89-3



IDAHO BLM

TECHNICAL BULLETIN

B
63

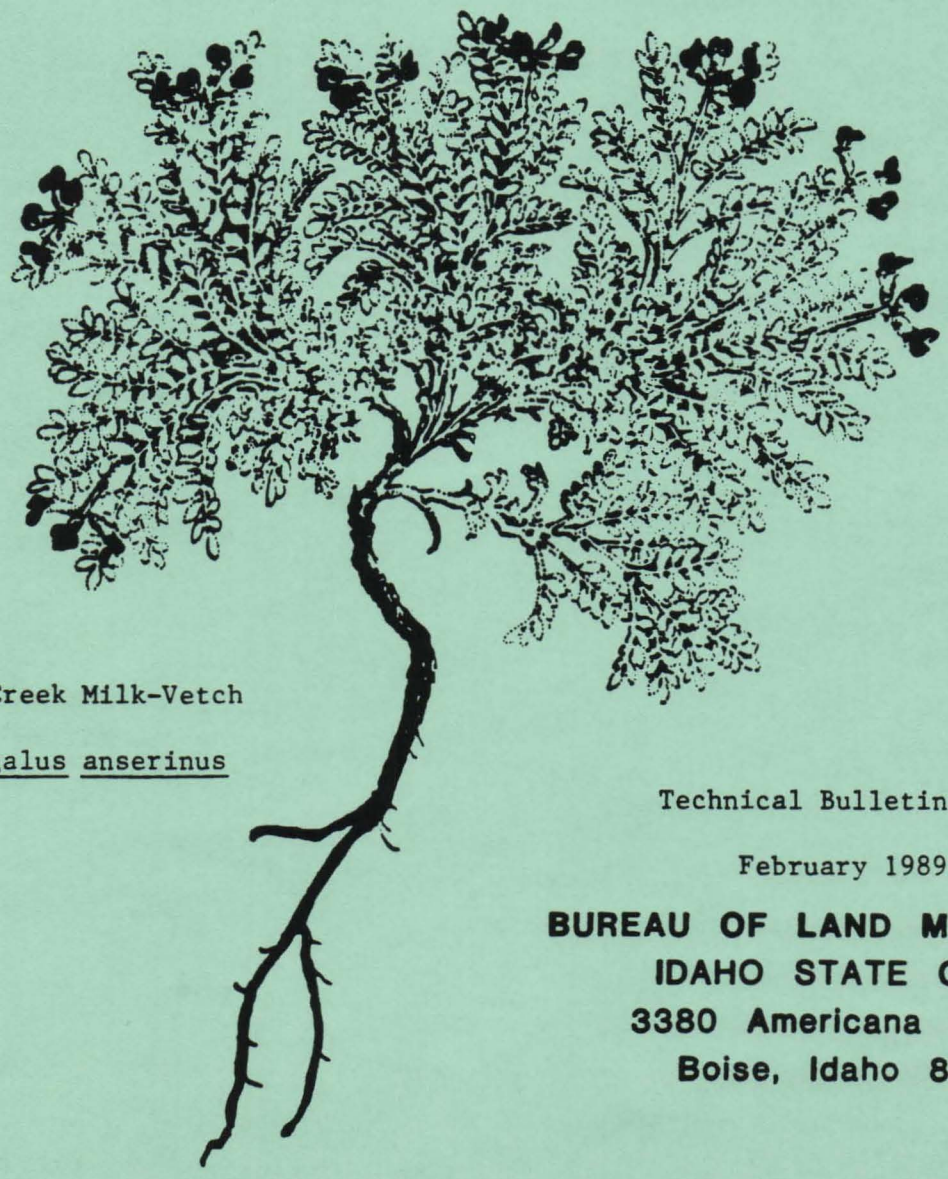
AN ILLUSTRATED GUIDE TO THE

SENSITIVE PLANTS OF BURLEY DISTRICT

BUREAU OF LAND MANAGEMENT

by

Ann DeBolt



Goose Creek Milk-Vetch

Astragalus anserinus

Technical Bulletin 89-3

February 1989

BUREAU OF LAND MANAGEMENT
IDAHO STATE OFFICE
3380 Americana Terrace
Boise, Idaho 83706

IDAHO BLM

TECHNICAL BULLETIN

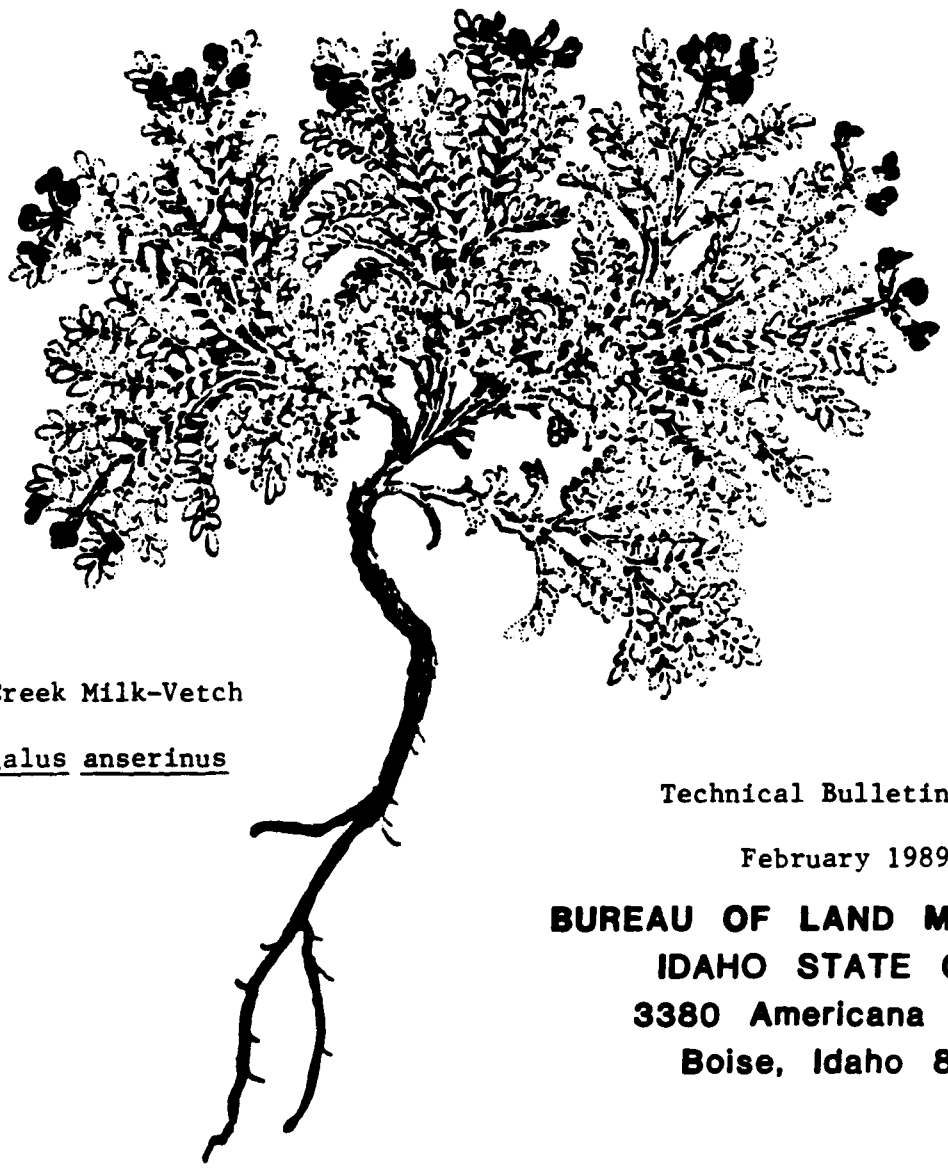
AN ILLUSTRATED GUIDE TO THE

SENSITIVE PLANTS OF BURLEY DISTRICT

BUREAU OF LAND MANAGEMENT

by

Ann DeBolt



Goose Creek Milk-Vetch

Astragalus anserinus

Technical Bulletin 89-3

February 1989

BUREAU OF LAND MANAGEMENT
IDAHO STATE OFFICE
3380 Americana Terrace
Boise, Idaho 83706

INTRODUCTION

This Technical Bulletin was developed to familiarize Burley District field personnel with what sensitive plant species occur, or might occur, in their area. It is believed that it will help streamline the Environmental Assessment and clearance processes by providing a search image for most species, and by listing all current location data and habitat information.

No one flora covers this part of Idaho, as the "Literature Cited" section reveals. Rather, the region lies between four floristic units with distinct floras, namely, the Snake River Plains to the north, the Great Basin to the south, the Owyhee Uplift to the west, and the Albion Mountains to the east (Packard, et. al. 1979). The Salmon Falls Creek area, which is lower than lands to the east and west, appears to be a migration route for Great Basin species such as Allium anceps, Glyptopleura marginata, and Scutellaria nana. Unique edaphic (soil) conditions are prevalent throughout the district as well, and provide the habitat for most of the species of concern.

The plants are arranged in alphabetical order by genera. An index of common names has been included for those unfamiliar with scientific names. Plant nomenclature follows that of Hitchcock and Cronquist in the Flora of the Pacific Northwest (1973), and Cronquist, et. al. in the Intermountain Flora, Vols. 4 & 6 (1977, 1984). Illustrations are from a variety of sources including Flora of the Pacific Northwest, Intermountain Flora, Threatened and Endangered Vascular Plants of Oregon, "Brittonia", and the "Great Basin Naturalist".

LIST OF SENSITIVE PLANTS IN THE BURLEY DISTRICT

Allium anceps (Taper-Tip Onion)

Astragalus anserinus (Goose Creek Milk-Vetch)

Astragalus atratus var. inseptus (Mourning Milk-Vetch)

Astragalus atratus var. owyheensis (Owyhee Mourning Milk-Vetch)

Astragalus tetrapterus (Four-Wing Milk-Vetch)

Castilleja christii (Christ's Indian Paintbrush)

Cymopterus davisii (Davis Parsley)

Epipactis gigantea (Giant Helleborine)

Eriogonum ochrocephalum var. sceptrum (Ochre-Flowered Buckwheat)

Glyptopleura marginata (White Margined Wax Plant)

Gymnosteris nudicaulis (Large Flowered Gymnosteris)

Lepidium davisii (Davis Peppergrass)

Mentzelia torreyi var. acerosa (Torrey's Blazing Star)

Pediocactus simpsonii var. robustior (Simpson's Hedgehog Cactus)

Scutellaria nana (Dwarf Skullcap)

Townsendia scapigera (Stemless Townsendia)

ALPHABETICAL LISTING OF COMMON NAMES

Christ's Indian Paintbrush (Castilleja christii)

Davis Parsley (Cymopterus davisii)

Davis Peppergrass (Lepidium davisii)

Dwarf Skullcap (Scutellaria nana)

Four-Wing Milk-Vetch (Astragalus tetrapterus)

Giant Helleborine (Epipactis gigantea)

Goose Creek Milk-Vetch (Astragalus anserinus)

Large Flowered Gymnosteris (Gymnosteris nudicaulis)

Mourning Milk-Vetch (Astragaus atratus var. inseptus)

Ochre-Flowered Buckwheat (Eriogonum ochrocephalum var. sceptrum)

Owyhee Mourning Milk-Vetch (Astragalus atratus var. owyheensis)

Simpson's Hedgehog Cactus (Pediocactus simpsonii var. robustior)

Stemless Townsendia (Townsendia scapigera)

Taper-Tip Onion (Allium anceps)

Torrey's Blazing Star (Mentzelia torreyi var. acerosa)

White Margined Wax Plant (Glyptopleura marginata)

LIST OF SPECIES WITH AUTHORITIES

Allium anceps Kellogg

Astragalus anserinus Atwood, Goodrich, & Welsh

Astragalus atratus Wats. var. inseptus Barneby

Astragalus atratus var. owyheensis (Nels. & Macbr.) Jones

Astragalus tetrapterus Gray

Castilleja christii N. Holmgren

Cymopterus davisii R.L. Hartman

Epipactis gigantea Douglas ex Hook.

Eriogonum ochrocephalum Wats. var. sceptrum Reveal

Glyptopleura marginata D.C. Eat.

Gymnosteris nudicaulis Gooding

Lepidium davisii Rollins

Mentzelia torreyi var. acerosa Gray

Pediocactus simpsonii (Engelm.) Britt. & Rose var. robustior Coult.

Scutellaria nana A. Gray

Townsendia scapigera D.C. Eat.

LIST OF SPECIES BY STATUS

Federal Category 1 (C1)

Castilleja christii

Federal Category 2 (C2)

Astragalus anserinus
Astragalus atratus var. inseptus
Lepidium davisii

State Priority 1

Glyptopleura marginata

State Priority 2

Allium anceps
Astragalus tetrapterus
Epipactis gigantea
Mentzelia torreyi var. acerosa

State Sensitive

Astragalus atratus var. owyheensis
Cymopterus davisii
Gymnosteris nudicaulis
Pediocactus simpsonii var. robustior

State Review

Eriogonum ochrocephalum var. sceptrum
Scutellaria nana
Townsendia scapigera

Plant Distribution by Soil Characteristics

Dried Mudflat or Playa
Allium anceps
Lepidium davisii

Volcanic Ash
Astragalus anserinus
Astragalus tetrapterus
Eriogonum ochrocephalum var. sceptrum
Mentzelia torreyi var. acerosa

Fine Alluvial Sand
Glyptopleura marginata
Gymnosteris nudicaulis
Pediocactus simpsonii var. robustior
Townsendia scapigera

Shallow, Rocky
Pediocactus simpsonii var. robustior
Scutellaria nana

Subalpine to Alpine
Castilleja christii
Cymopterus davisii

Shallow Clay Over Basalt
Astragalus atratus var. inseptus

Calcareous Hot/Cold Springs
Epipactis gigantea

Sagebrush Hillsides (deeper soils than var. inseptus)
Astragalus atratus var. owyheensis

Allium anceps (Taper-tip Onion)

Family: Liliaceae (Lily)

Status: Priority 2 on the State Sensitive Plant List.

Known Locations: Twin Falls County, Idaho
NE California
Nevada
SE Oregon

sites in or near Burley District
T12S, R18E, Sec. 10 SESE 3.5 miles S of Rock Creek townsite
T14S, R15E, Sec. 31 E side of Salmon Falls Creek Reservoir
T15S, R15E, Sec. 5, 8

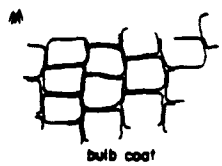
Soil Type: Heavy soils of volcanic origin in swales, where water stands in spring. Also known from at least one playa perimeter (non-alkaline).

Habitat and Ecology: A perennial found in low-lying, sparsely vegetated areas where water stands in the spring. Associated species include low sage and Eriogonum microthecum. At the playa, it is associated with basin big sage and Astragalus calycosus. In Idaho it is known from 4600 to 5050 feet, but undoubtedly spans a broader elevational range since only three sites are known. First reported for Idaho in 1979. Blooms in May and early June.

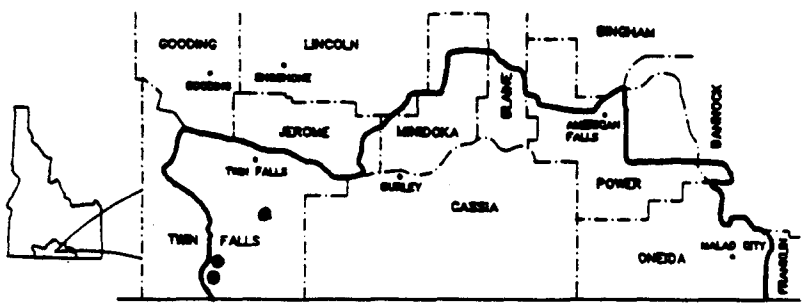
Threats: Range improvement projects

Key Characteristics

Flowers pinkish
Leaves two, flattened
Tepals slender, linear to lance-linear
Stamens inserted







BURLEY DISTRICT

Astragalus anserinus (Goose Creek Milk-Vetch)

Family: Fabaceae (Legume)

Status: Federal Category II (C2) and Sensitive on the BLM Sensitive Plant List.

Known Locations: Cassia County, Idaho
Elko County, Nevada
Box Elder County, Utah

Idaho
T16S, R21E, Sec. 33 N1/2 of SENE near Beaverdam Creek (private land)

Nevada
T47N, R70E, Sec. 29 SW 6 km S of Idaho on the UT-NV line

Utah
T14N, R19W, Sec. 15 SE 6.5 km S of UT-ID line
.5 km E of UT-NV line at Hardister, 7 km S of ID
25.5 km NW of Lynn

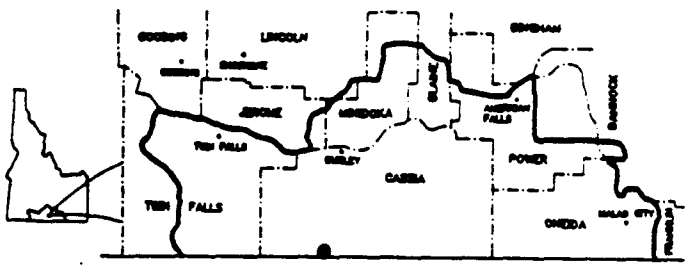
Soil Type: On white tuffaceous ash, usually of outcrops

Habitat and Ecology: A dwarf, matted perennial known at this time only from undeveloped soils of tuffaceous outcrops in the Goose Creek drainage. It was not described until 1984. Associated species include Stipa comata, Eriogonum ovalifolium, and Chrysothamnus viscidiflorus. Also known from juniper communities. Grows at elevations from 4700 to 5000 feet. It is more matted and has smaller flowers than the common A. purshii. The leaves and pods are woolly, but the hairs on A. anserinus are shorter than those of A. purshii. Blooms in May and June.

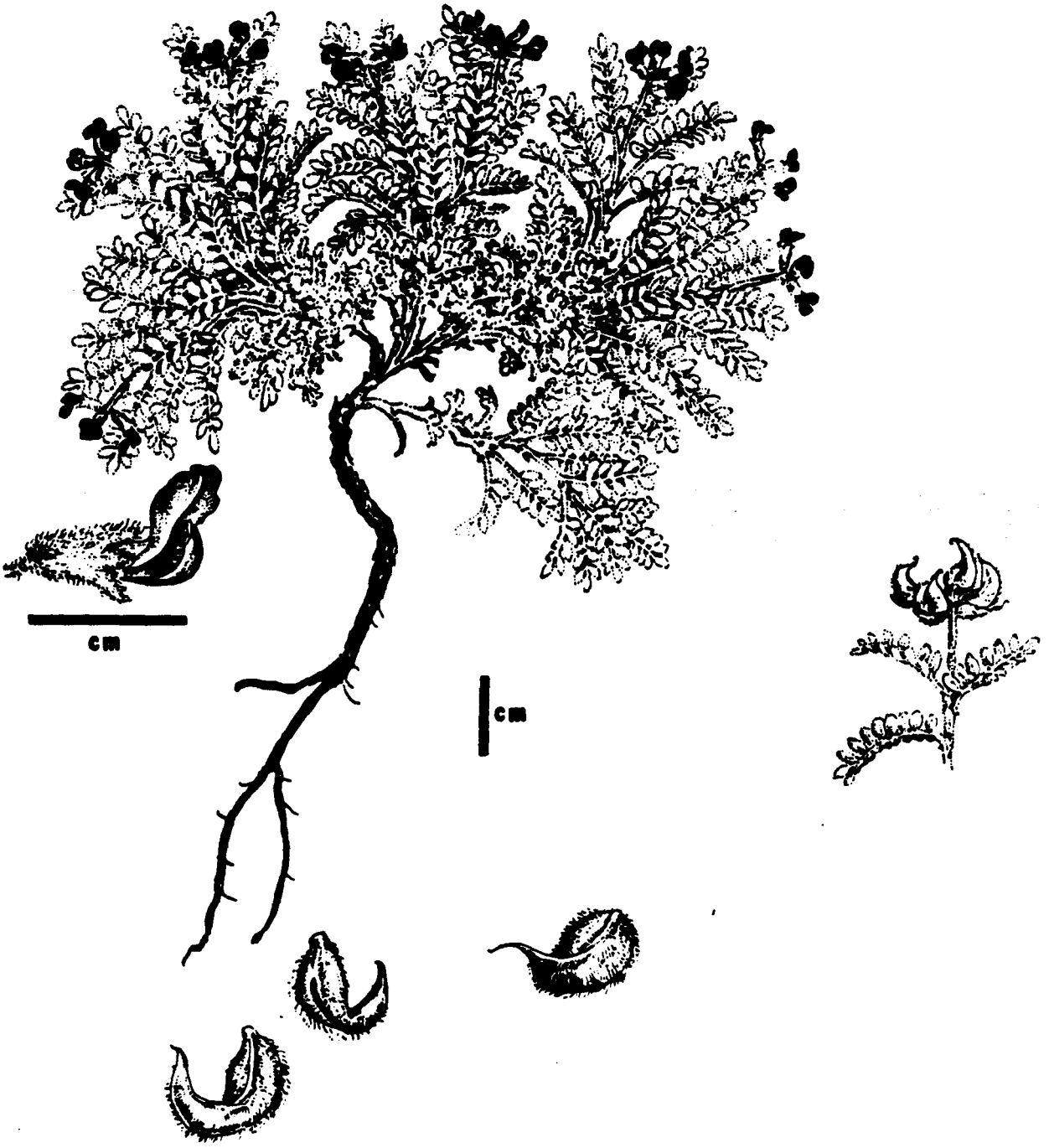
Threats: Off-road vehicles

Key Characteristics

Flowers small, 9-11 mm,
pink-purple in color
Dwarf, matted growth
Tomentose herbage
Pods compressed, curved, and
lightly hairy
Similar to A. purshii, but more
diminutive with shorter hairs



BURLEY DISTRICT



Habit and details of *Astragalus anserinus*

Astragalus atratus var. inseptus (Mourning Milk-Vetch)

Family: Fabaceae (Legume)

Status: Federal Category II (C2) recommended for Threatened status.

Known Locations: Blaine, Camas, Elmore, Gooding, Lincoln, and Twin Falls Counties, Idaho

sites near Burley District

T6S, R13E, Sec. 20 SE Shoestring Bridge, S of Bliss

T7S, R13E, Sec. 32 Peter's Gulch near Hagerman (var. in question, specimen immature)

Soil Type: Shallow clay soil over basalt

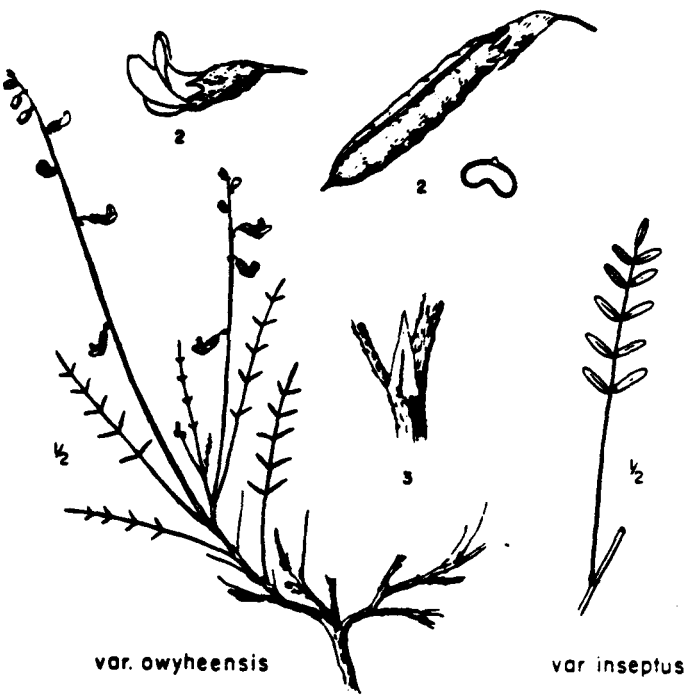
Habitat and Ecology: A wiry, perennial milk-vetch endemic to the mid Snake River Plains of southern Idaho. Flowering stems are decumbent to prostrate. It is usually found in flats and on plains, but also occurs on gentle slopes. At lower elevation sites it occurs with Wyoming sage and low sage, while at higher altitudes it occurs with mountain big sage and A. longiloba. It is also associated with Allium acuminatum, Aster scopulorum and Poa sandbergii. It often occurs within the protection of sagebrush plants. The plant is most common within the Shoshone District, but should be watched for in Burley District, particularly the northwest corner on basalt flats. Collections to verify the variety are best if the fruits are mature. Blooms in May and June.

Threats: Range improvement programs, over grazing, and agricultural development

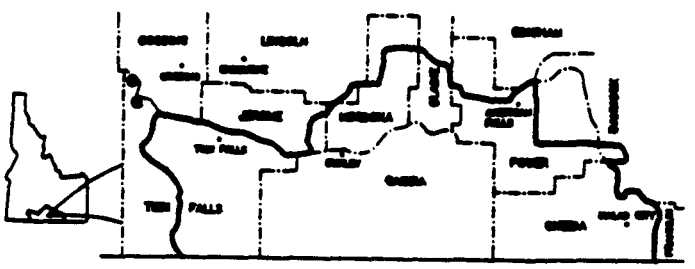
Key Characteristics

Pods red speckled, with leathery texture
Flowers white, sometimes faintly lilac-tinged
Leaflets 9-15, terminal one jointed to the stem

(see key on next page)



A. atratus



BURLEY DISTRICT

Astragalus atratus var. owyheensis (Owyhee Mourning Milk-Vetch)

Family: Fabaceae (Legume)

Status: Sensitvie on the BLM and State Sensitive Plant Lists.

Known Locations: Elmore, Owyhee, Twin Falls Counties, Idaho
Baker, Malheur Counties, Oregon
Elko County, Nevada

sites in or near Burley District

T9S, R13E, Sec. 11 Salmon Falls Creek Canyon, 5 miles SW of US #30
T14S, R13E, Sec. 7 E of Devil's Creek
T14S, R15E, Sec. 7 1 mile N of Salmon Falls Dam, on bench above Salmon Falls Creek
16S, R17E, Sec. 30 S of Magic Hot Springs, on sides of Shoshone Creek Cyn.

Soil Type: Sagebrush hillsides with relatively deep, volcanic soils

Habitat and Ecology: A perennial with many very slender, often prostrate and creeping to erect stems. Found on steep hillsides and flats over basalt. usually taking shelter under and entangled in sagebrush. Found from 3,500 to 6,000 feet. Often on bluffs overlooking the Jarbidge, Bruneau, and Owyhee River canyons. Its leaves blend in with the leaves of grass and are not easily noticed. Blooms from May to July.

Threats: Range improvement programs, overgrazing, agricultural development

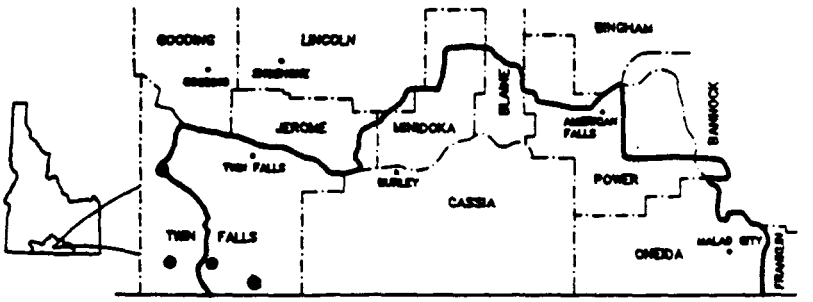
Key to two varieties of Astragalus atratus:

1. Leaflets all very small, narrow, and remote, the terminal one continuous withthe rachis or represented by a small dilation of the rachis; pod of papery texture; sagebrush slopes.....var. owyheensis

1. Leaflets more ample and less scattered, the terminal one jointed to the rachis; pod of leathery texture; shallow clay soils where moist in spring .....var. atratus

Key Characteristics

Flowers whitish, purplish-lined or tinged and 8-9 mm long
Leaflets 7-11, terminal one continuous with the stem
Pod 14-20 mm long and 3-4 mm wide
Pod of papery texture



BURLEY DISTRICT

Astragalus tetrapterus (Four-Wing Milk-Vetch)

Family: Fabaceae (Legume)

Status: Priority 2 on the State Sensitive Plant List.

Known Locations: Twin Falls County, Idaho
Northwest Arizona
Eastern Nevada
Southeast Oregon
4 counties in Southwest Utah

Idaho
T16S, R15E, Sec. 8 small drainage east of Salmon Falls Reservoir

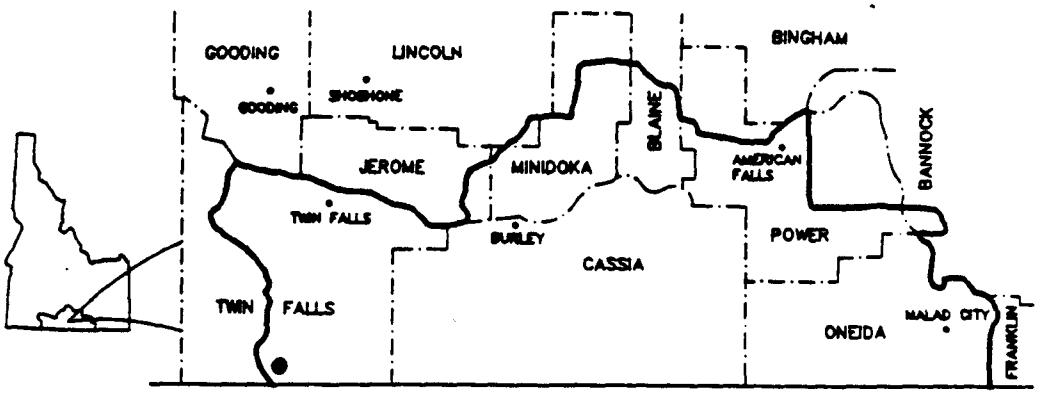
Soil Type: Sparsely vegetated ash or sandy alkaline soils

Habitat and Ecology: A perennial milk-vetch that is known from only one site in Idaho. Apparently south-central Idaho is the northern extent of its range. It is found in coarse soils within Wyoming sage habitats as well as pinyon-juniper habitat in Utah and Nevada, from 3500 to 6500 feet. Mostly in exposed places but sometimes taking shelter under or entangled in sagebrush. Barneby states that the plant is widely dispersed but uncommon. This species is highly variable. Collections are needed to determine its range in Idaho. Seen but not collected and verified in the BLM Winnemucca District of Nevada. Blooms from late April through June.

Threats: Off-road vehicles, trampling and overgrazing by wild horses

Key Characteristics

Pods four-sided
Pods pendulous, incurved or coiled, usually pubescent
Pods 2-4 cm long
Flowers vary in color from white with lilac tinges to bright pink purple
Stems and leaves round in cross section & with pointed tips



BURLEY DISTRICT

Castilleja christii (Christ's Indian Paintbrush)

Family: Scrophulariaceae (Figwort)

Status: Federal Category I (C1) recommended for Endangered status.

Known Locations: Cassia County, Idaho

T13S, R24E, Sec. 4,9 Harrison Mountain, near the top; SE of Burley
(Forest Service administered land)

Soil Type: Loamy gravel with quartzite and mica schist stones

Habitat and Ecology: A perennial plant endemic to Harrison Mountain in the Cache Peak Range of the Albion Mountains. It is found in grassy subalpine meadows with Trisetum spicatum, Festuca idahoensis, Solidago multiradiata, Pedicularis contorta, and Achillea millefolium. Elevation is 9000 to 9300 feet, on Sawtooth National Forest land. The species was described by Noel Holmgren in 1973, who unsuccessfully searched the neighboring mountains and adjacent peaks in the same range. It is locally abundant on Harrison Mtn. Blooms in July.

Threats: Additional radio relay or lookout facilities, and possibly grazing

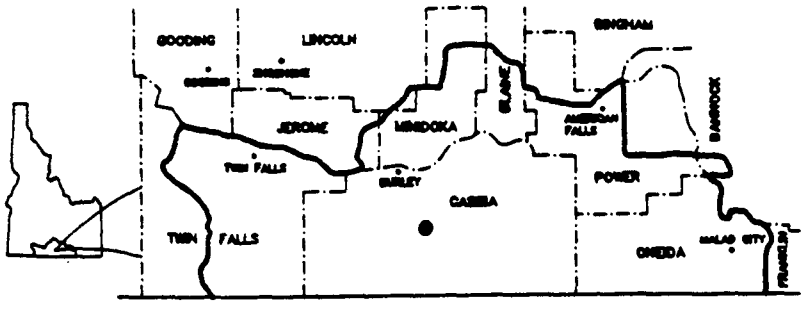
Key Characteristics:

Subalpine meadow habitat
Flowers and bracts uniquely
yellow to yellow orange
Plants to 18 inches high









BURLEY DISTRICT

Cymopterus davisii (Davis' Parsley)

Family: Apiaceae (Carrot)

Status: Sensitive on the State and BLM Sensitive Plant Lists.

Known Locations: Cassia County, Idaho

T13S, R24E, Sec. 1,4,9 NE near the summit of Harrison Mountain
T14S, R24E, Sec. 20 NE, 21 SW pass between Mt. Independence and Cache Peak

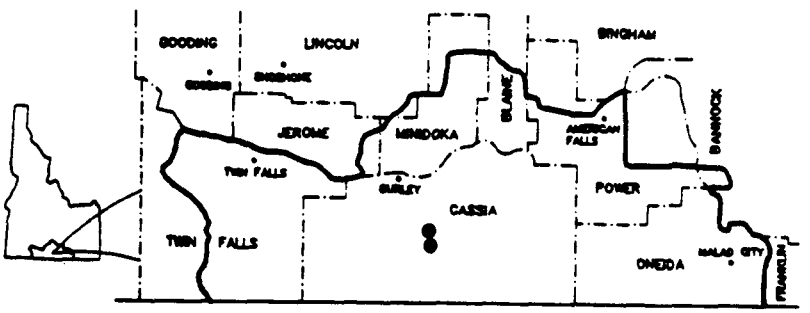
Soil Type: Gravelly disturbed sites or rock outcrops of granitic and quartzite substrate.

Habitat and Ecology: A low-growing, herbaceous perennial known only from the Cache Peak Range of the Albion Mountains. It is locally abundant on grassy slopes or rock outcrops of alpine areas on Harrison Mountain and Cache Peak. This plant probably does not occur on BLM lands, but it should be watched for when examining higher elevation sites. Blooms in July, with fruiting in late July through August.

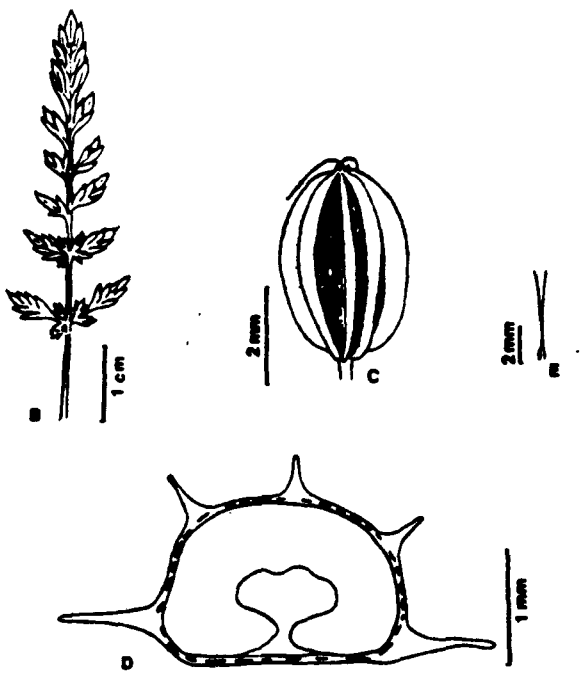
Threats: Expansion of radio relay or lookout facilities

Key Characteristics

Flowers yellow
Fruits densely granular-roughened
Ultimate leaf divisions 3.5-15 mm or more long
2-16 cm tall



BURLEY DISTRICT





A. Habit. B. Foliage leaf. C. Fruit, dorsal view. D. Fruit transection. E. Carpophore.

Epipactis gigantea (Giant Helleborine)

Family: Orchidaceae (Orchid)

Status: Priority 2 on the State Sensitive Plant List.

Known Locations: Boise, Bonner, Boundary, Clark, Elmore, Idaho, Jerome, Owyhee, Twin Falls Counties, Idaho
Uncommon in most of the western states in the Rocky Mountains

sites in or near Burley District
Murtaugh section of the Snake River
T10S, R18E, Sec. 3 Vineyard Creek ACEC, 12 miles NE of the city of Twin Falls, on N rim of Snake River Canyon

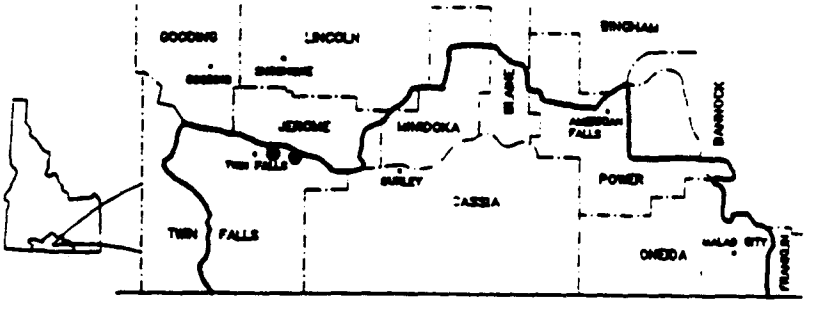
Soil Type: Streambanks and springs, often on calcareous sites

Habitat and Ecology: A rhizomatous orchid with one to many stems. It is restricted to streambanks, springs, and seepage areas, near thermal or cold water, often in otherwise desert regions. Often grows with monkey flowers, spike rushes, and sedges. The plant still has a broad range, but because of its vulnerable habitat, it is rapidly disappearing. It should be watched for at appropriate habitats in the Burley District. Blooms from April to July.

Threats: Development and human disturbance of cold and hot springs, livestock grazing

Key Characteristics

Flowers brownish-purple
Plants up to 3 feet tall
Leaves numerous, elliptical,
broad, with lengthwise folds



BURLEY DISTRICT



1/2



Epipactis gigantea

Eriogonum ochrocephalum var. scoptrum (Ochre-Flowered Buckwheat)

Family: Polygonaceae (Buckwheat)

Status: Review species on the State Sensitive Plant List.

Known Locations: Elmore, Owyhee, Twin Falls Counties, Idaho
Malheur County, Oregon

Sites in or near Burley District:
T8S, R13E, Sec. 10 SENW Yahoo Creek, 8 air miles S of Hagerman
T8S, R14E, Sec. 29 near Banbury Hot Springs

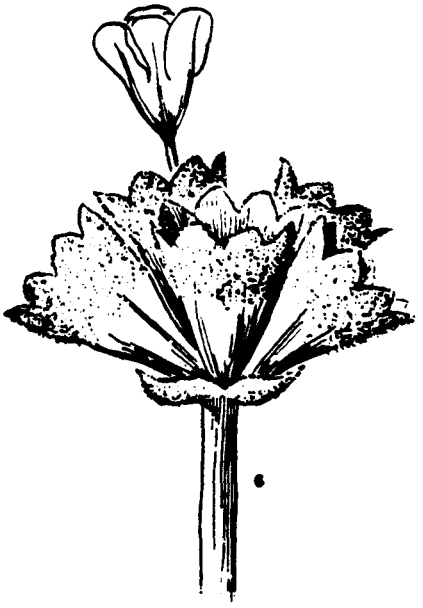
Soil Type: Loose, white, lacustrine ash deposits and heavy clays, mostly barren of vegetation

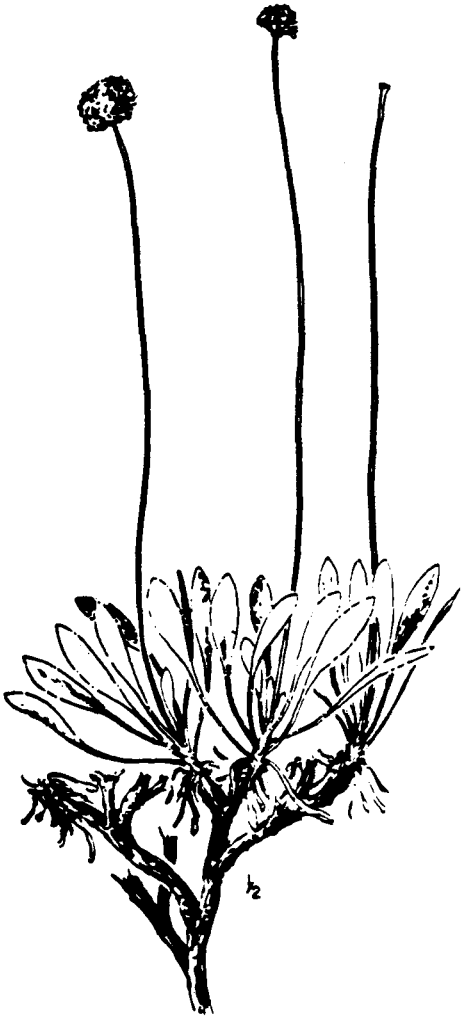
Habitat and Ecology: A perennial buckwheat of barren lacustrine slopes, typically in the Wyoming big sagebrush zone. It is usually found at elevations below 4000 feet. This variety has not been officially described by James Reveal yet, who is the current authority on Eriogonum. Collections of it are needed to determine its true taxonomic status and distribution. Blooms in June and July.

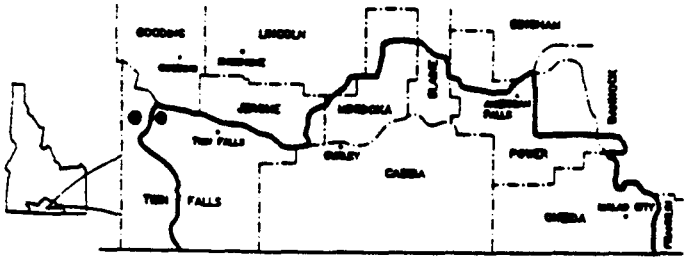
Threats: Off-road vehicles, mining exploration

Key Characteristics

Involucres tomentose
Flowers cream-colored to yellow
Taller than other similar buckwheats







BURLEY DISTRICT

Glyptopleura marginata (White-Margined Wax Plant)

Family: Asteraceae (Composite)

Status: Priority 1 on the State Sensitive Plant List.

Known Locations: Ada, Canyon, Owyhee, Twin Falls Counties, Idaho
Harney, Malheur Counties, Oregon
uncommon in California, Nevada, Utah

sites in or near Burley District
T16S, R14E, Sec. 29 SENW Player Canyon area SW of Salmon Falls Creek Reservoir
T16S, R15E, Sec. 7 upper Salmon Falls Creek Reservoir

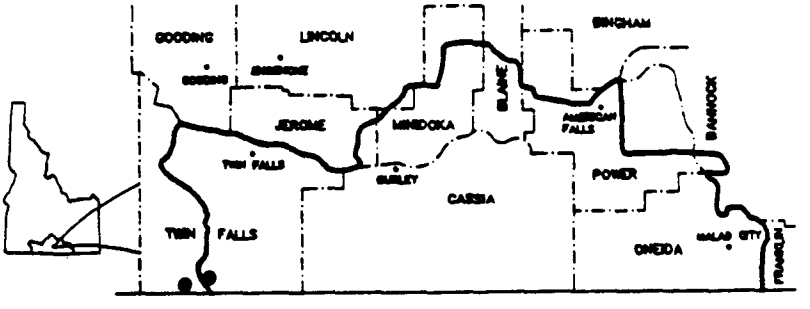
Soil Type: Dry, sandy places, sometimes in loose ash or volcanic cinder.

Habitat and Ecology: A dwarf, tufted winter annual with milky juice and a tap root. Grows in Atriplex-Artemisia habitat on warm, dry micro-sites barren of other vegetation, from 3000 to 5000 feet. This plant has a broad range but is highly infrequent in Idaho, with only a small number of individuals in most of those populations. More common in southwest Idaho. Blooms from May to June, with flowers open in the morning, reputed to close in mid-afternoon.

Threats: Off-road vehicles, increased agricultural development, range improvement programs, and heavy recreational use.

Key Characteristics

Dwarf annual
Flowers white or pale yellow,
drying to pink
Leaves crowded, pinnately lobed
or toothed with a white, waxy
margin



BURLEY DISTRICT

Gymnosteris nudicaulis (Large-Flowered Gymnosteris)

Family: Polemoniaceae

Status: Sensitive on the BLM and State Sensitive Plant Lists.

Known Locations: Blaine, Butte, Canyon, Elmore, Gem, Lincoln, Minidoka, Owyhee, Twin Falls Counties, Idaho
Malheur County, Oregon

sites in or near Burley District
T7S, R12E, Sec. 14 west of Hagerman
T7S, R13E, Sec. 25 3 miles south of Hagerman, 1940 record
T7S, R15E, Sec. 24 NWNE, 27 SE, 33 NE of Wendell
T9S, R17E, Sec. 34 1936 record, near Twin Falls
T10S, R12E, Sec. 8 SESE, 20 NENW
T12S, R25E, Sec. 6 1893 record, from Albion

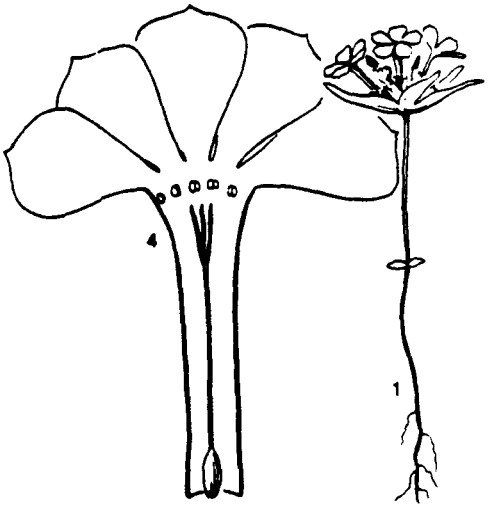
Soil Type: Sandy to sandy loam

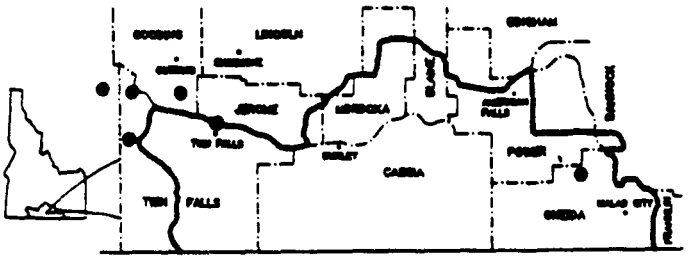
Habitat and Ecology: A weak-stemmed annual that grows in somewhat open, sandy areas in the basin big sage-grassland zone. Found from 2700 to 5000 feet. The plant was collected much more frequently in the early to mid-1900's than in the past 15 years. This might partly be due to its early blooming time, which can be as early as the first week of April. It may also be due to the invasion of much of its range by cheatgrass. It was once noted as common. Blooms from April to May.

Threats: Agricultural development, range improvement projects, competition with cheatgrass

Key Characteristics

Flowers showy and vary from white to yellow to lavender
Short naked stem
Whorl of entire leaves just beneath the flower cluster







Lepidium davisii (Davis Peppergrass)

Family: Brassicaceae (Mustard)

Status: Federal Category II (C2) recommended for Threatened status.

Known Locations: Ada, Elmore, Owyhee, Twin Falls Counties, Idaho
Malheur County, Oregon

sites in or near Burley District
T14S, R15E, Sec. 23 NWNE, 31 NENE, 32 NESW about 4 miles S of Salmon Falls Dam

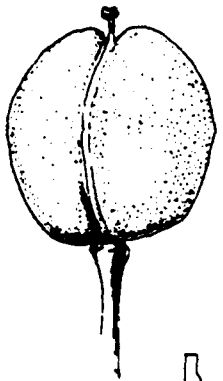
Soil Type: Hard bottom playa

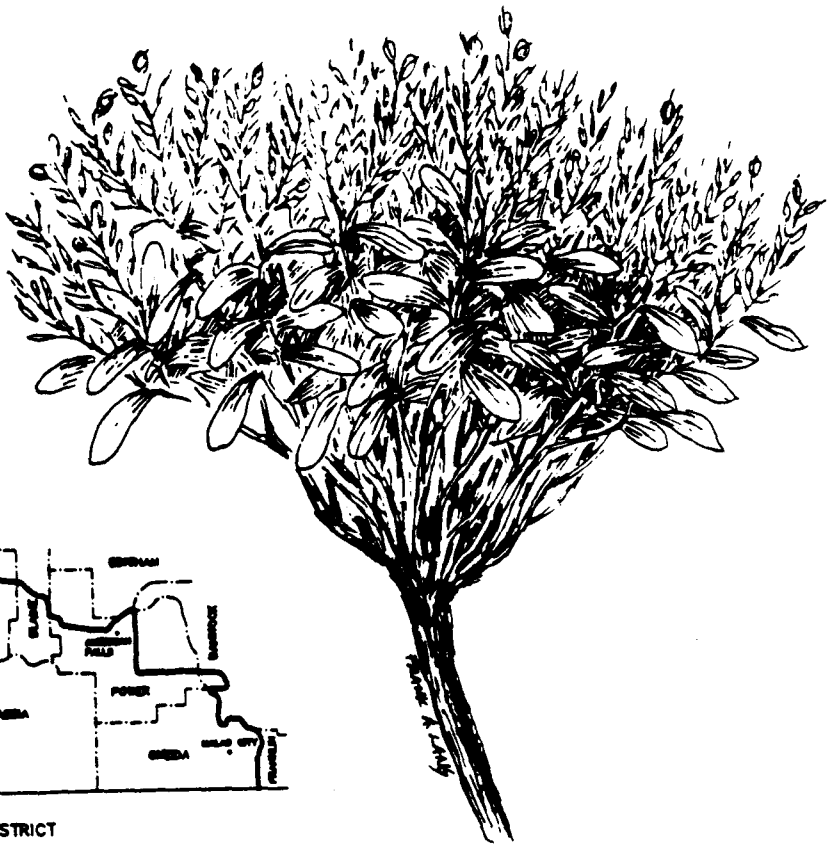
Habitat and Ecology: A caespitose perennial found only in very hard bottom playas that are usually barren of other vegetation. They are poorly drained and often inundated with standing water early in the spring. On rare occasions a few shadscale and silver sage plants may grow in the playas. Playas are located in Wyoming big sage and fourwing saltbush habitat at 2900 to 5000 feet. One of the playas in Burley District is in low sage habitat. Populations vary in leaf shape, size, and time of flowering, and may be genetically distinct populations because of the plant's short distance dispersal mechanism and pollination vectors. Blooms from April to as late as August, depending on moisture.

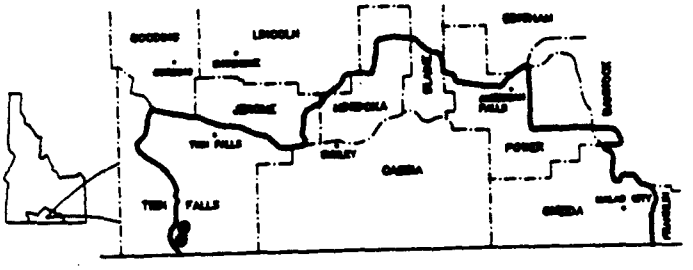
Threats: Water storage pond development, spring livestock trampling, off-road vehicles, and military tanks (Boise District). Indirect threats may include siltation from range fires and rehabilitation projects.

Key Characteristics

Only found on playas
White, 4-petaled flowers
Plant can become quite woody
Fleshy entire to toothed to pinnately lobed leaves







BURLEY DISTRICT

Mentzelia torreyi var. acaulosa (Torrey's Blazing Star)

Family: Loasaceae (Blazing Star)

Status: Priority 1 on the State Sensitive Plant List.

Known Locations: Ada, Elmore, Gooding, Owyhee, Twin Falls Counties, Idaho
Mono County, California
Nevada

sites in or near Burley District
T6S, R13E, Sec. 33 NE across from mouth of Malad River, on the Snake River
T8S, R13E, Sec. 10 SENW along Yahoo Creek, near Thousand Springs
T8S, R14E, Sec. 29 SENW, SWSE several miles W of Buhl, on road to Banbury Hot Springs
T8S, R14E, Sec. 32 historic record from 1949; 11 miles NW of Buhl
T9S, R14E, Sec. 9 SWNE 2 miles S of Banbury Hot springs
T9S, R14E, Sec. 10 near mouth of Mud Creek
T9S, R15E, Sec. ? Snake River Canyon, 10 miles NW of Filer
several sites along Salmon Falls Creek, on canyon slopes

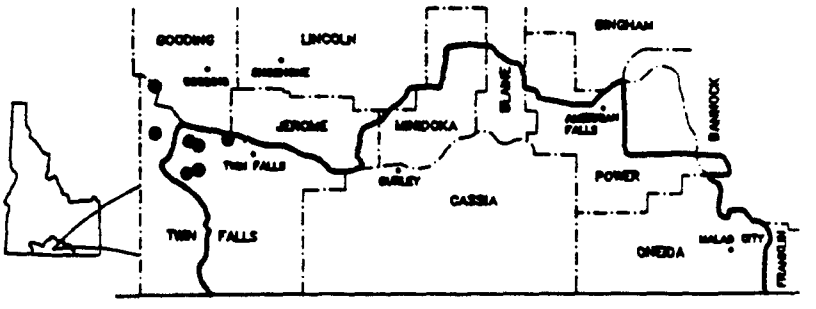
Soil Type: Barren sandy lacustrine soil or volcanic cinder, particularly on south or west-facing slopes.

Habitat and Ecology: A caespitose perennial of barren sandy or volcanic soils from 2900 to 3500 feet in Idaho. It is typically found in the Wyoming big sage-grassland zone or shadscale zone, and often grows with white-stemmed blazing star, Indian ricegrass, and Phlox sp. It is sometimes found with Astragalus kentrophyta var. jessiae, another sensitive plant species. Southern Idaho is the northern limit of its range. In late summer and fall the plant is still easily recognized and often breaks loose, blowing around like a very small tumbleweed. Blooms May and June.

Threats: Off-road vehicles, increased agricultural development, and mining claims

Key Characteristics

Barren lacustrine slopes
Branched spiny white
hairy stems and leaves
Flowers orange



BURLEY DISTRICT

Pediocactus simpsonii var. robustior (Simpson's Hedgehog Cactus)

Family: Cactaceae (Cactus)

Status: Sensitive on the BLM and State Sensitive Plant Lists.

Known Locations: Cassia, Owyhee, Twin Falls Counties, Idaho
Colorado, Nevada, Utah, Wyoming

sites in or near Burley District

T12S, R18E, Sec. 10 SW
T14S, R20E, Sec. 21 NW, 36 NE about 16 miles SW of Oakley on Hudson Ridge
T14S, R21E, Sec. 31 NW Trapper Creek proposed RNA
T14S, R22E, Sec. 35 N edge of Middle Mountain, 6 air miles S of Oakley
T15S, R23E, Sec. 12 SW, 13 N 1/2 Graham Peak ridgeline, SE of Oakley
T15S, R29E, Sec. 16 W 1/2, 17 E 1/2 Pole Canyon proposed Research Natural area
T16S, R17E, Sec. 26 SW

Soil Type: Shallow rocky soils. Sometimes sandy sites

Habitat and Ecology: A typically solitary-stemmed cactus of rocky soils, benches, and canyon rims. Also known from sandy soils near the City of Rocks. It is often associated with low sage and bud sage. In Burley District it may be found with juniper, Aster scopulorum, and Haplopappus acaulis. This cactus variety is relatively widespread in southern Idaho, and even though it is somewhat protected by its habitat, it may be exploited by cactus collectors.

Threats: Commercial collectors

Key Characteristics

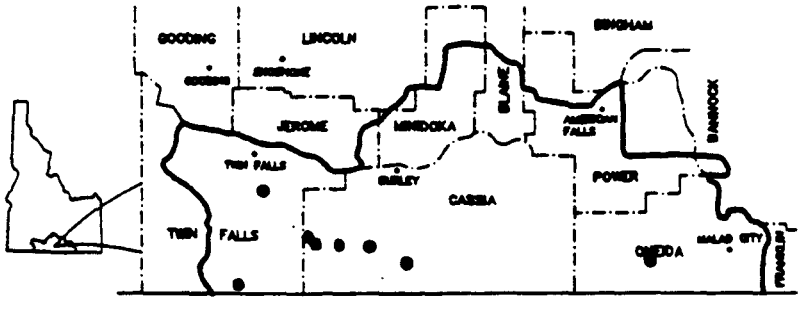
Only barrel cactus in southern Idaho
Flowers light pink, yellowish, or greenish



habit



½



BURLEY DISTRICT

Scutellaria nana (Dwarf Scullcap)

Family: Lamiaceae (Mint)

Status: Review species on the State Sensitive Plant List.

Known Locations: Ada, Owyhee, Twin Falls Counties, Idaho
Northeast California
Central Nevada
Southeast Oregon
Iron, Washington Counties, Utah
sites in or near Burley District
T16S, R16E, Sec. 29 SW near the Mule Creek Crossing

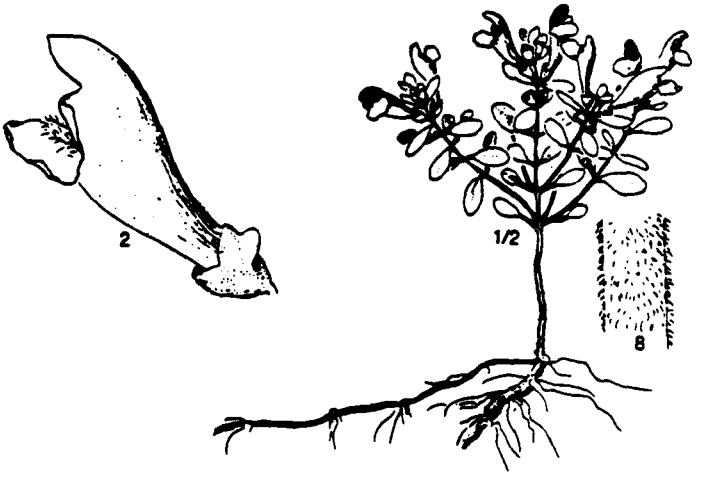
Soil Type: On rhyolitic gravel or shallow scabland sites associated with basalt

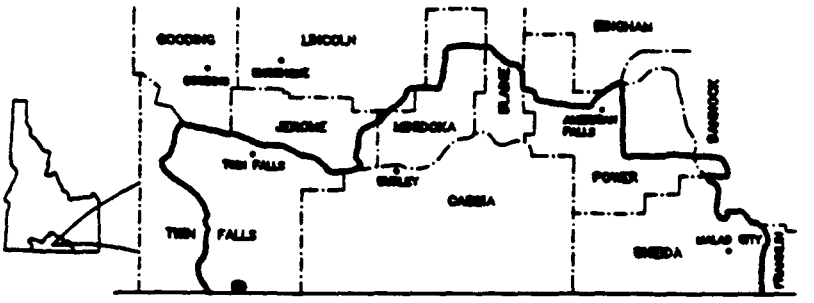
Habitat and Ecology: A diminutive, rhizomatous perennial in the mint family. Very striking appearance when in bloom. It grows on sites with shallow rocky soil, usually in low sage habitat, where other vegetation is sparse. Other associated species might include bluebunch wheatgrass, Penstemon deustus, and Erigeron bloomeri. It has also been found on soils sorted by stream action such as dry gravel bars along desert riparian areas. This species was put on the "Review" list at the 1988 Sensitive Plant Workshop. It has a wide range, but collections reflect that it may be uncommon. This might partly be due to its small size and harsh choice of habitat. Blooms in May and June.

Threats: None known.

Key Characteristics

Flowers cream-colored, the upper lip pale purplish
Leaves elliptic, entire
Rhizomatous
Gravelly soils





BURLEY DISTRICT

Townsendia scapigera (Stemless Townsendia)

Family: Asteraceae (Composite)

Status: Review species on the State Sensitive Plant List.

Known Locations: Twin Falls County, Idaho
Millard County, Utah
California
Nevada

Idaho
T16S, R16E, Sec. 30 N edge of Jackpot Basin

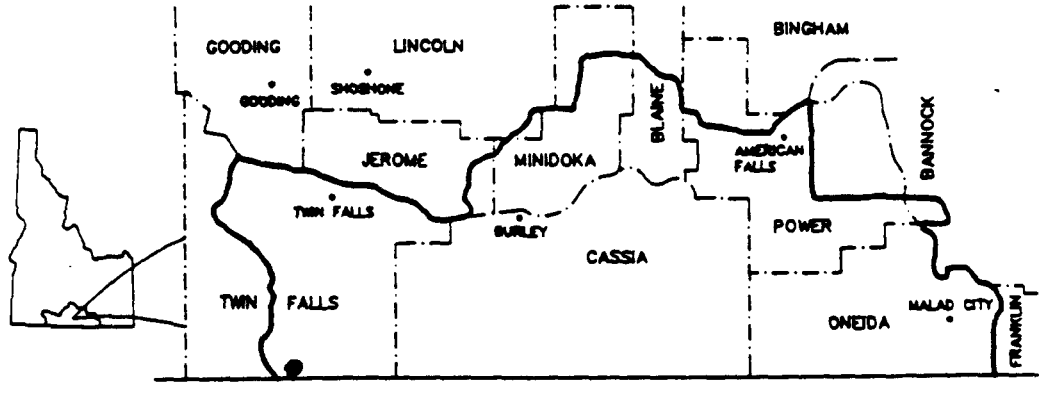
Soil Type: Dry sandy sites in the Great Basin. Ash slopes at the Idaho site.

Habitat and Ecology: A caespitose, acaulescent, biennial or short-lived perennial that grows in a broad range of habitats, from sagebrush to alpine tundra (4500-9500 feet). It has only been collected once in Idaho, in 1979. It is distinguished from T. florifer by its lack of stems. The plant apparently just gets into Idaho. Collections are needed to determine its range and extent in this state. Blooms in July.

Threats: None known

Key Characteristics

Caespitose growth form
Flowers white to pink
Stems lacking



BURLEY DISTRICT

LITERATURE CITED

Atwood, N.D., S. Goodrich, S. Welsh. 1984. New Astragalus (Leguminosae) from the Goose Creek Drainage, Utah-Nevada. Great Basin Naturalist, 44(2), pp. 263-264.

Barneby, R.C. 1964. Atlas of North American Astragalus, Vol. 1 & 2. New York Botanical Garden, Bronx, New York.

Cronquist, A., A.H. Holmgren, N.H. Holmgren, & J. Reveal. 1972. Intermountain Flora: Vascular Plants of the Intermountain West, USA, Vols. 1, 4, 6. Hafner Publ. Co., Inc. New York & London.

Davis, R.J. 1952. Flora of Idaho. Brigham Young Univ. Press, Provo, UT.

DeBolt, A. & R. Rosentreter. 1988. An Illustrated Guide to the Sensitive Plants of Boise District Bureau of Land Management, 1988. BLM Tech. Bull. #88-4. 80 pp.

Hall, J.D. & E. Lee. 1980. Inventory of Threatened and Endangered Plants - Cassia County, Idaho. Prepared for Burley District, Contract No. ID020-CTO-3.

Hartman, R.L. 1985. A new species of Cymopterus (Umbelliferae) from Southern Idaho. Brittonia, 37(1), pp. 102-105.

Henderson, D., et. al. 1977. Endangered and Threatened Plants of Idaho. Univ. of Idaho Forest, Wildlife and Range Experiment Station. Contrib. No. 73 ISSN:0073-4586.

Hitchcock, C.L. 1974. Flora of the Pacific Northwest: An Illustrated Manual. Univ. of Washington Press, Seattle, WA.

Hitchcock, C.L., A. Cronquist, M. Ownbey, & J.W. Thompson. 1971. Vascular Plants of the Pacific Northwest, Vols. 1-5. Univ. of Washington Press, Seattle, WA.

Holmgren, N.H. 1973. Five new species of Castilleja (Scrophulariaceae) from the Intermountain Region. Bull. Torr. Bot., 100(2), pp. 83-93.

Packard, P.L., et. al. 1979. Inventory of Threatened and Endangered Plants Located in the Twin Falls Planning Unit. Prepared for Burley District, Contract No. ID-910-CT9-0007. 57 pp.

Rosentreter, R. 1986. Sensitive and Uncommon Plants in the Boise District Bureau of Land Management. BLM Tech. Bull. #86-2. 87 pp.

Smithman, L.S. 1988. Astragalus atratus var. inseptus Training and Inventory Project. Prepared for Shoshone District. 22 pp.

Welsh, S.L., N.D. Atwood, L.C. Higgins, & S. Goodrich. 1987. A Utah Flora. Great Basin Nat. Memoir No. 9, Brigham Young Univ., Provo, UT.

Legal Descriptions of Sensitive Plants in or near Burley District

T6S, R13E, Sec. 20 SE	Astragalus atratus var. inseptus
Sec. 33 NE	Mentzelia torreyi var. acerosa
T7S, R12E, Sec. 14	Gymnosteris nudicaulis
R13E, Sec. 32	Astragalus atratus var. inseptus
Sec. 25	Gymnosteris nudicaulis
R15E, Sec. 24 NWNE	Gymnosteris nudicaulis
Sec. 27 SE	Gymnosteris nudicaulis
Sec. 33	Gymnosteris nudicaulis
T8S, R13E, Sec. 10 SENW	Eriogonum ochrocephalum var. sceptrum
Sec. 10 SENW	Mentzelia torreyi var. acerosa
T8S, R14E, Sec. 29 SENW	Mentzelia torreyi var. acerosa
Sec. 29 SWSE	Mentzelia torreyi var. acerosa
Sec. 29	Eriogonum ochrocephalum var. sceptrum
Sec. 32	Mentzelia torreyi var. acerosa
T9S, R13E, Sec. 11	Astragalus atratus var. owyheensis
T9S, R14E, Sec. 9 SWNE	Mentzelia torreyi var. acerosa
Sec. 10	Mentzelia torreyi var. acerosa
T9S, R15E, Sec. ?	Mentzelia torreyi var. acerosa
T9S, R17E, Sec. 34	Gymnosteris nudicaulis
T10S, R12E, Sec. 8 SESE	Gymnosteris nudicaulis
Sec. 20 NENW	Gymnosteris nudicaulis
T10S, R18E, Sec. 4 NENE	Epipactis gigantea
Murtaugh sec. of the Snake R.	Epipactis gigantea
T12S, R18E, Sec. 10 SW	Pediocactus simpsonii var. robustior
Sec. 10 SE	Allium anceps
R25E, Sec. 6	Gymnosteris nudicaulis
T13S, R24E, Sec. 1	Cymopterus davisii
Sec. 4	Cymopterus davisii
Sec. 4	Castilleja christii
Sec. 9 NE	Cymopterus davisii
Sec. 9	Castilleja christii
T14S, R13E, Sec. 11	Astragalus atratus var. owyheensis
R15E, Sec. 7	Astragalus atratus var. owyheensis
R15E, Sec. 23 NWNE	Lepidium davisii
Sec. 31	Allium anceps
Sec. 31 NENE	Lepidium davisii
Sec. 32 NESW	Lepidium davisii
R20E, Sec. 21 NW	Pediocactus simpsonii var. robustior
Sec. 36 NE	Pediocactus simpsonii var. robustior

T14S, R21E, Sec. 31 NW		Pediocactus simpsonii var. robustior
R22E, Sec. 35 NESE		Pediocactus simpsonii var. robustior
R24E, Sec. 20 NE		Cymopterus davisii
Sec. 21 SW		Cymopterus davisii
T15S, R15E, Sec. 5		Allium anceps
Sec. 8		Allium anceps
R23E, Sec. 12 SW		Pediocactus simpsonii var. robustior
Sec. 13 N 1/2		Pediocactus simpsonii var. robustior
R29E, Sec. 16 W 1/2		Pediocactus simpsonii var. robustior
Sec. 17 E 1/2		
T16S, R14E, Sec. 29 SENW		Glyptopleura marginata
R15E, Sec. 8		Astragalus tetrapterus
Sec. 7		Glyptopleura marginata
R16E, Sec. 29 SW		Scutellaria nana
Sec. 30		Townsendia scapigera
R17E, Sec. 30		Astragalus atratus var. owyheensis
Sec. 26 SW		Pediocactus simpsonii var. robustior
R21E, Sec. 33 N 1/2 SESE		Astragalus anserinus