

FIELD GUIDE TO THE  
SPECIAL STATUS PLANTS OF THE  
BUREAU OF LAND MANAGEMENT  
LOWER SNAKE RIVER DISTRICT

A Bureau of Land Management  
Challenge Cost Share Project  
with  
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Idaho distribution maps, and species data.

## INTRODUCTION

The purpose of this field guide is to assist federal agency personnel, professionals, amateur botanists and interested lay persons in field work for the identification and management of BLM Special Status Plants. Field identification of rare plants is an essential element in development and implementation of the BLM rare plant program.

The introductory part of this guide discusses the rationale for its development, its purpose, acknowledgments, credits, definitions and codes for all taxa status codes, abbreviations used and illustration credits.

The second part provides a list of BLM Special Status Species for the Lower Snake River District and the four Resource Areas (RA): Bruneau RA (BRA), Cascade RA (CRA), Jarbidge RA (JRA), and the Owyhee RA (ORA). Additional lists provide information for taxa by soil characteristics and vegetation/habitat type. These have been provided to allow personnel a quick reference for community/habitat and soil data for each taxon. The species are arranged alphabetically by scientific name, by genus followed by species. The remainder of the guide provides pertinent data for each individual species on a single two-sided page. The front side includes a line drawing of each species, when available, with the key characters used to identify it. It also displays additional data for the specific taxon discussed, including: author(s), bibliographic reference, common name(s), synonyms, Idaho Native Plant Society status, Idaho Natural Heritage Program status, and distribution; data on habitat, phenology, elevational range, phenology, and a discussion of look-alikes based on similar taxa in Idaho. The reverse side of each page includes a close-up color photograph, the habitat (when available) and a distribution map for Idaho. The guide is arranged in a three-ring binder so additions and deletions of taxa can be made as new data becomes available.

Plant nomenclature is based primarily on Cronquist et al. in their current volumes of the Intermountain Flora, with a few exceptions (1984, 1989, 1994 and 1997); and Hitchcock and Cronquist in the Flora of the Pacific Northwest (1973). Other sources of information include: An Illustrated Guide to the Sensitive Plants of the Boise District Bureau of Land Management, Technical Bulletin 88-4, An Illustrated Guide to the Sensitive Plants of the Burley District Bureau of Land Management, Technical Bulletin 89-3, Sensitive Plants of the Jarbidge Resource Area, Technical Bulletin 96-7, and a few reports produced by the Idaho Natural Heritage Program.

Any new information gathered on the BLM Lower Snake River District rare plants should be sent to Ann DeBolt in the Lower Snake River District Office, 3948 Development Ave., Boise, Idaho 83705.

## ACKNOWLEDGMENTS

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The New York Botanical Garden, University of Washington Press, Great Basin Naturalist and The Army National Guard gave permission for the use of the following line drawings: The New York Botanical Garden- *Allium aseae*, *Astragalus atratus* var. *inseptus*, *Astragalus conjunctus*, *Astragalus cusickii* var. *packardiae*, *Astragalus mulfordiae*, *Astragalus purshii* var. *ophiogenes*, *Astragalus sterilis*, *Astragalus vallis*, *Astragalus yoder-williamsii*, *Blepharidachne kingii*, *Carex buxbaumii*, *Chaenactis cusickii*, *Chaenactis stevioides*, *Cryptantha propria*, *Cymopterus acaulis* var. *greeleyorum*, *Dimeresia howellii*, *Downingia bacigalupii*, *Eatonella nivea*, *Epipactis gigantea*, *Gilia polycladon*, *Glyptopleura marginata*, *Hackelia cronquistii*, *Hackelia ophiobia*, *Haplopappus bloomeri*, *Haplopappus radiatus*, *Juncus hallii*, *Lupinus uncialis*, *Machaerocarpus californicus*, *Nemacladus rigidus*, *Penstemon janishiae*, *Peraphyllum ramosissimum*, *Peteria thompsoniae*, *Phacelia lutea* var. *calva*, *Phacelia minutissima*, *Psathyrotes annua*, *Stylocline filaginea*, *Teucrium canadense* var. *occidentale*, and *Trifolium owyheense*. University of Washington Press- *Camassia cusickii*, *Carex aboriginum*, *Ceanothus prostratus*, *Pediocactus simpsonii* var. *robustior*, and *Stanleya confertiflora*. Idaho Army National Guard- *Lepidium papilliferum*. The Great Basin Naturalist- *Lomatium packardiae*.

## DEFINITIONS AND CODES

### FEDERAL STATUS

US Fish and Wildlife Service (58 Federal Register 51147, 1993)

- E Endangered: taxa formally listed as endangered.
- T Threatened: taxa formally listed as threatened.
- P Proposed E or T: taxa formally proposed for listing as endangered or threatened.
- C1 Notice of Review, Category 1: taxa for which substantial biological information exists on file to support proposing to list as endangered or threatened.

**IDAHO NATIVE PLANT SOCIETY STATUS (INPS).** Not an official State Status in Idaho but used by the INPS and the INHP to rank individual taxa.

**GLOBALLY RARE SPECIES** = species, varieties and subspecies (taxa) rare throughout their range.

**Global Ranks** are:

G1=Critically imperiled because of extreme rarity or because of some factor of its biology making it especially vulnerable to extinction (typically 5 or fewer populations).

G2=Imperiled because of rarity or because of other factors demonstrably making it very vulnerable to extinction (typically 6-20 populations).

G3=Rare or uncommon, but not imperiled (typically 21-100 populations).

G4=Not rare and apparently secure, but with cause for long-term concern (usually more than 100 populations).

G5=Demonstrably widespread, abundant and secure.

**STATE RARE** = Taxa rare within the political boundaries of Idaho, but more common elsewhere.

State Priority 1=A taxon in danger of becoming extinct or extirpated from Idaho in the foreseeable future if identifiable factors contributing to its decline continue to operate; these are taxa whose populations are present only at critically low levels or whose habitats have been degraded or habitat depleted to a significant degree.

State Priority 2=A taxon likely to be classified as Priority 1 within the foreseeable future in Idaho, if factors contributing to its population decline or habitat degradation or loss continue.

Sensitive=A taxon with small populations or localized distributions within Idaho that presently do not meet the criteria for classification as Priority 1 or 2, but whose populations and habitats may be jeopardized without active management or removal of threats.

Monitor=Taxa that are common within a limited range as well as those taxa which are uncommon, but have no identifiable threats (for example, certain alpine taxa).

Review=Global and State rare taxa which may be of conservation concern in Idaho by the INPS, but lack sufficient data to base a recommendation regarding their appropriate classification.

Global conservation ranks are used to assign taxa based on The Nature Conservancy system also used by the Natural Heritage Program and Conservation Data Center Network. This one-through-five ranking system is used to develop the INPS list; G1-G3 taxa are considered GLOBALLY RARE, while the STATE RARE categories are comprised of G4 or G5 taxa that are rare in Idaho.

**SPECIAL STATUS PLANTS - LOWER SNAKE RIVER DISTRICT  
BUREAU OF LAND MANAGEMENT**

<b>SPECIES</b>	<b>BRA</b>	<b>CRA</b>	<b>JRA</b>	<b>OR</b>
Aase's onion ( <i>Allium aaseae</i> )		X		
Mourning milkvetch ( <i>Astragalus atratus</i> v. <i>inseptus</i> )	X		X	
Stiff milkvetch ( <i>Astragalus conjunctus</i> )				X
Packard's milkvetch ( <i>Astragalus cusickii</i> v. <i>packardiae</i> )		X		
Mulford's milkvetch ( <i>Astragalus mulfordiae</i> )	X	X		X
Snake Canyon milkvetch ( <i>Astragalus purshii</i> v.	X		X	X
Barren milkvetch ( <i>Astragalus sterilis</i> )				X
Snake River milkvetch ( <i>Astragalus vallis</i> )		X		
Osgood Mountains milkvetch ( <i>Astragalus yoder-williamsii</i> )	X			X
King's desertgrass ( <i>Blepharidachne kingii</i> )				X
Cusick's camas ( <i>Camassia cusickii</i> )		X		
Indian Valley sedge ( <i>Carex aboriginum</i> )		X		
Buxbaum's sedge ( <i>Carex buxbaumii</i> )		X		
Prostrate ceanothus ( <i>Ceanothus prostratus</i> )		X		
Cusick's false yarrow ( <i>Chaenactis cusickii</i> )				X
Desert pincushion ( <i>Chaenactis stevioides</i> )	X		X	X
Malheur cryptantha ( <i>Cryptantha propria</i> )	X			X
Greeley's wavewing ( <i>Cymopterus acaulis</i> v. <i>greeleyorum</i> )	X		X	X
Dimeresia ( <i>Dimeresia howellii</i> )	X			X
Bacigalupi's downingia ( <i>Downingia bacigalupii</i> )	X			X
Eatonella ( <i>Eatonella nivea</i> )	X		X	X
Chatterbox orchid ( <i>Epipactis gigantea</i> )	X	X	X	
Calcareous buckwheat ( <i>Eriogonum ochrocephalum</i> var. <i>calcareum</i> )		X		
Annual salt buckwheat ( <i>Eriogonum salicornioides</i> )	X		X	X
Cowpie buckwheat ( <i>Eriogonum shockleyi</i> )	X		X	X
Spreading gilia ( <i>Gilia polycladon</i> )	X		X	
White-margined wax plant ( <i>Glyptopleura marginata</i> )	X		X	X
Cronquist's stickseed ( <i>Hackelia cronquistii</i> )		X		
Rattlesnake stickseed ( <i>Hackelia ophiobia</i> )	X			X
Rabbitbrush goldenweed ( <i>Haplopappus bloomeri</i> v. <i>bloomeri</i> )				X
Snake River goldenweed ( <i>Haplopappus radiatus</i> )		X		
Hall's rush ( <i>Juncus hallii</i> )				X
Davis peppergrass ( <i>Lepidium davisii</i> )	X		X	X
Slickspot peppergrass ( <i>Lepidium papilliferum</i> )	X	X	X	

SPECIES	BRA	CRA	JRA	OR
Bruneau River prickly phlox ( <i>Leptodactylon glabrum</i> )	X		X	
Packard's lomatium ( <i>Lomatium packardiae</i> )				X
Inch-high lupine ( <i>Lupinus uncialis</i> )	X			X
Fringed waterplantain ( <i>Machaerocarpus californicus</i> )	X			X
Smooth mentzelia ( <i>Mentzelia mollis</i> )				X
Rigid threadbush ( <i>Nemacladus rigidus</i> )	X		X	X
Simpson's hedgehog cactus ( <i>Pediocactus simpsonii</i> v. <i>robustior</i> )	X		X	X
Janish's penstemon ( <i>Penstemon janishiae</i> )	X		X	X
Squaw apple ( <i>Peraphyllum ramosissimum</i> )		X		
Spine-noded milkvetch ( <i>Peteria thompsoniae</i> )	X		X	
Ute ladies'-tresses ( <i>Spiranthes diluvialis</i> )				
Malheur yellow phacelia ( <i>Phacelia lutea</i> v. <i>calva</i> )				X
Least phacelia ( <i>Phacelia minutissima</i> )				X
Wilcox's primrose ( <i>Primula "wilcoxiana"</i> )		X		
Turtleback ( <i>Psathyrotes annua</i> )	X			X
Malheur princesplume ( <i>Stanleya confertiflora</i> )		X		X
Stylocline ( <i>Stylocline filaginea</i> )	X		X	X
American wood sage ( <i>Teucrium canadense</i> v. <i>occidentale</i> )	X	X	X	
Woven-spore lichen ( <i>Texosporium sancti-jacobi</i> )	X			
Owyhee clover ( <i>Trifolium owyheense</i> )				X

## BRUNEAU RESOURCE AREA SPECIAL STATUS PLANT LIST

*Astragalus atratus* var. *inseptus* (Mourning milkvetch)  
*Astragalus mulfordiae* (Mulford's milkvetch)  
*Astragalus purshii* var. *ophiogenes* (Snake River milkvetch)  
*Astragalus yoder-williamsii* (Osgood Mountains milkvetch)  
*Chaenactis stevioides* (Desert pincushion)  
*Cryptantha propria* (Malheur cryptantha)  
*Cymopterus acaulis* var. *greeleyorum* (Greeley's wavewing)  
*Dimeresia howellii* (Dimeresia)  
*Downingia bacigalupii* (Bacigalupi's downingia)  
*Eatonella nivea* (Eatonella)  
*Epipactis gigantea* (Chatterbox orchid)  
*Eriogonum salicornioides* (Annual salt buckwheat)  
*Eriogonum shockleyi* (Cowpie buckwheat)  
*Gilia polycladon* (Spreading gilia)  
*Glyptopleura marginata* (White-margined wax plant)  
*Hackelia ophiobia* (Rattlesnake stickseed)  
*Lepidium davisii* (Davis peppergrass)  
*Lepidium papilliferum* (Slickspot peppergrass)  
*Leptodactylon glabrum* (Bruneau River prickly-phlox)  
*Lupinus uncialis* (Inch-high lupine)  
*Machaerocarpus californicus* (Fringed waterplantain)  
*Nemacladus rigidus* (Rigid threadbush)  
*Pediocactus simpsonii* var. *robustior* (Simpson's hedgehog cactus)  
*Penstemon janishiae* (Janish's penstemon)  
*Peteria thompsoniae* (Spine-noded milkvetch)  
*Psathyrotes annua* (Turtleback)  
*Stylocline filaginea* (Stylocline)  
*Teucrium canadense* var. *occidentale* (American wood sage)  
*Texosporium sancti-jacobi* (Woven-spore lichen)

**CASCADE RESOURCE AREA  
SPECIAL STATUS PLANT LIST**

- Allium aaseae* (Aase's onion)  
*Astragalus cusickii* var. *packardiae* (Packard's milkvetch)  
*Astragalus mulfordiae* (Mulford's milkvetch)  
*Astragalus vallis* (Snake Canyon milkvetch)  
*Camassia cusickii* (Cusick's camas)  
*Carex aboriginum* (Indian Valley sedge)  
*Carex buxbaumii* (Buxbaum's sedge)  
*Ceanothus prostratus* (Squaw carpet)  
*Epipactis gigantea* (Chatterbox orchid)  
*Hackelia cronquistii* (Cronquist's stickseed)  
*Haplopappus radiatus* (Snake River goldenweed)  
*Lepidium papilliferum* (Slickspot peppergrass)  
*Peraphyllum ramosissimum* (Squaw apple)  
*Primula "wilcoxiana"* (Wilcox's primrose)  
*Stanleya confertiflora* (Malheur princesplume)  
*Teucrium canadense* var. *occidentale* (American wood sage)

**JARBIDGE RESOURCE AREA  
SPECIAL STATUS PLANT LIST**

*Astragalus atratus* var. *inseptus* (Mourning milkvetch)  
*Astragalus purshii* var. *ophiogenes* (Snake River milkvetch)  
*Chaenactis stevioides* (Desert pincushion)  
*Cymopterus acaulis* var. *greeleyorum* (Greeley's wavewing)  
*Eatonella nivea* (Eatonella)  
*Epipactis gigantea* (Chatterbox orchid)  
*Eriogonum salicornioides* (Annual salt buckwheat)  
*Eriogonum shockleyi* (Cowpie buckwheat)  
*Gilia polycladon* (Spreading gilia)  
*Glyptopleura marginata* (White-margined wax plant)  
*Lepidium davisii* (Davis peppergrass)  
*Lepidium papilliferum* (Slickspot peppergrass)  
*Leptodactylon glabrum* (Bruneau River prickly-phlox)  
*Nemacladus rigidus* (Rigid threadbush)  
*Pediocactus simpsonii* var. *robustior* (Simpson's hedgehog cactus)  
*Penstemon janishiae* (Janish's penstemon)  
*Peteria thompsoniae* (Spine-noded milkvetch)  
*Stylocline filaginea* (Stylocline)  
*Teucrium canadense* var. *occidentale* (American wood sage)

**OWYHEE RESOURCE AREA  
SPECIAL STATUS PLANT LIST**

*Astragalus conjunctus* (Stiff milkvetch)  
*Astragalus mulfordiae* (Mulford's milkvetch)  
*Astragalus purshii* var. *ophiogenes* (Snake River milkvetch)  
*Astragalus sterilis* (Barren milkvetch)  
*Astragalus yoder-williamsii* (Osgood Mountains milkvetch)  
*Blepharidachne kingii* (King's desertgrass)  
*Chaenactis cusickii* (Cusick's false yarrow)  
*Chaenactis stevioides* (Desert pincushion)  
*Cryptantha propria* (Malheur cryptantha)  
*Cymopterus acaulis* var. *greeleyorum* (Greeley's wavewing)  
*Dimeresia howellii* (Dimeresia)  
*Downingia bacigalupii* (Bacigalupi's downingia)  
*Eatonella nivea* (Eatonella)  
*Eriogonum salicornioides* (Annual salt buckwheat)  
*Eriogonum shockleyi* (Cowpie buckwheat)  
*Gilia polycladon* (Spreading gilia)  
*Glyptopleura marginata* (White-margined wax plant)  
*Hackelia ophiobia* (Rattlesnake stickseed)  
*Haplopappus bloomeri* var. *bloomeri* (Rabbitbrush goldenweed)  
*Juncus hallii* (Hall's rush)  
*Lepidium davisii* (Davis peppergrass)  
*Lomatium packardiae* (Packard's lomatium)  
*Lupinus uncialis* (Inch-high lupine)  
*Machaerocarpus californicus* (Fringed waterplantain)  
*Mentzelia mollis* (Smooth mentzelia)  
*Nemacladus rigidus* (Rigid threadbush)  
*Pediocactus simpsonii* var. *robustior* (Simpson's hedgehog cactus)  
*Penstemon janishiae* (Janish's penstemon)  
*Phacelia lutea* var. *calva* (Malheur yellow phacelia)  
*Phacelia minutissima* (Least phacelia)  
*Psathyrotes annua* (Turtleback)  
*Stanleya confertiflora* (Malheur princesplume)  
*Stylocline filaginea* (Stylocline)  
*Trifolium owyheense* (Owyhee clover)

## PLANT DISTRIBUTION BY VEGETATION TYPES/HABITAT

### **Aspen/Tall Forb**

*Phacelia minutissima*

### **Bitterbrush-Bluebunch Wheatgrass**

*Allium aaseae*

### **Bitterbrush/Sandberg Bluegrass**

*Astragalus sterilis*

### **Alkali Sage, Owyhee Sage, or Stiff Sage**

*Stylocline filaginea*

### **Mountain Big Sagebrush**

*Astragalus yoder-williamsii*

### **Big Sagebrush/Grass/Four-wing Saltbrush**

*Astragalus purshii* var. *ophiogenes*

### **Low Sagebrush**

*Astragalus yoder-williamsii*

*Blepharidachne kingii*

*Gilia polycladon*

*Pediocactus simpsonii* var. *robustior*

*Penstemon janishiae*

### **Sagebrush/Bunchgrass**

*Hackelia cronquistii*

*Peraphyllum ramosissimum*

### **Sagebrush/Grassland**

*Allium aaseae*

*Astragalus atratus* var. *inseptus*

*Astragalus conjunctus*

*Astragalus sterilis*

*Cryptantha propria*

*Dimeresia howellii*

*Hackelia cronquistii*

*Haplopappus radiatus*

*Lomatium packardiae*

*Lupinus uncialis*

*Peraphyllum ramosissimum*

*Primula "wilcoxiana"*

*Trifolium owyheense*

### **Wyoming Sagebrush**

*Astragalus cusickii* var. *packardiae*

*Astragalus vallis*

*Chaenactis cusickii*

*Chaenactis stevioides*

*Cymopterus acaulis* var. *greeleyorum*

*Eriogonum salicornioides*

*Lepidium davisii*

*Lepidium papilliferum*  
*Mentzelia mollis*  
*Nemacladus rigidus*  
*Texosporium sancti-jacobi*

**Wyoming Sagebrush-Shadscale**

*Cymopterus acaulis* var. *greeleyorum*  
*Eatonella nivea*  
*Eriogonum shockleyi* var. *shockleyi*  
*Glyptopleura marginata*  
*Mentzelia mollis*  
*Nemacladus rigidus*  
*Phacelia lutea* var. *calva*

**Four-wing Saltbrush**

*Chaenactis stevioides*  
*Eriogonum ochrocephalum* var. *calcareum*

**Greasewood**

*Blepharidachne kingii*  
*Glyptopleura marginata*

**Horsebrush**

*Blepharidachne kingii*  
*Chaenactis stevioides*  
*Gilia polycladon*

**Idaho Fescue**

*Haplopappus radiatus*  
*Primula "wilcoxiana"*

**Indian Ricegrass**

*Blepharidachne kingii*  
*Chaenactis stevioides*  
*Cymopterus acaulis* var. *greeleyorum*

**Needle-and-Thread Grass/Indian Ricegrass/Bitterbrush**

*Astragalus mulfordiae*

**False Hellebore/Forb**

*Phacelia minutissima*

**Mountain Shrub**

*Peraphyllum ramosissimum*

**Open Woods**

*Haplopappus bloomeri* var. *bloomeri*

**Ponderosa Pine/Shrub**

*Ceanothus prostratus*

**Rabbitbrush**

*Astragalus yoder-williamsii*  
*Blepharidachne kingii*

**Riparian**

*Carex aboriginum*  
*Carex buxbaumii*  
*Downingia bacigalupii*  
*Epipactis gigantea*  
*Juncus hallii*  
*Spiranthes diluvialis*  
*Teucrium canadense* var. *occidentale*

**Salt Desert Shrub**

*Blepharidachne kingii*  
*Chaenactis cusickii*  
*Chaenactis stevioides*  
*Cymopterus acaulis* var. *greeleyorum*  
*Eatonella nivea*  
*Eriogonum salicornioides*  
*Eriogonum shockleyi* var. *packardiae*  
*Gilia polycladon*  
*Glyptopleura marginata*  
*Lepidium davisii*  
*Mentzelia mollis*  
*Nemacladus rigidus*  
*Peteria thompsoniae*  
*Penstemon janishiae*  
*Phacelia lutea* var. *calva*  
*Psathyrotes annua*  
*Stanleya confertiflora*

**Canyon Wall or Base**

*Hackelia ophiobia*  
*Leptodactylon glabrum*

## PLANT DISTRIBUTION BY SOIL CHARACTERISTICS

### **Coarse Sand**

*Allium aaseae*  
*Astragalus mulfordiae*  
*Chaenactis stevioides*  
*Cymopterus acaulis* var. *greeleyorum*  
*Gilia polycladon*  
*Glyptopleura marginata*  
*Psathyrotes annua*

### **Fine Alluvial Sand**

*Astragalus purshii* var. *ophiogenes*  
*Eatonella nivea*

### **Volcanic Ash**

*Astragalus sterilis*  
*Chaenactis cusickii*  
*Cryptantha propria*  
*Cymopterus acaulis* var. *greeleyorum*  
*Eriogonum salicornioides*  
*Glyptopleura marginata*  
*Lomatium packardiae*  
*Mentzelia mollis*  
*Peteria thompsoniae*  
*Penstemon janishiae*  
*Phacelia lutea* var. *calva*  
*Stanleya confertiflora*  
*Trifolium owyheense*

### **Rhyolite Cliffs/Talus**

*Hackelia ophiobia*  
*Leptodactylon glabrum*  
*Lomatium packardiae*

### **Clay**

*Astragalus cusickii* var. *packardiae*  
*Cryptantha propria*  
*Eriogonum ochrocephalum* var. *calcareum*  
*Eriogonum salicornioides*  
*Lomatium packardiae*  
*Penstemon janishiae*  
*Peraphyllum ramosissimum*  
*Stanleya confertiflora*

### **Clay Loam**

*Astragalus vallis*  
*Peraphyllum ramosissimum*  
*Primula "wilcoxiana"*

### **Sandy Loam**

*Hackelia cronquistii*  
*Primula "wilcoxiana"*

**Silt**

*Astragalus yoder-williamsii*  
*Gilia polycladon*  
*Haplopappus radiatus*

**Calcareous Hot/Cold Springs**

*Epipactis gigantea*

**Oolitic Limestone**

*Eriogonum shockleyi* var. *packardiae*

**Peat Bogs**

*Carex buxbaumii*  
*Juncus halli*

**Moist bottom-lands**

*Carex aboriginum*  
*Teucrium canadense* var. *occidentale*

**Margins of Lakes**

*Downingia bacigalupii*  
*Juncus halli*

**Marshes**

*Carex buxbaumii*  
*Machaerocarpus californicus*

**Wet Meadows**

*Carex buxbaumii*  
*Downingia bacigalupii*  
*Spiranthes diluvialis*

**Sloughs**

*Machaerocarpus californicus*

**Streambanks**

*Carex aboriginum*  
*Downingia bacigalupii*  
*Epipactis gigantea*  
*Juncus halli*  
*Machaerocarpus californicus*  
*Spiranthes diluvialis*  
*Teucrium canadense* var. *occidentale*

**Spring fed areas or slow moving water**

*Camassia cusickii*

**Vernal pools/Vernally moist areas**

*Downingia bacigalupii*  
*Machaerocarpus californicus*  
*Stylocline filaginea*

**Playa or Natric Sites**

*Lepidium davisii*

*Lepidium papilliferum*

**Thin Soil over Basalt**

*Astragalus atratus* var. *inseptus*

*Pediocactus simpsonii* var. *robustior*

*Stylocline filaginea*

**Volcanic Cinder**

*Astragalus conjunctus*

*Astragalus yoder-williamsii*

*Dimeresia howellii*

*Eatonella nivea*

*Glyptopleura marginata*

*Lupinus uncialis*

*Nemacladus rigidus*

*Peteria thompsoniae*

*Pediocactus simpsonii* var. *robustior*

*Stylocline filaginea*

**Cindery gravel over stony basalt**

*Astragalus conjunctus*

*Stylocline filaginea*

**Gravelly**

*Blepharidachne kingii*

*Dimeresia howellii*

*Eriogonum shockleyi* var. *shockleyi*

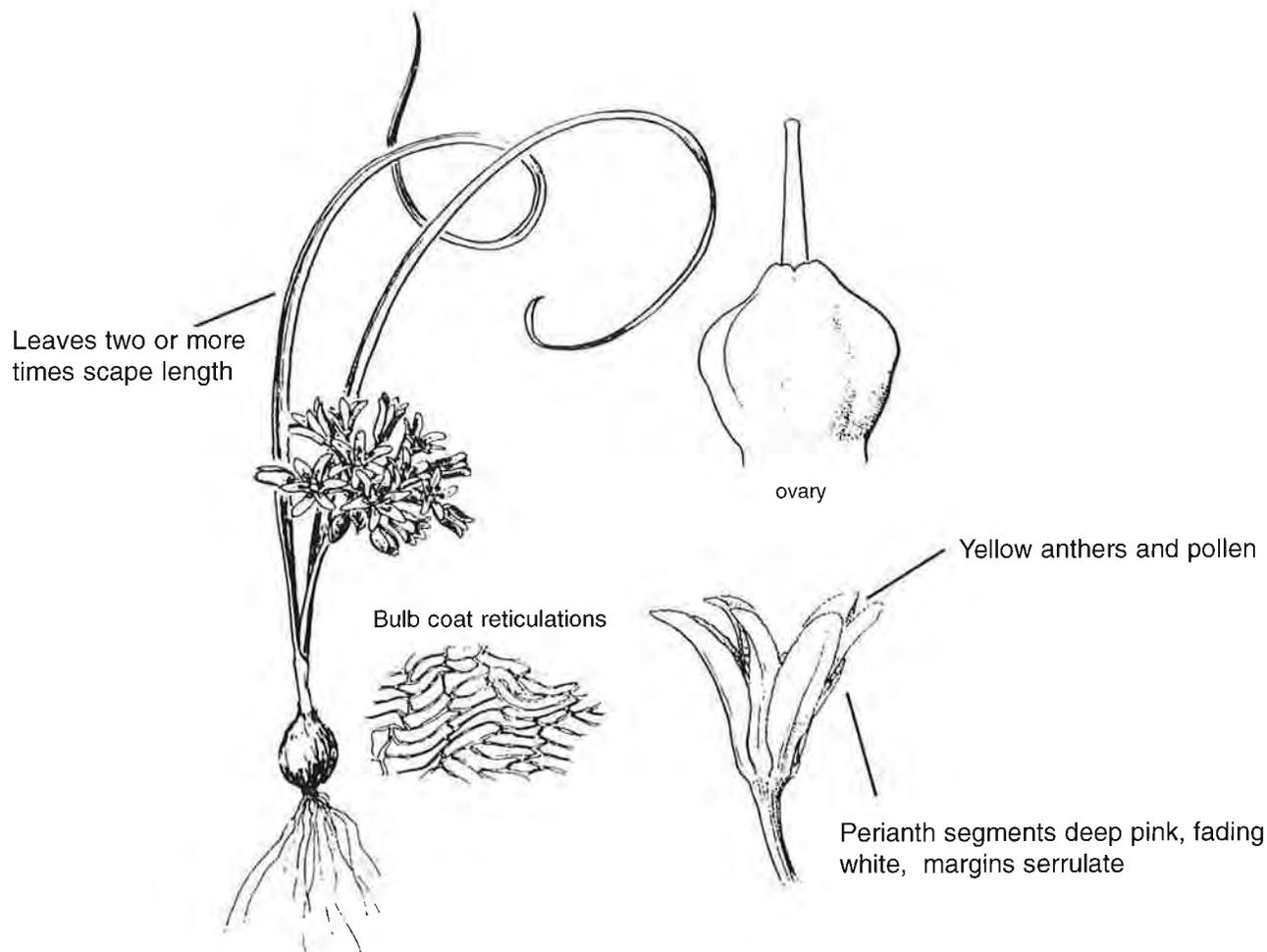
*Glyptopleura marginata*

*Haplopappus bloomeri* var. *bloomeri*

*Pediocactus simpsonii* var. *robustior*

**Granitic**

*Ceanothus prostratus*



**Scientific Name:** *Allium aaseae* Ownbey

**Bibliographic Reference:** Ownby, 1950. Res. Stud. State Col. Wash. 18:38.

**Common Name:** Aase's onion

**Family (Common Name):** Liliaceae (Lily Family)

**Synonyms:** None

**Idaho Native Plant Society Category:** Global Priority 3

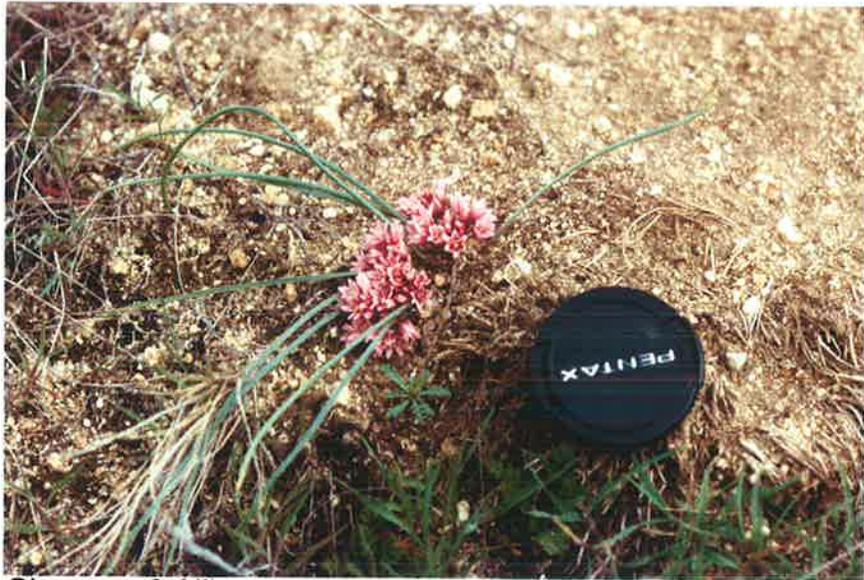
**Natural Heritage Program Rank:** S3

**Distribution:** Endemic to Idaho in the lower foothills from the Boise to Weiser areas in Ada, Boise, Gem, Payette and Washington counties.

**Habitat:** Coarse sandy soil most commonly on steep southerly exposures. Usually on or near ridge tops in sagebrush-grass communities, often with bitterbrush, from 800-1500 m elevation.

**Phenology:** Flowering as early as late February through April, depending on elevation and seasonal weather patterns.

**Look-alikes:** Similar to *A. simillimum* but differing in having deep pink perianth segments that fade white, with yellow anthers and pollen versus purple anthers or mottled purple and white, and with white to light gray pollen in *A. simillimum*. Aase's onion is also sometimes confused with *A. brandegei*, but the later species is easily distinguished by its shorter leaves, which are mostly less than twice as long as the scape, the flowering pedicels being mostly longer than the perianth, and entire perianth segments.



Closeup of *Allium aaseae*

Ann Debolt



Habitat of *Allium aaseae*

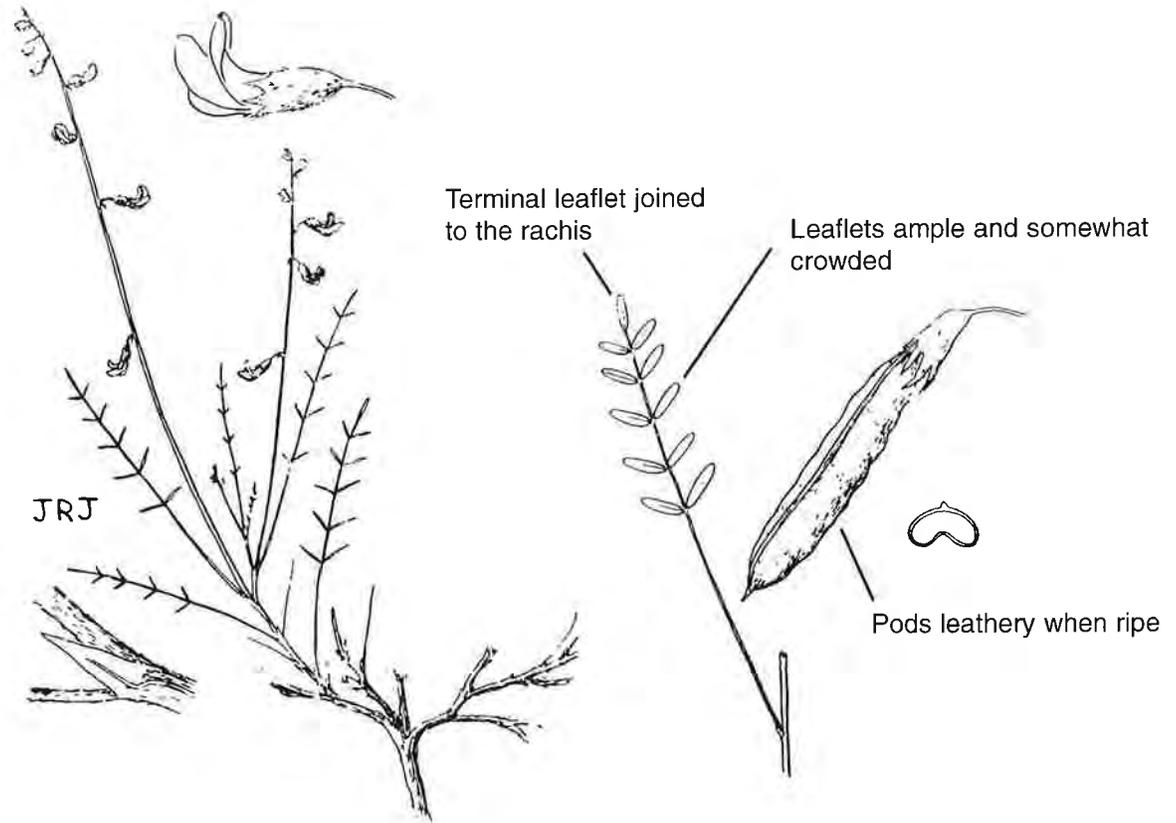
Ann Debolt

Species  
Distribution



**Mourning milkvetch**

***Astragalus atratus* var. *inseptus***



---

**Scientific Name:** *Astragalus atratus* S. Wats. var. *inseptus* Barneby

**Bibliographic Reference:** Barneby, 1961. Univ. Wash. Publ. Biol. 17(3): 220.

**Common Name:** Mourning milkvetch

**Family (Common Name):** Fabaceae or Leguminosae (Pea Family)

**Synonyms:** According to Barneby (1989) plants in Gooding County pass into var. *owyheensis* suggesting var. *inseptus* may not be taxonomically distinguishable.

**Idaho Native Plant Society Category:** Global Priority 3

**Natural Heritage Program Rank:** S3

**Distribution:** Endemic to the n edge of the Snake River Plains in s Blaine, s Camas, n Lincoln, and Gooding counties, Idaho, central around the Mount Bennett Hills.

**Habitat:** Sagebrush/grass communities in thin soil of stony basalt flats where moist in spring, below 1500 m elevation.

**Phenology:** Late May through July.

**Look-alikes:** Similar to var. *owyheensis* but with more ample and less scattered leaflets; and the terminal leaflet jointed to the rachis. The pods are coriaceous when ripe.



Closeup of *Astragalus atratus* var. *inseptus*

Ann Debolt

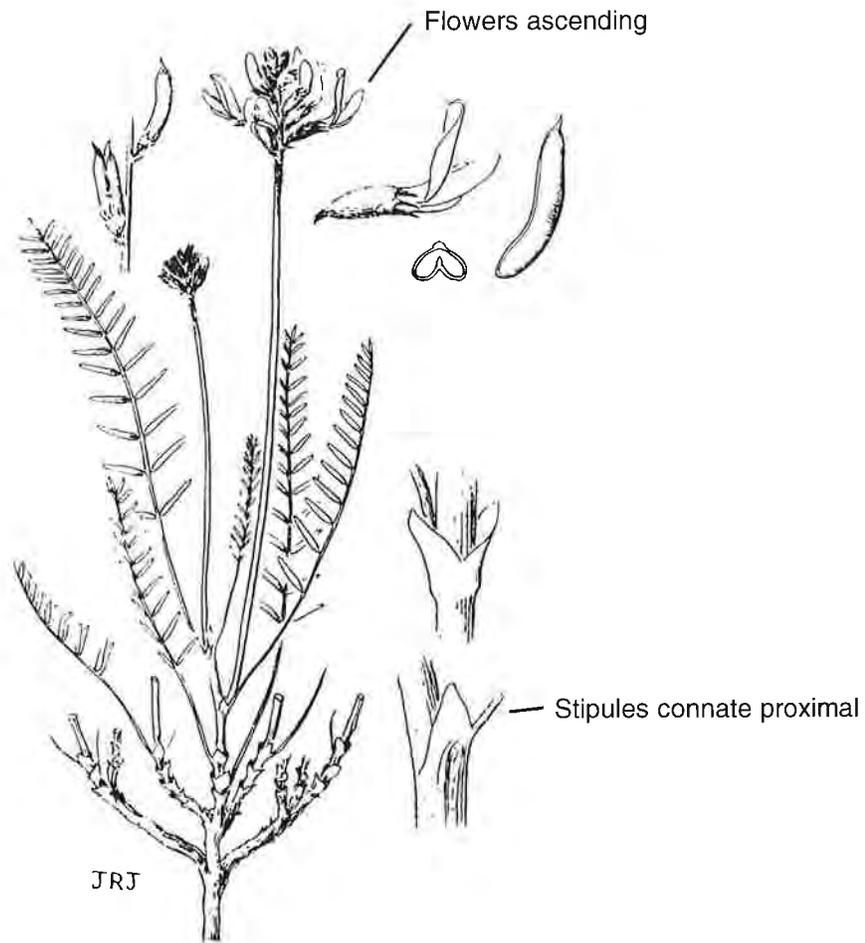


Habitat of *Astragalus atratus* var. *inseptus*

Ann Debolt

Species  
Distribution





Plants subcaulescent

**Scientific Name:** *Astragalus conjunctus* S. Wats.

**Bibliographic Reference:** Watson, 1882. Proc. Amer. Acad. Arts 17: 371.

**Common Name:** Stiff milkvetch or Basalt milkvetch

**Family (Common Name):** Fabaceae or Leguminosae (Pea Family)

**Synonyms:** *A. reventus* var. *conjunctus* M.E. Jones; *Phaca conjunctus* Piper; *Tium conjunctum* Rydb.

**Idaho Native Plant Society Category:** State Review

**Natural Heritage Program Rank:** S2

**Distribution:** Southwestern Idaho in Owyhee County; North transmontane Oregon in Malheur and Harney counties.

**Habitat:** Rocky hilltops, hillsides and canyon benches of sagebrush scrubland and steppe-desert communities up to the lower edge of the pine forest on volcanic, especially basalt, substrates from 1100-1650 m elevation (up to 2100 m in the Steen Mts. of sw Oregon).

**Phenology:** Mid April through June.

**Look-alikes:** Easily distinguished by its ascending flowers and connate proximal stipules. Sometimes confused with *A. toanus* and *A. adanus* because of their similar pods. Both latter species are caulescent plants with stems as long or longer than the peduncles versus subcaulescent in the former species.

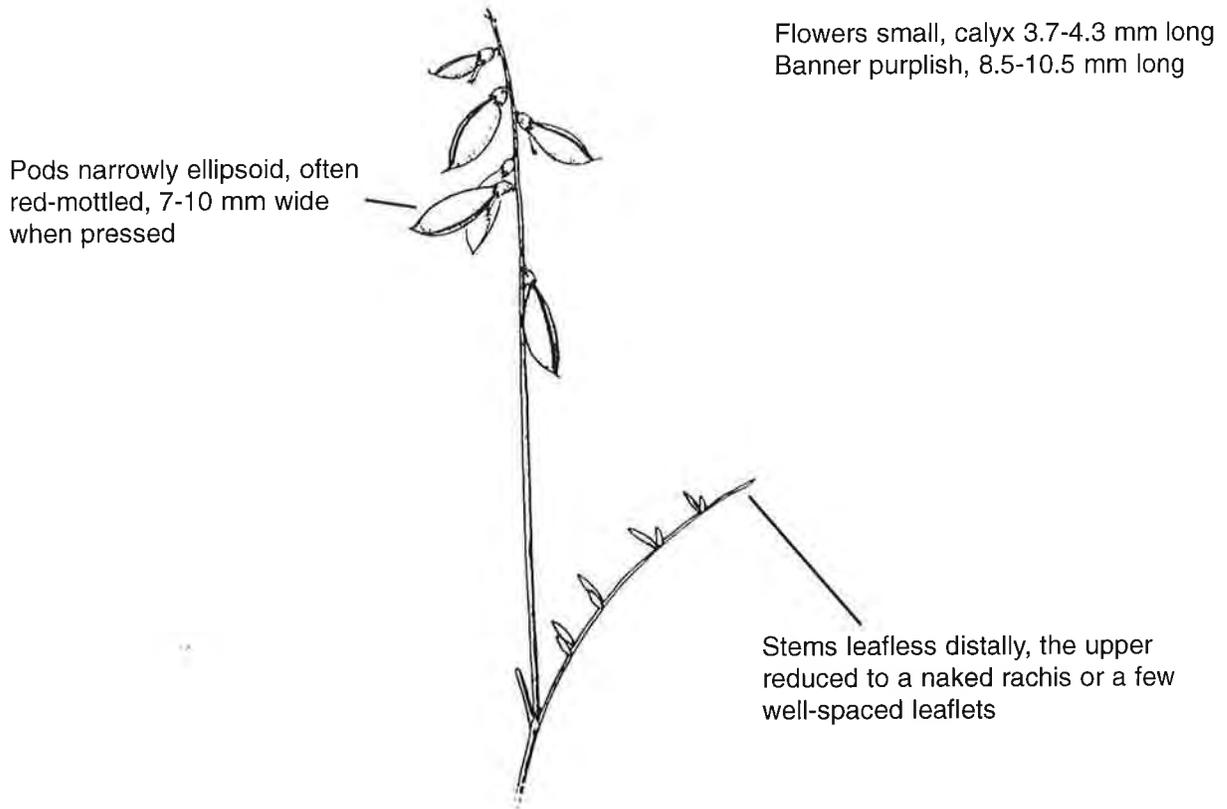
No photos available

Species  
Distribution



Packard's milkvetch

*Astragalus cusickii* var. *packardiae*



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**Scientific Name:** *Astragalus cusickii* A. Gray var. *packardiae* Barneby

**Bibliographic Reference:** Barneby, 1989. Interm. Fl. 3b:78-80.

**Common Name:** Packard's milkvetch

**Family (Common Name):** Fabaceae or Leguminosae (Pea Family)

**Synonyms:** None

**Idaho Native Plant Society Category:** Global Priority 1

**Natural Heritage Program Rank:** S1

**Distribution:** Endemic to the tributaries of Big and Little Willow Creek, Payette County, Idaho.

**Habitat:** Sparsely vegetated light colored soils. Usually associated with Wyoming sagebrush, at ca 850 m elevation.

**Phenology:** May through July.

**Look-alikes:** Most closely related to var. *cusickii* but with smaller purplish flowers, the calyx 3.7- 4.3 mm long, the purplish banner 8.5-10.5 mm long, narrowly ellipsoid, often red-mottled pods 7-10 mm wide when pressed, the stems leafless distally with the upper leaves reduced to a naked rachis or a few well-spaced leaflets.



Closeup of *Astragalus cusickii* var. *packardiae*

Ann Debolt



Ann Debolt

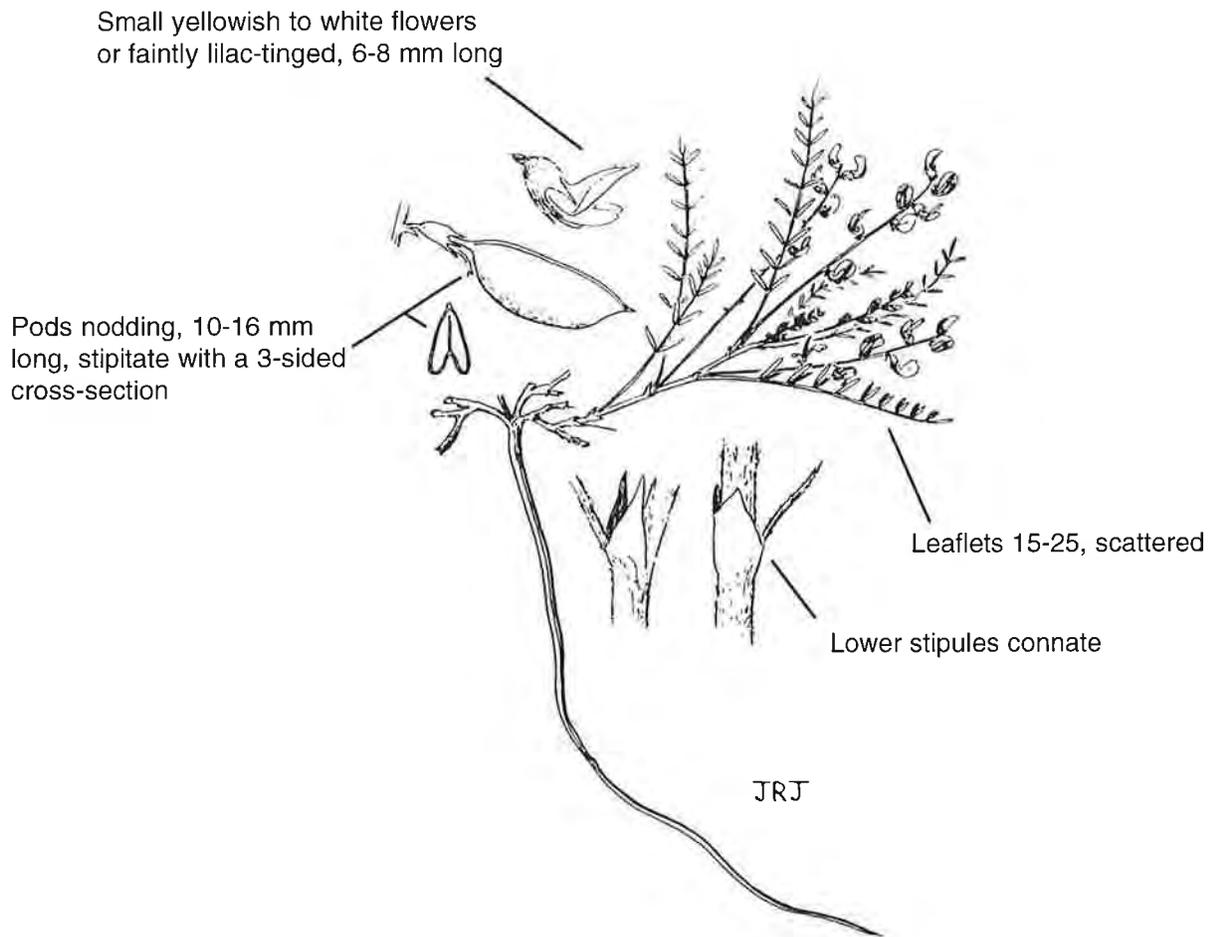
Habitat of *Astragalus cusickii* var. *packardiae*

Species  
Distribution



## Mulford's milkvetch

*Astragalus mulfordiae*



---

**Scientific Name:** *Astragalus mulfordiae* M.E. Jones

**Bibliographic Reference:** Jones, 1898. Contr. W. Bot. 8: 18.

**Common Name:** Mulford's milkvetch

**Family (Common Name):** Fabaceae or Leguminosae (Pea Family)

**Idaho Native Plant Society Category:** Global Priority 2

**Natural Heritage Program Rank:** S2

**Synonyms:** *Onix mulfordae* Rydb.

**Distribution:** Western part of the Snake River Plain in Ada, Owyhee, Payette and Washington counties, Idaho; Malheur County, Oregon.

**Habitat:** Sandy slopes and ridges with needle-and-thread grass, Indian ricegrass and bitterbrush mostly on south facing exposures, from 650-850 m elevation.

**Phenology:** May and June.

**Look-alikes:** Allied to *A. yoder-williamsii* and *A. oniciformis* but easily recognized from these by the small yellowish to whitish or faintly lilac-tinged flowers, nodding stipitate trigonous and bilocular pods and lower connate stipules.



Closeup of *Astragalus mulfordiae*

Ann Debolt



Habitat of *Astragalus mulfordiae*

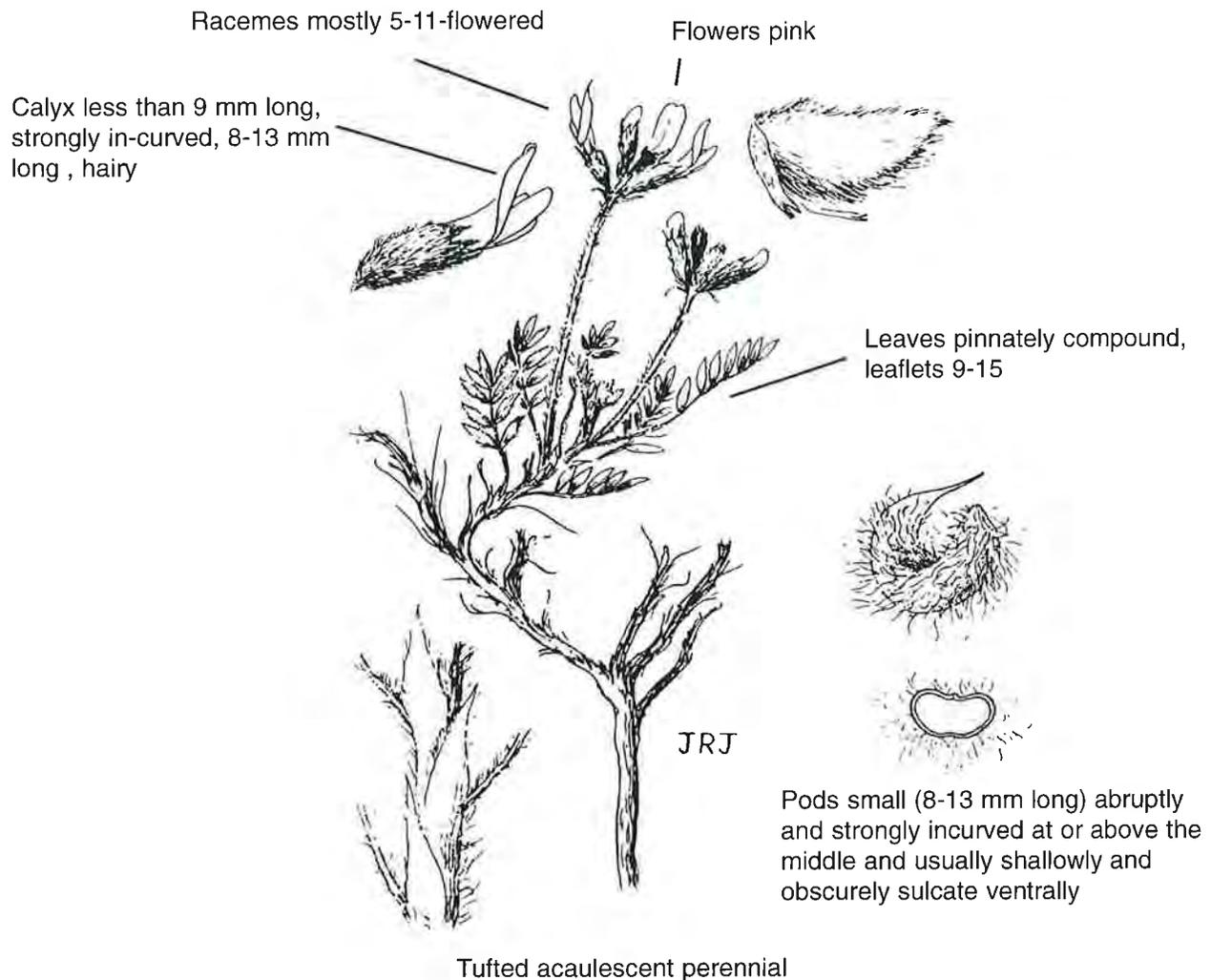
Ann Debolt

Species  
Distribution



## Snake River milkvetch

## *Astragalus purshii* var. *ophiogenes*



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

**Bibliographic Reference:** Barneby, 1961. Univ. Wash. Publ. Biol. 17(3): 256.

**Common Name:** Snake River milkvetch

**Family (Common Name):** Fabaceae or Leguminosae (Pea Family)

**Synonyms:** *Astragalus ophiogenes* Barneby

**Idaho Native Plant Society Category:** Global Priority 3

**Natural Heritage Program Rank:** S3

**Distribution:** Snake River corridor and surrounding uplands from Gooding and Twin Falls counties to Owyhee County in sw Idaho; Malheur County, Oregon.

**Habitat:** Often on barren sites with big sagebrush, Indian ricegrass, needle-and-thread grass and four-wing satl-bush. Growing in loosely aggregated, frequently moving sand and gravelly sand deposits on bluffs, talus, dunes and volcanic ash beds, from 700-1075 m. elevation.

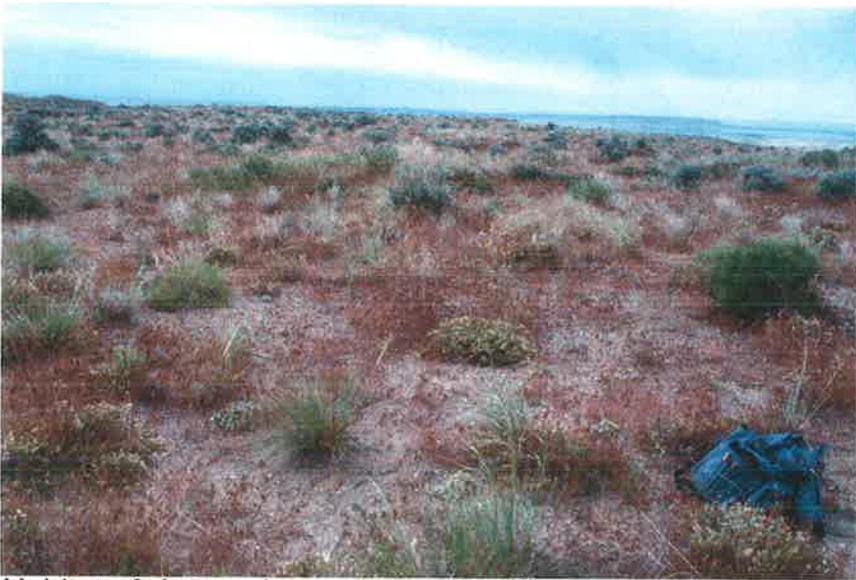
**Phenology:** Late April through June.

**Look-alikes:** Most similar to the w and nw Great Basin varieties *lectulus* and *lagopus* which are out of the range of var. *ophiogenes*. Variety *ophiogenes* has the racemes mostly 5-11-flowered, and more leaflets (9-17 vs 5-11).



Closeup of *Astragalus purshii* var. *ophiogenes*

Ann Debolt

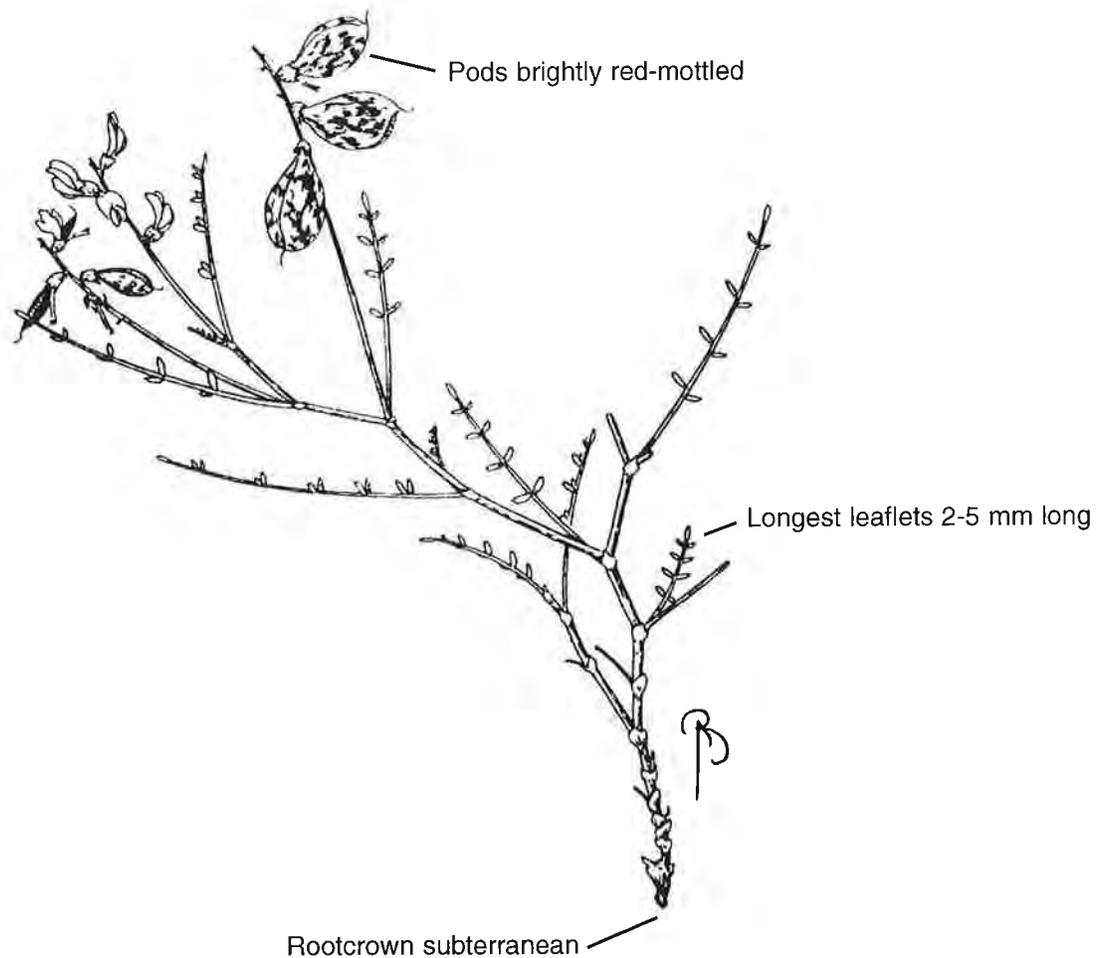


Habitat of *Astragalus purshii* var. *ophiogenes*

Ann Debolt

Species  
Distribution





**Scientific Name:** *Astragalus sterilis* Barneby

**Bibliographic Reference:** Barneby, 1949. Leafl. W. Bot. 5: 193.

**Common Name:** Barren milkvetch

**Family (Common Name):** Fabaceae or Leguminosae (Pea Family)

**Synonyms:** *Astragalus cusickii* A. Gray var. *sterilis* Barneby

**Idaho Native Plant Society Category:** Global Priority 3

**Natural Heritage Program Rank:** S1

**Global and State Ranks:** G3

**Distribution:** Owyhee Desert along and near Succor Creek and the lower Owyhee River in Malheur Co., Oregon and adjacent Owyhee Co., Idaho in the vicinity of Dry Creek and McBride Creek.

**Habitat:** Bluffs, knolls and slopes in sagebrush-grass and bitterbrush-Sandberg bluegrass communities on white or reddish-brown ash soils that decompose to clay.

**Phenology:** May through June.

**Look-alikes:** Similar to other varieties of *A. cusickii* but differing from them in the smaller leaflets (2-5 mm long vs 5-8 mm), subterranean root-crown and bright red-mottled pods.



Closeup of *Astragalus sterilis*

Roger Rosentreter

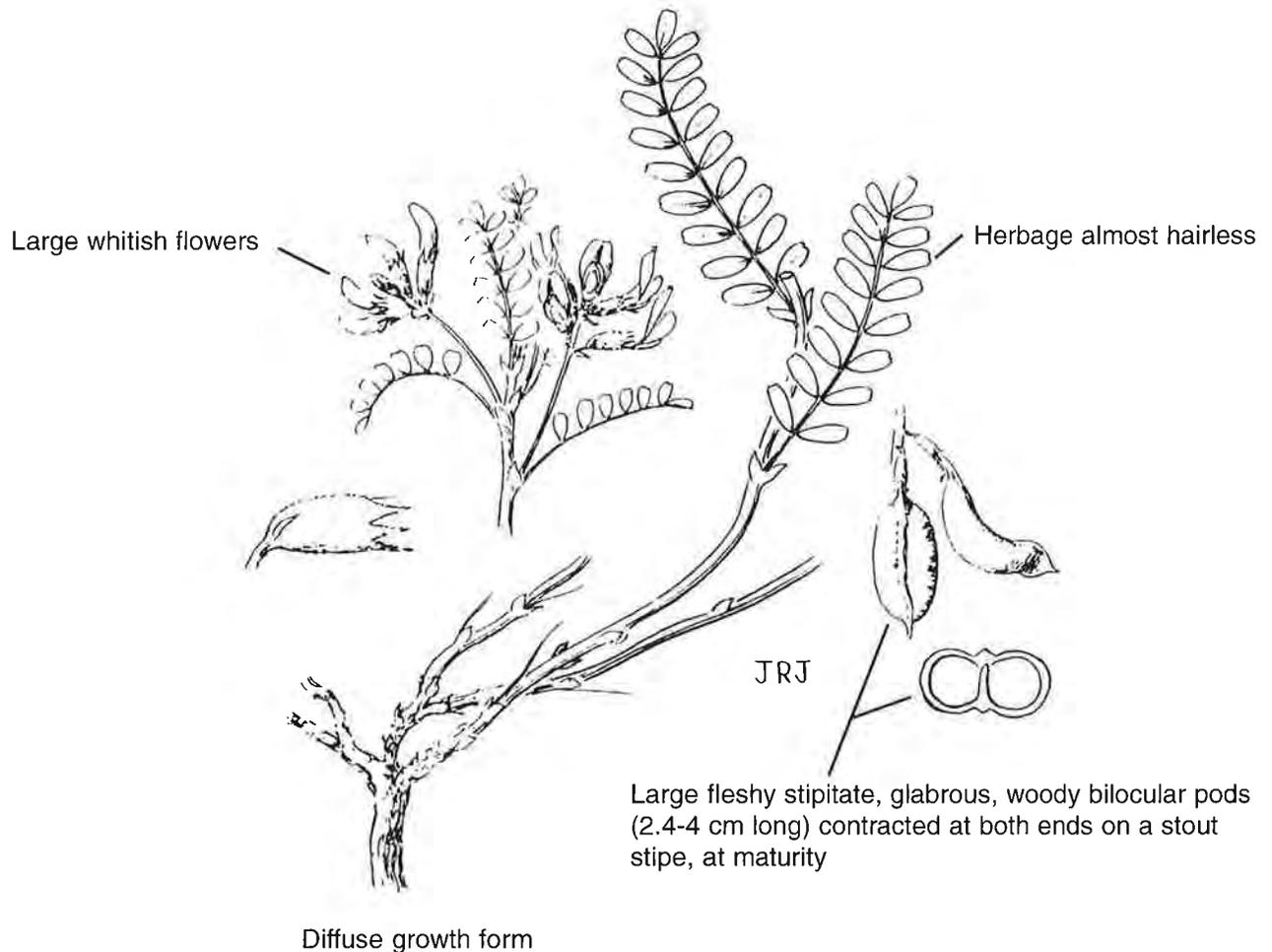


Habitat of *Astragalus sterilis*

Steve Caicco

Species  
Distribution





**Scientific Name:** *Astragalus vallis* M.E. Jones

**Bibliographic Reference:** Jones, 1902. Contr. W. Bot. 10:59.

**Common Name:** Snake Canyon milkvetch

**Family (Common Name):** Fabaceae or Leguminosae (Pea Family)

**Synonyms:** *Hesperonix vallis* (Jones) Rydb.

**Idaho Native Plant Society Category:** Former Sensitive Species

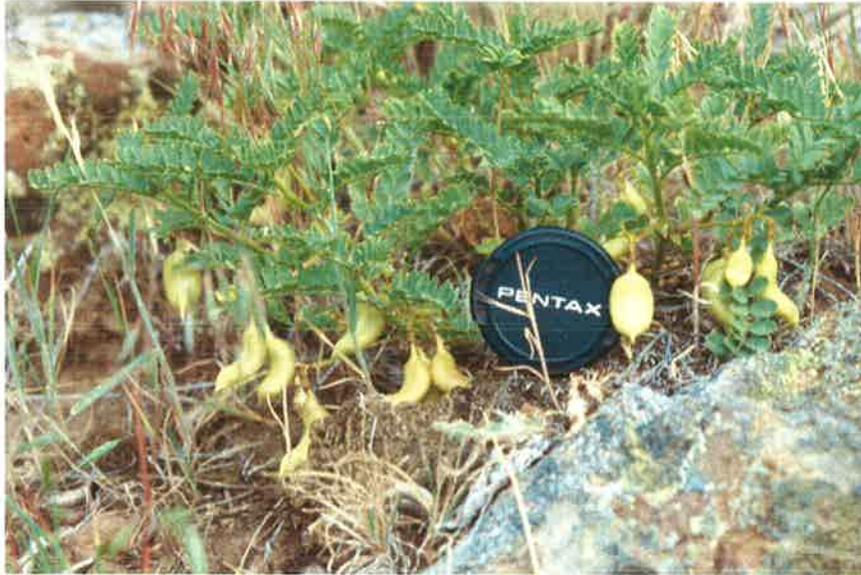
**Natural Heritage Program Rank:** S3

**Distribution:** Endemic to the Snake River area in Adams and Washington counties, Idaho; and in the Baker and Malheur counties, Oregon.

**Habitat:** Scattered in the Wyoming sagebrush hills and canyon-benches on clay loam of basaltic origin, 700-950 m elevation.

**Phenology:** Late April through June.

**Look-alikes:** None within the range of the species.



Closeup of *Astragalus vallis*

Ann Debolt

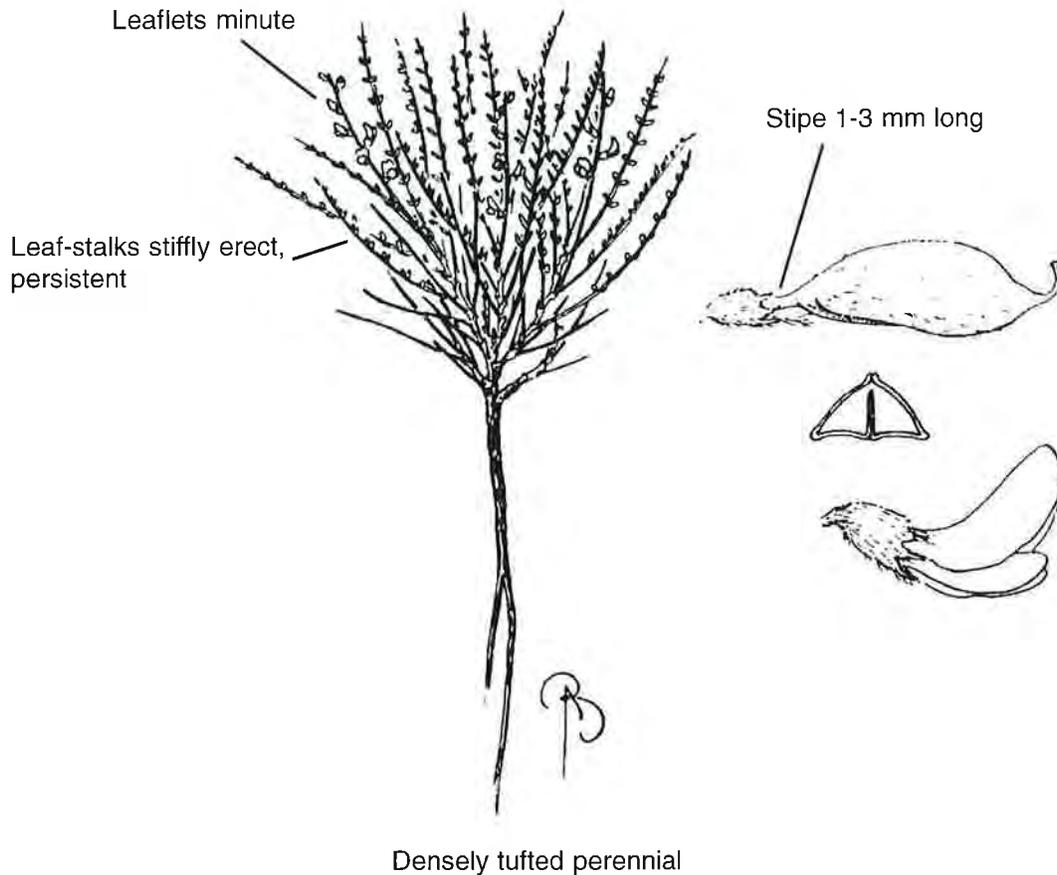


Habitat of *Astragalus vallis*

Ann Debolt

Species  
Distribution





**Scientific Name:** *Astragalus yoder-williamsii* Barneby

**Bibliographic Reference:** Barneby, 1980. Britt. 32:30.

**Common Name:** Osgood Mountain milkvetch

**Family (Common Name):** Fabaceae or Leguminosae (Pea Family)

**Idaho Native Plant Society Category:** Global Priority 3

**Natural Heritage Program Rank:** S3

**Distribution:** Restricted to the upper forks of the Owyhee River in Owyhee County, Idaho; and ec Humboldt County, Nevada.

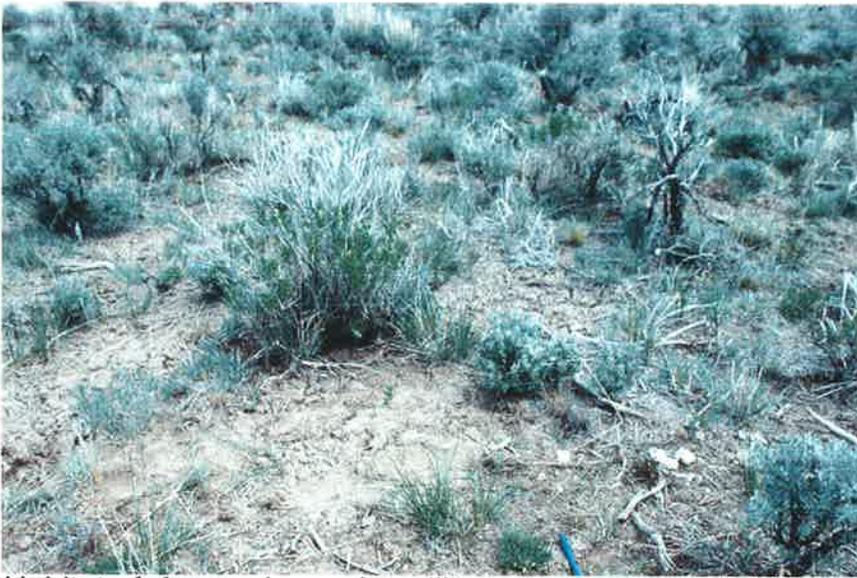
**Habitat:** Decomposed granitic soils in Nevada. Idaho populations occur on fine loamy soils in low sagebrush, big sagebrush, or rabbitbrush communities, from 1575-2170 m elevation.

**Look-alikes:** According to Barneby (1989), "this species suggests a diminished and condensed *A. mulfordiae*...but differs in the densely tufted habit, stiffly erect persistent leaf-stalks, minute leaflets and smaller pod."



Closeup of *Astragalus yoder-williamsii*

Bob Moseley



Habitat of *Astragalus yoder-williamsii*

Bob Moseley

Species  
Distribution

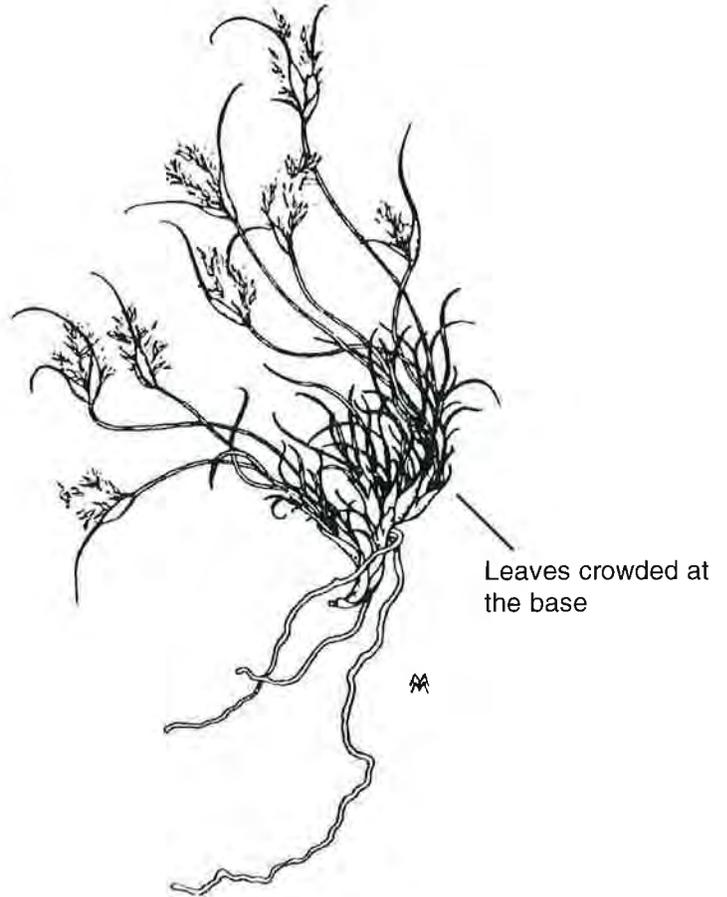
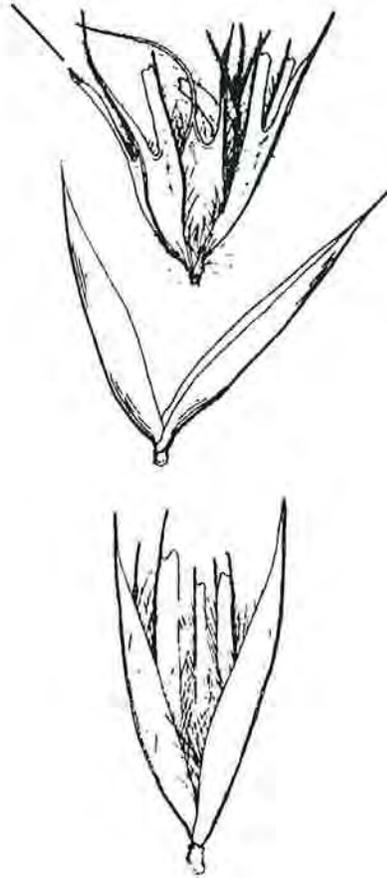


## King's desertgrass

## *Blepharidachne kingii*

Uppermost lemma a 3-awned  
bristle-like rudiment

Spikelets 4-flowered



---

**Scientific Name:** *Blepharidachne kingii* (S. Wats.) Hackel in A. & C. DC.

**Bibliographic Reference:** Hackel, 1889. Monogr. Phanerog. 6: 261.

**Common Name:** King's desertgrass

**Family (Common Name):** Poaceae or Gramineae (Grass Family)

**Synonyms:** *Eremochloe kingii* S. Wats.

**Idaho Native Plant Society Category:** State Priority 1

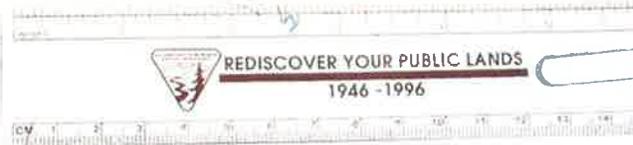
**Natural Heritage Program Rank:** S1

**Distribution:** Western Utah, e to California and disjunct in the n part of sw Idaho (Owyhee County).

**Habitat:** Greasewood, shadscale, ephedra, rabbitbrush, horsebrush, Indian ricegrass, budsage, sagebrush and Idaho fescue communities in gravelly soils, from 1070-1830 m elevation.

**Phenology:** Late May through late June; sometimes flowering in the fall following late summer rains.

**Look-alikes:** A distinct species with the leaves crowded near the base, spikelets mostly 4-flowered vs 5-8-flowered, and the uppermost lemma a 3-awned bristle-like rudiment.



Closeup of *Blepharidachne kingii*

Ann Debolt



Habitat of *Blepharidachne kingii*

Bob Moseley

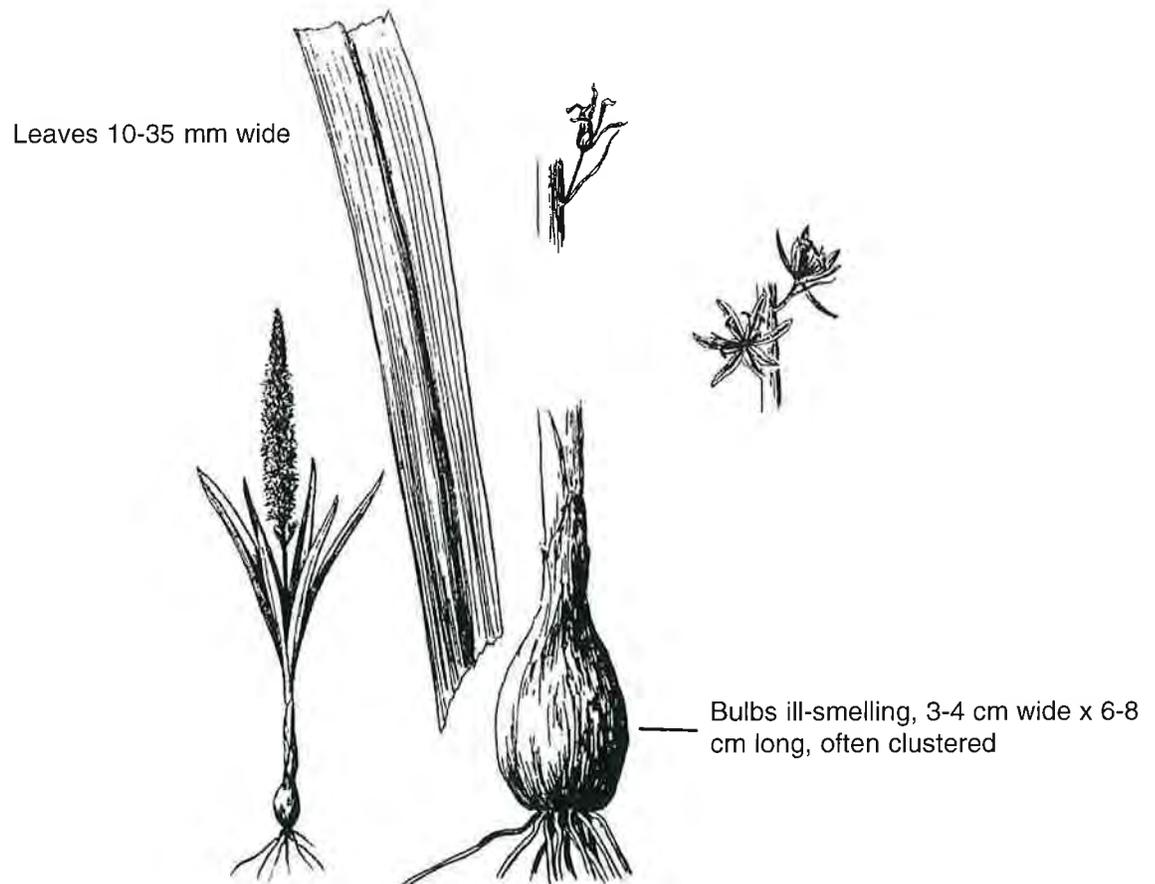


Species  
Distribution

## Cusick's camas

## *Camassia cusickii*

Large plants with scapes 4-5 dm long, densely flowered



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**Scientific Name:** *Camassia cusickii* S. Wats.

**Bibliographic Reference:** Watson, 1887. Proc. Amer. Acad. 22: 479.

**Common Name:** Cusick's camas

**Family (Common Name):** Liliaceae (Lily Family)

**Synonyms:** *Quamasia cusickii* Cov.

**Idaho Native Plant Society Category:** State Monitor

**Natural Heritage Program Rank:** S2

**Distribution:** Steep slopes in the Snake River canyon and tributaries of Adams, Gem and Washington counties, Idaho; Baker County, Oregon.

**Habitat:** Steep moist slopes and terraces of spring fed areas or slow moving water.

**Phenology:** April through July, depending on elevation.

**Look-alikes:** Related to other *Camassia* species but a much more robust taxon with leaves 10-35 mm wide, larger (3-4 cm wide x 6-8 cm long) clustered, ill-smelling bulbs, and taller scapes (4-5 dm long). Not to be confused with death camas based on the above mentioned characters.



Closeup of *Camassia cusickii*

Roger Rosentreter



Habitat of *Camassia cusickii*

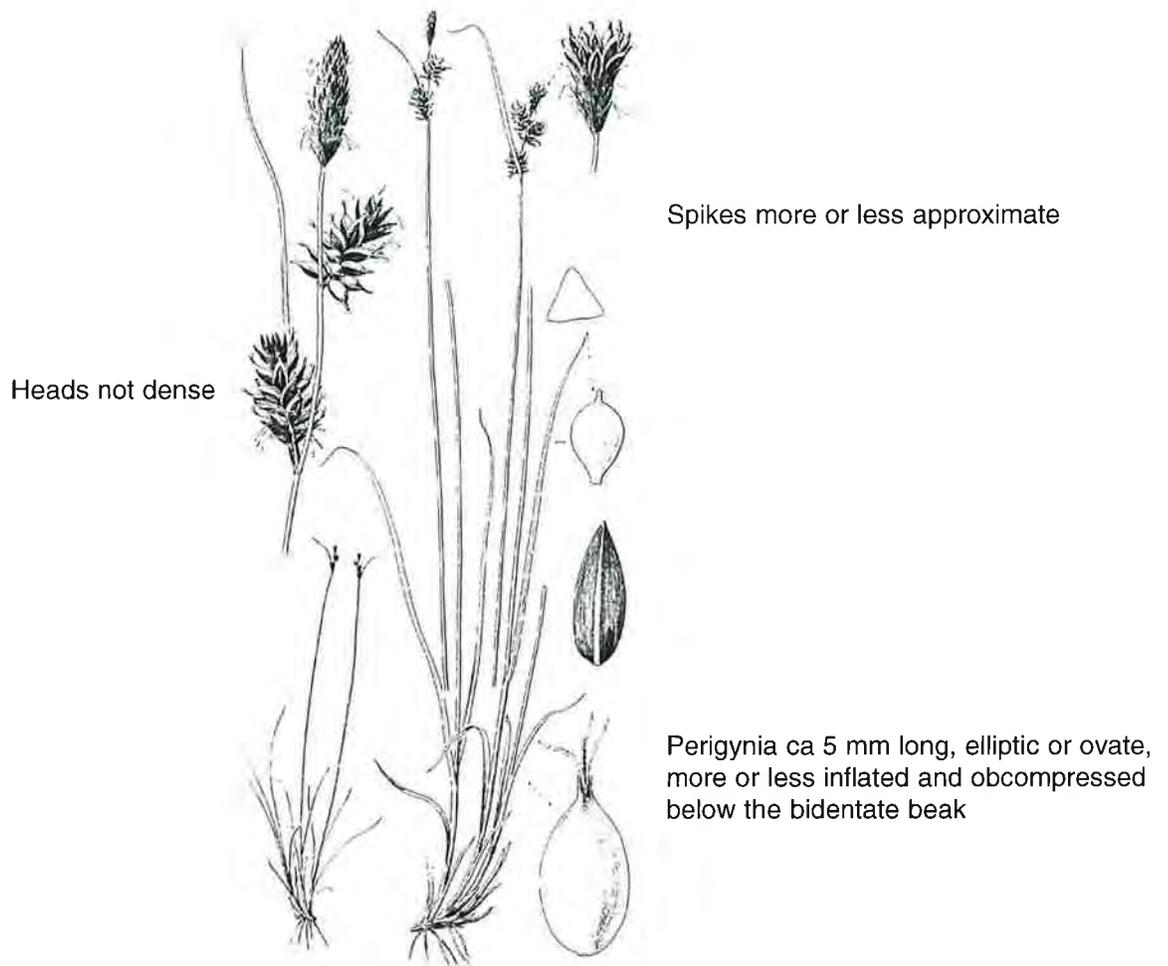
Roger Rosentreter

Species  
Distribution



**Indian Valley sedge**

***Carex aboriginum***



---

**Scientific Name:** *Carex aboriginum* M. E. Jones

**Bibliographic Reference:** Jones, 1910. Bull. U. Mont. Biol. 15: 69.

**Common Name:** Indian Valley sedge

**Family (Common Name):** Cyperaceae (Sedge Family)

**Synonyms:** None

**Idaho Native Plant Society Category:** Global Priority 1

**Natural Heritage Program Rank:** S1

**Distribution:** Endemic to the Indian Valley area of Adams County, Idaho.

**Habitat:** Dry gumbo or gravelly soils.

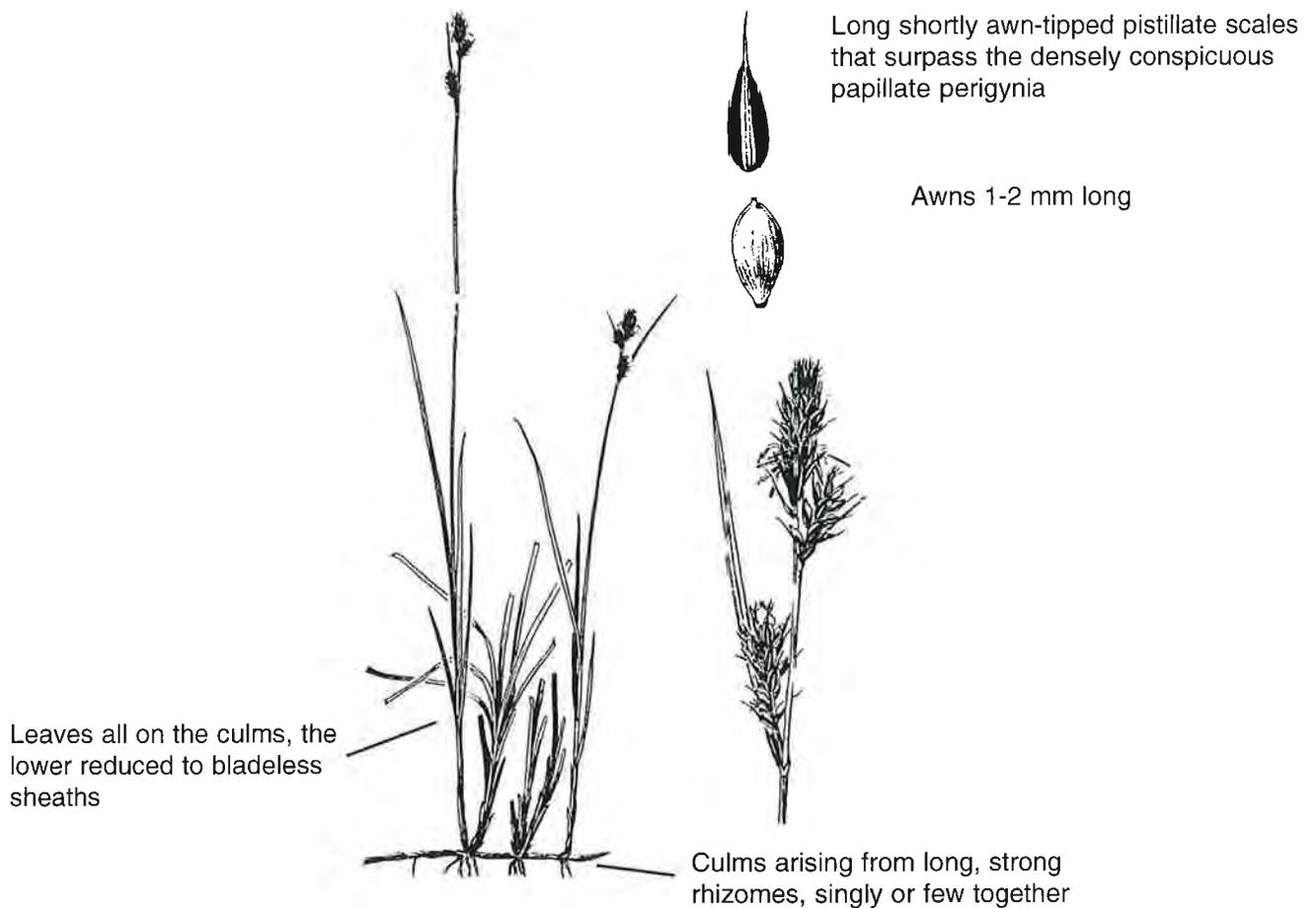
**Phenology:** June through July.

**Look-alikes:** Most similar to *C. raynoldsii* but the heads not dense and spikes more or less approximate. The perigynia ca 5 mm long, elliptic or ovate, more or less inflated and with a bidentate beak to 1 mm long, obcompressed below the bidentate beak. Collected in 1999 for the first time since the original collection.

No photos available

Species  
Distribution





**Scientific Name:** *Carex buxbaumii* Wahlenb.

**Bibliographic Reference:** Wahlenb, 1803. Kongl. Vetensk. Acad. Nya Handl. 24: 163.

**Common Name:** Buxbaum's sedge

**Family (Common Name):** Cyperaceae (Sedge Family)

**Synonyms:** *Physiglochis buxbaumii* Raf.; *C. holmiana* Mackenzie

**Idaho Native Plant Society Category:** State Sensitive

**Natural Heritage Program Rank:** S3

**Distribution:** Idaho populations are known from Blaine, Bonner, Boundary, Custer, Fremont, Teton and Valley counties; Circumboreal, s in the USA. to N.C. and c Calif.

**Phenology:** Late July through early September.

**Habitat:** Peat bogs, wet meadows, marshes and other wet places, near sea level to moderate elevations in the mountains.

**Look-alikes:** A well marked wholly distinct species. Easily distinguished by its strong rhizomes, long shortly awn-tipped pistillate scales that surpass the densely conspicuous papillate perigynia,



Habitat of *Carex buxbaumii*

Bob Moseley



Bob Moseley

Close up of *Carex buxbaumii*

Species  
Distribution



**Prostrate ceanothus**

***Ceanothus prostratus***

Plants prostrate

Leaves opposite, thick, 3 to 7-toothed  
above the middle



Branches neither spinose nor rigid

---

**Scientific Name:** *Ceanothus prostratus* Benth.

**Bibliographic Reference:** Bentham, 1848. Pl. Hartw.302.

**Common Name:** Prostrate ceanothus

**Family (Common Name):** Rhamnaceae (Buckthorn Family)

**Synonyms:** None

**Idaho Native Plant Society Category:** State Priority 1

**Natural Heritage Program Rank:** S1

**Distribution:** Eastern slope of the Cascades from Washington through Oregon to the Sierra Nevada, and w Nevada; disjunct in Adams Co., Idaho.

**Phenology:** May through July.

**Habitat:** Ponderosa pine/shrub community in coarse granitic soils.

**Look-alikes:** Can be confused with *C. macrantha*, which has larger heads, few pappus scales, and pinnatifid leaves.



Closeup of *Ceanothus prostratus*

Roger Rosentreter

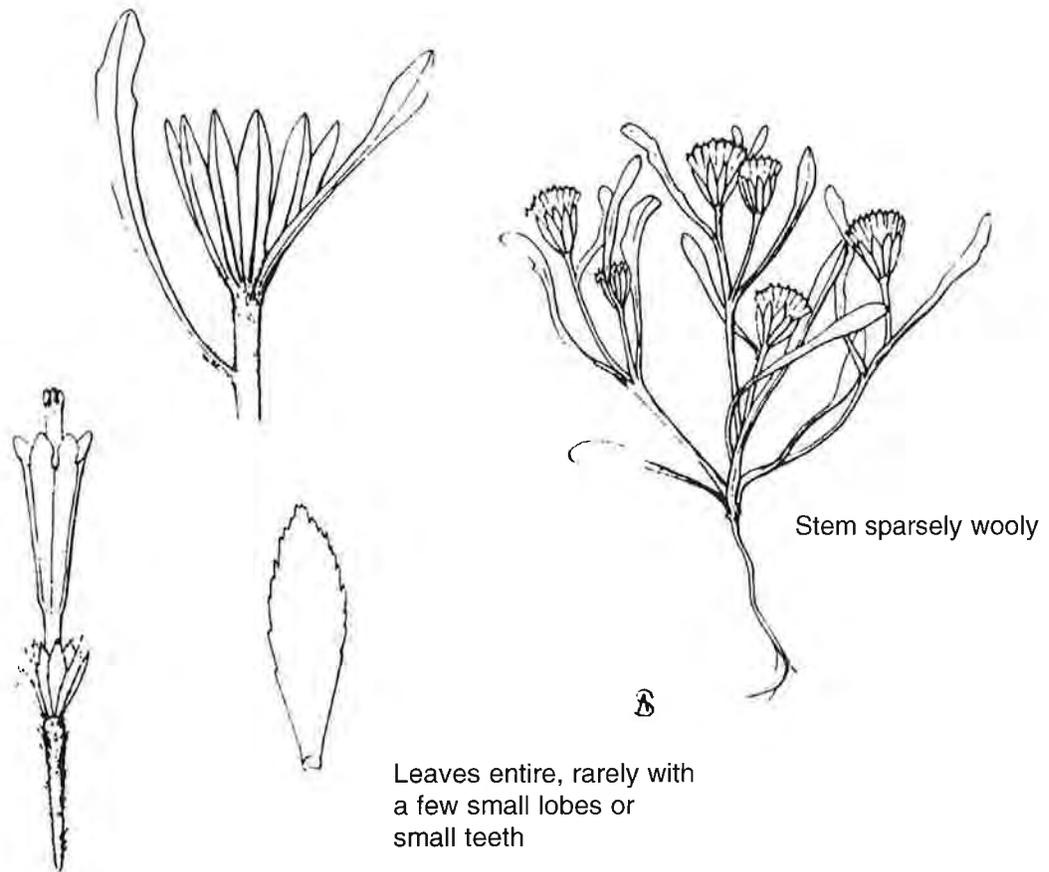
Species  
Distribution



**Cusick's false yarrow**

*Chaenactis cusickii*

Plants annual, less than 10 cm tall



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**Scientific Name:** *Chaenactis cusickii* A. Gray

**Bibliographic Reference:** Gray, 1886. Syn. Fl. N. Amer. ed. 2 .1(2):452.

**Common Name:** Cusick's false yarrow

**Family (Common Name):** Asteraceae or Compositae (Sunflower Family)

**Synonyms:** None

**Idaho Native Plant Society Category:** Global Priority 3

**Natural Heritage Program Rank:** S2

**Distribution:** Endemic to Elmore and Owyhee counties, Idaho; Malheur County, Oregon.

**Habitat:** Open places on volcanic ash soils, especially the Succor Creek Formation, in saltbrush, and Wyoming sagebrush zone, 732-1300 m elevation.

**Phenology:** May-June.

**Look-alikes:** A distinctive endemic annual with entire leaves and small stature, should not be confused with any other species.



Closeup of *Chaenactis cusickii*

Bob Moseley



Habitat of *Chaenactis cusickii*

Bob Moseley

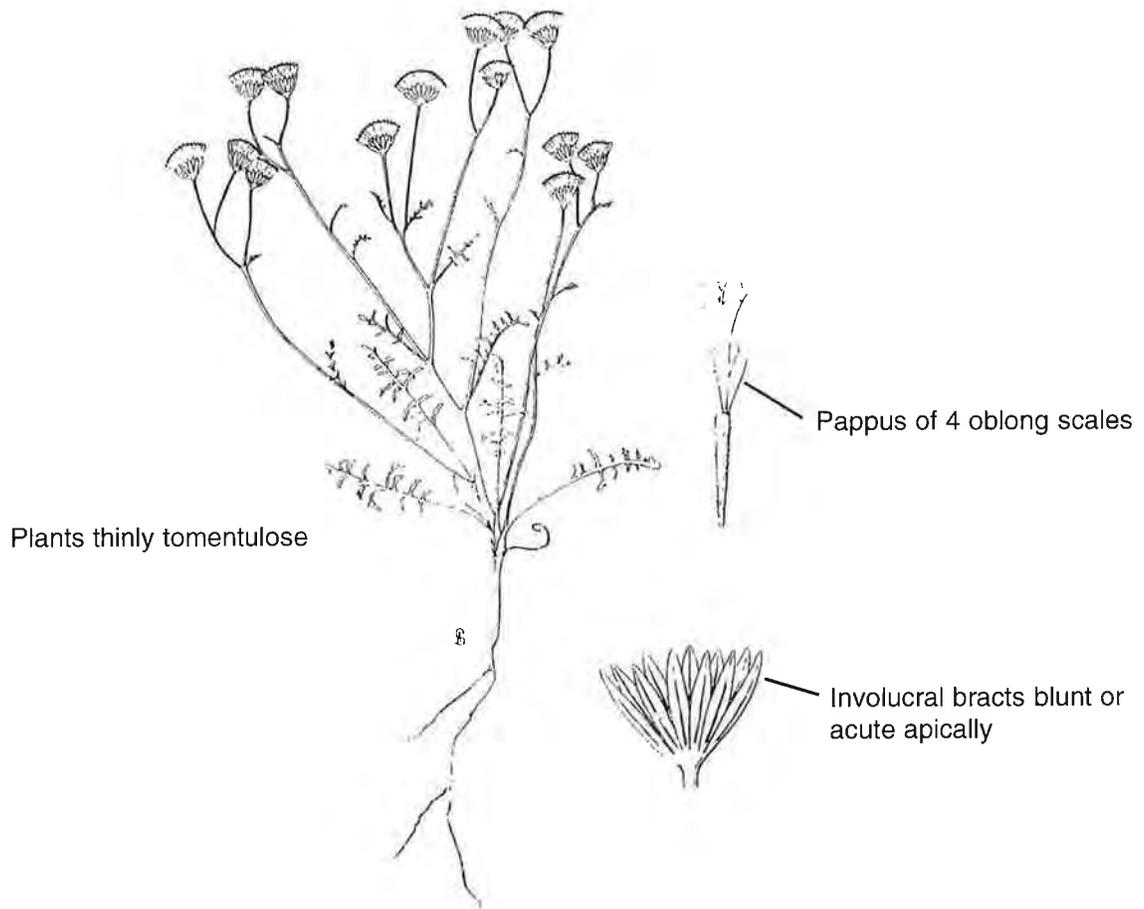
Species  
Distribution



**Desert pincushion**

***Chaenactis stevioides***

Annual



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**Scientific Name:** *Chaenactis stevioides* Hook. & Arn.

**Bibliographic Reference:** Hooker and Arnold, 1839. Bot. Beechey Voy. 353.

**Common Name:** Desert pincushion

**Family (Common Name):** Asteraceae or Compositae (Sunflower Family)

**Synonyms:** *C. brachypappa* A. Gray; *C. stevioides* var. *brachypappa* H.M. Hall; *C. floribunda* Greene; *C. stevioides* var. *thorneri* Stockw.

**Idaho Native Plant Society Category:** State Priority 2

**Natural Heritage Program Rank:** S2

**Distribution:** Idaho populations are known from Ada, Elmore, and Owyhee counties; w Colo. and sw Wyo., w and s to se Oreg., s Calif., Baja Calif., Ariz., n. Sonora. and w N.M.

**Habitat:** Open, usually sandy sites in salt desert shrub, primarily, Wyoming sagebrush, horsebrush, four-wing saltbrush and Indian ricegrass communities, to 1200 m elevation.

**Phenology:** April through June.

**Look-alikes:** None



Closeup of *Chaenactis stevioides*

Ann Debolt



Habitat of *Chaenactis stevioides*

Ann Debolt

Species  
Distribution

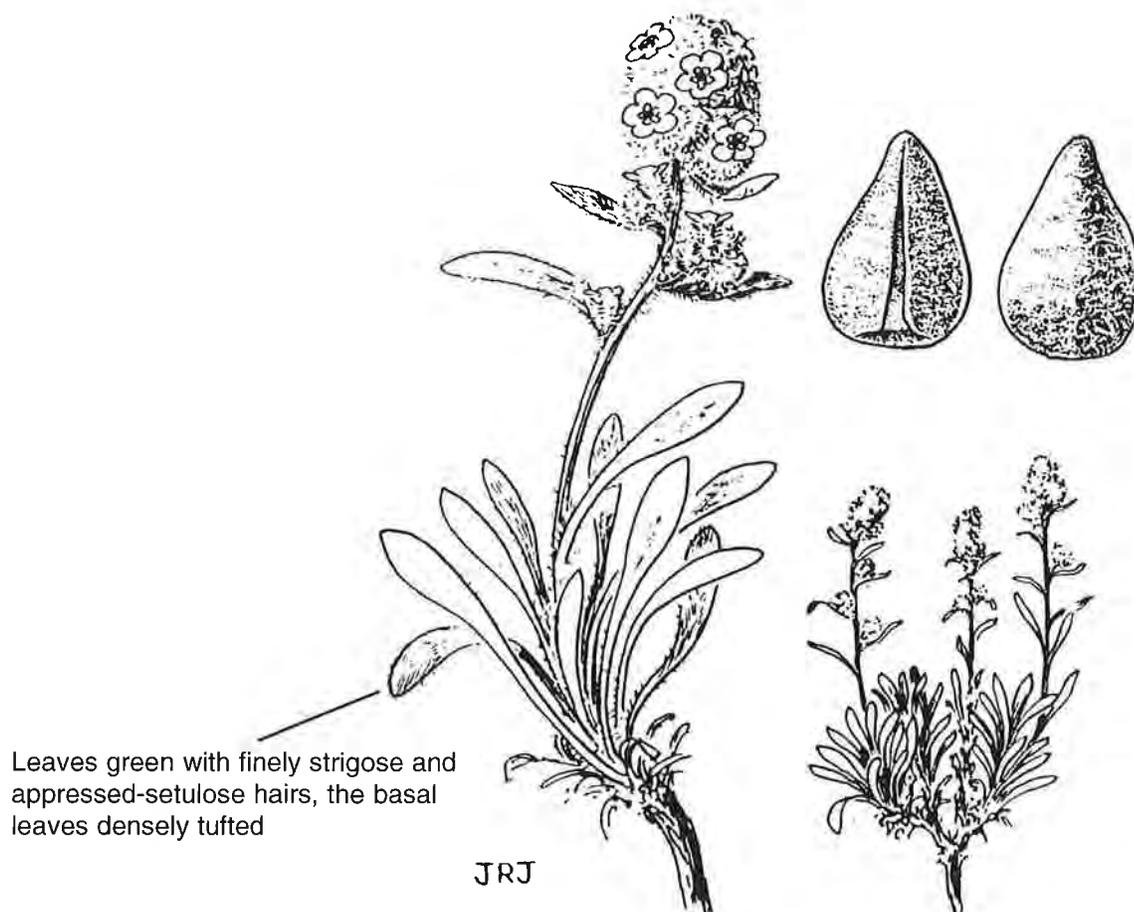


## Malheur cryptantha

## *Cryptantha propria*

Densely caespitose perennial

1-2.5 dm tall



**Scientific Name:** *Cryptantha propria* (Nels. & Macbr.) Pays.

**Bibliographic Reference:** Payson, 1927. Ann. Mo. Bot. Gard. 14:317.

**Common Name:** Malheur cryptantha

**Family (Common Name):** Boraginaceae (Borage Family)

**Synonyms:** *Oreocarya propria* Nels. & Macbr.; *Krynitzkia fulvocanescens* var. *idahoensis* Jones (type from 18 mi below Weiser, Id.).

**Idaho Native Plant Society Category:** State Review

**Natural Heritage Program Rank:** S2

**Distribution:** Western and southern Idaho in Adams, Gooding, Payette, Twin Falls, Owyhee and Washington counties; e Malheur County, Oregon.

**Habitat:** Bare soil of ash and clay on open hillsides in the sagebrush-grassland zone, 915-1220 m elevation.

**Phenology:** April through May.

**Look-alikes:** Probably close to *C. humilis*, but differing from this species in having green leaves vs gray, finely strigose and appressed-setulose pubescence and the more caespitose habit of *C. humilis*.

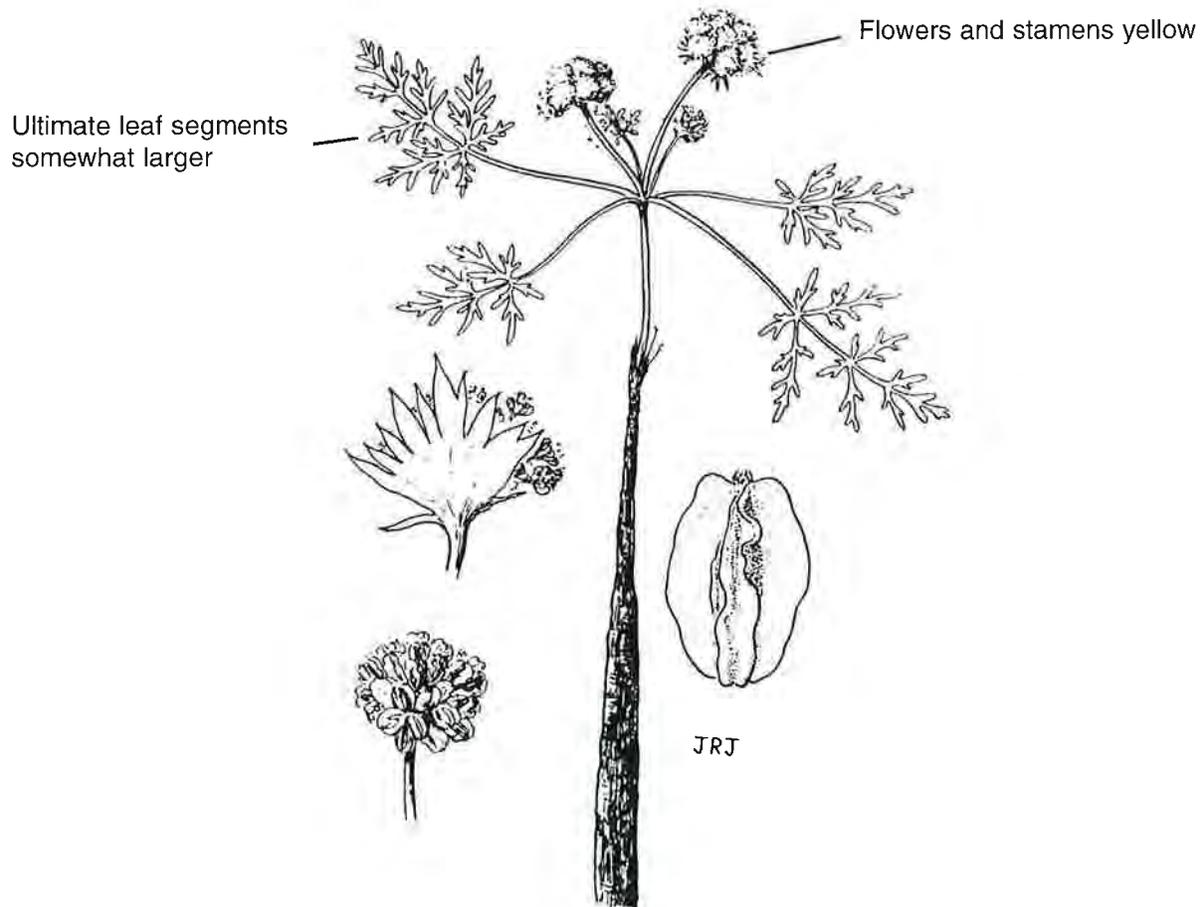
No photos available

Species  
Distribution



Greeley's wavewing

*Cymopterus acaulis* var. *greeleyorum*



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

**Bibliographic Reference:** Grimes & Packard, 1981. Britt. 33: 430.

**Common Name:** Greeley's wavewing

**Family (Common Name):** Apiaceae or Umbelliferae (Carrot Family)

**Synonyms:** None

**Idaho Native Plant Society Category:** Global Priority 2

**Natural Heritage Program Rank:** S2

**Distribution:** Currently known from Elmore and Owyhee Counties, Idaho; Malheur County, Oregon.

**Habitat:** Sandy soil and brown and white volcanic ash in Wyoming sagebrush, desert shrub and Indian ricegrass zones.

**Phenology:** Flowering in March-April; fruiting into early June.

**Look-alikes:** Closely related to var. *acaulis* but recognized from this variety in having yellow flowers and stamens vs white in var. *acaulis*, and the ultimate leaf segments of the leaves also tend to be somewhat larger than in var. *acaulis*.



Closeup of *Cymopterus acaulis* var. *greeleyorum* Ann Debolt



Habitat of *Cymopterus acaulis* var. *greeleyorum* Ann Debolt



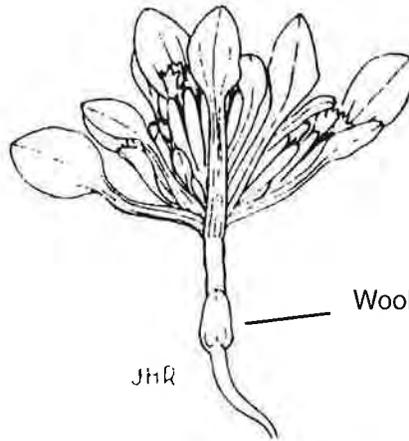
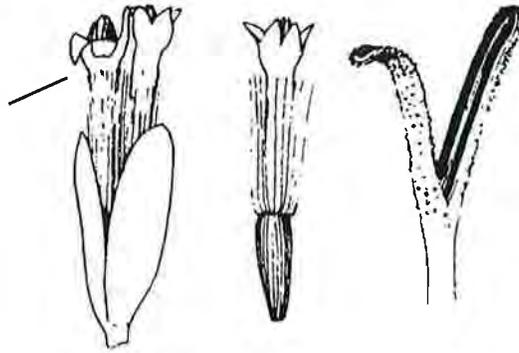
Species  
Distribution

## Dimeresia

## *Dimeresia howellii*

Annual with mostly discoid heads

Flowers white to pinkish or purple, all alike and perfect



Woolly at base of plant

JHR

---

**Scientific Name:** *Dimeresia howellii* A. Gray

**Bibliographic Reference:** Gray, 1886. Syn. Fl. N. Amer. ed.2. 1(2):449.

**Common Name:** Dimeresia

**Family (Common Name):** Asteraceae or Compositae (Sunflower Family)

**Synonyms:** *Ereminula howellii* A. Gray

**Idaho Native Plant Society Category:** Global Priority 2

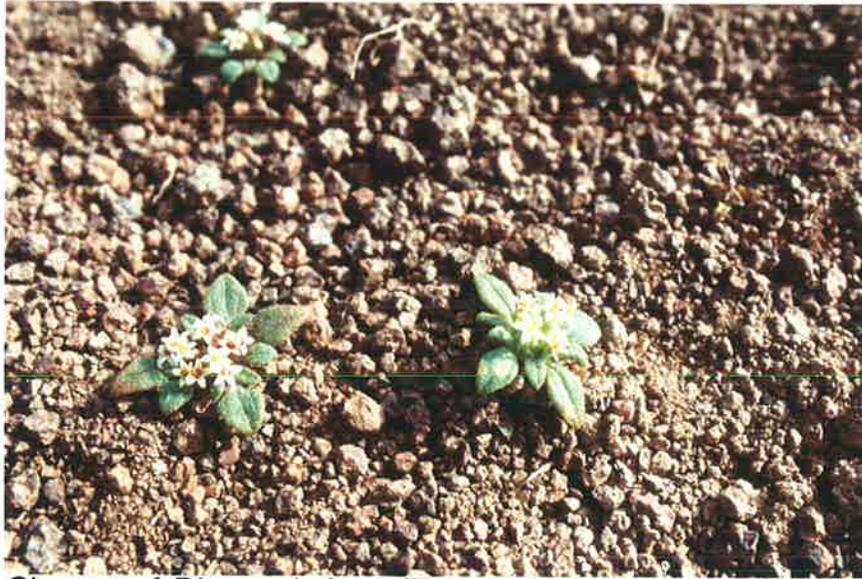
**Natural Heritage Program Rank:** S2

**Distribution:** Owyhee County, Idaho; c and se Oregon, n Nevada and ne California.

**Habitat:** High desert foothills and drier parts of the mountains on dry rocky, cinder or gravelly soils, 1100-2900 m elevation.

**Phenology:** June in Idaho.

**Look-alikes:** None. A distinctive monotypic genus. This easily overlooked annual is rarely more than 3 cm tall.



Closeup of *Dimeresia howellii*

Bob Moseley



Habitat of *Dimeresia howellii*

Bob Moseley

Species  
Distribution



Corolla lavender-blue and  
with deeper colored veins

Lobes of upper corolla-lip widely diver-  
gent, and erect or arched backward

Lower lip with two bright  
yellow-orange spots



Lower lip rounded and  
abruptly pointed

**Scientific Name:** *Downingia bacigalupii* Weiler

**Bibliographic Reference:** Weiler, 1962. Madrono 16: 256.

**Common Name:** Bacigalupi's downingia

**Family (Common Name):** Campanulaceae (Bellflower Family)

**Synonyms:** None

**Idaho Native Plant Society Category:** State Priority 1

**Natural Heritage Program Rank:** S2

**Distribution:** Southern Idaho in Gooding, Lincoln, and Owyhee counties; s Oregon, n Nevada, n California and Grant, and Kittitas counties, Washington.

**Habitat:** Drying mud of vernal pools, muddy margins of lakes, wet meadows, roadsides, irrigation ditches and streambanks, 900-1900 m elevation.

**Phenology:** Late May through early August.

**Look-alikes:** Other *Downingia* species, but differing from them in having the following combination of characters: lavender-blue corollas and deeper colored veins, two bright yellow-orange spots on the lower lip, lobes of the upper corolla-lip widely divergent, and erect or arched backward and the lower lip rounded and abruptly pointed.



Closeup of *Downingia bacigalupii*

Bob Moseley



Habitat of *Downingia bacigalupii*

Bob Moseley

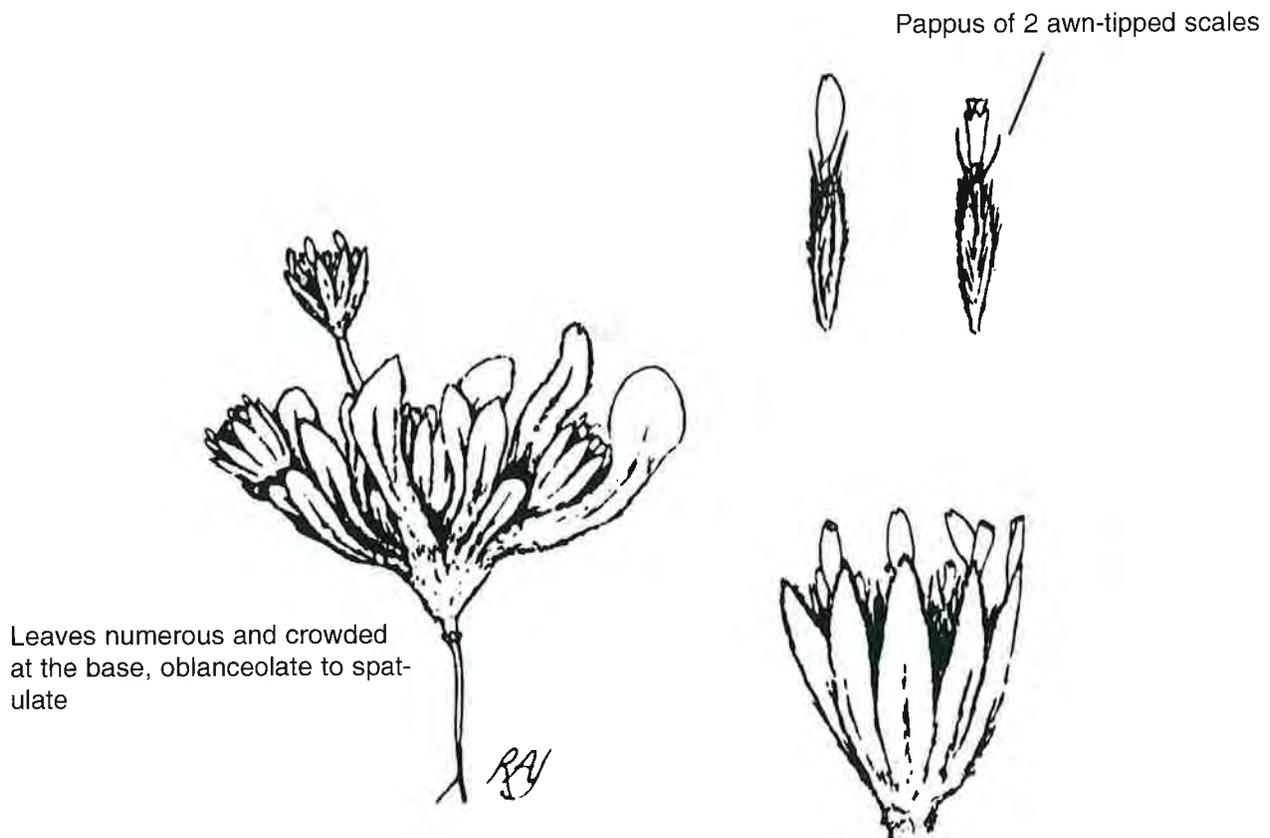
Species  
Distribution



## Eatonella

## *Eatonella nivea*

Depressed, white-wooly annual branching from the base and forming small tufts



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

**Bibliographic Reference:** Gray, 1883. Proc. Amer. Acad. Arts 19: 19.

**Common Name:** Eatonella

**Family (Common Name):** Asteraceae or Compositae (Sunflower Family)

**Synonyms:** *Burrielia nivea* D.C. Eaton in King

**Idaho Native Plant Society Category:** State Sensitive

**Natural Heritage Program Rank:** S3

**Distribution:** Adams, Lemhi, Custer, Elmore and Owyhee counties, Idaho. The central Idaho populations are disjunct along the Salmon River; se Oregon, c and w Nevada and Inyo County, California.

**Habitat:** Dry desert areas in sandy or volcanic soils, often with sagebrush, 763-1900 m elevation.

**Phenology:** Early April through June, sometimes as late as early July.

**Look-alikes:** None. A distinctive species similar in habit to species in the genus *Monoptilon*, a more southern genus. A typical plant is 1-2 cm tall.



Closeup of *Eatonella nivea*

Ann Debolt



Habitat of *Eatonella nivea*

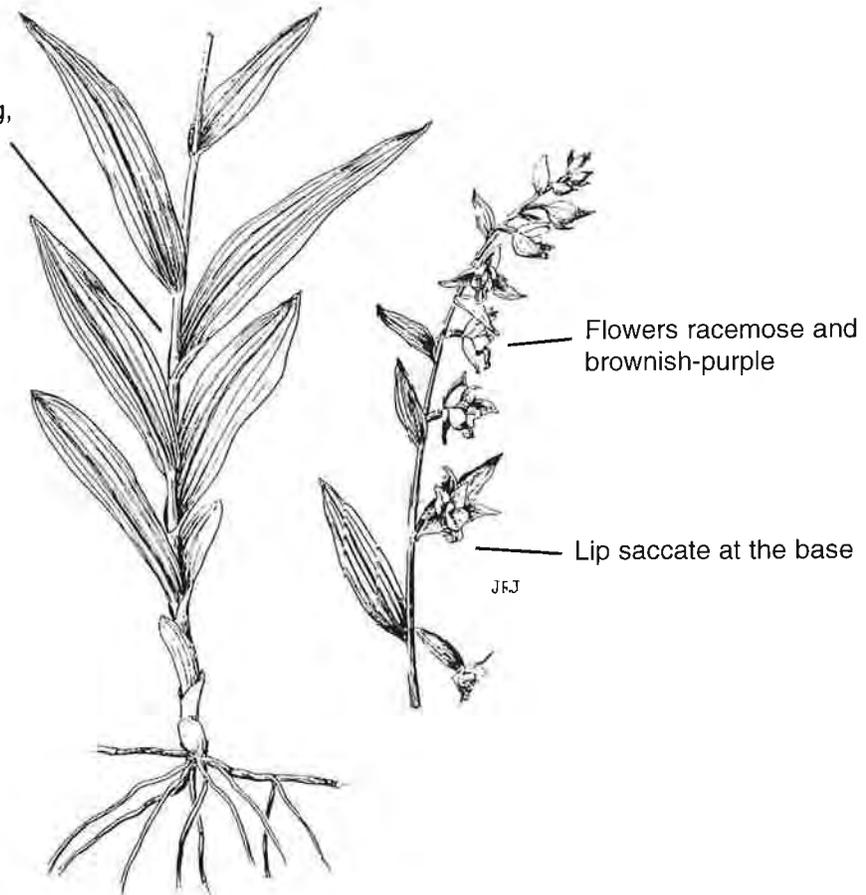
Ann Debolt

Species  
Distribution



Rhizomatous plants to 3 feet tall

Leaves large, sessile, clasping, lanceolate to ovate



Flowers racemose and brownish-purple

Lip saccate at the base

J.F.J.

**Scientific Name:** *Epipactis gigantea* Dougl. ex Hook.

**Bibliographic Reference:** Douglas ex Hooker, 1839. Fl. Boreali-Amer. 2:202. , pl. 202.

**Common Name:** Chatterbox orchid

**Family (Common Name):** Orchidaceae (Orchid Family)

**Synonyms:** *Limodorum giganteum* Kuntze; *Peramium giganteum* J. M. Coulter; *Serapias gigantea* A. A. Eat.; *Helleborine gigantea* Druce; *Amesia gigantea* Nels. & Macbr.

**Idaho Native Plant Society Category:** State Priority 1

**Natural Heritage Program Rank:** S3

**Distribution:** Adams, Boise, Bonner, Boundary, Camas, Clark, Custer, Elmore, Gooding, Idaho, Jerome, Lemhi, Madison, Owyhee, Twin Falls, and Valley counties, Idaho; British Columbia, to Baja California, and most of w N. Amer. to the Rocky Mountains and S. Dakota to n Sonora, Mexico.

**Phenology:** April to early August.

**Habitat:** Calcareous hot or cold springs, from 800-2000 m elevation.

**Look-alikes:** None. A very distinct genus in vegetative condition and in flower. Easily recognized by its large stature, large lanceolate to ovate sessile clasping leaves and the racemose inflorescence, brownish-purplish flowers and lip saccate at the base.



Habitat of *Epipactis gigantea*

Bob Moseley



Peter Lesica

Closeup of *Epipactis gigantea*

Species  
Distribution



No illustration

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

**Bibliographic Reference:** Peck, ???

**Common Name:** Calcareous buckwheat

**Family (Common Name):** Polygonaceae (Buckwheat Family)

**Synonyms:** None

**Idaho Native Plant Society Category:** Global Priority 3

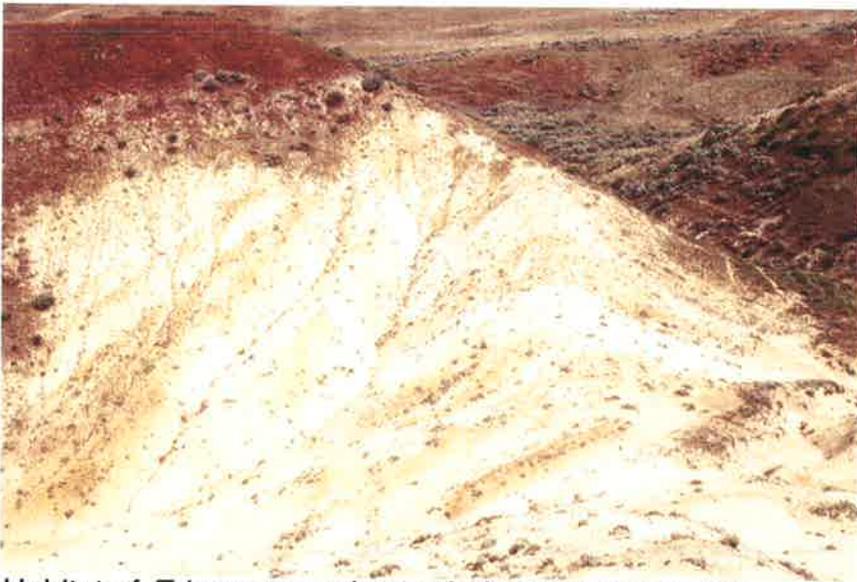
**Natural Heritage Program Rank:** S1

**Distribution:** Payette and Washington counties, Idaho; e Oregon.

**Habitat:** Rolling clay hills with four-wing saltbrush, 854 m elevation.

**Phenology:** Late June through September.

**Look-alikes:** *E. ochrocephalum* var. *sceptrum* which has longer scapes (2-3.5 dm long), longer leaves (1.5-2.5 cm long), shorter flowers 1-1.5 (2) mm long, and smaller achenes (1.5-2 mm long).



Habitat of *Eriogonum ochrocephalum* var. *calcareum*

Michael Mancuso

Species  
Distribution



No illustration

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**Scientific Name:** *Eriogonum salicornioides* Gandg.

**Bibliographic Reference:** Gandoger, 1906. Bull. Soc. Bot. Belg. 42: 187.

**Common Name:** Annual salt buckwheat

**Family (Common Name):** Polygonaceae (Buckwheat Family)

**Synonyms:** *Eriogonum vimineum* Dougl. ex Benth. var. *salicornioides* (Gandg.) S. Stokes; *E. demissum* S. Stokes; *E. demissum* S. Stokes var. *romanum* S. Stokes; *E. vimineum* ssp. *baileyi* var. *salicornioides* S. Stokes (?).

**Idaho Native Plant Society Category:** State Review

**Natural Heritage Program Rank:** S3

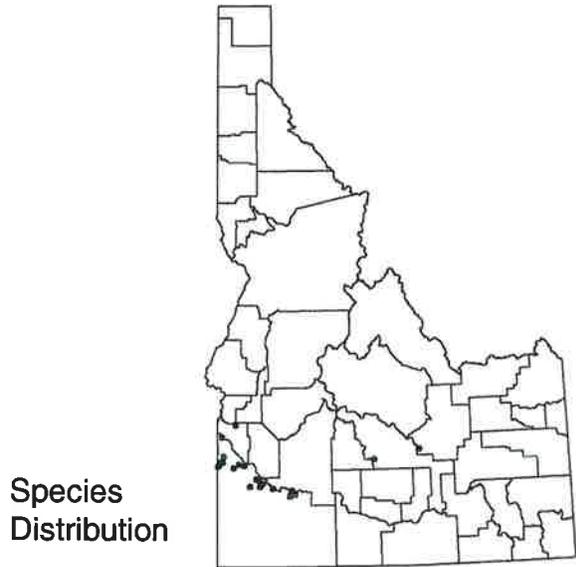
**Distribution:** Owyhee County, Idaho; Malheur County, Oregon and w Humboldt County, Nevada.

**Habitat:** Dry, sparsely vegetated, white, ashy clay soils in shadscale-budsage and Wyoming sagebrush communities, 793-1355 m elevation.

**Phenology:** April through May (June to September).

**Look-alikes:** Differing from other annuals in Idaho by the erect, sessile upper involucre, white to rose flowers 1.2-1.8 mm long and smaller achenes (1.6-2 mm long).

No photos available



No illustration

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**Scientific Name:** *Eriogonum shockleyi*

**Bibliographic Reference:** Watson, 1883. Proc. Amer. Acad. 18: 194.

**Common Name:** Cowpie buckwheat

**Family (Common Name):** Polygonaceae (Buckweat Family)

**Synonyms:** *E. acaule* Nutt. var. *chiclayo* (S. Wats.) M.E. Jones; *E. chiclayo* S. Wats. var. *typicum* S. Stokes; *E. villiflorum* A. Gray var. *candidum* M.E. Jones; *E. chiclayo* S. Wats. ssp. *candidum* (M.E. Jones) S. Stokes; *E. pulvinatum* Small

**Idaho Native Plant Society Category:** State Priority 2

**Natural Heritage Program Rank:** S2

**Distribution:** Elmore, Gooding, Owyhee, and Twin Falls counties, Idaho; Inyo County, California across c Nevada to w Utah.

**Habitat:** Gravelly benches on lake sediments in shadscale, mixed desert shrub and sagebrush communities, 760-1300 m elevation.

**Phenology:** May through July.

**Look-alikes:** Following is a key to the two varieties of *E. shockleyi* in Idaho, using both morphological measurements of herbarium specimens collected at anthesis and characterization of diagnostic features of the plant's habitat from field observation:

1. Flowering stems at anthesis average less than 10 mm long, most less than 5 mm; 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 less than 4 mm long.....*E. shockleyi* var. *packardae*

-- Flowering stems at anthesis greater than 10 mm long, the capitate inflorescences obviously extending above the cushion; leaves larger, the blades obovate, oblanceolate, elliptic, or spatulate, 3-10 mm long X 2-5 mm wide; petioles generally greater than 4 mm long.....*E. shockleyi* var. *shockleyi*



Closeup of *Eriogonum shockleyi*

Ann Debolt

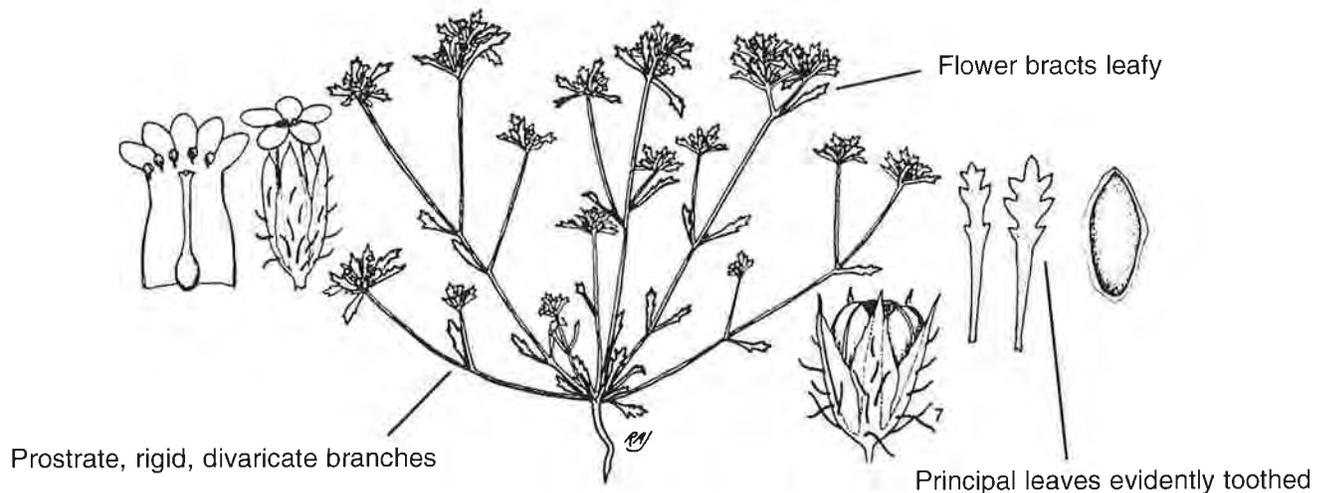


Habitat of *Eriogonum shockleyi*

Roger Rosentreter

Species  
Distribution





**Scientific Name:** *Gilia polycladon* Torr. in Emory

**Bibliographic Reference:** Torrey in Emory, 1858. Rep. U.S. & Mex. Boundary Surv. 2(1): 146.

**Common Name:** Spreading gilia

**Family (Common Name):** Polemoniaceae (Phlox Family)

**Synonyms:** *Navarretia polycladon* Kuntze; *Ipomopsis polycladon* V. Grant

**Idaho Native Plant Society Category:** State Priority 2

**Natural Heritage Program Rank:** S2

**Distribution:** Butte, Elmore, Owyhee, and Power counties, Idaho; California, Nevada, Utah and Colorado, s to Texas, New Mexico, Arizona and n Mexico.

**Habitat:** Dry, open areas in desert shrub communities of shadscale, horsebrush, and sagebrush on sandy to silty soils, 800-1500 m elevation.

**Phenology:** April through June.

**Look-alikes:** None. Easily identified by its prostrate, rigid, subnaked divaricate branches and terminal, leafy-bracted flower-clusters.



Closeup of *Gilia polycladon*

Duane Atwood



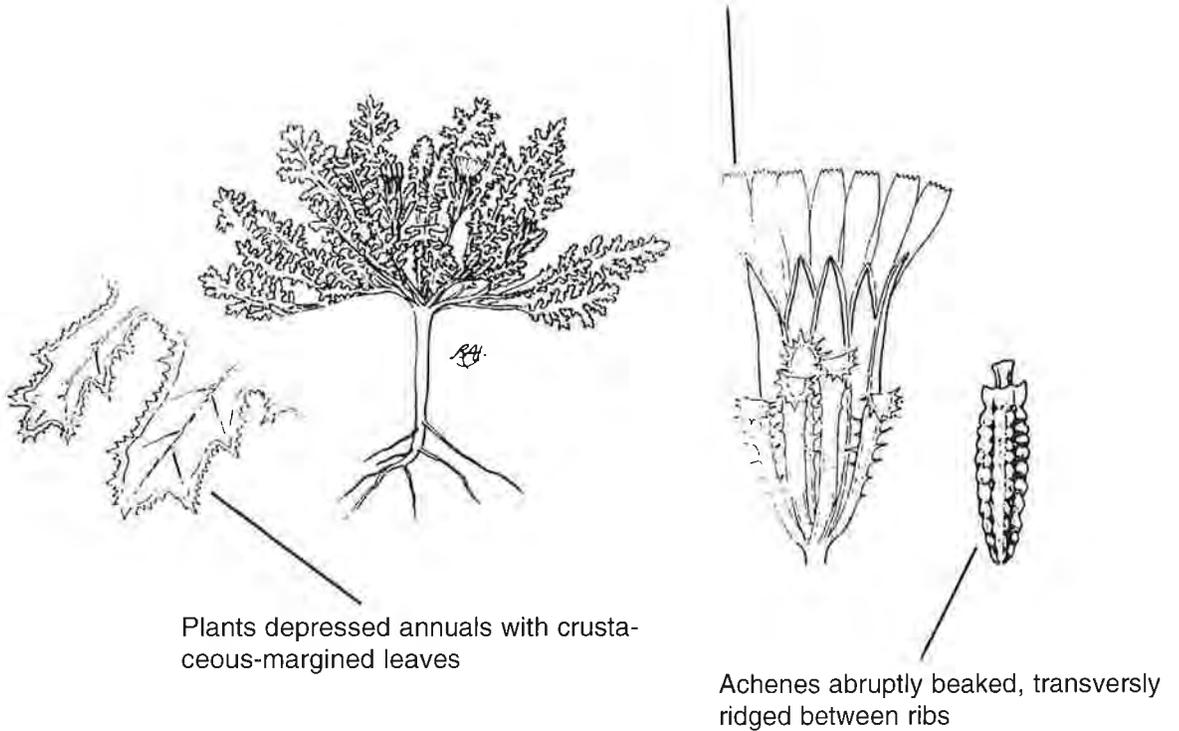
Habitat of *Gilia polycladon*

Ann Debolt

Species  
Distribution



Ray flowers inconspicuous, only shortly exerted



Plants depressed annuals with crustaceous-margined leaves

Achenes abruptly beaked, transversly ridged between ribs

**Scientific Name:** *Glyptopleura marginata* D.C. Eaton in King

**Bibliographic Reference:** Eaton in King, 1871. Rep. U.S. Geol. Explor. 40<sup>th</sup> Parallel 5: 207.

**Common Name:** White-margined wax plant

**Family (Common Name):** Asteraceae or Compositae (Sunflower Family)

**Synonyms:** None

**Idaho Native Plant Society Category:** State Sensitive

**Natural Heritage Program Rank:** S3

**Distribution:** Elmore, Owyhee, and Twin Falls counties, Idaho; se Oregon, s through w Nevada to San Bernardino County and the White Mountains of California, e through Elko and White Pine counties, Nevada to scattered counties in Utah.

**Habitat:** Dry sandy-gravelly or loose ash soils in shadscale, greasewood, rabbitbrush, spiny hopsage, winterfat, and sagebrush communities, 800-1200 m elevation.

**Phenology:** May through June.

**Look-alikes:** None. A genus with very distinct species. This small annual generally has a prostrate growth form and ranges in size from 2-6 cm diameter.

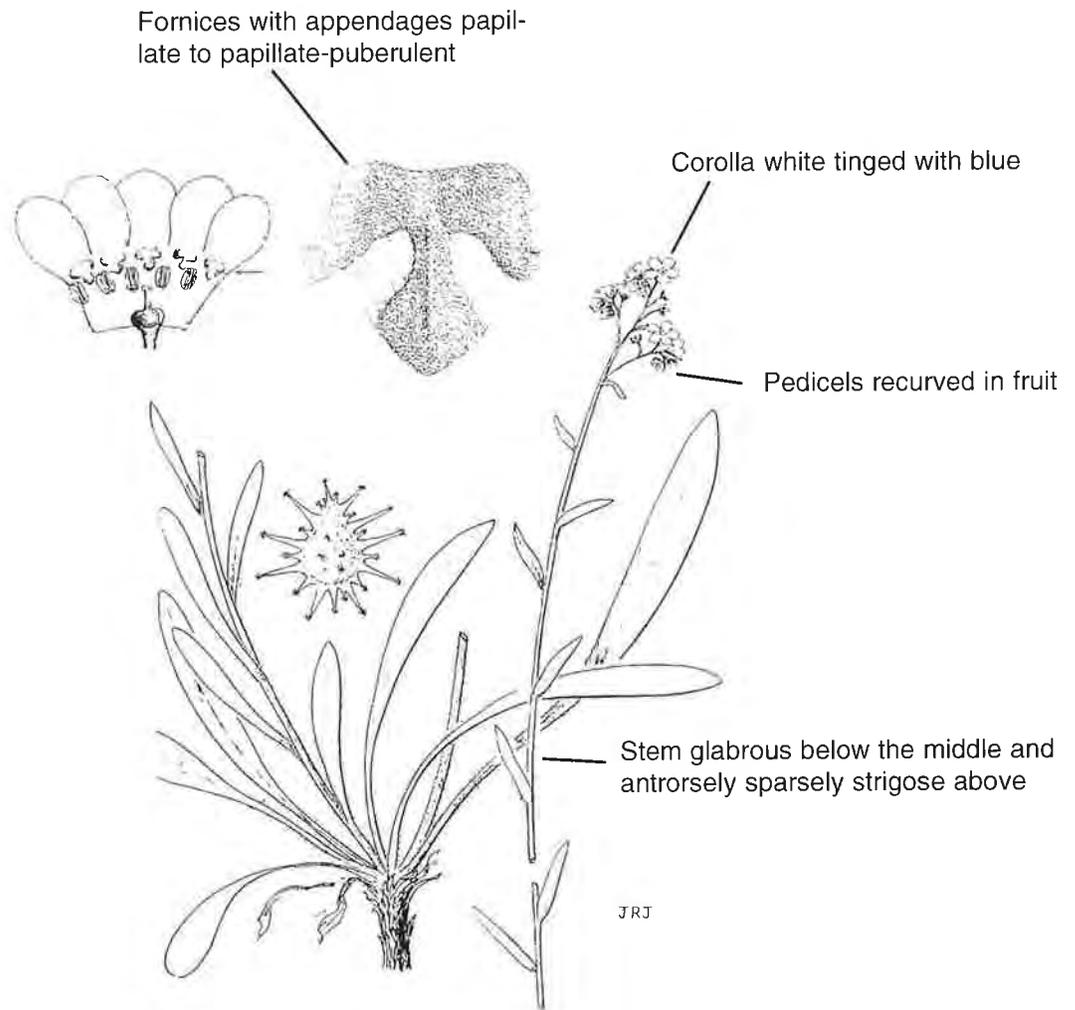


Ann Debolt

Closeup of *Glyptopleura marginata*

Species  
Distribution





**Scientific Name:** *Hackelia cronquistii* J. Gentry

**Bibliographic Reference:** Gentry, 1972. *Madroño* 21: 490.

**Common Name:** Cronquist's stickseed

**Family (Common Name):** Boraginaceae (Borage Family)

**Synonyms:** *Hackelia patens* (Nutt.) I.M. Johnston var. *semiglabra* Cronq.

**Idaho Native Plant Society Category:** Global Priority 3

**Natural Heritage Program Rank:** S1

**Distribution:** Payette and Washington counties, Idaho; Malheur County, Oregon.

**Habitat:** Sandy or loamy soils of sagebrush-bunchgrass slopes mostly on north exposures, 700-800 m elevation.

**Phenology:** May.

**Look-alikes:** Similar to *H. patens* var. *patens*, but differing clearly in stem pubescence which is glabrous below the middle and antrorsely sparsely strigose above, and the corolla fornices just papillate or papillate-puberulent.



Closeup of *Hackelia cronquistii*

Ann Debolt

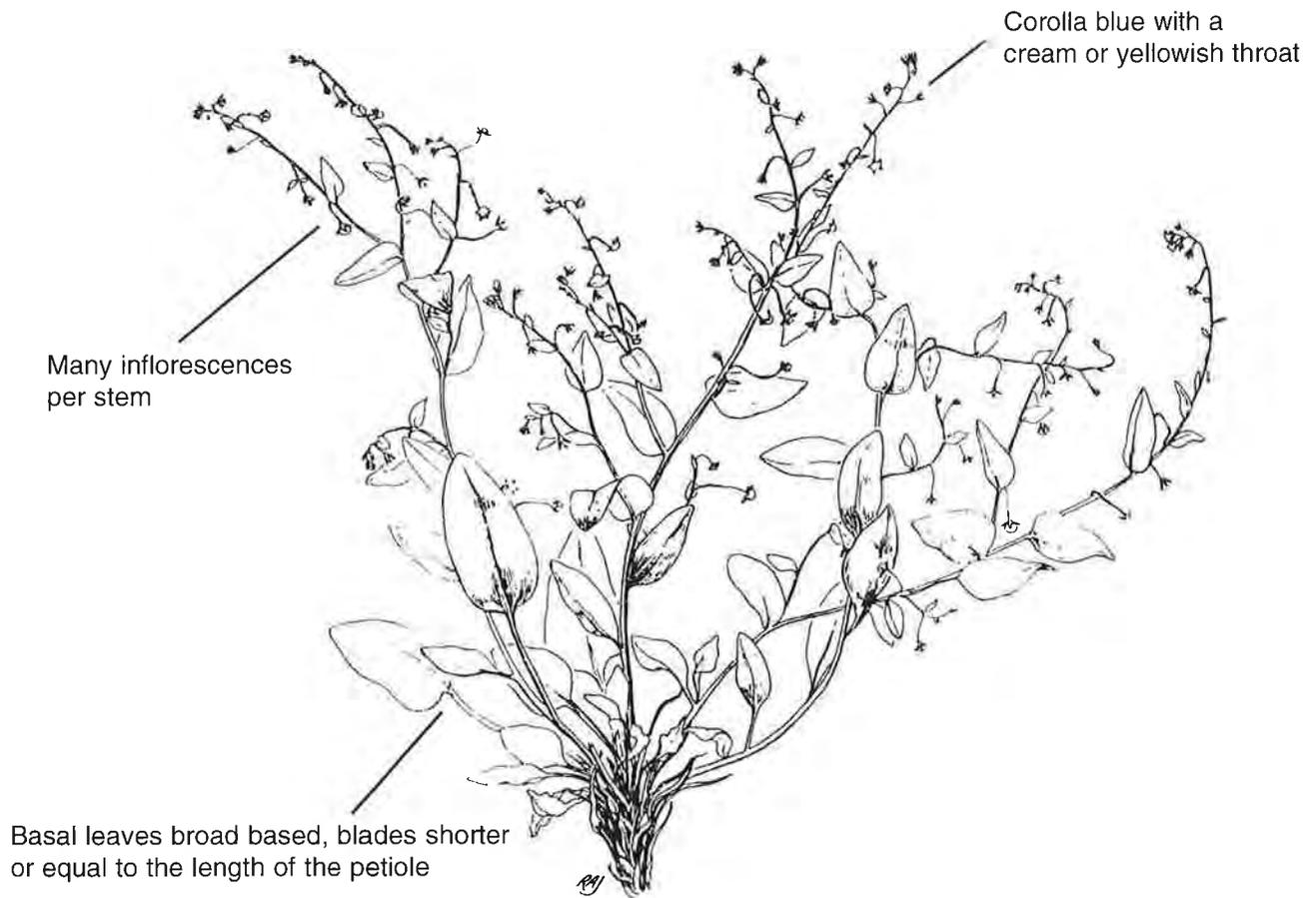


Habitat of *Hackelia cronquistii*

Ann Debolt

Species  
Distribution





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**Scientific Name:** *Hackelia ophiobia* R.L. Carr

**Bibliographic Reference:** Carr, 1974. *Madroño* 22: 390.

**Common Name:** Rattlesnake stickweed, Owyhee forget-me-not

**Family (Common Name):** Boraginaceae (Borage Family)

**Synonyms:** None

**Idaho Native Plant Society Category:** Global Priority 3

**Natural Heritage Program Rank:** S2

**Distribution:** Owyhee County, Idaho; n Malheur County, Oregon and nw Humboldt County, Nevada.

**Habitat:** Talus at the base of rhyolitic cliffs and rock crevices on shady north face of canyons. Associated with Packard's sagebrush, Great Basin wildrye, and Louisiana sage.

**Phenology:** May through June.

**Look-alikes:** None



Closeup of *Hackelia ophiobia*

Ann Debolt



Habitat of *Hackelia ophiobia*

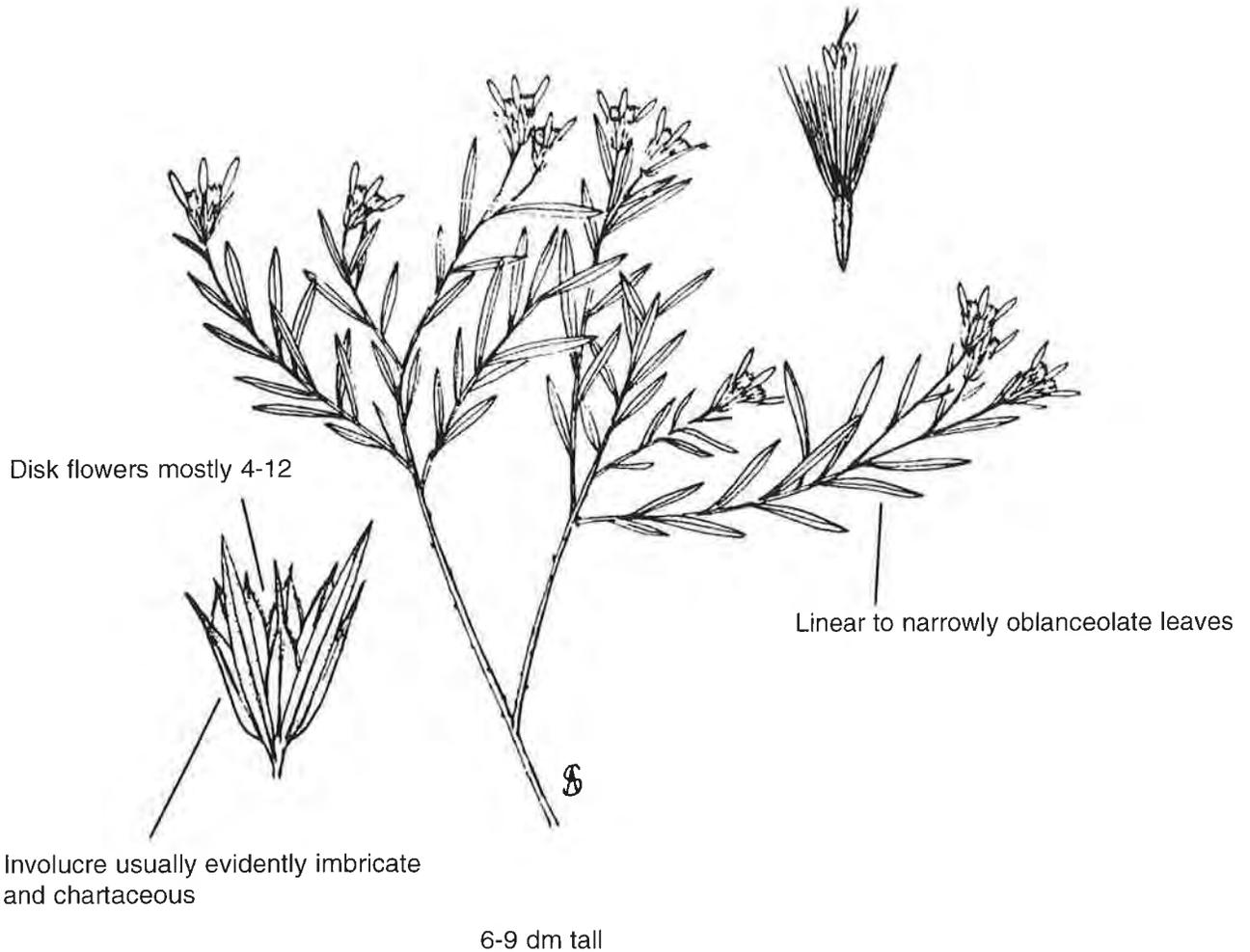
Ann Debolt

Species  
Distribution



Rabbitbrush goldenweed

*Haplopappus bloomeri* var. *bloomeri*



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**Scientific Name:** *Haplopappus bloomeri* A. Gray var. *bloomeri*

**Bibliographic Reference:** Gray, 1865. Proc. Amer. Acad. Arts 6: 541.

**Common Name:** Rabbitbrush goldenweed

**Family (Common Name):** Asteraceae or Compositae (Sunflower Family)

**Synonyms:** *Aster bloomeri* Kuntze; *Chrysothamnus bloomeri* Greene; *Aplopappus bloomeri* var. *angustatus* A. Gray; *Chrysothamnus bloomeri angustatus* Greene; *Haplopappus bloomeri* ssp. *angustatus* H.M. Hall; *Aplopappus bloomeri* var. *sonnei* Greene; *Chrysothamnus bloomeri* var. *pubescens* L.F. Henderson; *Ericameria bloomeri* J. F. Macbr.

**Idaho Native Plant Society Category:** State Review

**Natural Heritage Program Rank:** S1

**Distribution:** Owyhee County, Idaho; Mainly a Cascade-Sierran taxon, B.C. s to Mono County, California, e to Strawberry Mt. and Wagontire Mt. in Oregon, and Storey and Washoe counties, Nevada.

**Habitat:** Dry rocky slopes and open woods, 1500-2200 m elevation.

**Phenology:** August through September.

**Look-alikes:** Similar to var. *greenii* but taller (6-9 dm tall), linear to narrowly oblanceolate leaves (2-6 cm long x 0.5-4 mm wide), involucre usually evidently imbricate and chartaceous, disk flowers mostly 4-12. Some Owyhee County plants tend toward var. *greenii*.

No photos available

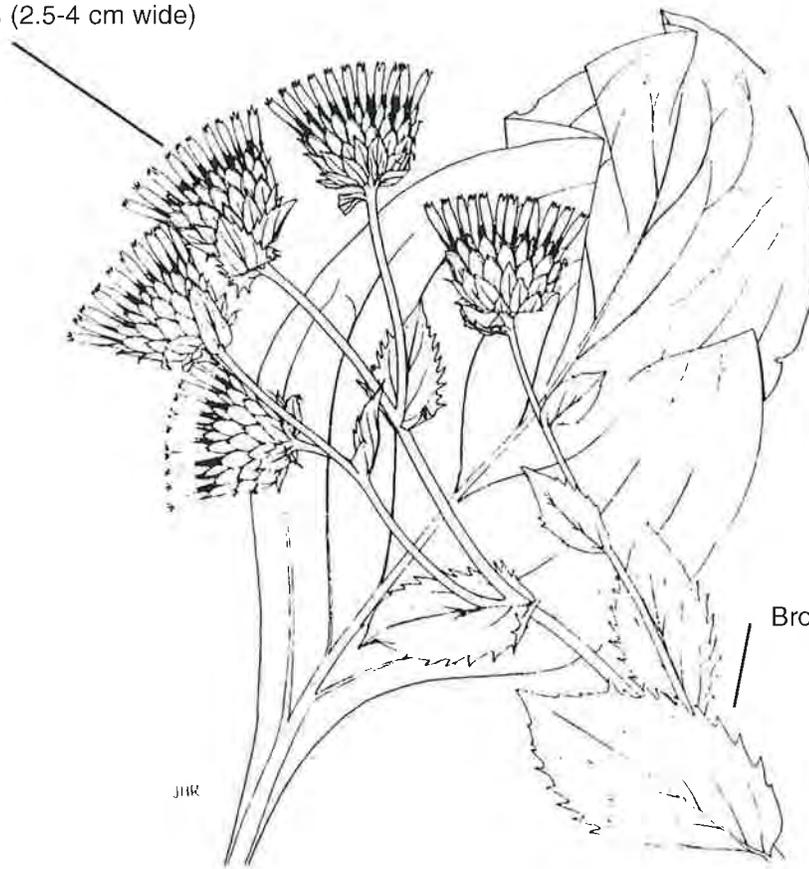
Species  
Distribution



## Snake River goldenweed

*Haplopappus radiatus*

Large heads (2.5-4 cm wide)



Broad basal tufted leaves

Plants large (4-9 dm tall)

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**Scientific Name:** *Haplopappus radiatus* (Nutt.) Cronq.

**Bibliographic Reference:** Cronquist, 1955. Univ. Wash. Publ. Biol. 17(5): 223.

**Common Name:** Snake River goldenweed

**Family (Common Name):** Asteraceae or Compositae (Sunflower Family)

Synonyms: *Pyrocoma radiata* Nutt.; *Aplopappus carthamoides* var. *maximus* A. Gray; *Haplopappus carthamoides* ssp. *maximus* H.M. Hall.

**Idaho Native Plant Society Category:** Global Priority 3

**Natural Heritage Program Rank:** S3

**Distribution:** Washington County, Idaho; Baker and Malheur counties, Oregon.

**Habitat:** Loam soils on steep rocky hillsides in big sagebrush, bluebunch wheatgrass, arrowleaf balsamroot and Idaho fescue communities, 650-1500 m elevation.

**Phenology:** June through August.

**Look-alikes:** Similar to *H. carthamoides* but differing from this species in the larger size (4-9 dm tall), broader basal tufted leaves and larger heads (2.5-4 cm wide).



Closeup of *Haplopappus radiatus*

Ann Debolt

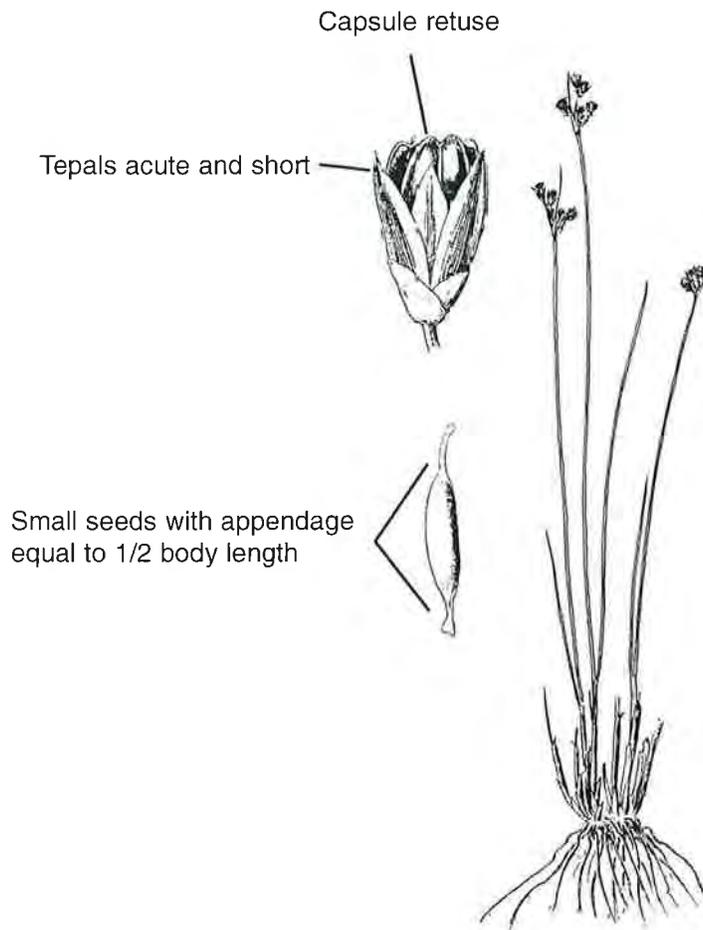


Habitat of *Haplopappus radiatus*

Roger Rosentreter

Species  
Distribution






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**Scientific Name:** *Juncus hallii* Engelm.

**Bibliographic Reference:** Engelmann, 1866. Trans. Acad. Sci. St. Louis 2: 446.

**Common Name:** Hall's rush

**Family (Common Name):** Juncaceae (Rush Family)

**Synonyms:** None

**Idaho Native Plant Society Category:** State Review

**Natural Heritage Program Rank:** S2

**Distribution:** Bonneville, Clearwater, Fremont, Lemhi and Owyhee counties, Idaho; sw Montana, to Colorado and ne Utah.

**Habitat:** Dry, wet, boggy meadows, margins of ponds and lakes, and along streams, 1500-1900 m elevation.

**Phenology:** June through August.

**Look-alikes:** Similar to *J. parryi* but Hall's rush differs in having a retuse capsule, acute tepals 4-5 (5.5) mm long vs 5-7 mm long and smaller seeds (1 mm long vs 2 mm). The seed appendage at each end is ½ the body length vs equalling or a little longer in Parry's rush.



No illustration

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**Scientific Name:** *Lepidium davisii* Rollins

**Bibliographic Reference:** Rollins, 1946. Madroño 9: 164.

**Common Name:** Davis peppergrass

**Family (Common Name):** Brassicaceae or Cruciferae (Mustard Family)

**Synonyms:** *L. montanum* Nutt. ex T. & G. ssp. *davisii* (Rollins) C.L. Hitchc.

**Idaho Native Plant Society Category:** Global Priority 3

**Natural Heritage Program Rank:** S3

**Distribution:** Ada, Elmore, Owyhee, and Twin Falls counties, Idaho; Malheur County, Oregon and n Elko County, Nevada.

**Habitat:** Mostly barren hard bottom playas, but sometimes with a few shadscale and silver sage plants, surrounded by Wyoming big sage, four-wing saltbush and sandberg bluegrass habitat, from 885-1800 m elevation.

**Phenology:** April to August.

**Look-alikes:** Similar to *L. montanum* but differing from this species in having fleshy entire leaves, a thick taproot 0.5-2 cm thick and very numerous stems from a much-branched caudex (sometimes woody).



Closeup of *Lepidium davisii*

Lynda Smithman



Habitat of *Lepidium davisii*

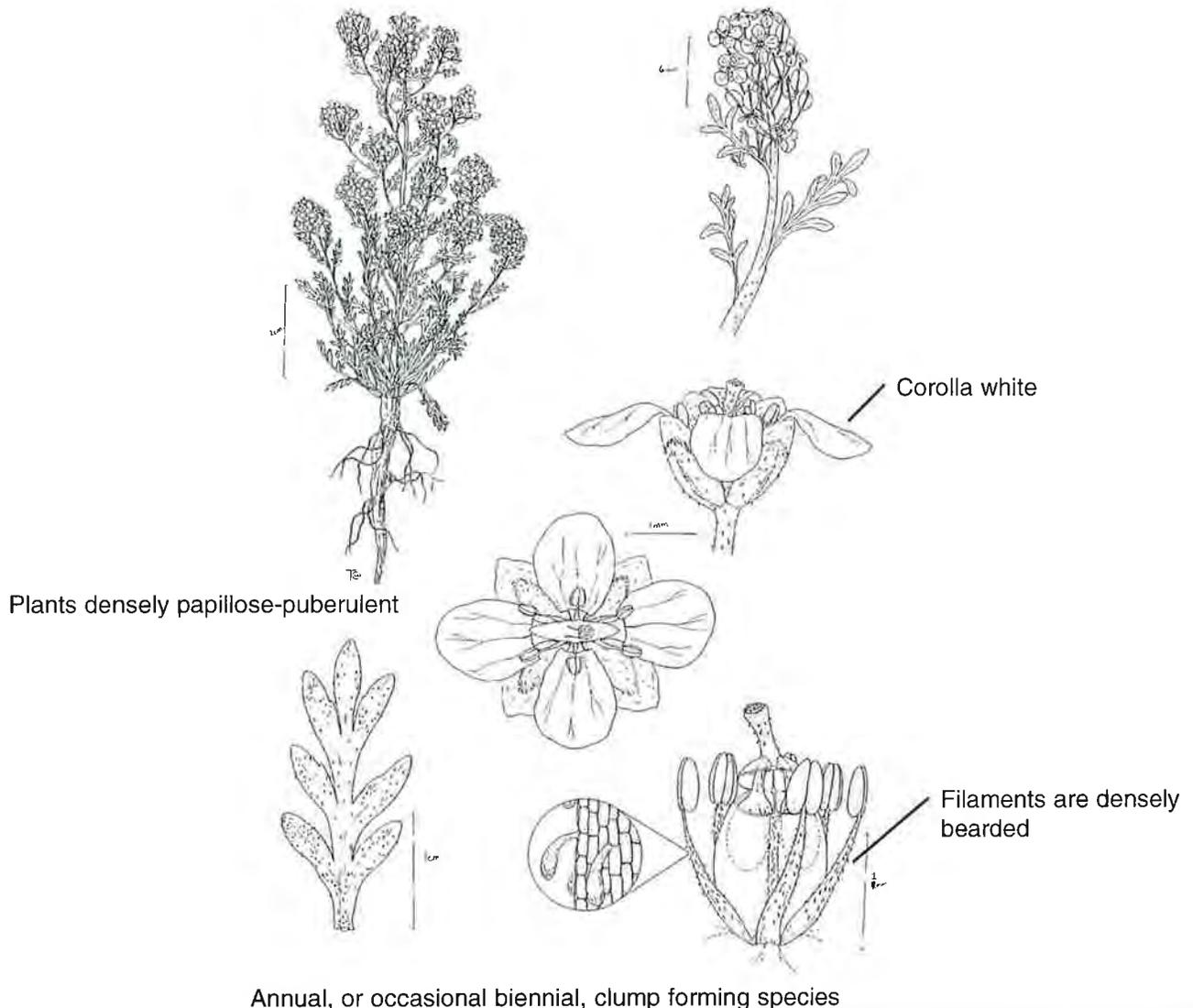
Lynda Smithman

Species  
Distribution



## Slickspot peppergrass

*Lepidium papilliferum*



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

**Bibliographic Reference:** Nelson & Macbride, 1913. Bot. Gaz. 56: 474.

**Common Name:** Slickspot peppergrass

**Family (Common Name):** Brassicaceae or Cruciferae (Mustard Family)

**Synonyms:** *Lepidium montanum* Nutt. ex T. & G. var. *papilliferum* Hends.; *L. montanum* ssp. *papilliferum* (Hend.) C.L. Hitchc., Madroño 10: 158. 1950.

**Idaho Native Plant Society Category:** Global Priority 2

**Natural Heritage Program Rank:** S2

**U.S. Fish & Wildlife Service Status:** Candidate Species

**Distribution:** Ada, Canyon, Elmore, Gem, Owyhee, and Payette counties, Idaho.

**Habitat:** Bare slickspot soils within Wyoming sagbrush habitat.

**Phenology:** May through June.

**Look-alikes:** Similar to *L. montanum*, but slickspot peppergrass is densely papillose-puberulent, the hairs appearing somewhat flattened and the filaments are densely bearded with papillose-puberulent hairs. This annual, and occasional 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 upturned margin.



Closeup of *Lepidium papilliferum*

Ann Debolt



Habitat of *Lepidium papilliferum*

Ann Debolt

Species  
Distribution



No illustration

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

**Bibliographic Reference:** Patterson & Yoder-Williams, 1984. Syst. Bot. 9: 261-262.

**Common Name:** Bruneau River prickly-phlox

**Family (Common Name):** Polemoniaceae (Phlox Family)

**Synonyms:** None

**Idaho Native Plant Society Category:** Global Priority 2

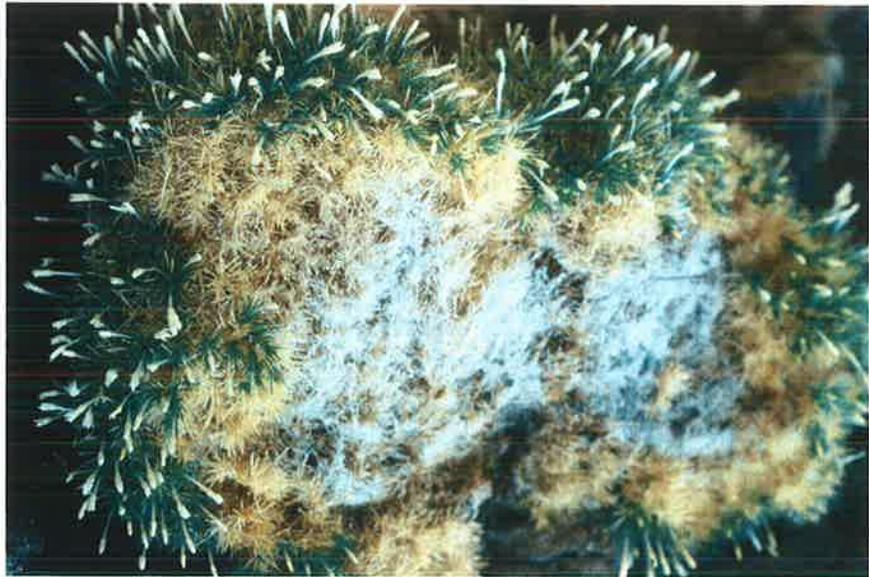
**Natural Heritage Program Rank:** S2

**Distribution:** Restricted to the Bruneau and Jarbidge Rivers in Owyhee County, Idaho and Humboldt County, Nevada.

**Habitat:** Vertical or underhanging rhyolitic canyon walls along the Bruneau and Jarbidge Rivers, 864-1444 m elevation.

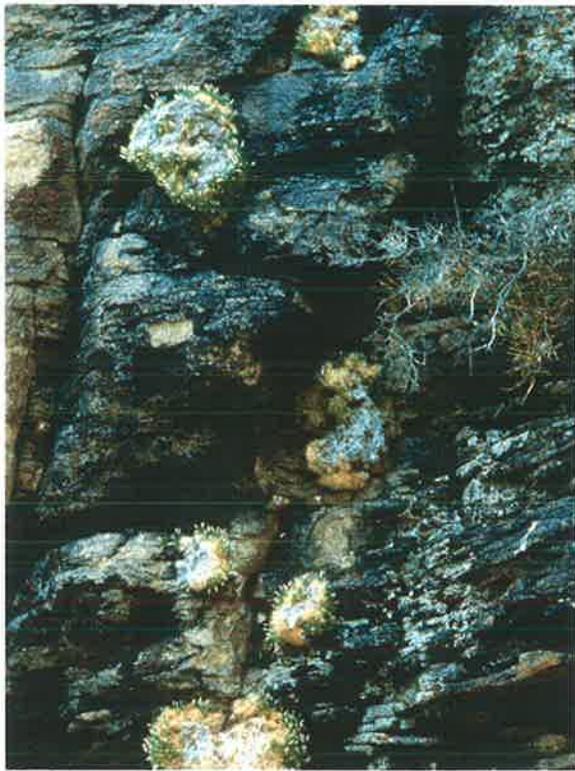
**Phenology:** April through July.

**Look-alikes:** Similar to *L. watsonii* but different in having finer, soft-filiform leaf lobes, the stems, leaves, bracts and calyces are eglandular and with little or no pubescence, and the leaf lobes are filiform-linear and only 0.5 mm wide.



Closeup of *Leptodactylon glabrum*

Roger Rosentreter



Habitat of *Leptodactylon glabrum*

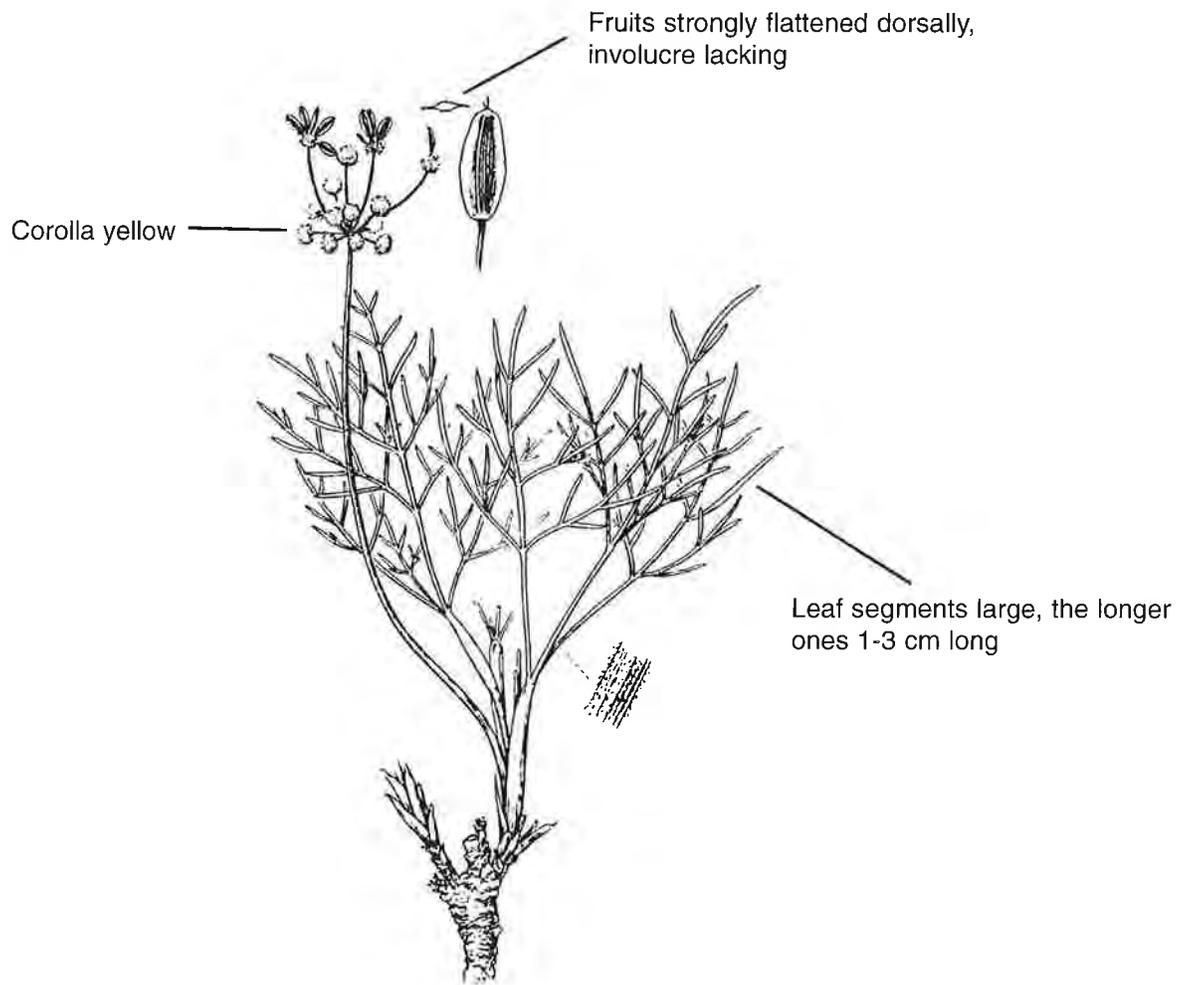
Roger Rosentreter

Species  
Distribution



**Packard's lomatium**

***Lomatium packardiae***



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**Scientific Name:** *Lomatium packardiae* Cronq.

**Bibliographic Reference:** Cronquist, 1992. Great Basin Natur. 52: 75.

**Common Name:** Packard's lomatium

**Family (Common Name):** Apiaceae or Umbelliferae (Carrot Family)

**Synonyms:** None

**Idaho Native Plant Society Category:** Global Priority 3

**Natural Heritage Program Rank:** S1

**Distribution:** Canyon and Owyhee counties, Idaho; Malheur and Lake counties, Oregon and Washoe and Humboldt counties, Nevada.

**Habitat:** Volcanic ash and rhyolite and rocky clay soils in the sagebrush zone, from 900-1300 m elevation.

**Phenology:** April through June.

**Look-alikes:** Prior to the naming of this species, herbarium specimens had been called *L. triternatum*, which has solitary or few stems or scapes from a simple or occasionally few-branched crown. Packard's lomatium also differs in having the ultimate segments of the leaves shorter with the larger ones only 1-3 cm long giving the leaves a different aspect.



Closeup of *Lomatium packardiae*

Bob Moseley



Habitat of *Lomatium packardiae*

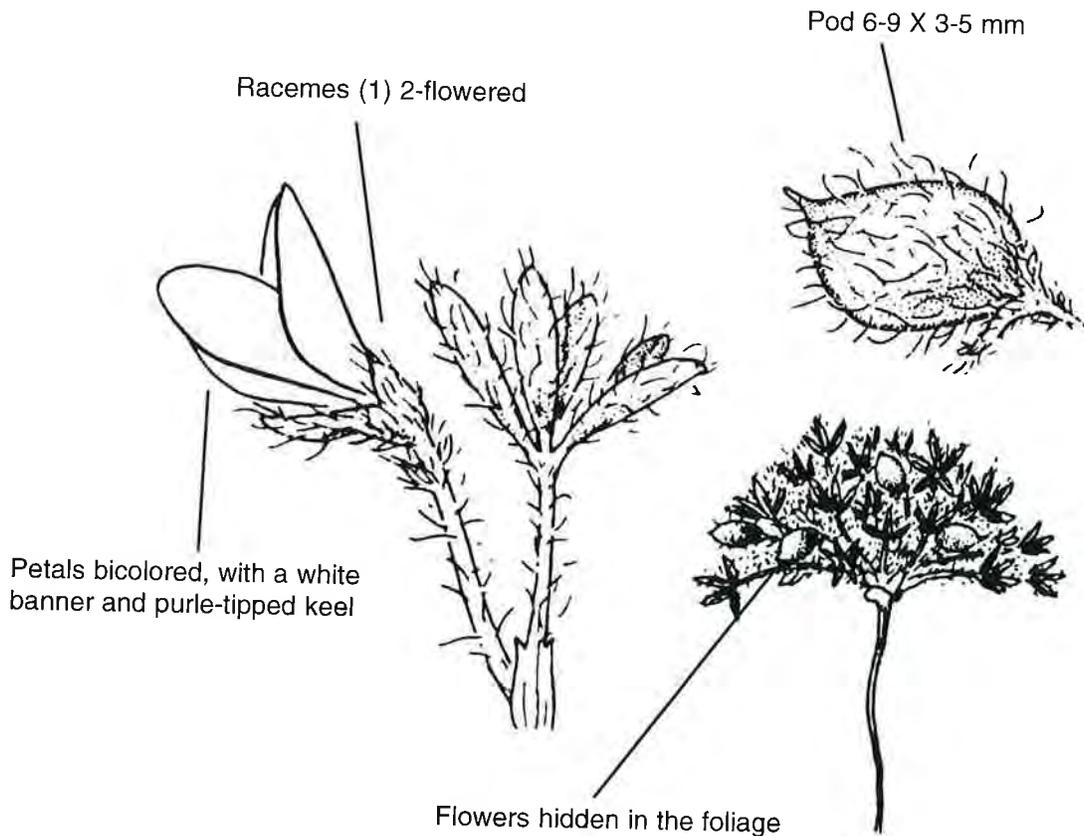
Bob Moseley

Species  
Distribution



## Inch-high lupine

*Lupinus uncialis*



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**Scientific Name:** *Lupinus uncialis* S. Wats. in King

**Bibliographic Reference:** Watson in King, 1871. Rep. Geol. Explor. 40<sup>th</sup> Parallel 5:54.

**Common Name:** Inch-high lupine

**Family (Common Name):** Fabaceae or Leguminosae (Pea Family)

**Synonyms:** *L. uncialis* var. *cryptanthus* Eastw.

**Idaho Native Plant Society Category:** State Priority 2

**Natural Heritage Program Rank:** S2

**Distribution:** Owyhee County, Idaho; Harney and s Malheur County, Oregon, s over most of n and c Nevada to n Nye and adjacent White Pine counties to Washoe, and Churchill counties, Nevada.

**Habitat:** Hills, bluffs, and level terraces in the sagebrush-grassland zone on rhyolite, and volcanic cinder, 946-1900 m elevation.

**Phenology:** April (at lower elevations), usually May through June.

**Look-alikes:** Like *L. brevicaulis* but with the racemes (1) 2-flowered, the small flowers hidden in the foliage, keel petals not over 6 mm long. This diminutive annual species is rarely more than 2 cm tall.



Closeup of *Lupinus uncialis*

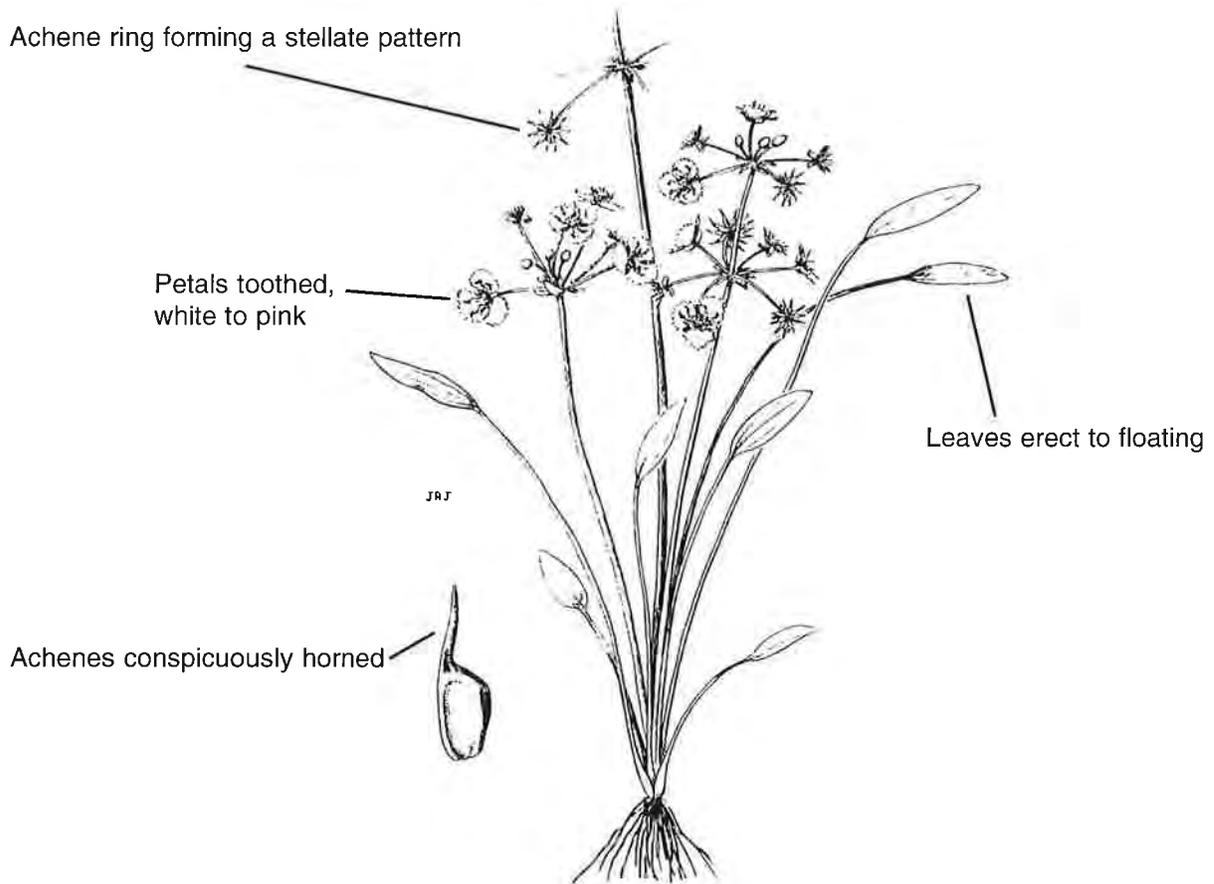
Ann Debolt

Species  
Distribution



## Fringed waterplantain

*Machaerocarpus californicus*



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**Scientific Name:** *Machaerocarpus californicus* (Torr. ex Benth.) Small

**Bibliographic Reference:** Small, 1909. N. Amer. Fl. 17: 44. 1909.

**Common Name:** Fringed waterplantain

**Family (Common Name):** Alismataceae (Water-plantain Family)

**Synonyms:** *Damasonium californicum* Torr. ex Benth.; *Alisma californica* M. Mich. in A. DC. & C. DC.

**Idaho Native Plant Society Category:** State Monitor

**Natural Heritage Program Rank:** S2

**Distribution:** Camas and Owyhee counties, Idaho; wc N. Amer., c Oregon, s to ne and c California, e to nw Nevada.

**Habitat:** Vernal pools, on margins of intermittent streams, sloughs, and mud flats of marshy places.

**Look-alikes:** In Idaho, most closely resembling *Alisma gramineum*, but different in having toothed petals, conspicuously horned achenes on the back with a sharp beak 3-6 mm long and achene ring forming a stellate pattern.



Closeup of *Machaerocarpus californicus*

Bob Moseley



Habitat of *Machaerocarpus californicus*

Mabel Jankovsky-Jones

Species  
Distribution



No illustration

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**Scientific Name:** *Mentzelia mollis* Peck

**Bibliographic Reference:** Peck, 1945. Leafl. W. Bot. 4: 183.

**Common Name:** Smooth mentzelia or Smooth stickleaf

**Family (Common Name):** Loasaceae (Stickleaf Family)

**Synonyms:** None

**Idaho Native Plant Society Category:** Global Priority 2

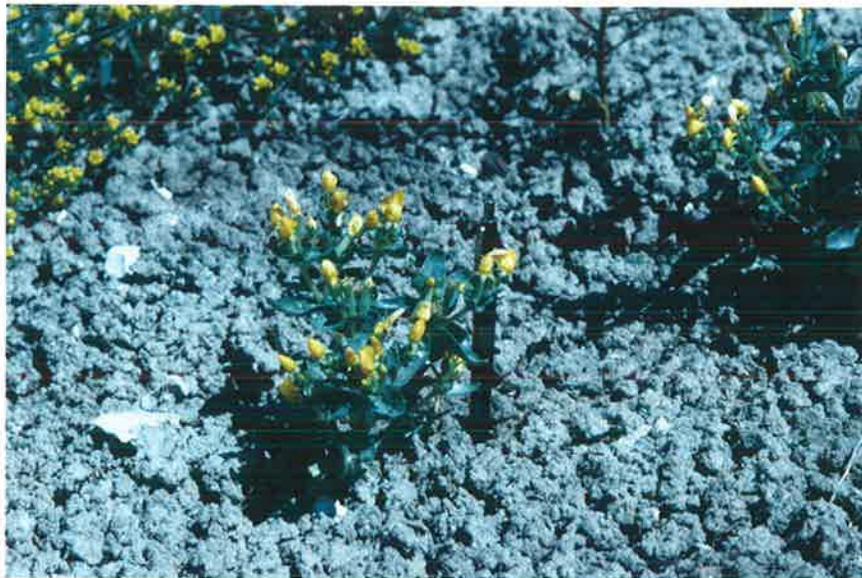
**Natural Heritage Program Rank:** S2

**Distribution:** Owyhee County, Idaho; Malheur County, Oregon.

**Habitat:** Brown, green or gray volcanic ash derived from the Succor Creek Formation. Associated with Wyoming sagebrush, *Phacelia lutea*, *Cleomella macbrideana*, and *Chaenactis cusickii*, 1100-1400 m elevation.

**Phenology:** May through June.

**Look-alikes:** This distinctive species has entire, sessile or subsessile leaves rounded at the end, and bright yellow flowers in small terminal clusters.



Closeup of *Mentzelia mollis*

Ann Debolt



Habitat of *Mentzelia mollis*

Ann Debolt

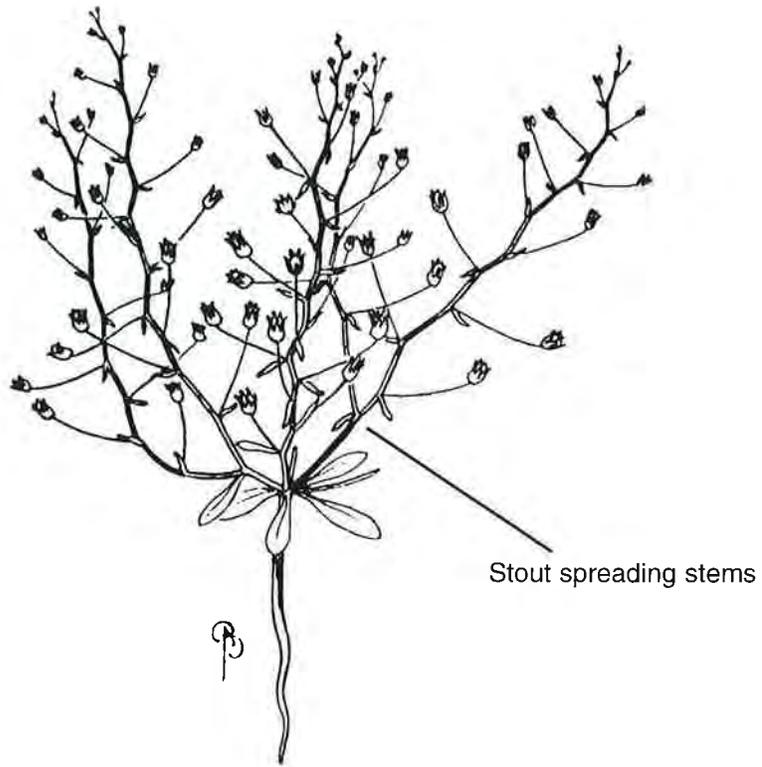
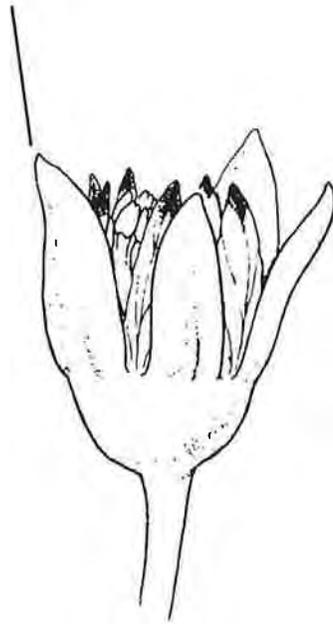
Species  
Distribution



## Rigid threadbush

## *Nemacladus rigidus*

Sepals unequal in length



Small annuals that are dark greenish-purple or brownish-purple in color

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**Scientific Name:** *Nemacladus rigidus* Curran

**Bibliographic Reference:** Curran, 1885. Bull. Calif. Acad. Sci. 1: 154.

**Common Name:** Rigid threadbush

**Family (Common Name):** Campanulaceae (Bellflower Family)

**Synonyms:** None

**Idaho Native Plant Society Category:** State Sensitive

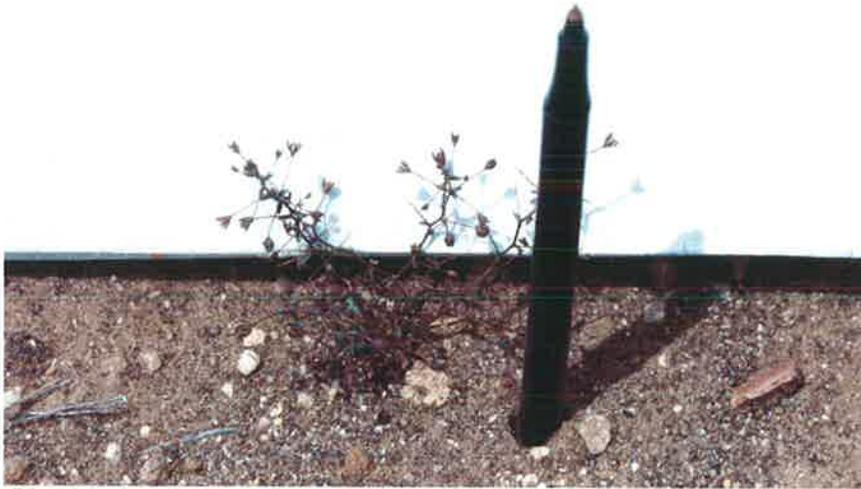
**Natural Heritage Program Rank:** S2

**Distribution:** Owyhee County, Idaho; se Oregon, s to ne California to Inyo County, e to n Nye County, Nevada.

**Habitat:** Sandy or cindery soils in the desert shrub zone, 800-1200 m elevation.

**Phenology:** May through June (July).

**Look-alikes:** Most similar to *N. glanduliferus* var. *orientalis* (not presently known for Idaho) but distinct in the dark greenish-purple or brownish-purple color of the plants, in having unequal sepals, the larger ones (1.5) 2-4 mm long and relatively stout spreading stems. This diminutive species is typically 1-3 cm tall.



Closeup of *Nemacladus rigidus*

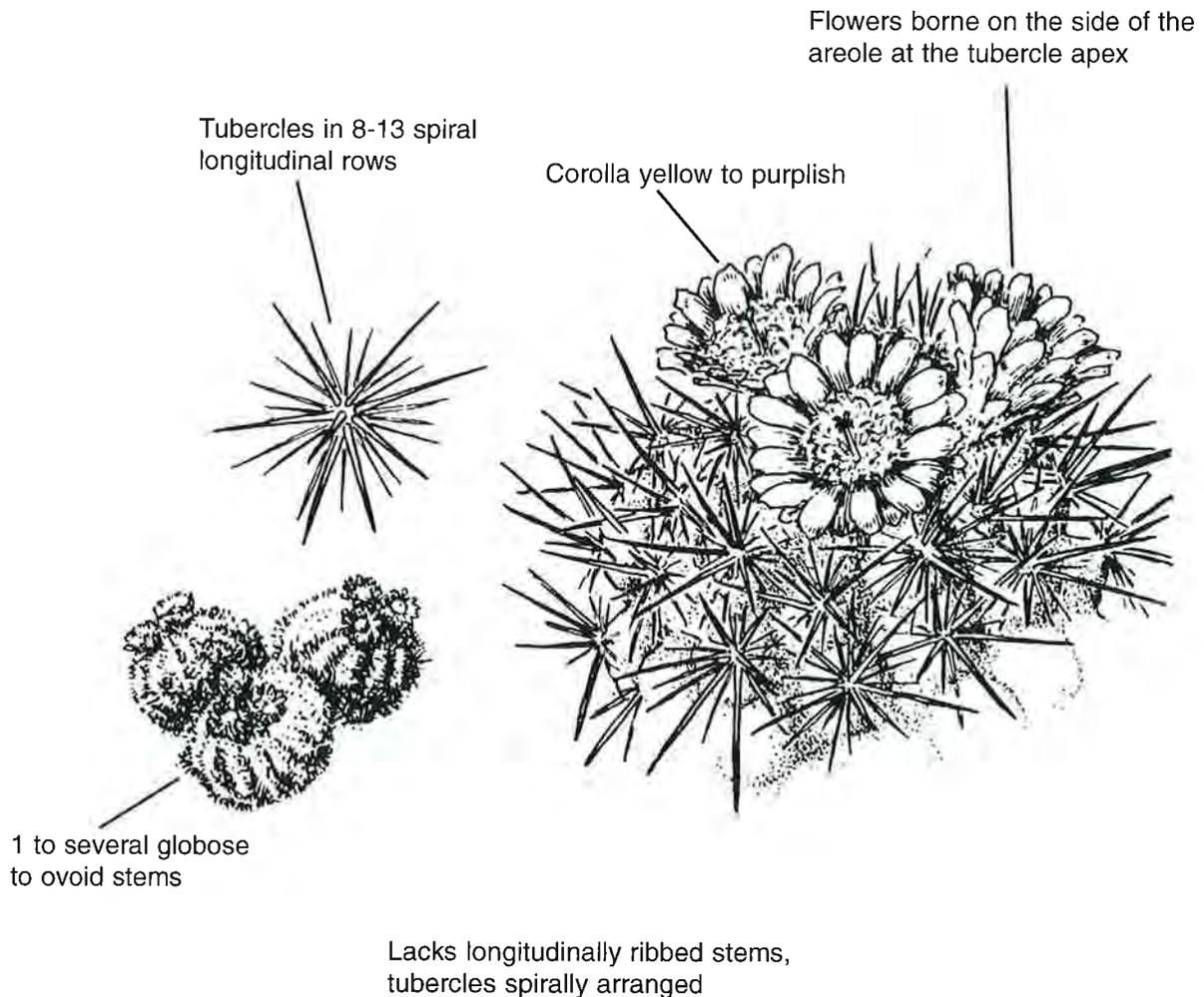
Ann Debolt



Species  
Distribution

## Simpson's hedgehog cactus

## *Pediocactus simpsonii* var. *robustior*



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

**Bibliographic Reference:** Britton & Rose, 1896. U.S. Natl. Herb. 3: 377.

**Family (Common Name):** Cactaceae (Cactus Family)

**Common Name:** Simpson's hedgehog cactus

**Synonyms:** None

**Idaho Native Plant Society Category:** State Monitor

**Natural Heritage Program Rank:** S3

**Distribution:** Cassia, Idaho, Nez Perce, Oneida, Lemhi, Owyhee and Twin Falls counties, Idaho; s and e to Nevada, Wyoming, Utah and Colorado.

**Habitat:** Rocky or sandy benches and canyon rims in low sagebrush, bud sage, and Sandberg bluegrass communities; often associated with *Erigeron bloomeri*, from 900-1800 m elevation.

**Phenology:** May through July.

**Look-alikes:** The only *Pediocactus* in S Idaho. However, may be confused with species in the genus *Coryphantha*, which differs in lacking the longitudinally ribbed stems, and with the flowers borne on the side of the tubercle at the base of a groove connecting the areole.



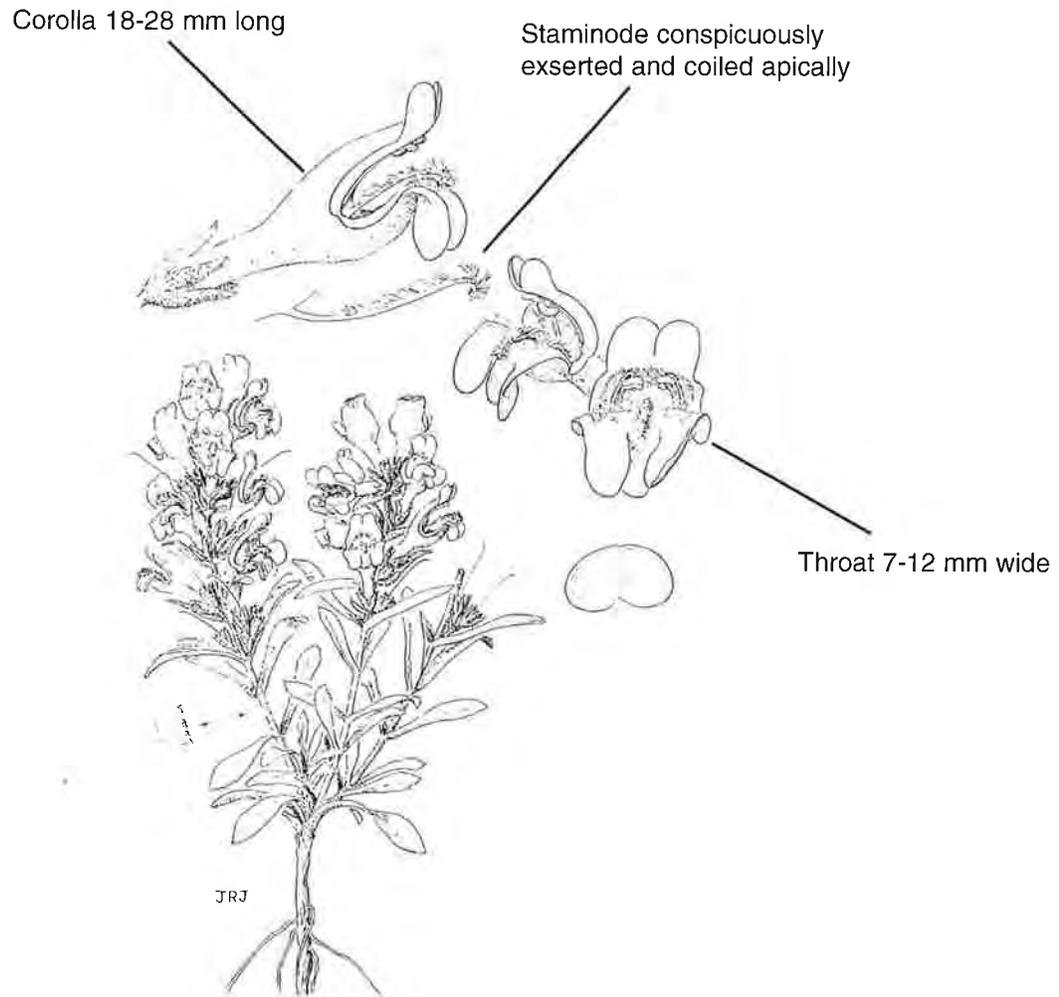
Closeup of *Pediocactus simpsonii* var. *robustior* Steve Caicco



Species  
Distribution

**Janish's penstemon**

*Penstemon janishiae*



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**Scientific Name:** *Penstemon janishiae* N. Holmg.

**Bibliographic Reference:** Holmgren, 1979. Britt. 31: 223.

**Common Name:** Janish's penstemon

**Family (Common Name):** Scrophulariaceae (Figwort Family)

**Synonyms:** None

**Idaho Native Plant Society Category:** State Priority 2

**Natural Heritage Program Rank:** S2

**Distribution:** Elmore and Owyhee counties, Idaho; ne California, s Oregon, and c Nevada.

**Habitat:** Clay soils derived from volcanic ash or lake bed sediment in sagebrush communities, 800- 1300 m elevation.

**Phenology:** Late May through June.

**Look-alikes:** Most closely allied to *P. miser* A. Gray but differing from that species in the larger corollas (18-28 mm long), corolla abruptly expanded into a broadly ventricose-ampliate throat, 7-12 mm broad when pressed, the upper lip (6.5) 8-13 mm long, and the staminode conspicuously exerted and coiled apically.



Closeup of *Penstemon janishiae*

Bob Moseley



Habitat of *Penstemon janishiae*

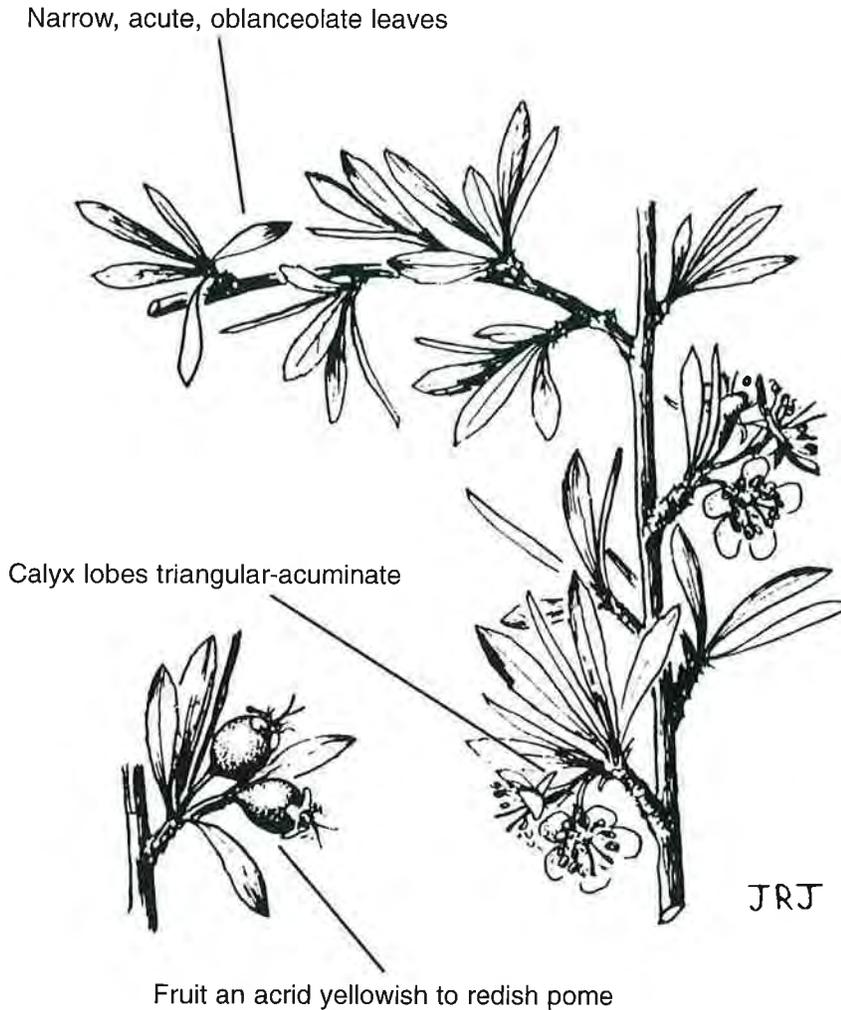
Ann Debolt

Species  
Distribution



## Squaw apple

*Peraphyllum ramosissimum*



---

**Scientific Name:** *Peraphyllum ramosissimum* Nutt. in Torr. & Gray

**Bibliographic Reference:** Nuttall in Torrey & Gray, 1840. Fl. N. Amer. 1: 474.

**Common Name:** Squaw apple

**Family (Common Name):** Rosaceae (Rose Family)

**Synonyms:** None

**Idaho Native Plant Society Category:** State Priority 2

**Natural Heritage Program Rank:** S2

**Distribution:** Washington County, Idaho; e and ne California, e Oregon, wc and s Nevada, s and c Utah to w Colorado, nw New Mexico.

**Habitat:** On heavy clay soils, often as small inclusions in sagebrush-bunchgrass or mountain shrub communities, 1000-1500 m elevation.

**Phenology:** May through June (July).

**Look-alikes:** A distinct intricately and rigidly branched shrub with narrowly, and abruptly acute oblanceolate leaves fascicled at the tips of short spurs. Calyx lobes triangular-acuminate; fruit an acrid yellowish to reddish apple-like pome.



Closeup of *Peraphyllum ramosissimum*

Joe Duft



Habitat of *Peraphyllum ramosissimum*

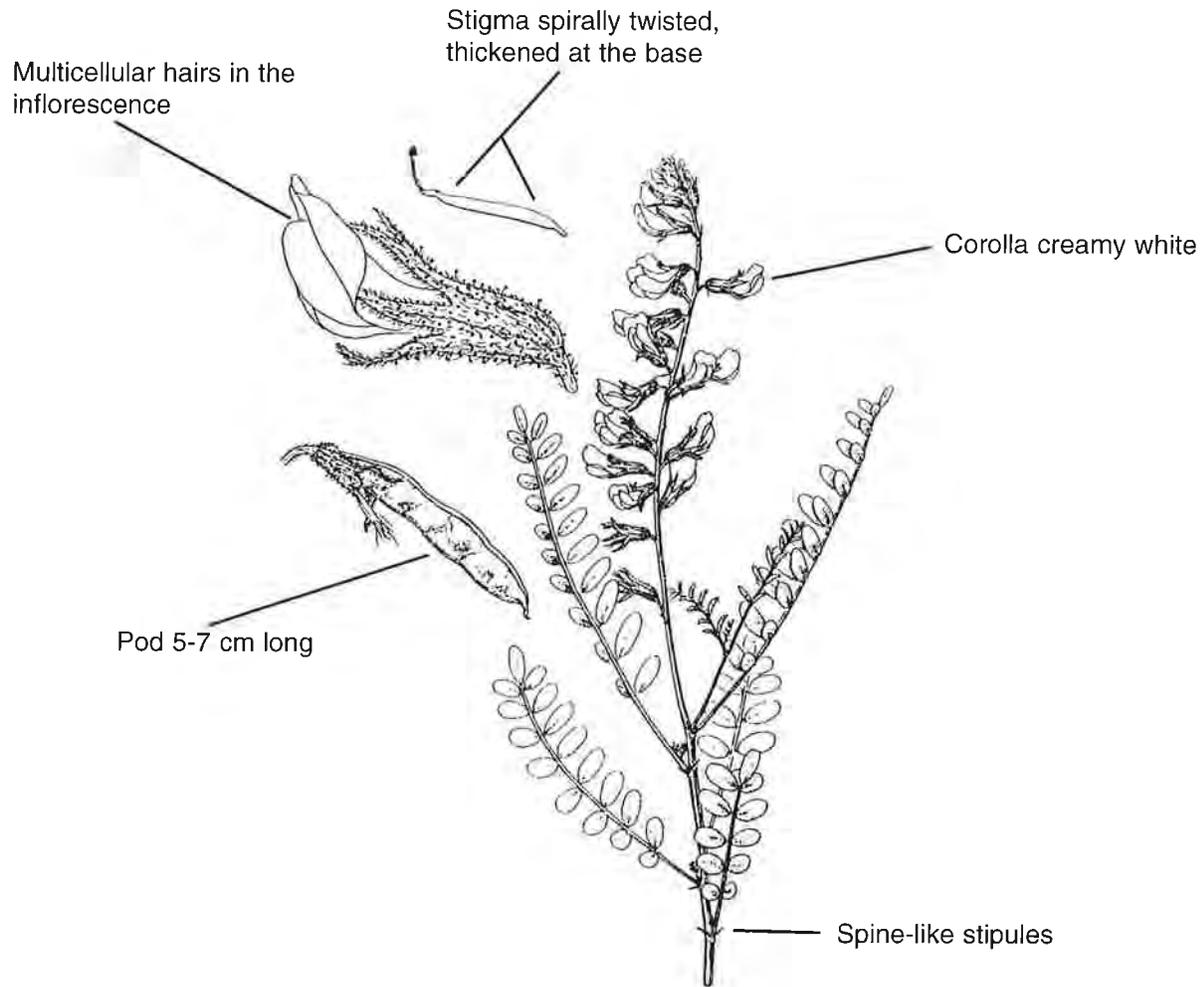
Roger Rosenreter

Species  
Distribution



## Spine-noded milkvetch

*Peteria thompsoniae*



**Scientific Name:** *Peteria thompsoniae* S. Wats.

**Bibliographic Reference:** Watson, 1873. Amer. Natur. 7: 300.

**Common Name:** Spine-noded milkvetch

**Family (Common Name):** Fabaceae or Leguminosae (Pea Family)

**Synonyms:** *Peteria nevadensis* Tidestr.

**Idaho Native Plant Society Category:** State Sensitive

**Natural Heritage Program Rank:** S2

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

**Habitat:** On slopes in desert shrub communities in dry washes, flats, ridges and talus. Idaho populations are restricted to volcanic sands, from 840-1300 m elevation.

**Phenology:** (late April) May through June.

**Look-alikes:** Superficially resembling an *Astragalus* but distinct from this genus of plants in having spine-like stipules (hence the common name spine-noded milkvetch), multicellular hairs in the inflorescence, and a spirally twisted, basally thickened style with a tuft of hairs below the stigma.



Closeup of *Peteria thompsoniae*

Duane Atwood



Habitat of *Peteria thompsoniae*

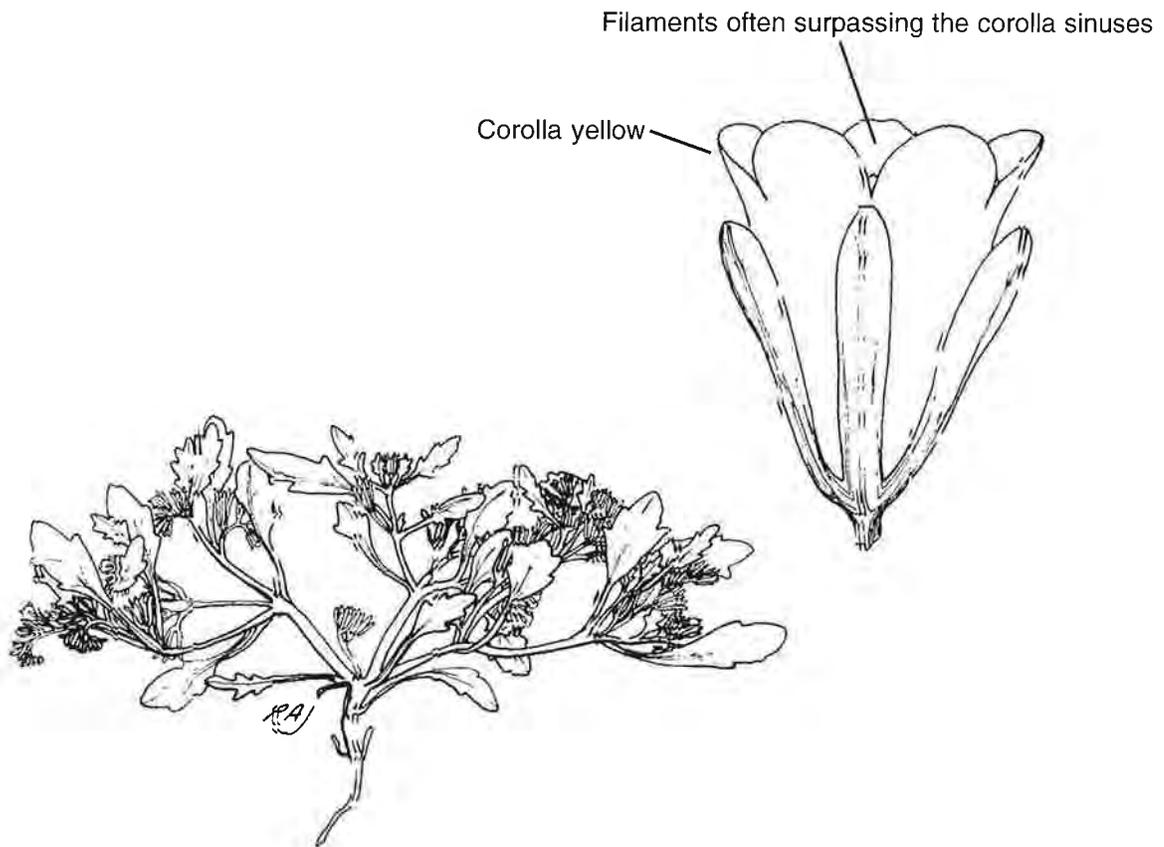
Ann Debolt

Species  
Distribution



**Malheur yellow phacelia**

***Phacelia lutea* var. *calva***



Plants glabrous except in the inflorescence, 1-4 cm tall

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**Scientific Name:** *Phacelia lutea* (Hook. & Arn.) J. T. Howell var. *calva* Cronq.

**Bibliographic Reference:** Cronquist, 1977. Vascular Plants of the Pacif. N.W. 4: 168.

**Common Name:** Malheur yellow phacelia

**Family (Common Name):** Hydrophyllaceae (Water-leaf Family)

Synonyms: None

**Idaho Native Plant Society Category:** Global Priority 3

**Natural Heritage Program Rank:** S2

**Distribution:** Owyhee County, Idaho; nw Humboldt County, Nevada; and e Malheur County, Oregon.

**Habitat:** Volcanic ash soils in Wyoming sagebrush or salt desert shrub zones, from 900-1600 m elevation.

**Phenology:** May through June.

**Look-alikes:** Similar to other varieties of *P. lutea* but differing from them in being completely glabrous except in the inflorescence and the filaments commonly surpassing the corolla sinuses.



Closeup of *Phacelia lutea* var. *calva*

Ann Debolt



Habitat of *Phacelia lutea* var. *calva*

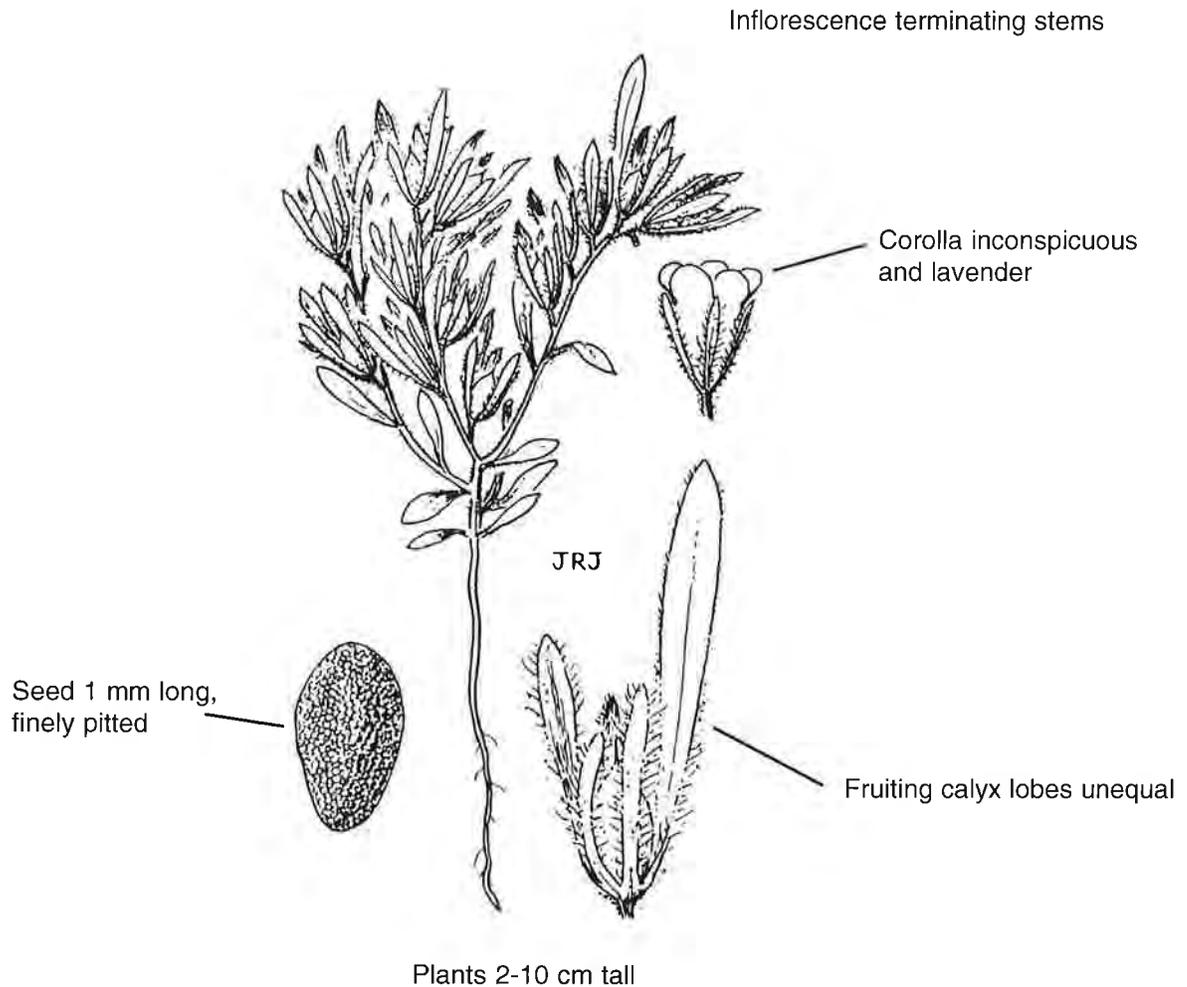
Ann Debolt

Species  
Distribution



## Least phacelia

## *Phacelia minutissima*



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

**Bibliographic Reference:** Henderson, 1900. Bull. Torr. Bot. Club 27: 351.

**Common Name:** Least phacelia

**Family (Common Name):** Hydrophyllaceae (Waterleaf Family)

**Synonyms:** *P. foliosepala* Nels. & Macbr.

**Idaho Native Plant Society Category:** Global Priority 3

**Natural Heritage Program Rank:** S2

**Distribution:** Camas and Owyhee counties, Idaho; and disjunct localities in Elko County, Nevada, Wallowa Mts. of Oregon and c Washington.

**Habitat:** Moist understory of *Veratrum californicum*, aspen and tall forb communities in meadows, especially snow bank areas, 1800-2100 m elevation.

**Phenology:** April through July.

**Look-alikes:** The only annual *Phacelia* of moist habitats in Idaho. Recognized by the unequal fruiting calyx lobes (one or more often foliaceous), mostly cauline leaves, an inflorescence terminating the stem, and making up most of the plant height, and the inconspicuous (2.5-4 mm long) lavender, tubular-campanulate corolla.



Closeup of *Phacelia minutissima*

Duane Atwood

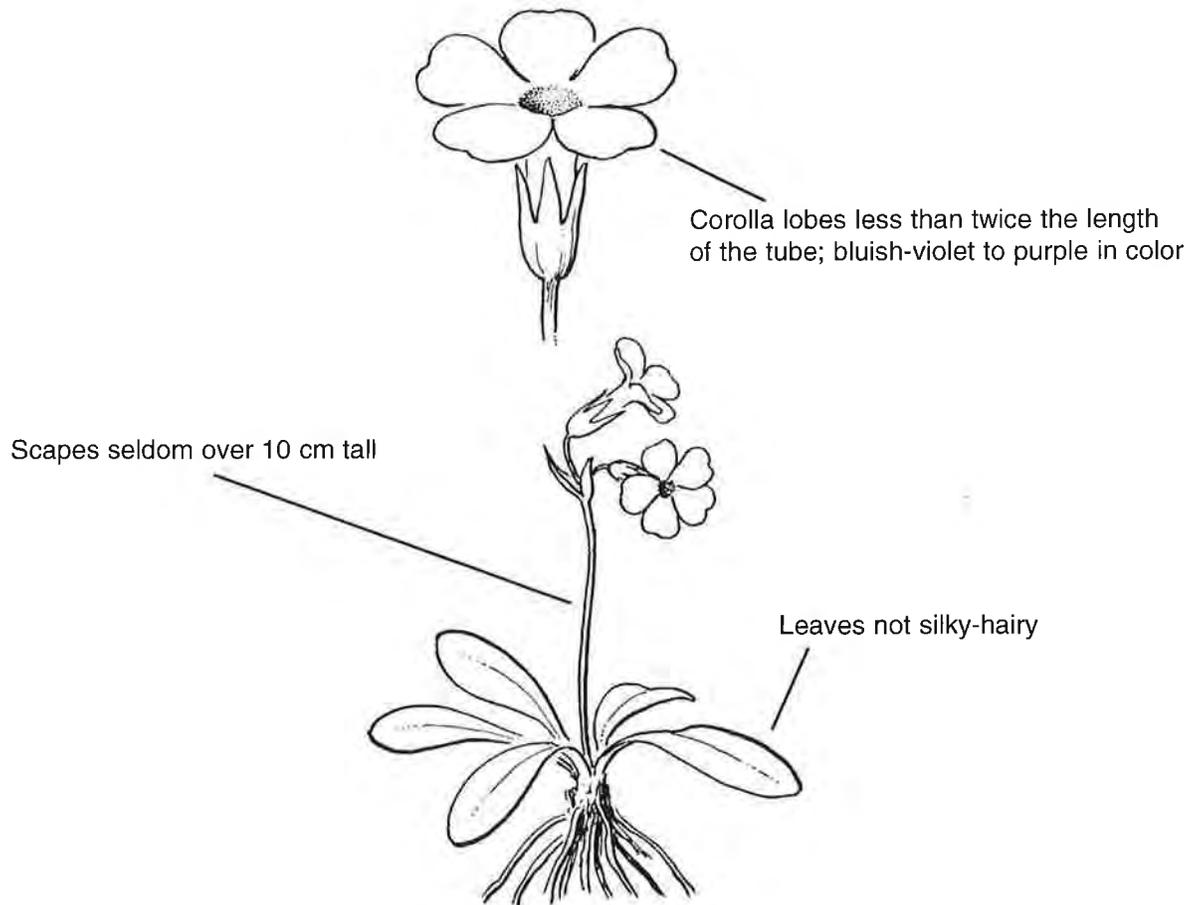


Habitat of *Phacelia minutissima*

Duane Atwood

Species  
Distribution





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**Scientific Name:** *Primula* "wilcoxiana"

**Bibliographic Reference:** An unpublished name

**Common Name:** Wilcox's primrose

**Family (Common Name):** Primulaceae (Primrose Family)

**Synonyms:** None

**Idaho Native Plant Society Category:** State Review

**Natural Heritage Program Rank:** S2

**Distribution:** Ada, Boise, Elmore, and Gem counties, Idaho.

**Habitat:** Steep north-facing slopes, often in snow bank areas on moss mats, big sagebrush-Idaho fescue communities and bitterbrush, from 900-1300 m elevation.

**Phenology:** March through April.

**Look-alikes:** In vegetative features confused with shooting star (*Dodecatheon* species), which grows with the *Primula*, but easily recognized in flower. Similar to if not synonymous with *P. cusickiana*. Its distinctiveness is still questionable.

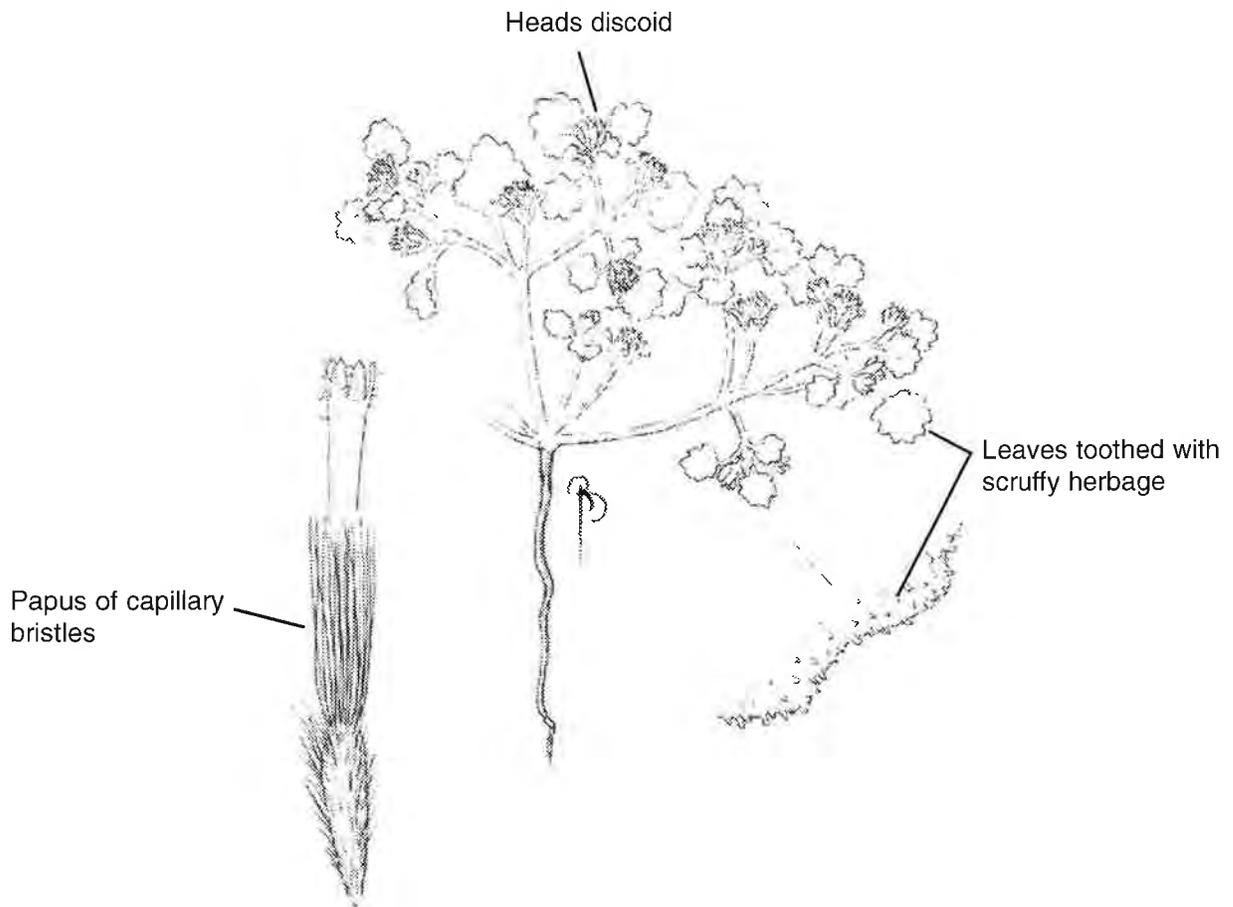


Bob Moseley

Close up of *Primula* "wilcoxiana"



Species  
Distribution



**Scientific Name:** *Psathyrotes annua* (Nutt.) A. Gray

**Bibliographic Reference:** Gray 1853, Pl. Wright. 2:100.

**Common Name:** Turtleback

**Family (Common Name):** Asteraceae or Compositae (Sunflower Family)

**Synonyms:** *Bulbostylis annua* Nutt., Pl. Wright. 2: 100. 1863.

**Idaho Native Plant Society Category:** State Priority 1

**Natural Heritage Program Rank:** S1

**Distribution:** Owyhee County, Idaho; California, Nevada and Arizona.

**Habitat:** Salt desert shrub communities, usually on sandy, well drained soils, 730-1200 m elevation.

**Phenology:** (June) July through August.

**Look-alikes:** Similar to other *Psathyrotes* species but distinct in having toothed leaves, scurfy herbage, but not long-piliferous as in other species.



Closeup of *Psathyrotes annua*

Mike Twitchell

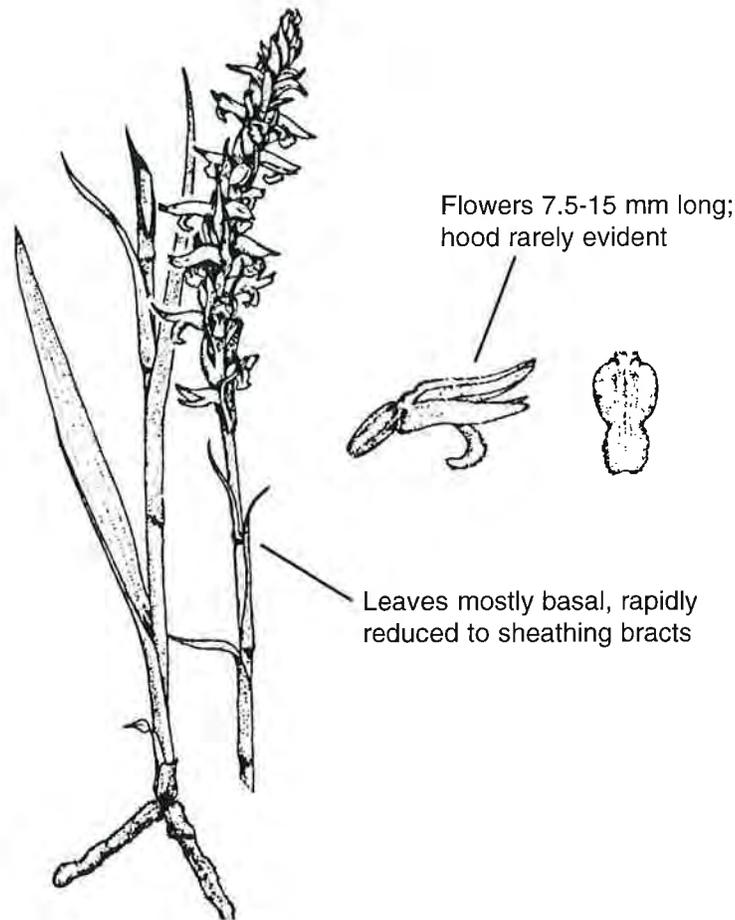


Habitat of *Psathyrotes annua*

Mike Twitchell

Species  
Distribution





Perennial herbs 2-5 dm tall.

**Scientific Name:** *Spiranthes diluvialis* Sheviak

**Bibliographic Reference:** Sheviak, 1984. Britt. 36(1): 8-14.

**Common Name:** Ute ladies'-tresses

**Family (Common Name):** Orchidaceae (Orchid Family)

**Synonyms:** *Spiranthes romanzoffiana* Cham. var. *diluvialis* (Sheviak) Welsh

**Idaho Native Plant Society Category:** Global Priority 2

**Natural Heritage Program Rank:** S1

**Federal Status:** Federally listed as Threatened

**Distribution:** Bonneville, Jefferson, and Madison, counties, Idaho; sw Nevada, n and sc Utah, n Colorado, s Montana, nc Washington, se Wyoming and w Nebraska. Included in this publication because the USFWS considers all of Idaho to be within potential range of the species.

**Habitat:** Moist streambanks, wet meadows and abandoned stream channels, 1500-1600 m elevation in Idaho.

**Phenology:** Late July through October.

**Look-alikes:** Similar to *S. romanzoffiana*, which has short, broad-based, strongly ascending flowers, deeply constricted lip petals and more densely congested, and shorter spikes. Ute ladies'-tresses has a set of characters reflecting its hybrid origin. In aspect plants are leafy with long stems which support ascending flowers with variably free sepals. The stem is disproportionately long for the length of the inflorescence, sepals are basally connate for a short distance, variably positioned and appressed to the rest of the flower, and free spreading or ascending. The hood is rarely evident, the lips are ovate to lanceolate or oblong in outline with a marked median constriction and distinctly parallel veined, but with evident lateral veins.



Closeup of *Spiranthes diluvialis*

Edna Rey-Vizgirdas

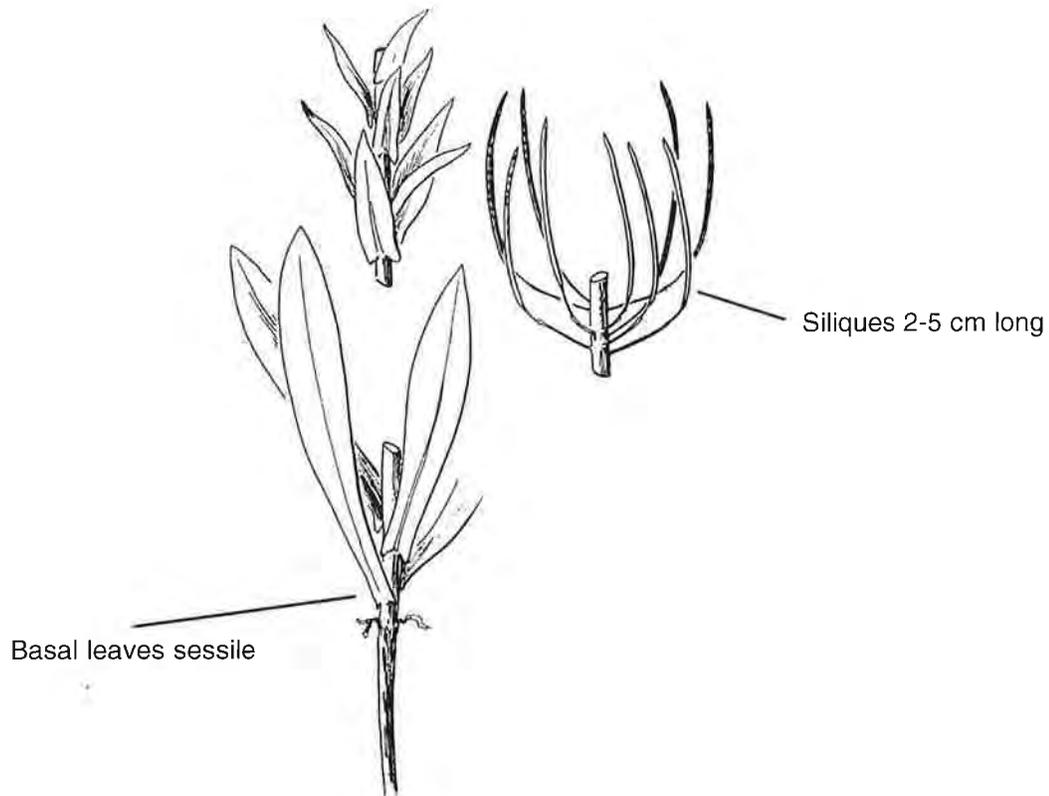


Habitat of *Spiranthes diluvialis*

Bob Moseley

Species  
Distribution





Plants with a single stem and dense raceme of creamy yellow flowers

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**Scientific Name:** *Stanleya confertiflora* (Robins.) Howell

**Bibliographic Reference:** Howell, 1897. Flora. of Northwest America 59.

**Common Name:** Malheur princesplume, biennial princesplume

**Family (Common Name):** Brassicaceae or Cruciferae (Mustard Family)

**Synonyms:** *S. viridiflora* Nutt. var. *confertiflora* Robins.; *S. rara* A. Nels.; *S. annua* M. E. Jones

**Idaho Native Plant Society Category:** Global Priority 1

**Natural Heritage Program Rank:** S1

**Distribution:** Gooding, Owyhee, and Washington counties, Idaho; Harney and Malheur counties, Oregon.

**Habitat:** Dry plains on somewhat sparsely vegetated clay soils, 732-1525 m elevation.

**Phenology:** April through June.

**Look-alikes:** *S. viridiflora* and *S. pinnata*, but Malheur princesplume has a single stem with dense racemes, larger, flowers, the slender petals to 2.5 cm long, siliques 2-5 cm long, the stipe to 2 cm long, and sessile basal leaves. It is an annual or biennial species versus perennial in the previous species.



Closeup of *Stanleya confertiflora*

Bob Moseley



Habitat of *Stanleya confertiflora*

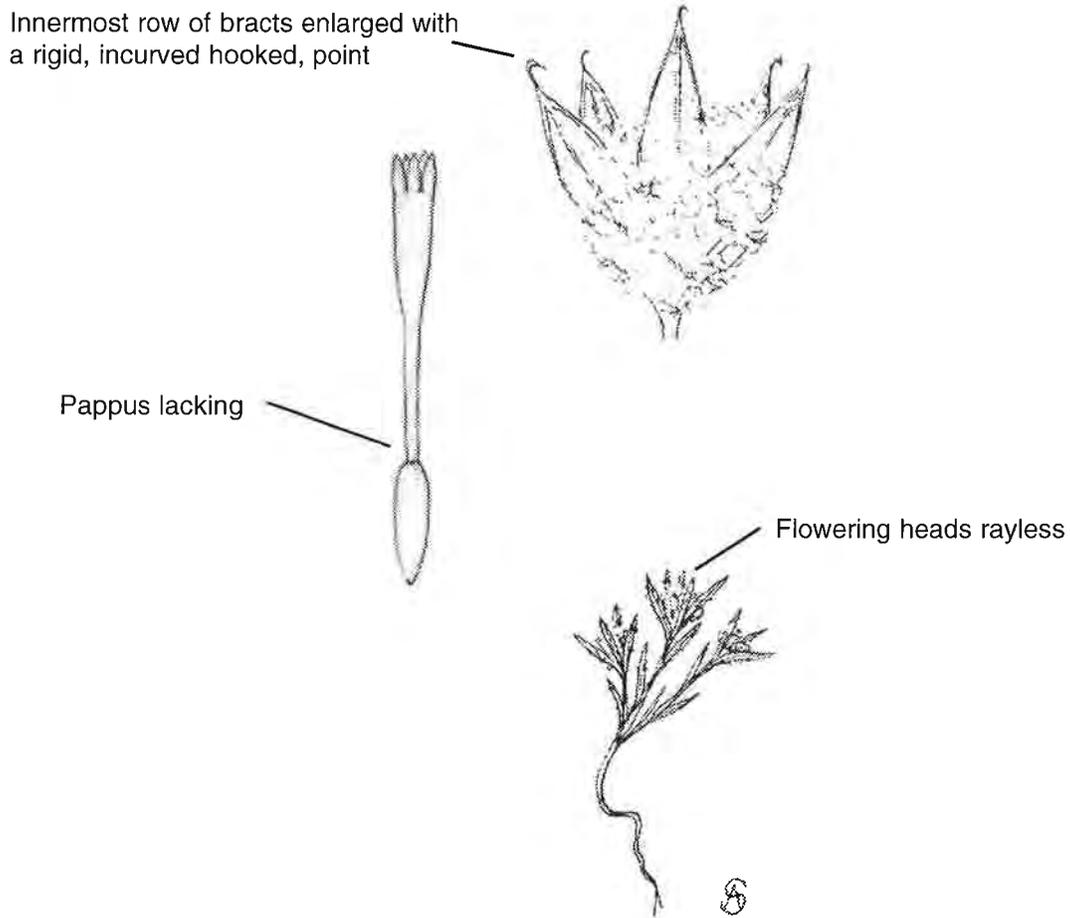
Bob Moseley

Species  
Distribution



## Stylocline

## *Stylocline filaginea*



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**Scientific Name:** *Stylocline filaginea* A. Gray

**Bibliographic Reference:** Gray, 1873. Proc. Amer. Acad. Arts 8: 652.

**Common Name:** Stylocline

**Family (Common Name):** Asteraceae or Compositae (Sunflower Family)

**Synonyms:** *Ancistrocarphus filagineus* A. Gray

**Idaho Native Plant Society Category:** State Monitor

**Natural Heritage Program Rank:** S2

**Distribution:** Blaine, Camas, Elmore, Gooding, Owyhee, and Washington counties, Idaho; Baja California; Jefferson and Baker counties, Oregon; Lander and w Elko counties, Nevada.

**Habitat:** Open, dry or vernal moist habitats in the valleys and foothills on shallow stony basalt with cindery graveled surface. Commonly associated with alkali sage, Owyhee sage or stiff sage, from 600-1900 m elevation.

**Phenology:** (April) May through June.

**Look-alikes:** Possibly confused with other species of the genus *Stylocline* but distinguished from them by the enlarged and conspicuous innermost row of receptacular bracts, each with a rigid, incurved hooked point.



Closeup of *Stylocline filaginea*

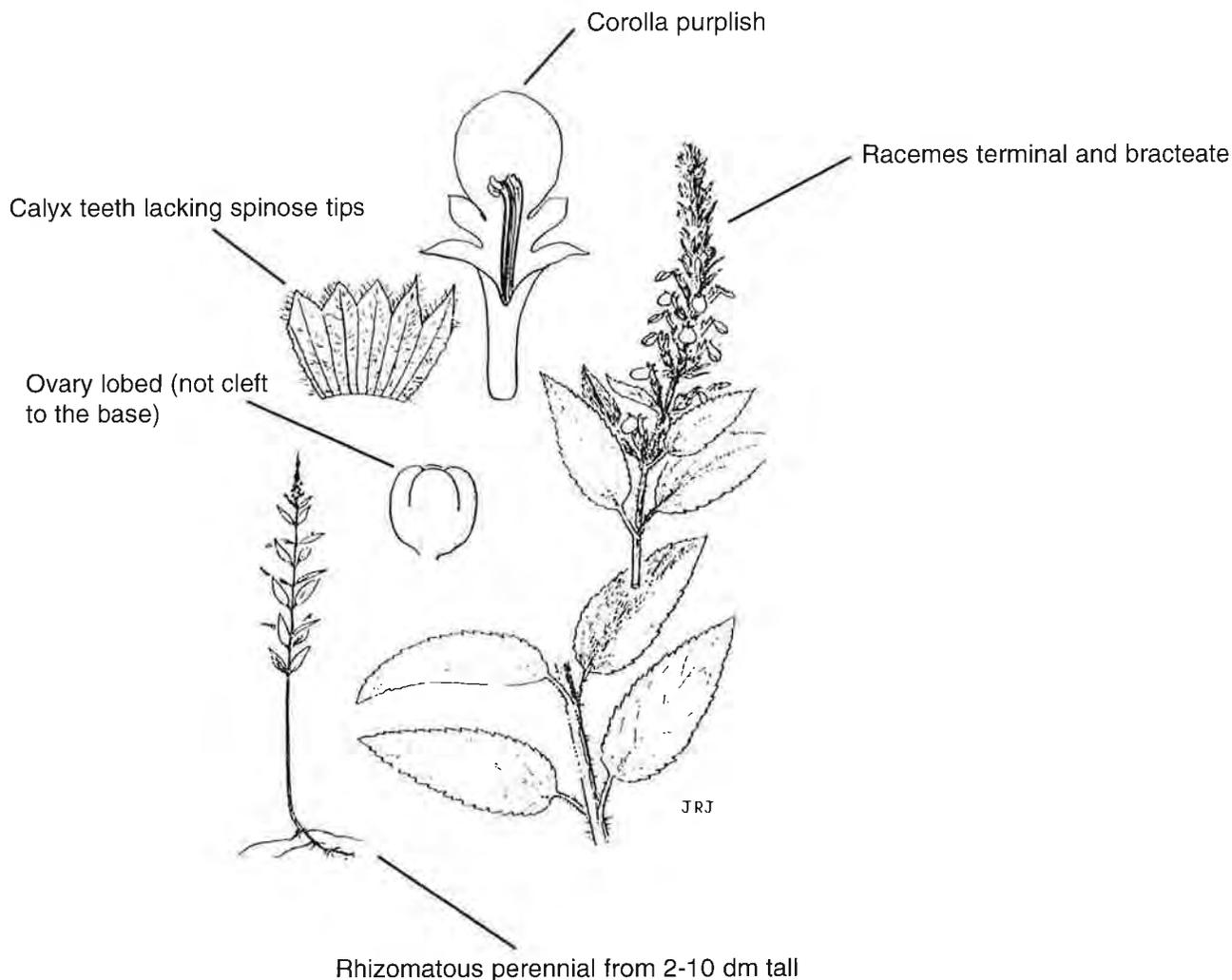
Ann Debolt



Species  
Distribution

## American wood sage

*Teucrium canadense* var. *occidentale*



**Scientific Name:** *Teucrium canadense* L. var. *occidentale* (A. Gray) McClintock & Epling

**Bibliographic Reference:** McClintock & Epling, 1946. Britt. 5: 499.

**Common Name:** American wood sage

**Family (Common Name):** Lamiaceae or Labiatae (Mint Family)

**Synonyms:** *T. occidentale* A. Gray; *T. canadense* ssp. *occidentale* W.A. Weber

**Idaho Native Plant Society Category:** State Priority 1

**Natural Heritage Program Rank:** S2

**Distribution:** Ada, Canyon, Idaho, Owyhee and Washington counties, Idaho; widespread in the U.S. and adj. Canada; less common in the w states, in Utah (Cache and Utah counties); Mexico.

**Habitat:** Streambanks and moist bottom-lands, 800-1200 m elevation.

**Phenology:** June through August.

**Look-alikes:** Some may confuse American wood sage with members of the genus *Stachys*, but it is easily distinguished from it by the terminal bracteate spikes or racemes (sometimes flowers are solitary in the axils of the upper leaves), calyx teeth lacking spinulose tips, exserted stamens, ovary merely lobed (not cleft to the base), and the laterally attached nutlets.



Ann Debolt

Habitat of *Teucrium canadense* var. *occidentale*



Species  
Distribution

No illustration

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

**Bibliographic Reference:** Nadvornik, 1942. Ann. Mycol. 40: 137.

**Common Name:** Woven-spore lichen

**Family (Common Name):** Caliciaceae

**Synonyms:** *Acolium sancti-jacobi* Tuck.; *Cyphelium sancti-jacobi* (Tuck.) Zahlbr.

**Idaho Native Plant Society Category:** Global Priority 2

**Natural Heritage Program Rank:** S2; Also listed as "Critically Endangered" in the preliminary Global Red List of Lichens.

**Distribution:** Ada and Elmore Counties, Idaho; Los Angeles, Santa Barbara, San Diego and San Benito counties, California; Benton and Klickitat counties, Washington; Jefferson and Wasco counties, Oregon.

**Habitat:** On well decomposed humus, flat or north-facing slopes in especially old clumps of Sandberg bluegrass, on Wyoming sagebrush-Thurber needlegrass-bluebunch wheatgrass sites, from 880-1000 m elevation.

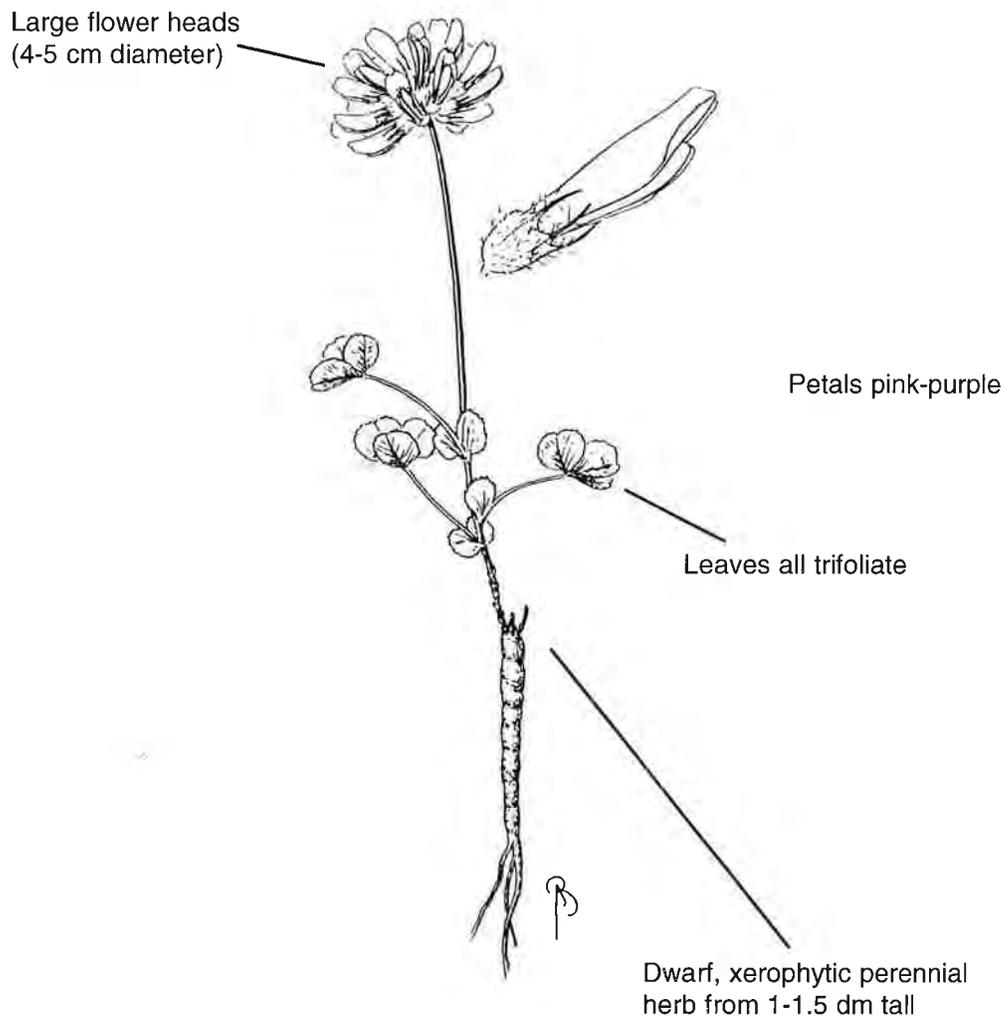
**Phenology:** Abundantly fertile all year.

**Look-alikes:** Woven-spore lichen can be distinguished by its powdery, olive green apothecia and its gray colored thallus. A hand lens is essential in the field to confirm this species.



## Owyhee clover

*Trifolium owyheense*



**Scientific Name:** *Trifolium owyheense* Gilkey

**Bibliographic Reference:** Gilkey, 1956. Madrono 13: 169.

**Common Name:** Owyhee clover

**Family (Common Name):** Fabaceae or Leguminosae (Pea Family)

**Synonyms:** None

**Idaho Native Plant Society Category:** Global Priority 3

**Natural Heritage Program Rank:** S1

**Distribution:** Owyhee County, Idaho; e Malheur County, Oregon.

**Habitat:** Barren slopes, diatomaceous or yellow-green ash and tuff soils in Wyoming sagebrush grasslands, 1300-1600 m elevation. In Idaho, only known to date from the Succor Creek area.

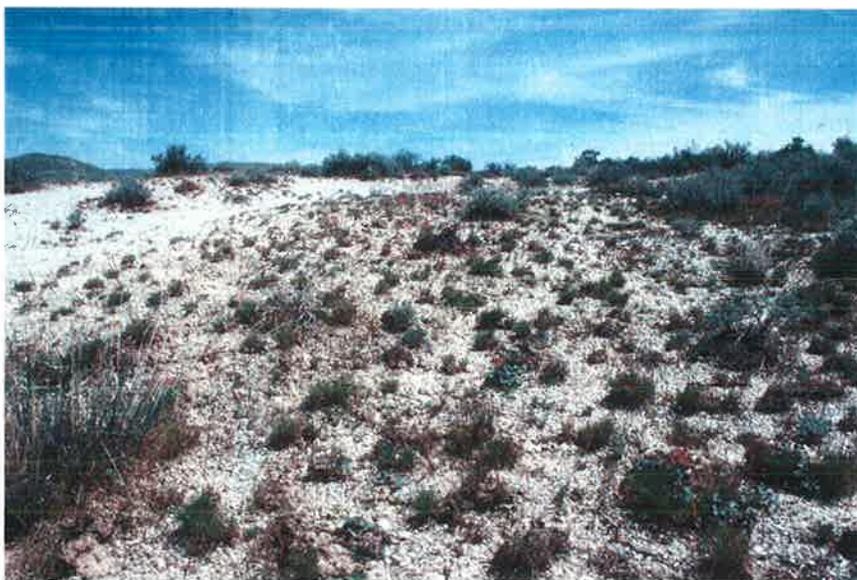
**Phenology:** May through June.

**Look-alikes:** Resembling *T. macrocephalum* in stature and the large flower-heads, but with tri- and not 5-9-foliate leaves.



Closeup of *Trifolium owyheense*

Joe Duft



Habitat of *Trifolium owyheense*

Ann Debolt

Species  
Distribution

