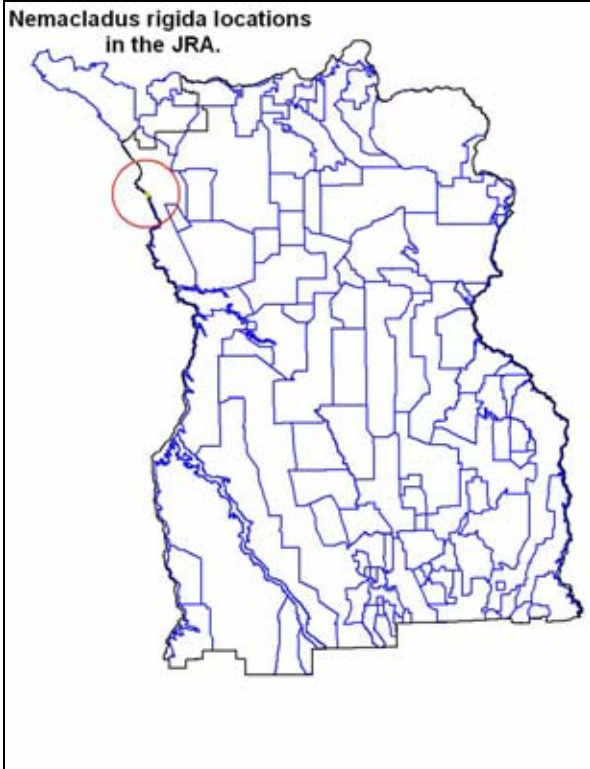
Distribution: known in the Bruneau Hill area, JRA; Owyhee Co, Idaho; se Oregon, s to ne California to Inyo Co, e to n Nye Co, Nevada

Key Characteristics: compact annual typically 1-3 cm tall; herbage dark-greenish-purple or brownish-purple; stems relatively stout, spreading, often multi-branched; flowers white, inconspicuous, sepals unequal, the larger ones (1.5) 2-4 mm long

Flora: Intermountain Flora Volume 4, page 526

Threats: include off-road vehicles and range development projects





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

Symbol: PESIR

Common Name: Simpson's hedgehog cactus

Family (Common Name): Cactaceae (Cactus Family)

Status: Idaho BLM Sensitive Type 4

Flowering Period: May through June

Habitat: small, barrel cactus found on gravelly soils in low sagebrush/Idaho fescue plant communities from 900-1800 m elevations

Associates: *Artemisia arbuscula*, *Artemisia spinescens*, *Poa sandbergii* communities; often associated with *Erigeron bloomeri*

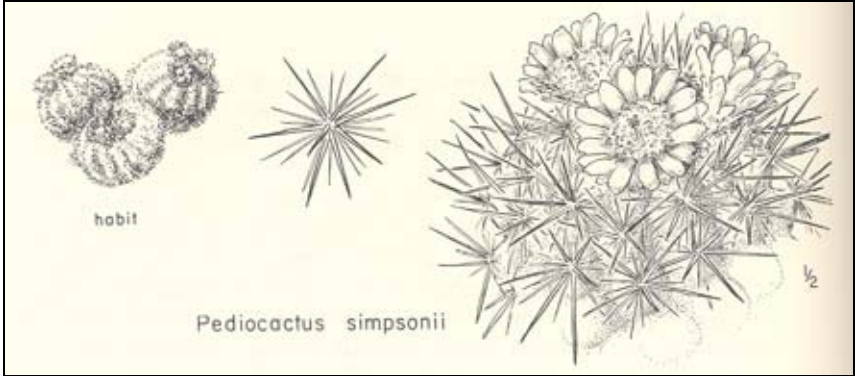
Distribution: known in the 71 Desert and Taylor Pocket areas, and se, JRA; Cassia, Idaho, Nez Perce, Oneida, Owyhee, and Twin Falls cos, Idaho; s and e to Nevada, Wyoming, Utah, and Colorado

Key Characteristics: only barrel cactus in s Idaho; may be confused with species of *Coryphantha* which differs in having flowers borne at base of the grooved tubercles of the stem

Flora: Vascular Plants of the Pacific Northwest Volume 3, page 510; Flora of the Pacific Northwest, page 301

Threats: primarily collection of plants from the wild by private and commercial cactus collectors, but fire, habitat degradation, and trampling from livestock and OHV also impact this species





Scientific Name: *Penstemon janishiae* N. Holmg.

Symbol: PEJA2

Common Name: Janish penstemon

Family (Common Name): Scrophulariaceae (Figwort Family)

Status: Idaho BLM Sensitive Type 3

Flowering Period: late April through mid-June

Habitat: occurs on clay soils derived from volcanic rock in sagebrush, juniper, and pinyon-juniper habitats at 800-1300 m elevations

Associates: *Astragalus purshii*, *A. toanus*, *Allium*, *Poa sandberg*; sometimes occurs with *Eriogonum ochrocephalum calcareum*

Distribution: known south of Pasadena Valley and Glenns Ferry, and in the Bruneau Hill area, JRA; s Idaho is the northeastern limit of this species' range

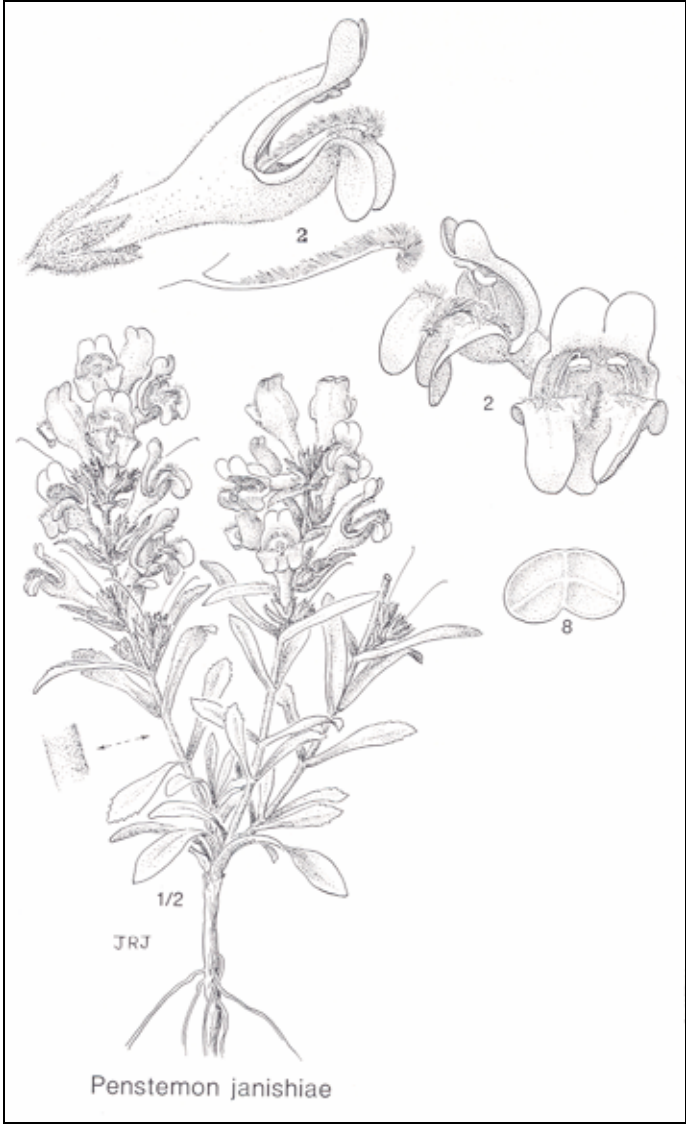
Key Characteristics: corolla pinkish-purple, 18-28 mm long, throat 7-12 mm wide when pressed, upper lip (6.5) 8-13 mm long; staminode conspicuously exerted and coiled apically

Flora: Intermountain Flora Volume 4, page 408

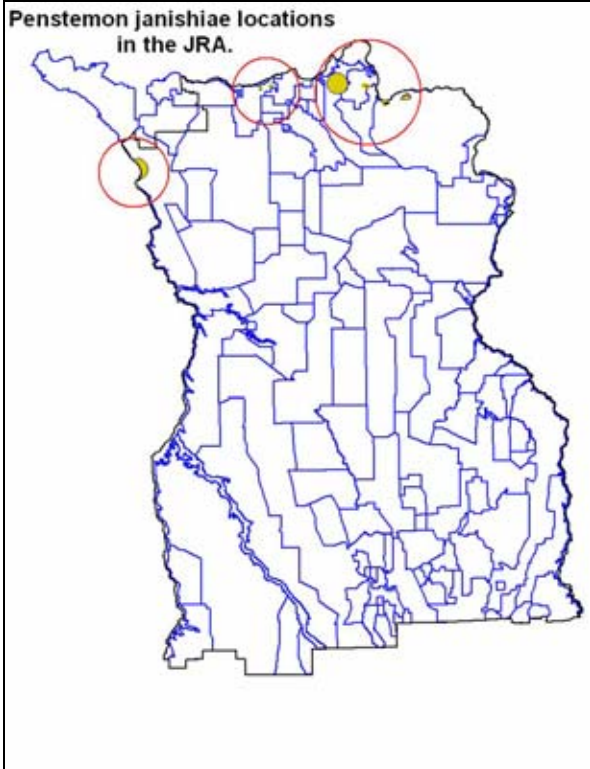
Threats: include off highway vehicle use, livestock and wild horse trampling and range improvement projects







Penstemon janishiae



Scientific Name: *Peteria thompsoniae* S. Wats.

Symbol: PETH5

Common Name: Spine-noded milkvetch

Family (Common Name): Fabaceae (Pea Family)

Status: Idaho BLM Sensitive Type 4

Flowering Period: (late April) May through June

Habitat: occurs in disjunct populations on barren areas with thin cinder soils in the salt desert shrub and sagebrush plant communities at elevations in Idaho from 840-1300 m

Associates: *Grayia spinosa*, *Atriplex*, *Tetradymia glabrata*, *Salvia dorrii*, *Astragalus geyeri*, *A. nudisiliquus*, *Dalea ornata*, *Gilia*

Distribution: known in the Bruneau Hill area, JRA; Owyhee Co, Idaho, e Utah, w across s Utah and adjacent Arizona, s Nevada to ne Nye Co; Idaho populations in the lower Bruneau River area are isolated from the main populations but represent some of the largest populations of the species

Key Characteristics: superficially resembling an *Astragalus* but easily distinguished by small, sharp spines at leaf bases; flowers white to yellowish; pods straight, flattened, 5-6.5 cm when fully fertilized

Flora: Intermountain Flora Volume 3B, page 20

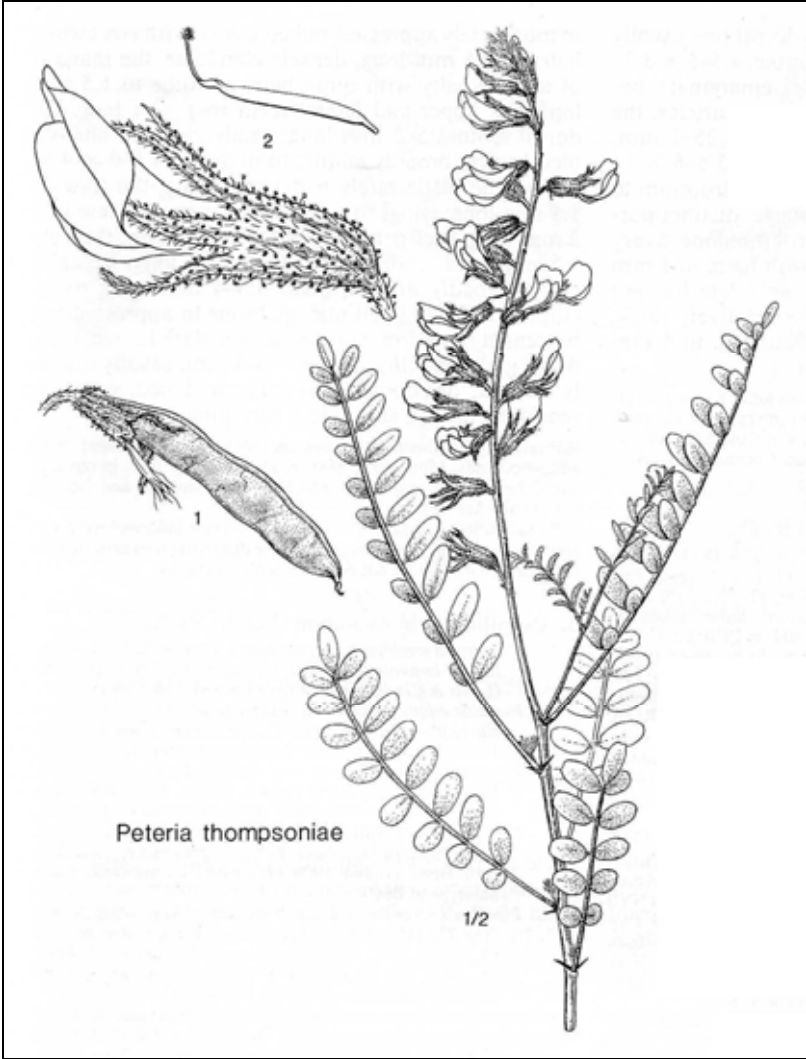
Threats: include off highway vehicle use and concentrated riparian grazing use of adjacent areas, silt block placement, development of irrigation canals, water diversions

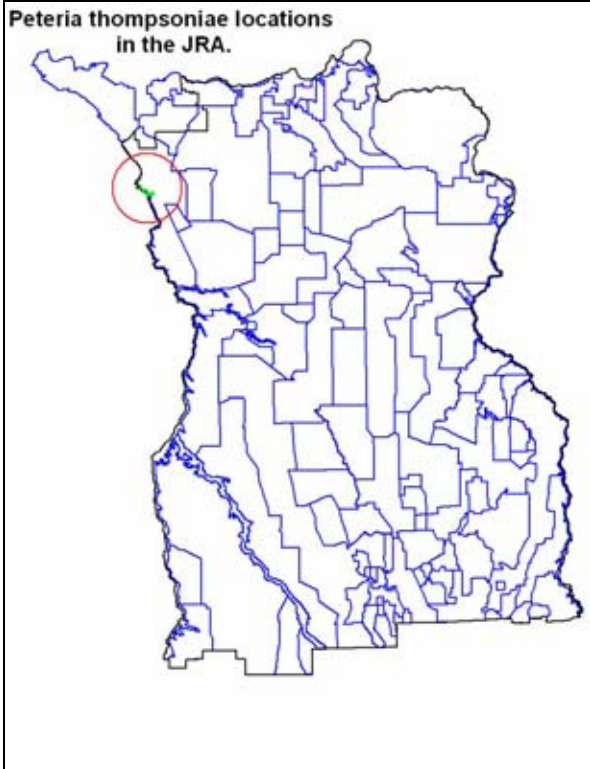




Peteria thompsoniae
habitat







Scientific Name: *Phacelia minutissima* L.F. Henderson

Symbol: PHMI7

Common Name: Least phacelia

Family (Common Name): Hydrophyllaceae (Waterleaf Family)

Status: Idaho BLM Sensitive Type 3; Nevada BLM Sensitive

Flowering Period: April through July

Habitat: occurs on vernal saturated, summer-drying, sparsely vegetated, partially shaded to fully exposed areas of bare soil and mud banks in meadows, at perimeters of *Veratrum californicum*, *Wyethia amplexicaulis*, and/or aspen stands, in sagebrush swales, along creek bed high-water lines, or around springs, in flat to gently sloping areas; the only annual *Phacelia* of moist habitats

Associates: *V. californicum*, *W. amplexicaulis*, *Populus tremuloides*

Distribution: known in the Diamond A area, JRA; Camas and Owyhee cos, Idaho; and disjunct localities in Elko Co, Nevada, Wallowa Mts., Oregon, and c Washington

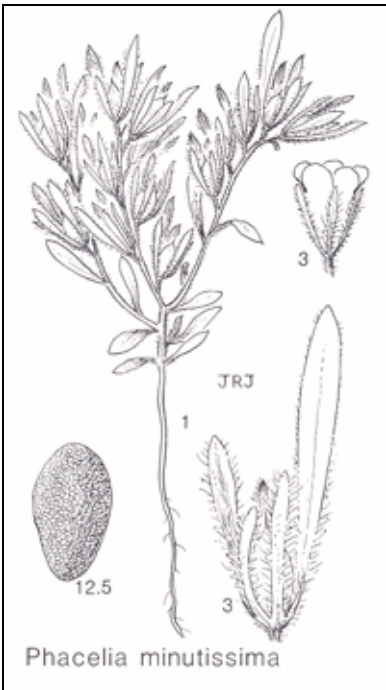
Key Characteristics: unequal fruiting calyx lobes (one or more often foliaceous); mostly cauline leaves; terminal inflorescence; annual plants to 10 cm tall; flowers inconspicuous, lavender

Flora: Intermountain Flora Volume 4, page 164; Flora of the Pacific Northwest, page 382

Threats: mineral exploration and development, livestock trampling, water developments and diversions, competition with invasive weeds







Scientific Name: *Primula cusickiana* (Gray) Gray var. *cusickiana*

Symbol: PRCU2

Common Name: Cusick's primula

Family (Common Name): Primulaceae (Primrose Family)

Status: Idaho BLM Watch List; Nevada BLM Sensitive

Flowering Period: Late February to June

Habitat: occurs on loam or especially heavy clay soils associated with ephemerally wet seeps, springs, and drainage-ways, swales in sagebrush-grass communities in the foothills and plains at elevations of 750-1900m; in the JRA occurs in small, moist openings in mountain mahogany thickets on steep slopes

Associates: strongly associated with *Saxifraga occidentalis*, also *Agropyron spicatum*, *Mertensia*, moss, and lichen

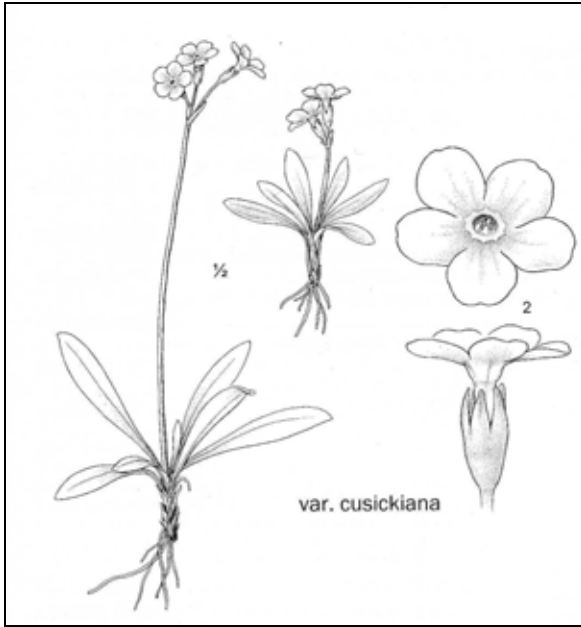
Distribution: known on Cougar Point off the East Fork Jarbidge River, JRA; SW Idaho, NE Oregon, Elko Co, Nevada;

Key Characteristics: leaves mostly in flat rosettes, <10cm long; corolla bluish-violet to purplish with yellow "eye", fornicies lacking in the throat, lobes about 4 mm long and <1.5 cm broad, corolla tube <1.5x as long as calyx; flowers 1-3 (6)

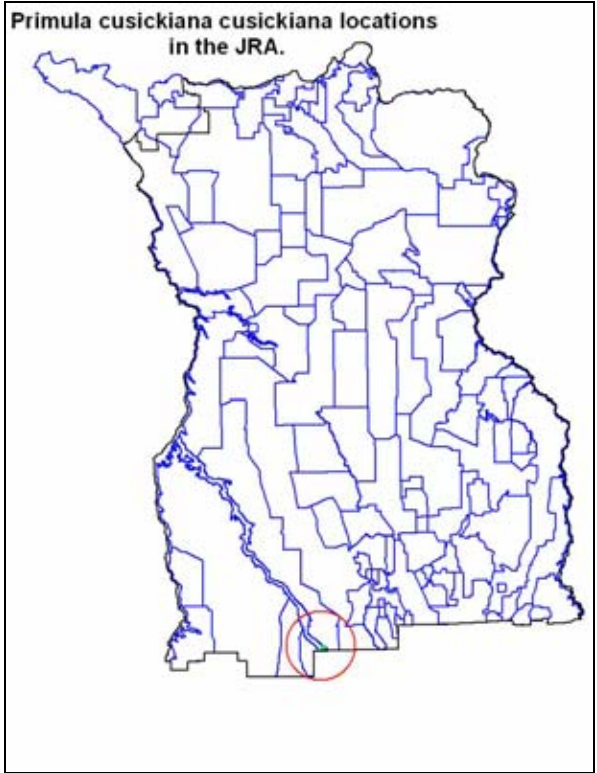
Flora: Intermountain Flora Volume 2B, page 458; Flora of the Pacific Northwest, page 355

Threats: include heavy grazing in spring, increasing housing developments, off-road vehicles, and juniper encroachment





Primula cusickiana cusickiana habitat



Scientific Name: *Teucrium canadense* L. var. *occidentale*

Symbol: TECAO

Common Name: American wood sage

Family (Common Name): Lamiaceae (Mint Family)

Status: Idaho BLM Sensitive Type 3

Flowering Period: April through August

Habitat: streambanks and moist bottom lands, 800-1200 m elevation

Associates:

Distribution: known along the Snake River, JRA; Ada, Canyon, Idaho, Owyhee, and Washington counties, ID; widespread in the US and adj. Canada; less common in the w states, in Utah, Cache and Utah counties; Mexico

Key Characteristics: terminal bracteate spikes or racemes (sometimes flowers are solitary in the axils of the upper leaves), calyx teeth lacking spinulose tips, exerted stamens, ovary merely lobed (not cleft to the base), and the laterally attached nutlets

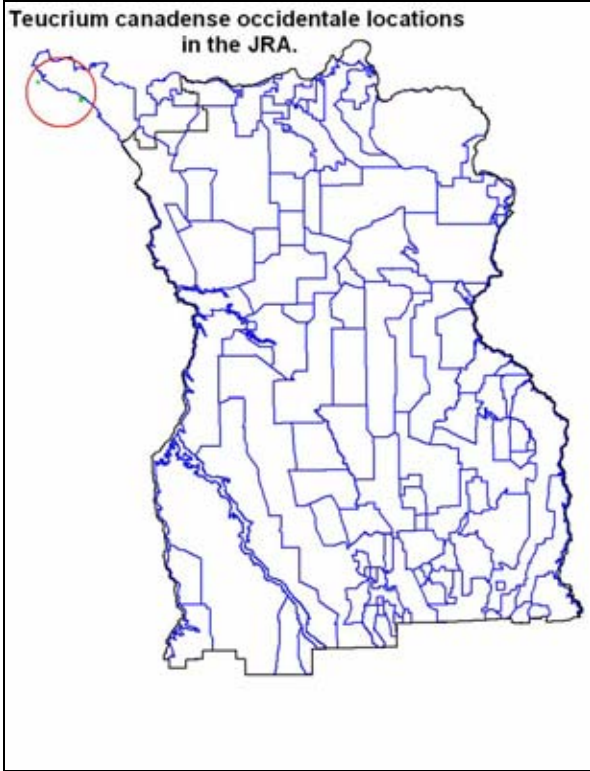
Flora: Intermountain Flora Volume 4, page 304; Flora of the Pacific Northwest, page 409

Threats: grazing, herbicides, agriculture, water diversions



*Teucrium canadense
occidentale*





Scientific Name: *Texosporium sancti-jacobi* (Tuck.) Navd.

Symbol: TESA

Common Name: Woven-spore lichen

Family (Common Name): Caliciaceae (Soot Lichen Family)

Status: Idaho BLM Sensitive Type 2

Flowering Period: Abundantly fertile all year

Habitat: on well decomposed humus, flat or north-facing slopes on especially old clumps of *Poa sandburgii*, in *Artemisia tridentata wyomingensis* / *Stipa thurberiana* - *Agropyron spicatum* sites; heavy clay soils, open areas with high intensity light; low elevation, dry sites from 880-1000m elevation

Associates: old growth *A. tridentata wyomingensis*, *P. sandburgii*, *S. thurberiana*, *A. spicatum*, *Sitanion hystrix*; also *Chrysothamnus nauseosus consimilis*

Distribution: expected in the JRA; Ada and Elmore cos, Idaho; Los Angeles, Santa Barbara, Sand Diego, and San Benito cos, CA; Benton and Klickitat cos, WA; Jefferson and Wasco counties, Oregon

Key Characteristics: can be distinguished by its powdery (sooty), olive green apothecia and its gray colored thallus; green fruiting bodies with white rims, grows adnate to the soil or over moss

Flora: Field Key to the Soil Lichens of Central and Eastern Oregon (McCune and Rosentreter 2001)

Threats: fire, livestock grazing, human disturbance, land development, air pollution



