

The Colorado Rare Plant Technical Committee presents:

9th Annual

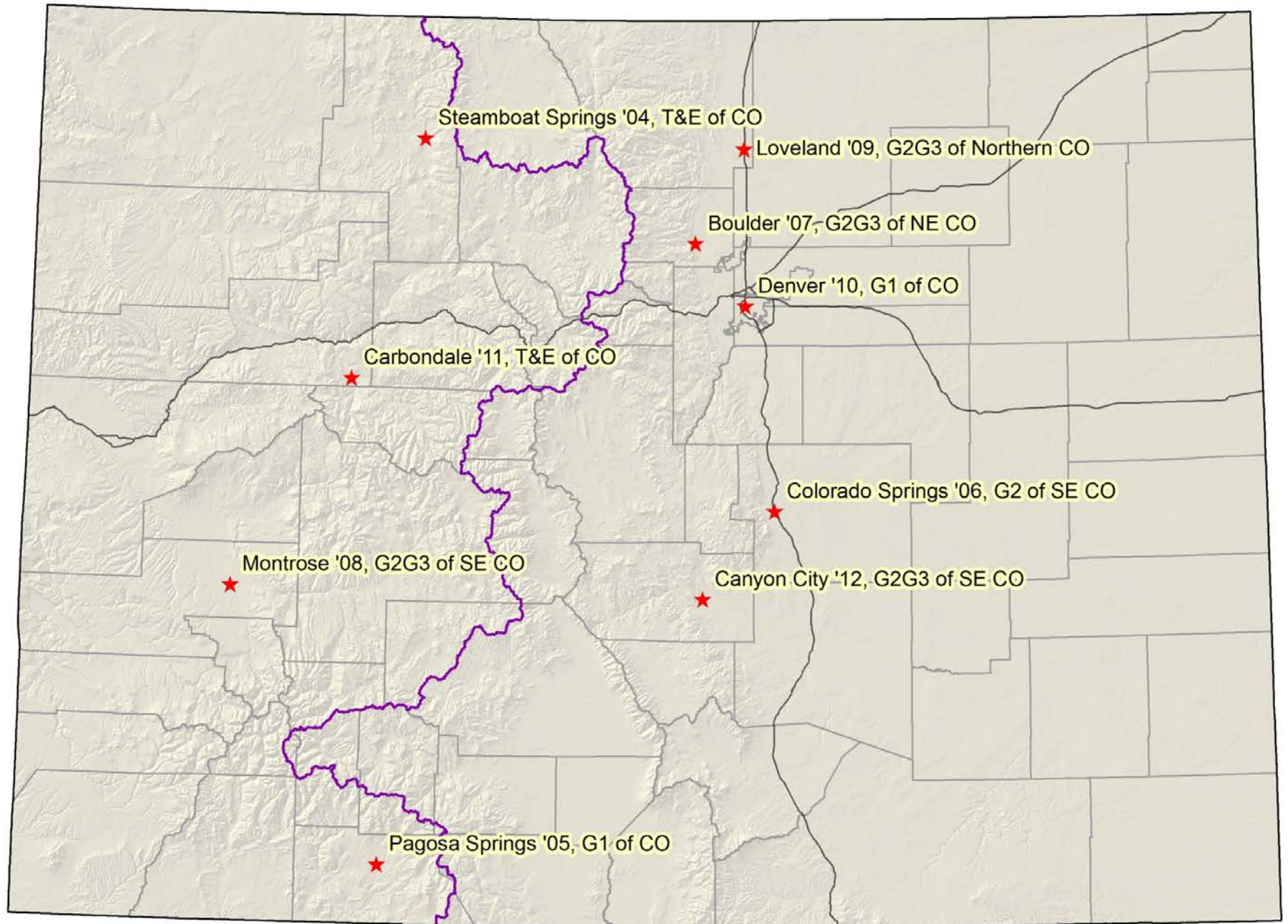
Colorado Rare Plant Symposium

September 28, 2012
Canyon City, Colorado

Sponsored by:

Colorado Native Plant Society
US Fish and Wildlife Service
Colorado Natural Heritage Program
USDA Forest Service





Review of Previous Meetings

SE Colorado G2 (2006)

Statewide T,E&C (2004)

Colorado Rare Plant Symposia



Species lists from current and previous years

2004/2011 - T & E Species Statewide	2005/2010 - G1 Species Statewide	
<i>Astragalus humillimus</i>	<i>Aletes latilobus</i>	<i>Oreoxis humilis</i>
<i>Astragalus osterhoutii</i>	<i>Aliciella sedifolia</i>	<i>Penstemon gibbensii</i>
<i>Astragalus tortipes</i>	<i>Astragalus deterior</i>	<i>Physaria pulvinata</i>
<i>Botrychium lineare*</i>	<i>Astragalus lonchocarpus</i> var. <i>hamiltonii</i>	<i>Physaria scrotiformis</i>
<i>Eriogonum pelinophilum</i>	<i>Astragalus microcymbus*</i>	
<i>Eutrema edwardsii</i> ssp <i>penlandii</i>	<i>Astragalus schmolliae*</i>	
<i>Ipomopsis polyantha</i>	<i>Boechera glareosa</i>	
<i>Lesquerella congesta</i>	<i>Botrychium</i> tax. nov. “ <i>furcatum</i> ”	
<i>Oenothera coloradensis</i> ssp <i>coloradensis</i>	<i>Cirsium scapanolepis</i>	
<i>Pediocactus knowltonii</i>	<i>Corispermum navicula</i>	
<i>Penstemon debilis</i>	<i>Cryptantha gypsophila</i>	
<i>Penstemon grahamii*</i>	<i>Descurainia kenheilii</i>	
<i>Penstemon penlandii</i>	<i>Draba malpighiacea</i>	
<i>Penstemon scariosus</i> var <i>albifluvis</i>	<i>Draba weberi</i>	
<i>Phacelia formosula</i>	<i>Erigeron wilkenii</i>	
<i>Phacelia submutica</i>	<i>Eriogonum brandegeei</i>	
<i>Physaria obcordata</i>	<i>Gutierrezia elegans</i>	
<i>Sclerocactus glaucus</i>	<i>Hackelia gracilentia</i>	
<i>Sclerocactus mesae-verdae</i>	<i>Lygodesmia doloresensis</i>	
<i>Spiranthes diluvialis</i>	<i>Mimulus gemmiparus</i>	

**2006/2012 - G2 Species
SE Colo**

**2007 - G2G3 Species
NE Colo**

Asclepias uncialis ssp. *uncialis*

Cleome multicaulis

Delphinium ramosum var. *alpestre*

Delphinium robustum

Draba exungiculata

Draba grayana

Draba smithii

Grindelia inornata

Herrickia horrida

Lesquerella calcicola

Nuttallia chrysantha

Nuttallia densa

Oenothera harringtonii

Oonopsis foliosa var. *monocephala*

Oonopsis puebloensis

Oxybaphus rotundifolius

Penstemon degeneri

Ptilagrostis porteri

Telesonix jamesii

Aletes humilis

Aletes nuttallii

Aquilegia saximontana

Astragalus sparsiflorus

Bolophyta alpina

Carex oreocharis

Draba crassa

Draba globosa

Draba streptobrachia

Eriogonum exilifolium

Heuchera hallii

Nuttallia sinuata

Nuttallia speciosa

Oonopsis wardii

Phacelia denticulata

Physaria bellii

Potentilla ambigens

Potentilla rupincola

Sisyrinchium pallidum

2008 - G2G3 Species SW Colo

2009 - G2G3 Species North & Central Colo

Astragalus anisus

Astragalus cronquistii

Astragalus equisolensis

Astragalus iodopetalus

Astragalus naturitensis

Astragalus piscator

Astragalus rafaensis

Boechera crandallii

Camissonia eastwoodiae

Castilleja puberula

Cirsium perplexans

Draba graminea

Erigeron kachinensis

Eriogonum clavellatum

Eriogonum coloradense

Lepidium crenatum

Lesquerella pruinosa

Lesquerella vicina

Lomatium concinnum

Lupinus crassus

Machaeranthera coloradoensis

Oreocarya osterhoutii

Physaria alpina

Physaria rollinsii

Puccinellia parishii

Salix arizonica

Thelypodopsis juniperorum

Townsendia glabella

Townsendia rothrockii

Anticlea vaginatus

Astragalus debequaeus

Carex stenoptila

Ipomopsis aggregata ssp. *weberi*

Ipomopsis globularis

Lesquerella parviflora

Limnorchis zothecina

Mentzelia rhizomata

Mertensia humilis

Oenothera acutissima

Oxytropis besseyi var. *obnapiformis*

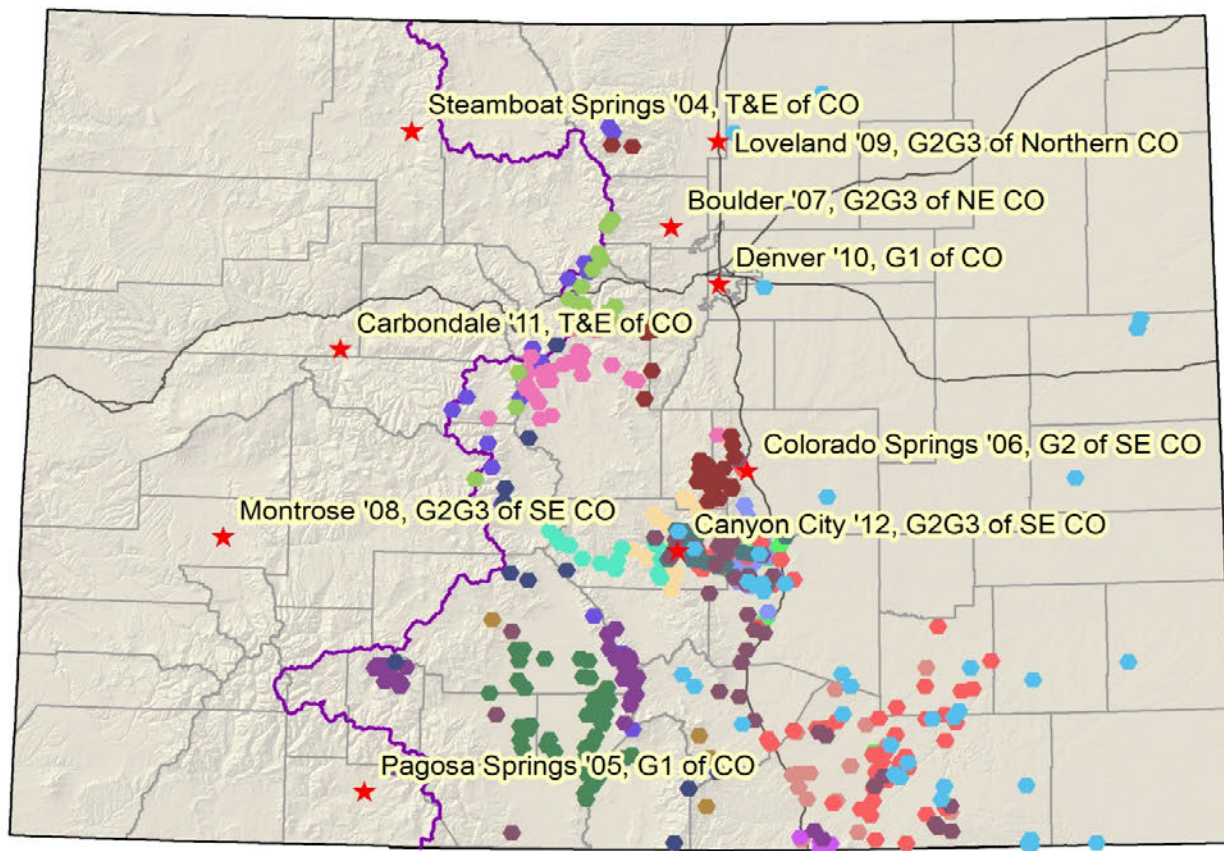
Penstemon fremontii var. *glabrescens*

Penstemon scariosus var.
cyanomontanus

Saussurea weberi

Thalictrum heliophilum

Thelypodium paniculatum



Legend

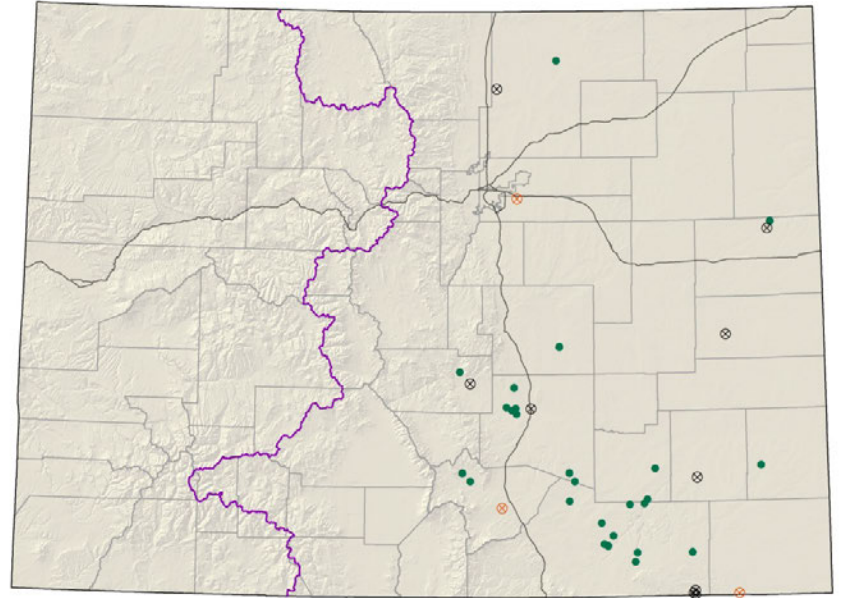
- *Asclepias uncialis* ssp. *uncialis*
- *Cleome multicaulis*
- *Delphinium ramosum* var. *alpestre*
- *Delphinium robustum*
- *Draba exunguiculata*
- *Draba grayana*
- *Draba smithii*
- *Herrickia horrida*
- *Lesquerella calcicola*
- *Nuttallia chrysantha*
- *Nuttallia densa*
- *Oenothera harringtonii*
- *Oenopsis foliosa* var. *monocephala*
- *Oenopsis* sp. 1
- *Oxybaphus rotundifolius*
- *Penstemon degeneri*
- *Ptilagrostis porteri*
- *Telesonix jamesii*

2006/2012
Colorado Springs/
Canyon City
SE Colorado
G2 species

Asclepias uncialis ssp. *uncialis*

Dwarf milkweed

- Federal status: BLM/USFS sensitive
- Heritage ranks: G3G4T2T3/S2
- Global distribution: Arizona, Texas, New Mexico, Wyoming, Oklahoma, Utah, and Eastern Colorado (Las Animas, Weld, Kit Carson, Huerfano, Pueblo, Otero, Prowers, Fremont, and El Paso counties); 3900-7700 ft.
- Last observed in Colorado: 2012
- Colorado occurrences: 38 (13 are historical or extirpated)
- Colorado individuals: ~500
- Primary threats: Population limitation by unknown biological requirements, altered disturbance regime, habitat loss, spread of exotic species, global climate change
- Land ownership/management: BLM, Military, Forest Service, Private, and State lands



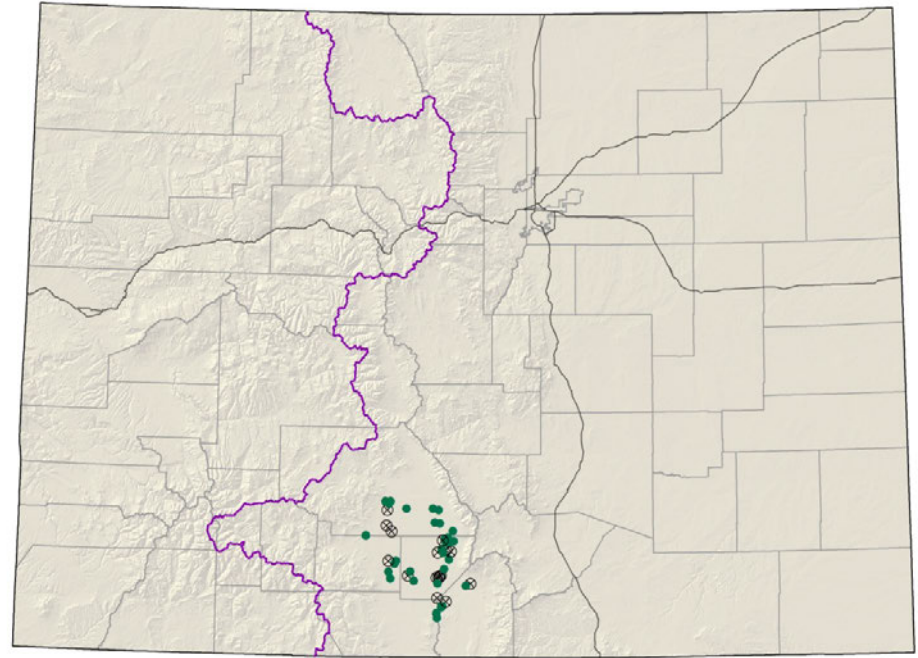


Asclepias uncialis ssp. *uncialis*

Cleome multicaulis

Many-stemmed spider-flower

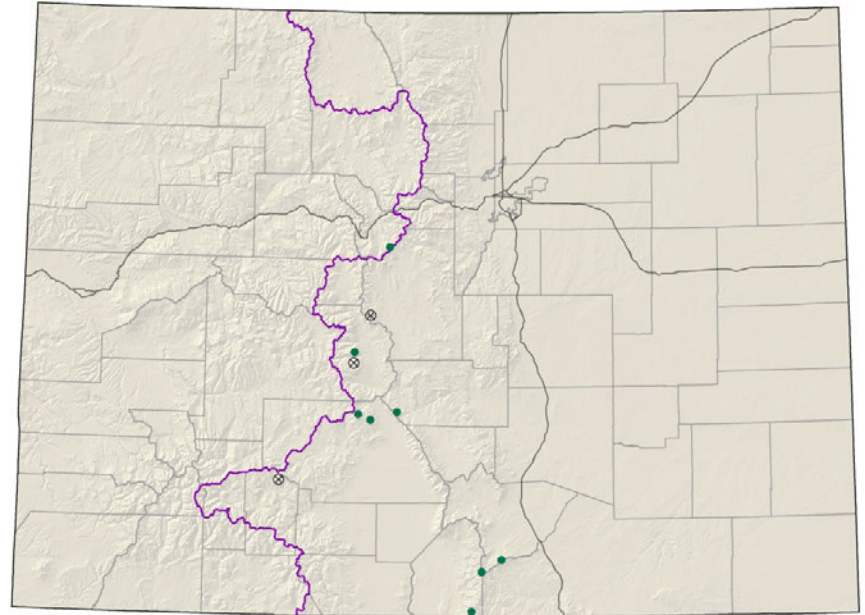
- Federal status: BLM sensitive
- Heritage ranks: G2G3/S2S3
- Global distribution: Mexico, Texas, Arizona, New Mexico, Wyoming and Colorado (Alamosa, Conejos, Costilla, Rio Grande, and Saguache counties); 7500-8200 ft.
- Last observed in Colorado: 2009
- Colorado occurrences: 35 (11 are historical)
- Colorado individuals: ~5,132,000
- Primary threats: draining of wetlands
- Land ownership/management: BLM, National Wildlife Refuge, Private, State, and Wilderness



Cleome multicaulis



Delphinium ramosum var.
alpestre
= *Delphinium alpestre*
Colorado larkspur



- Federal status: none
- Heritage ranks: G2/S2
- Global distribution: New Mexico and Colorado (Costilla, Chaffee, Fremont, Huerfano, Las Animas, Mineral, Park, Saguache, and Summit counties); 10,800-14,200 ft.
- Last observed in Colorado: 2005
- Colorado occurrences: 11 (3 are historical)
- Colorado individuals: 100+
- Primary threats: Trampling from recreational activities
- Land ownership/management: Forest Service, Private and Wilderness Areas

Delphinium ramosum var. *alpestre*

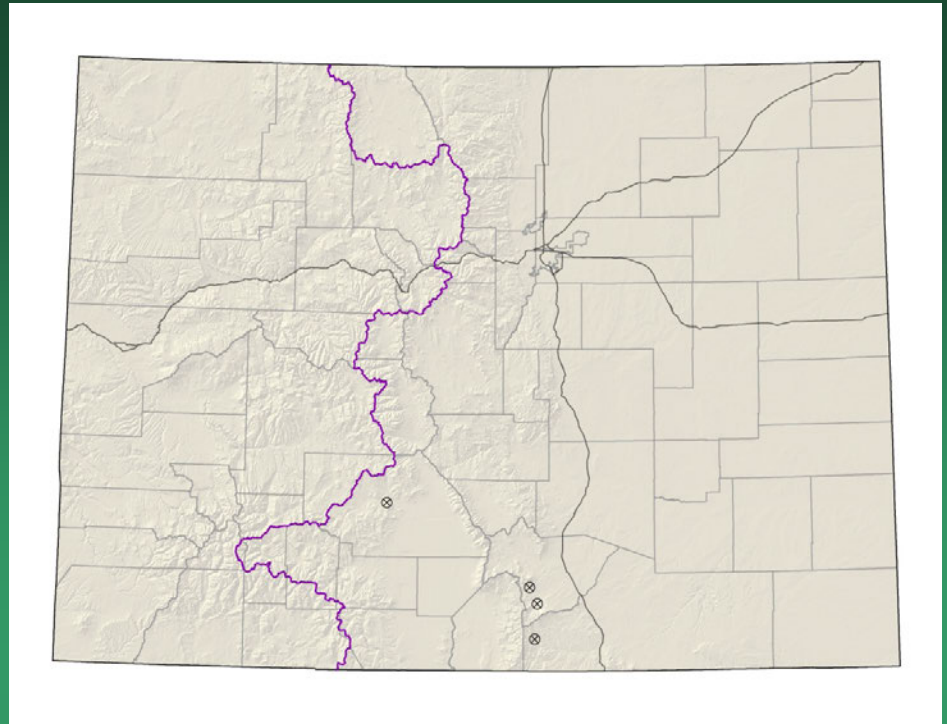


T. Todsén

Delphinium robustum

Wahatoya Creek larkspur

- Federal status: none
- Heritage ranks: G2?/S2?
- Global distribution: New Mexico and Colorado (Huerfano, El Paso, Las Animas, and Saguache counties); 7000-8500 ft.
- Last observed in Colorado: 1969
- Colorado occurrences: 4 – all historical
- Colorado individuals: unknown
- Primary threats: Some species of *Delphinium* are poisonous to cattle, so the genus as a whole is sometimes targeted for poisonous weed control
- Land ownership/management: BLM, Forest Service, Private and State



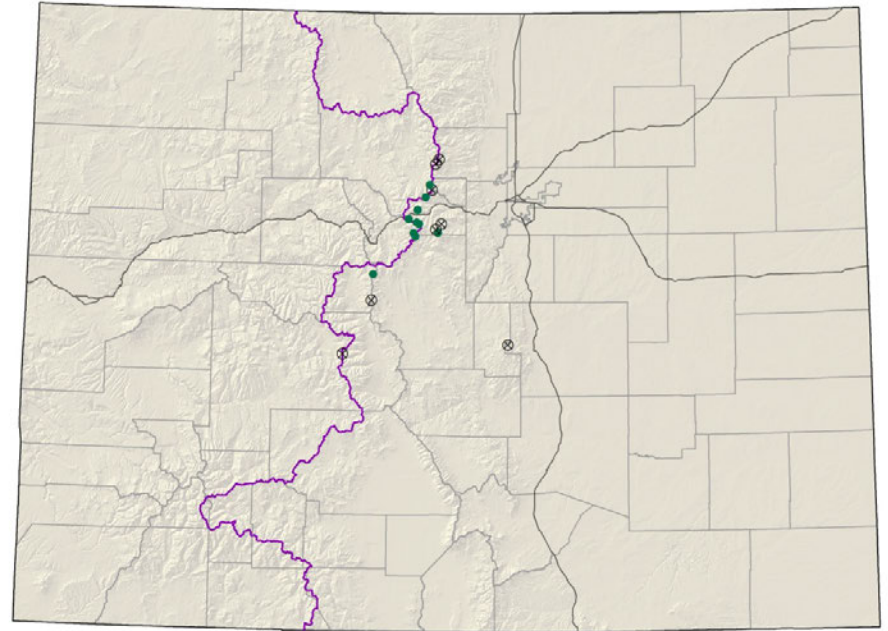
Delphinium robustum



Draba exunguiculata

Clawless draba

- Federal status: USFS sensitive
- Heritage ranks: G2/S2
- Global distribution: endemic to Colorado (Boulder, Chaffee, Clear Creek, El Paso, Gilpin, Grand, Lake, Park and Summit counties); 10,800-14,100 ft.
- Last observed in Colorado: **2012**
- Colorado occurrences: 18 (8 are historical)
- Colorado individuals: ~250
- Primary threats: Trampling from hikers and mountain goats, over-collection for gardens, acid rain, air pollution, and global warming
- Land ownership/management: BLM, Forest Service, Private, State and Wilderness Areas



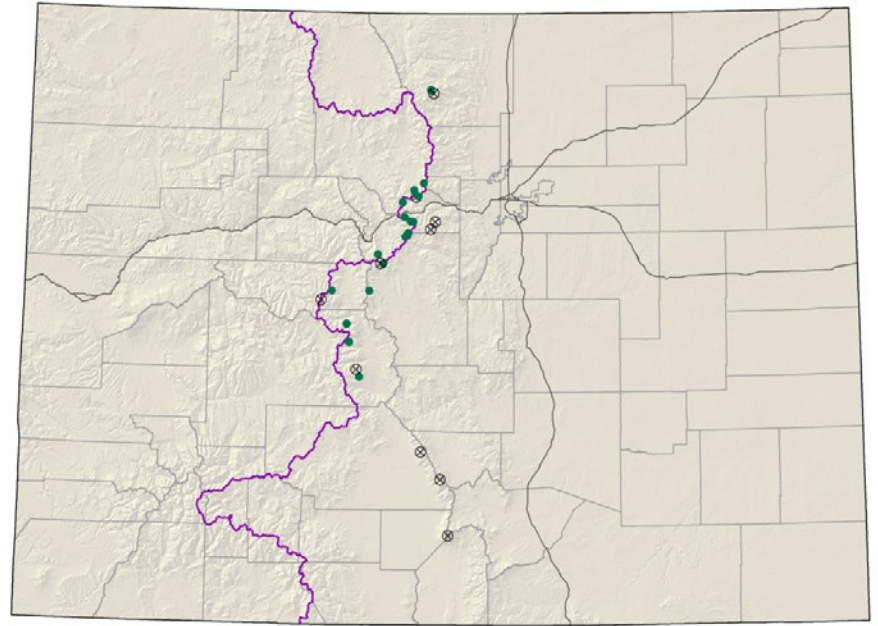


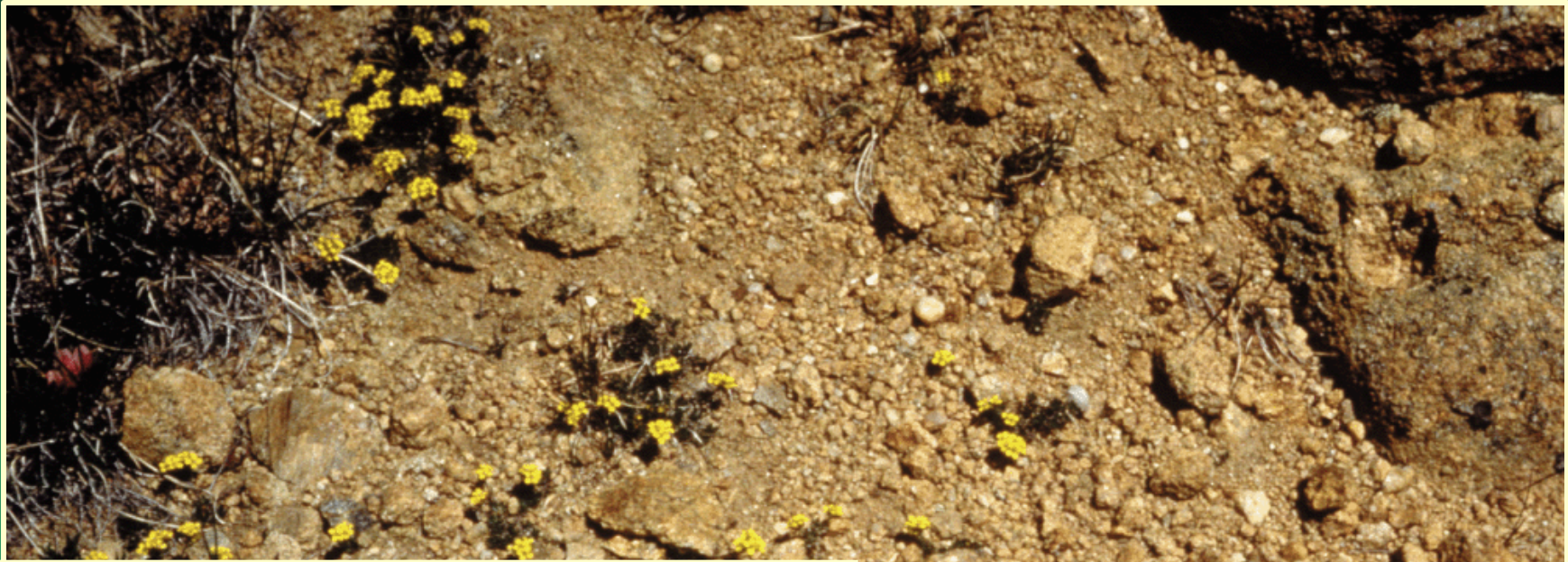
Draba exunguiculata

Draba grayana

Gray's Peak whitlow-grass

- Federal status: USFS sensitive
- Heritage ranks: G2/S2
- Global distribution: endemic to Colorado (Chaffee, Clear Creek, Grand, Huerfano, Larimer, Park, Pitkin, Saguache, and Summit counties)
- Last observed in Colorado: 2006
- Colorado occurrences: 27 (9 are historical)
- Colorado individuals: ~200
- Primary threats: Trampling from hikers and mountain goats, over-collection for gardens and global warming
- Land ownership/management: Forest Service, National Parks and Monuments, Private and Wilderness Areas

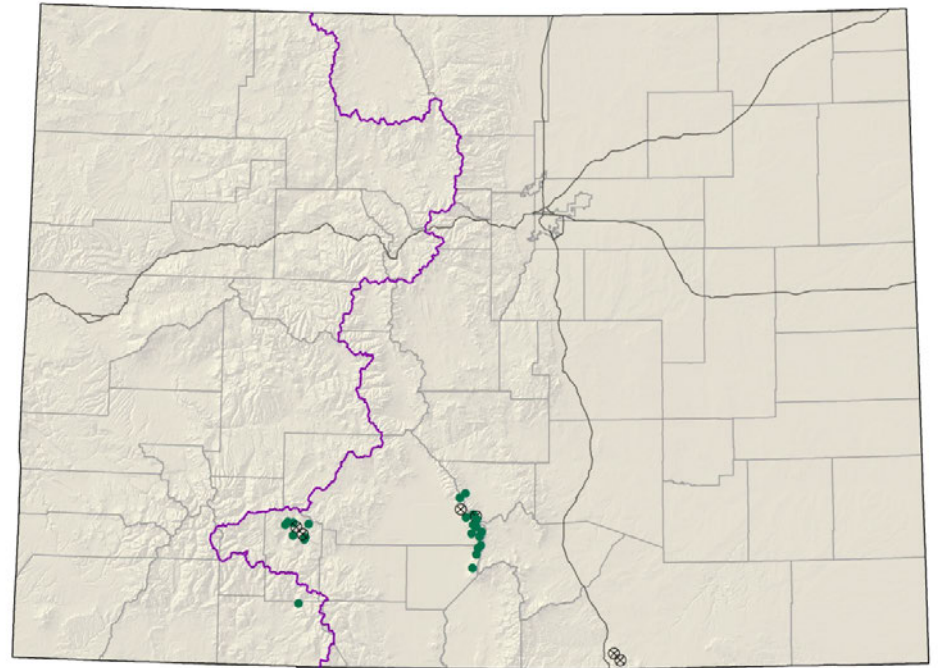




Draba grayana

Draba smithii

Smith's whitlow-grass



- Federal status: USFS sensitive
- Heritage ranks: G2/S2
- Global distribution: Colorado (Alamosa, Archuleta, Custer, Las Animas, Mineral, and Saguache counties), and NM; 7400-13,400 ft.
- Last observed in Colorado: 2009
- Colorado occurrences: 28 (6 are historical)
- Colorado individuals: ~3200
- Primary threats: Habitat modification from hiking and construction
- Land ownership/management: Forest Service, Private and State

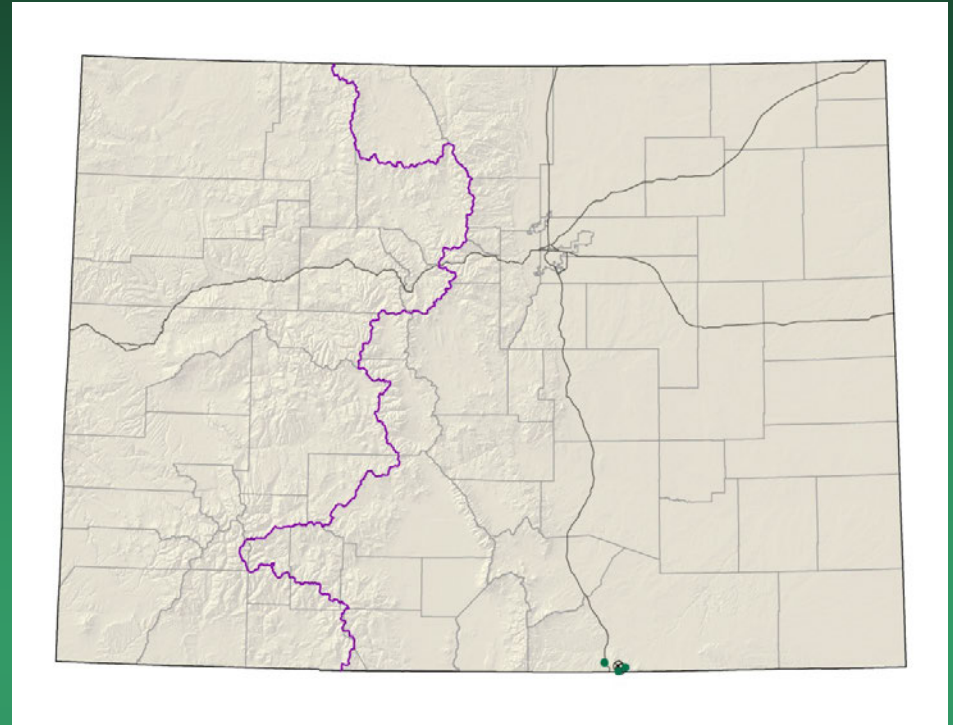
Draba smithii



Herrickia horrida

= *Eurybia horrida*

Canadian River spiny aster or
Horrid herrickia



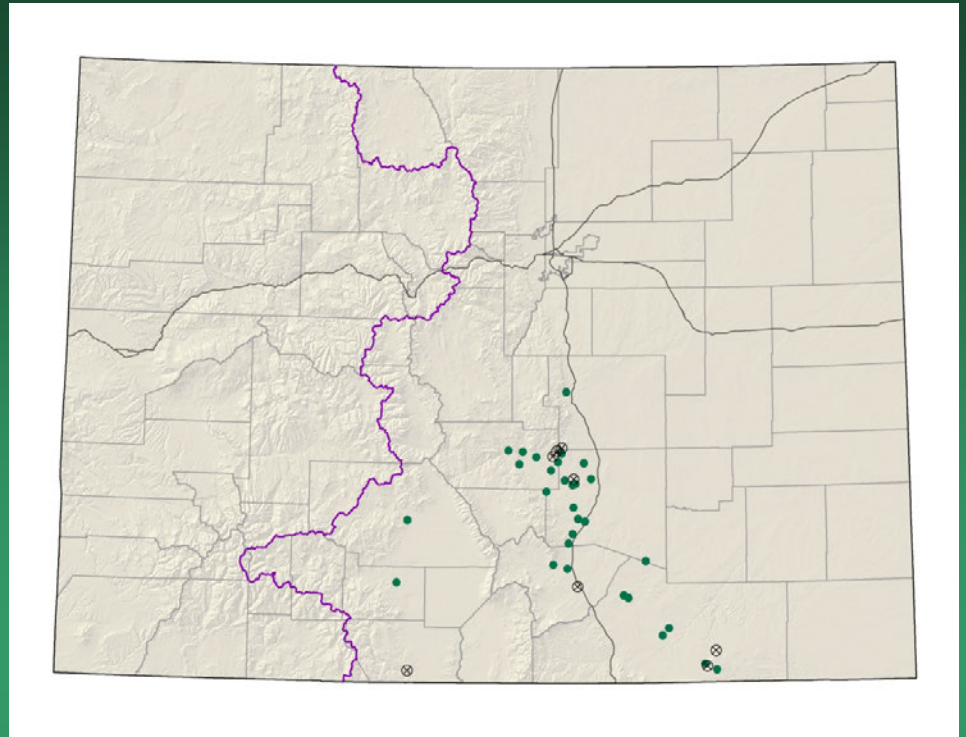
- Federal status: none
- Heritage ranks: G2?/S1
- Global distribution: New Mexico and Colorado (Las Animas County); 7900-9300 ft.
- Last observed in Colorado: 2010
- Colorado occurrences: 5 (2 historical)
- Colorado individuals: 500+
- Primary threats: unknown
- Land ownership/management: Private, State



Herrickia horrida

Lesquerella calcicola

Rocky Mountain bladderpod



- Federal status: none
- Heritage ranks: G3/S3
- Global distribution: New Mexico and Colorado (Conejos, El Paso, Fremont, Huerfano, Las Animas, and Pueblo counties); 4800-9800 ft.
- Last observed in Colorado: 2011
- Colorado occurrences: 38 (8 are historical)
- Colorado individuals: 24,000
- Primary threats: This species occurs in areas that are experiencing rapid development pressures
- Land ownership/management: BLM, Military, Private, and State



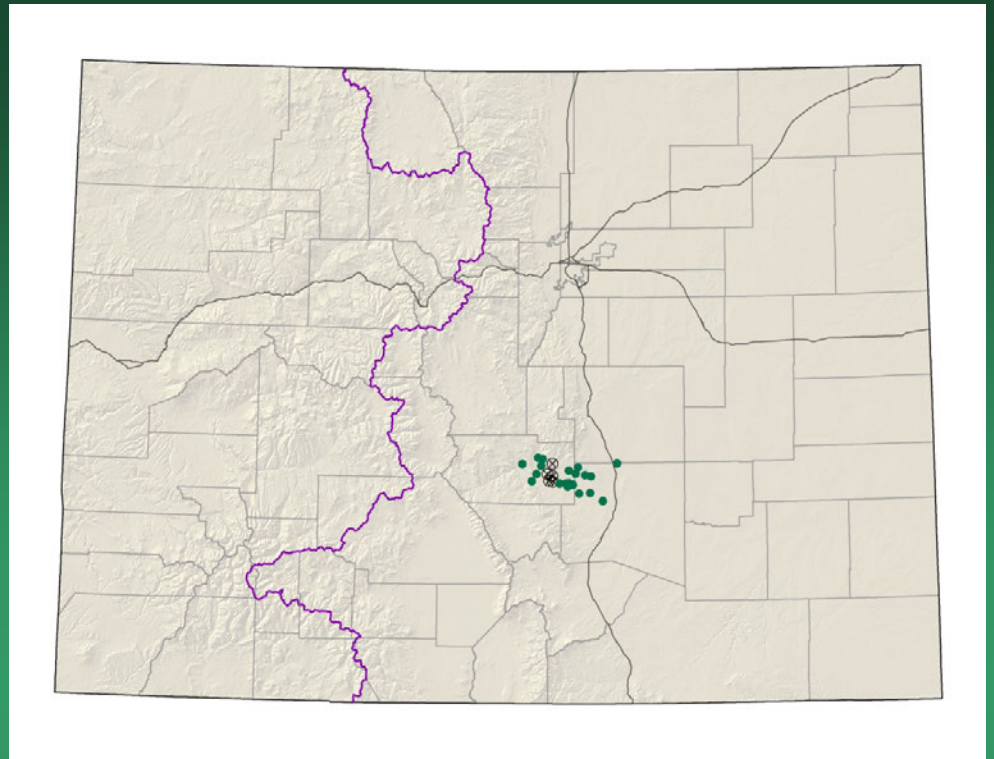
Lesquerella calcicola



Nuttallia chrysantha
= *Mentzelia chrysantha*
Golden blazing star

Conservation Action Plan

- Federal status: BLM sensitive
- Heritage ranks: G2/S2
- Global distribution: endemic to Colorado (Fremont, El Paso, and Pueblo counties); 4700-6800 ft.
- Last observed in Colorado: 2010
- Colorado occurrences: 26 (5 are historical)
- Colorado individuals: ~4100
- Primary threats: Grazing, quarry activities, and subdivision and road construction
- Land ownership/management: BLM, Military, Private and State

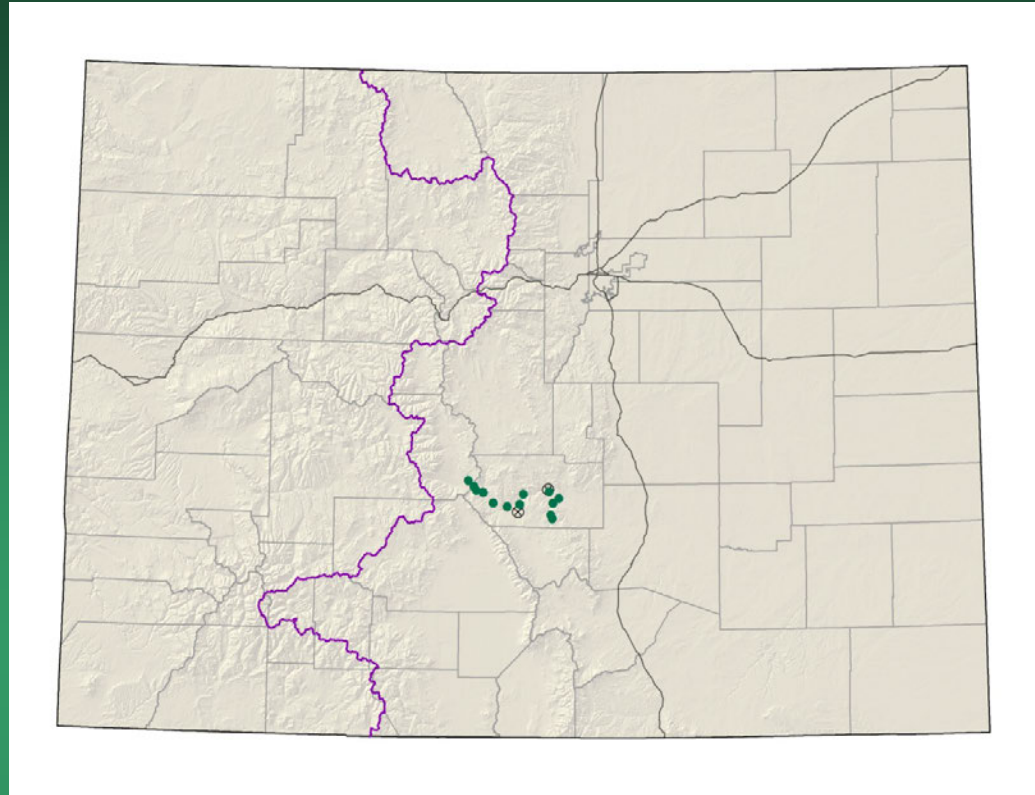




Nuttallia chrysantha

Nuttallia densa
= *Mentzelia densa*
Arkansas Canyon stickleaf

- Federal status: BLM sensitive
- Heritage ranks: G2/S2
- Global distribution: endemic to Colorado (Fremont County); 5400-7700 ft.
- Last observed in Colorado: 2009
- Colorado occurrences: 16 (2 are historical)
- Colorado individuals: ~13,500
- Primary threats: Recreational development and road construction
- Land ownership/management: BLM, Forest Service, Private and State



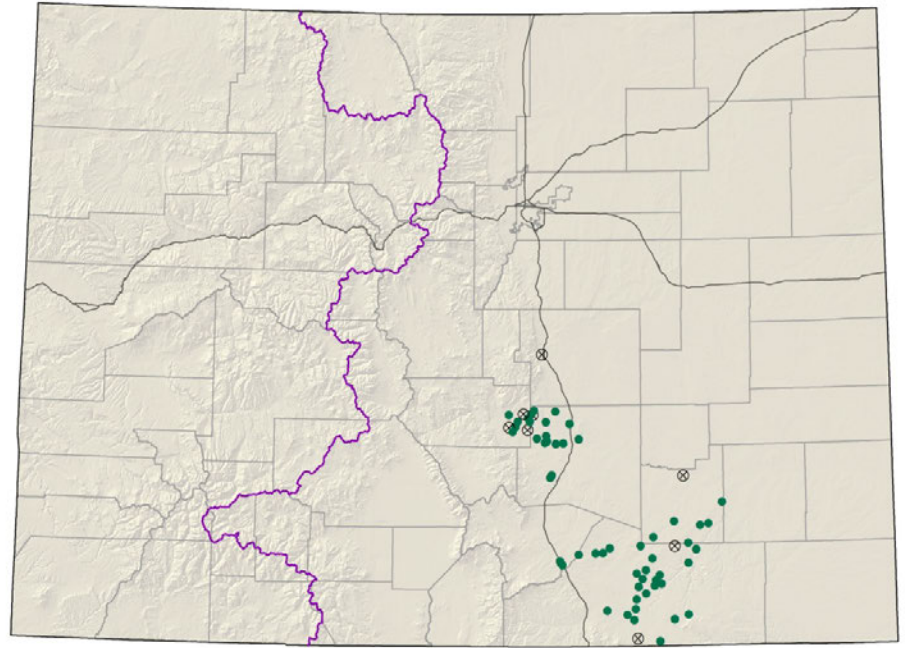


Nuttallia densa

Oenothera harringtonii

Arkansas Valley evening primrose

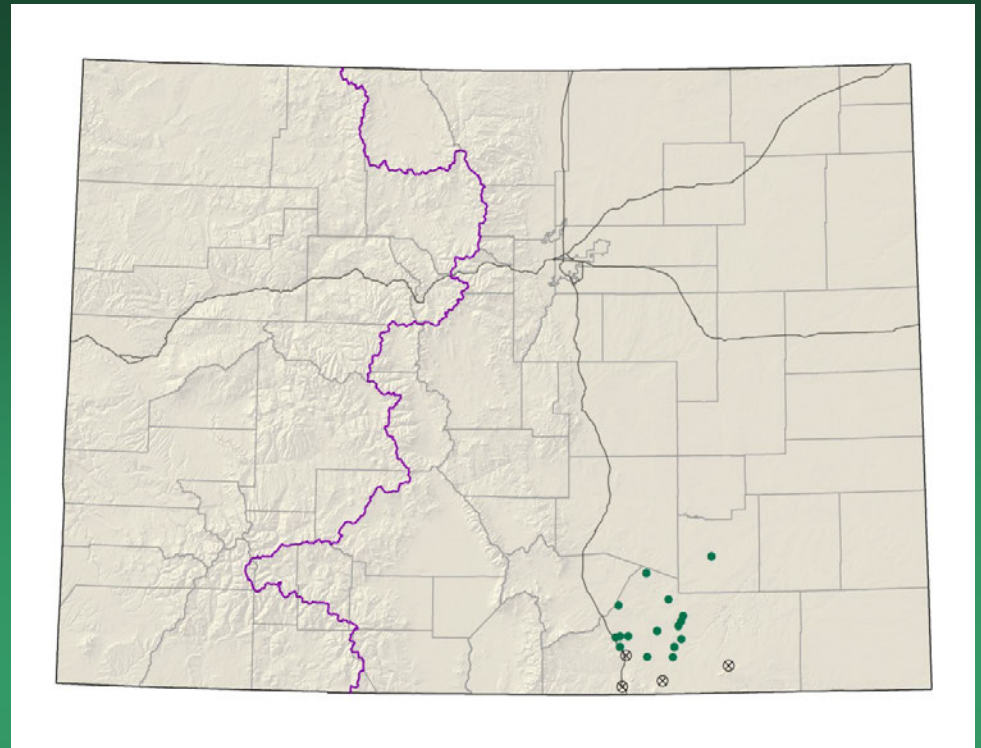
- Federal status: none
- Heritage ranks: G3/S3
- Global distribution: endemic to Colorado (El Paso, Fremont, Huerfano, Las Animas, Otero, and Pueblo counties); 4100-6400 ft.
- Last observed in Colorado: 2010
- Colorado occurrences: 62 (8 are historical)
- Colorado individuals: 12,000+
- Primary threats: Habitat loss due to urbanization, road development projects, and resource extraction activities, especially quarrying and surface mining
- Land ownership/management: BLM, Military, Forest Service, Private and State



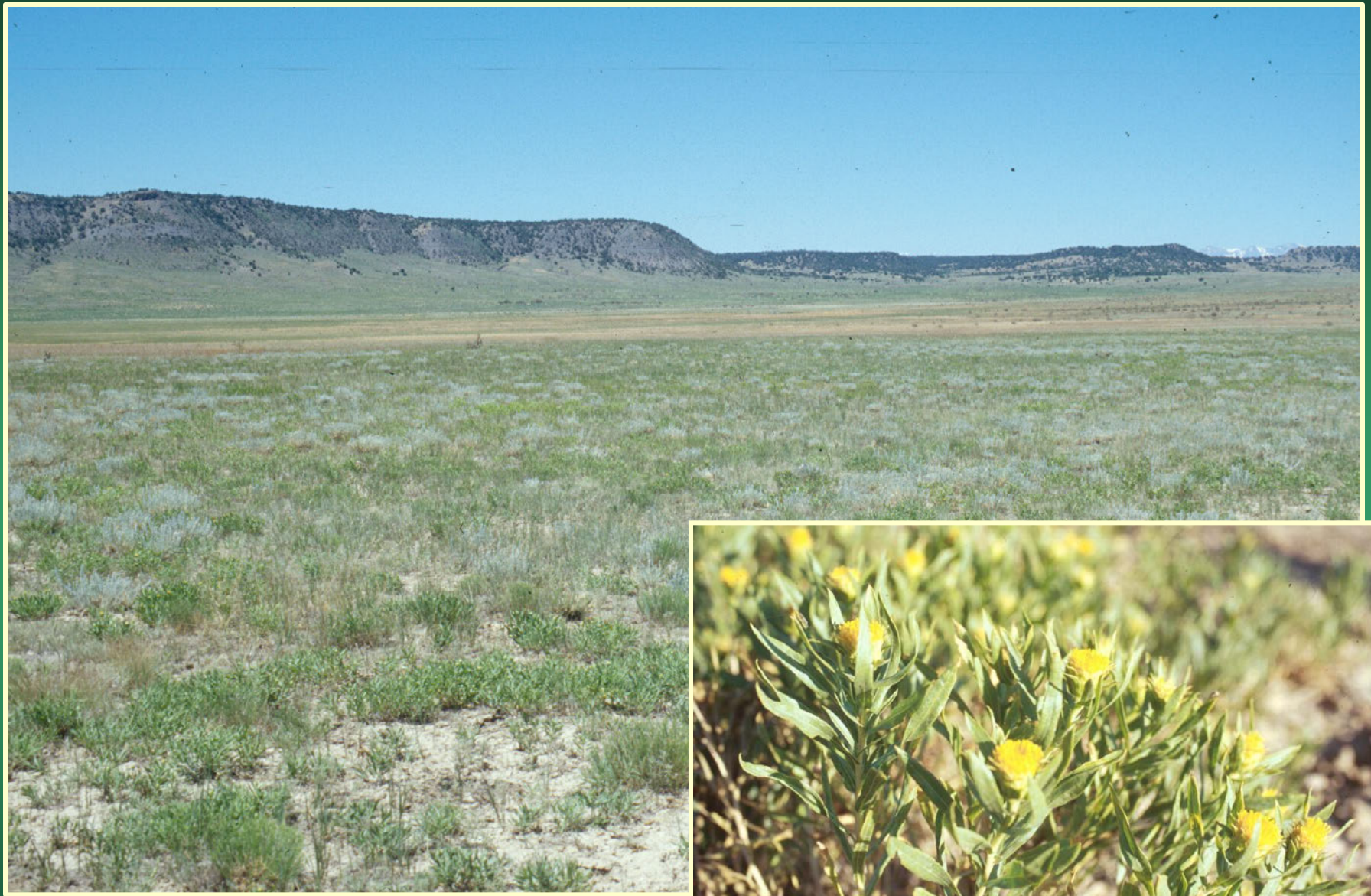


Oenothera harringtonii

Oenopsis foliosa var.
monocephala
Rayless goldenweed



- Federal status: none
- Heritage ranks: G3G4T2/S2
- Global distribution: endemic to Colorado (Las Animas, Pueblo, and Fremont counties); 4300-7900 ft.
- Last observed in Colorado: 2009
- Colorado occurrences: 16 (4 are historical)
- Colorado individuals: 400,000+
- Primary threats: Maintenance on current roads or further developments may disturb or destroy individuals
- Land ownership/management: BLM, Military, Private and State

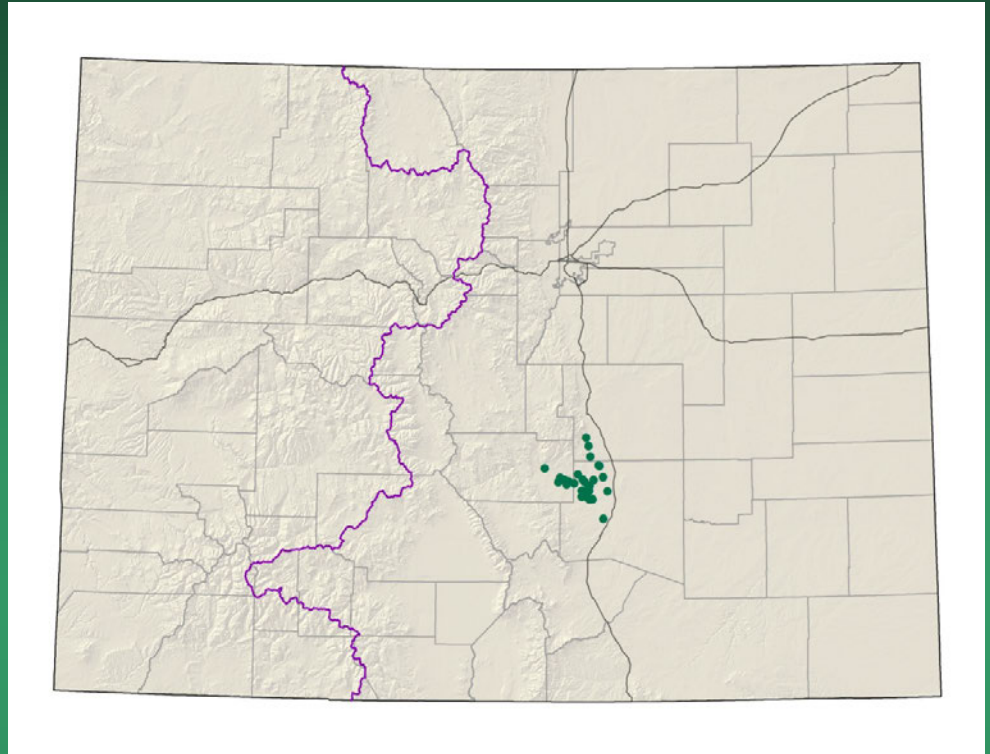


Oonopsis foliosa var. *monocephala*

Oonopsis “puebloensis”
= *Oonopsis* sp. 1
Pueblo goldenweed

Conservation Action Plan

- Federal status: none
- Heritage ranks: G2/S2
- Global distribution: endemic to Colorado (El Paso, Fremont and Pueblo counties); 4800-6100 ft.
- Last observed in Colorado: 2009
- Colorado occurrences: 28
- Colorado individuals: ~11,000 or more
- Primary threats: Shale extraction by cement plants
- Land ownership/management: Private, State and Military



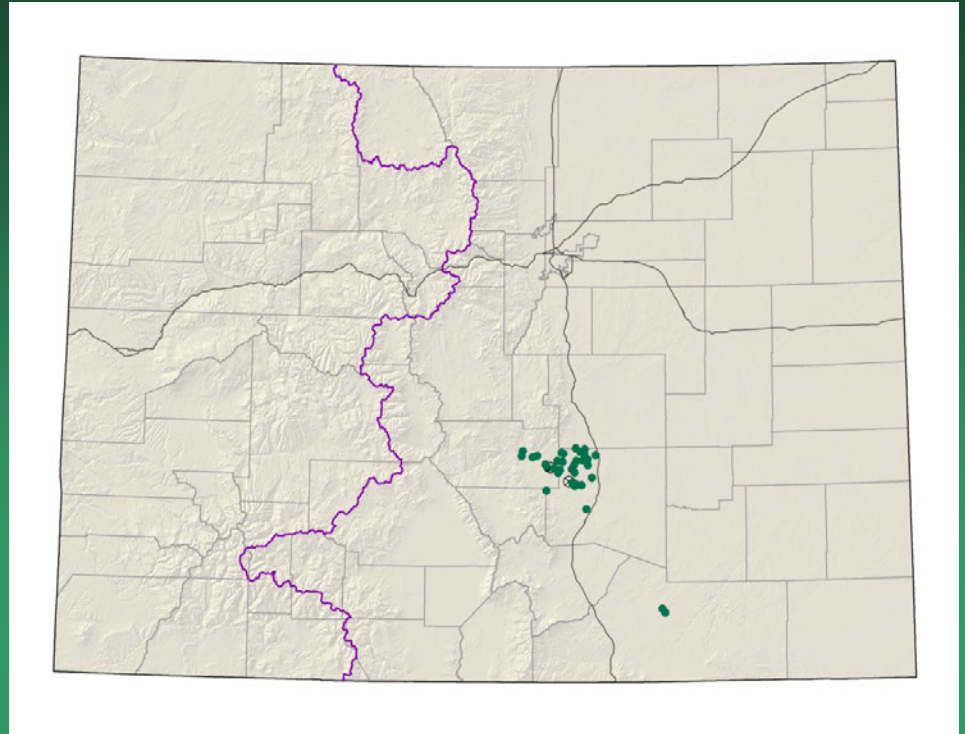


Oenopsis "puebloensis"

Oxybaphus rotundifolius
= *Mirabilis rotundifolia*
Round-leaf four-o'clock

Conservation Action Plan

- Federal status: none
- Heritage ranks: G2/S2
- Global distribution: endemic to Colorado (Fremont, Las Animas, El Paso and Pueblo counties); 4900-5900 ft.
- Last observed in Colorado: 2009
- Colorado occurrences: 38 (2 are historical)
- Colorado individuals: ~6200
- Primary threats: Highly threatened by residential and recreational development
- Land ownership/management: BLM, Military, Private and State



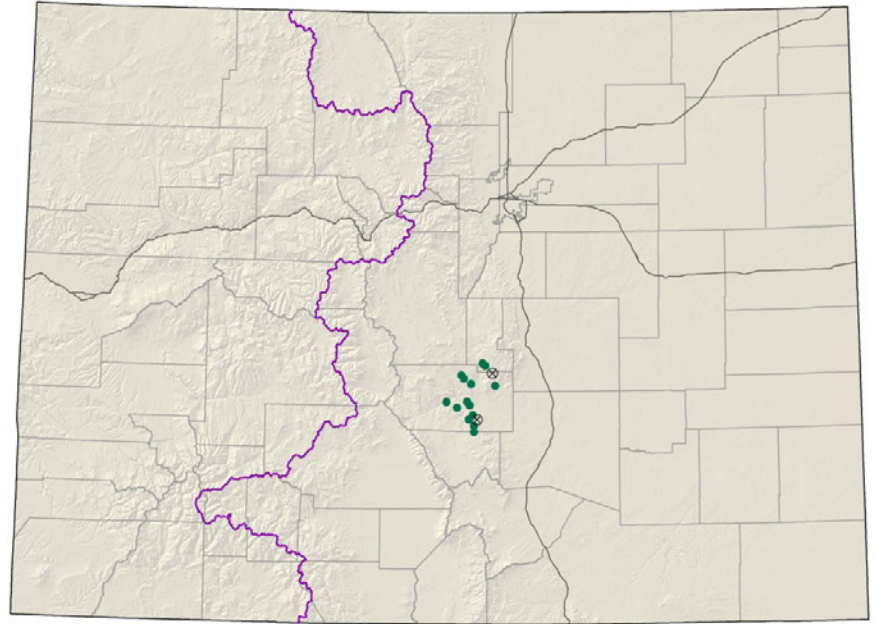


Oxybaphus rotundifolius

Penstemon degeneri

Degener beardtongue

- Federal status: USFS & BLM sensitive
- Heritage ranks: G2/S2
- Global distribution: endemic to Colorado (Chaffee, Custer and Fremont counties); 6000-9400 ft.
- Last observed in Colorado: 2010
- Colorado occurrences: 16 (2 historical)
- Colorado individuals: ~1500
- Primary threats: Motorized and non-motorized recreation, non-native plant invasion, grazing and trampling, extensive herbivory, succession, and global environmental changes
- Land ownership/management: BLM, Forest Service, Private and State



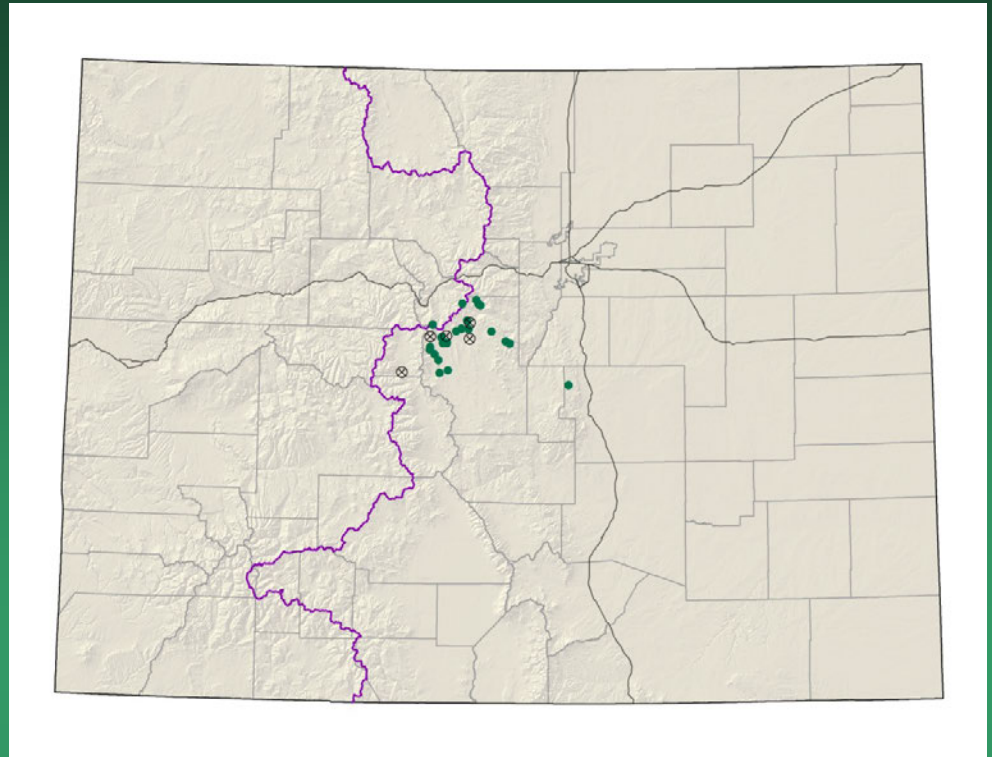


Penstemon degeneri

Ptilagrostis porteri

Porter feathergrass

- Federal status: USFS sensitive
- Heritage ranks: G2/S2
- Global distribution: Colorado (El Paso, Lake, Park and Summit counties); northern NM; 9000-12,500 ft.
- Last observed in Colorado: 2011
- Colorado occurrences: 26 (5 are historical)
- Colorado individuals: ~408,000
- Primary threats: Alterations to the water table resulting from increased diversion and pumping for the metropolitan front range
- Land ownership/management: BLM, Forest Service, and Private

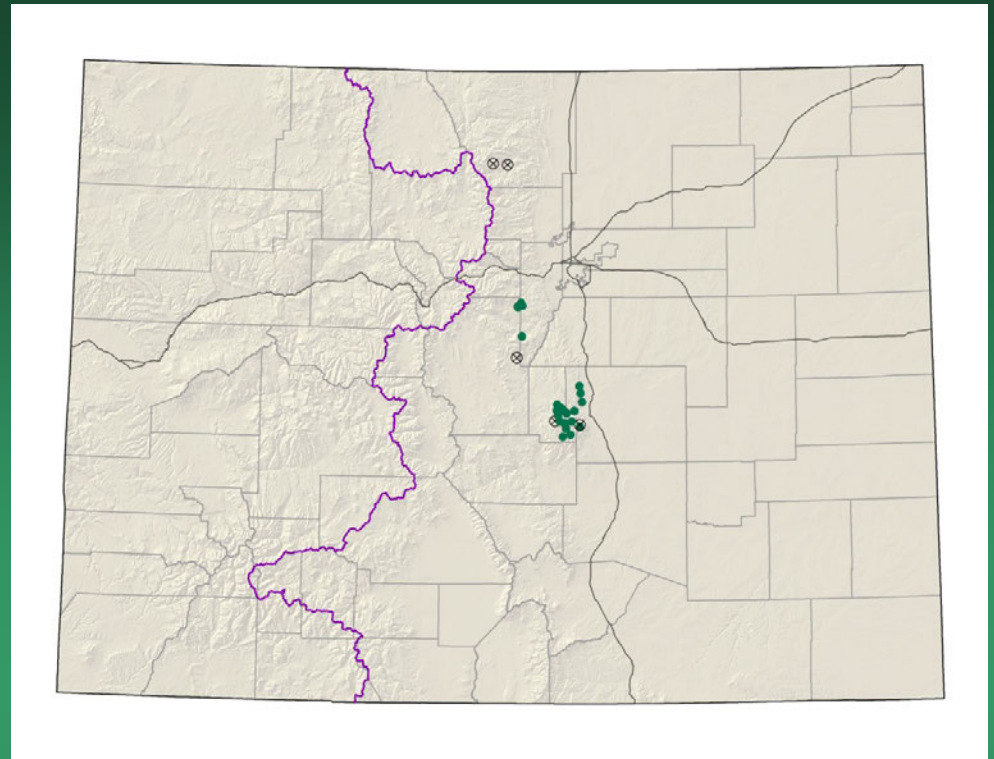




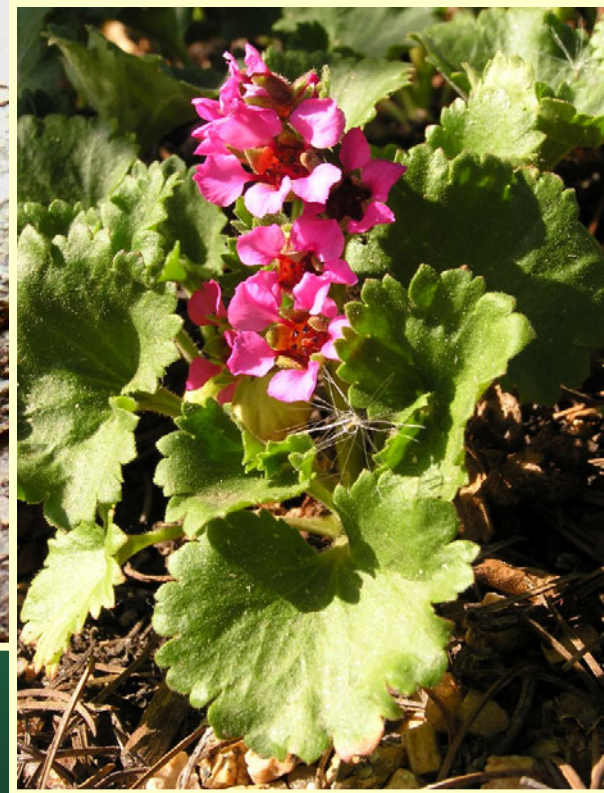
Ptilagrostis porteri

Telesonix jamesii

James' telesonix



- Federal status: none
- Heritage ranks: G2/S2
- Global distribution: New Mexico and Colorado (El Paso, Jefferson, Larimer, Park, and Teller counties); 6700-13,700 ft.
- Last observed in Colorado: 2012
- Colorado occurrences: 28 (5 are historical)
- Colorado individuals: ~20,000
- Primary threats: Motorized and non-motorized recreation, trail or road construction and maintenance, invasive species introduction, and horticultural collection
- Land ownership/management: BLM, Military, Forest Service, Private and State

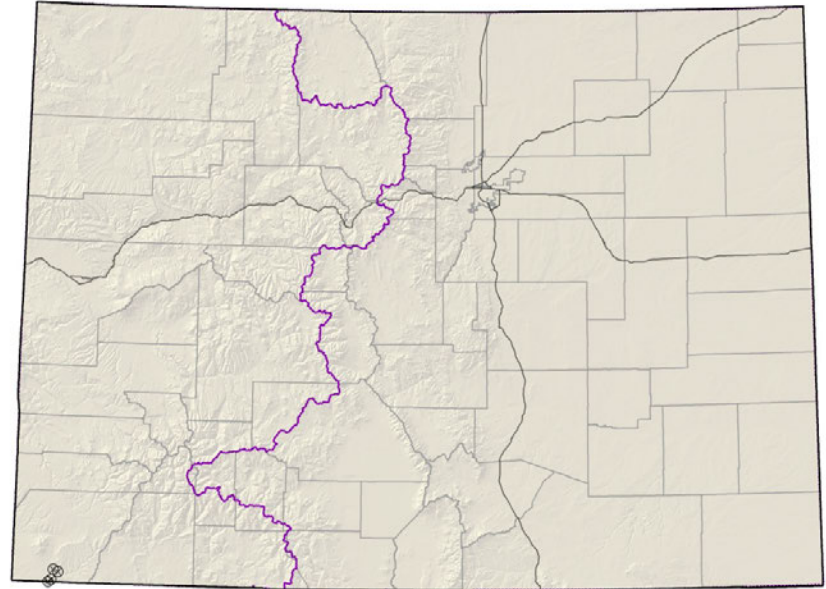


Telesonix jamesii

2004/2011
Steamboat Springs/Carbondale
Statewide
T,E & C Species

Astragalus humillimus

Mancos milkvetch



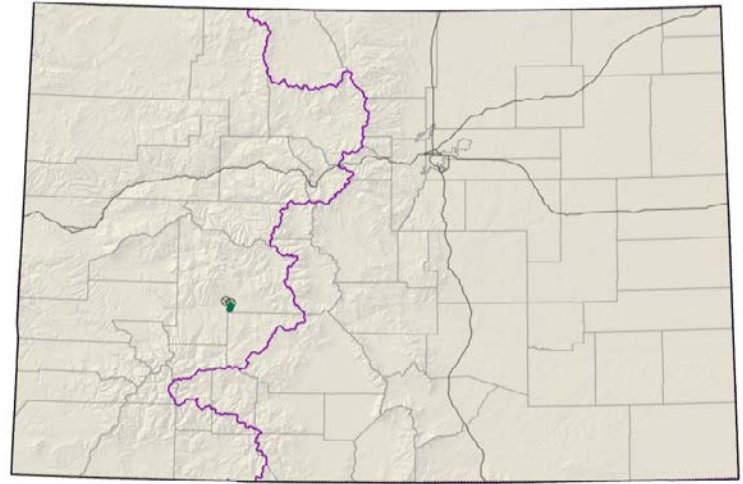
- Federal status: Endangered
- Heritage ranks: G1/S1
- Global distribution: New Mexico and Colorado (Montezuma County); 5200-6100 ft.
- Last observed in Colorado: 1989
- Colorado occurrences: 4 (all are historical)
- Colorado individuals: 25,000
- Primary threats: mineral, oil, and gas development, seismic exploration
- Land ownership/management: Ute Mountain Ute

Astragalus humillimus



Astragalus microcymbus

Skiff milkvetch



- Federal status: Candidate, BLM sensitive
- Heritage ranks: G1/S1
- Global distribution: Colorado endemic, South Beaver Creek, Gunnison and Saguache counties; 7600-8500 ft.
- Last observed: 2012
- Occurrences: 6 (1 is historical)
- Individuals: 17,800
- Primary threats: recreation, grazing by cattle and rabbits, mining, residential development
- Land ownership/management: BLM (most occurrences within a BLM ACEC and South Beaver Creek Natural Area), private

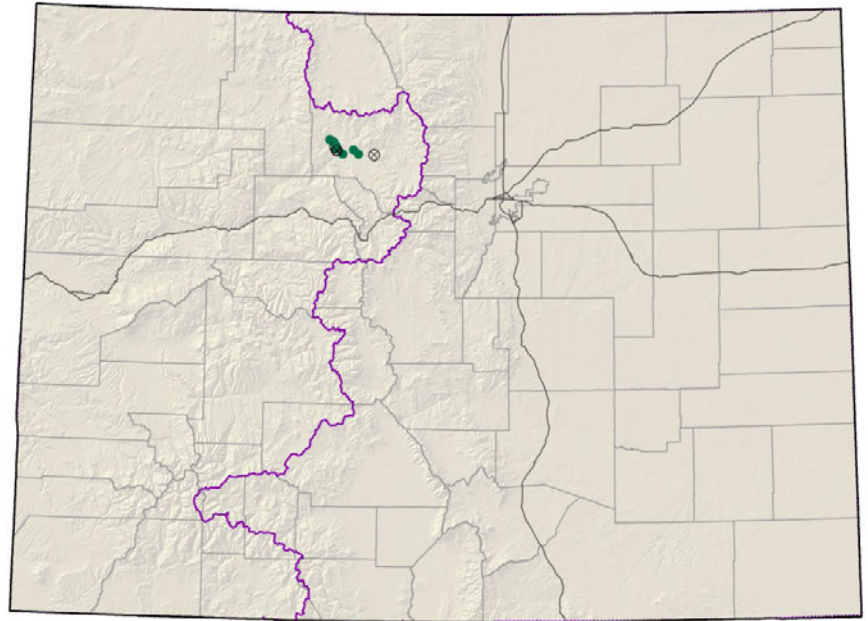
Astragalus microcymbus



Astragalus osterhoutii

Osterhout milkvetch

Conservation Action Plan



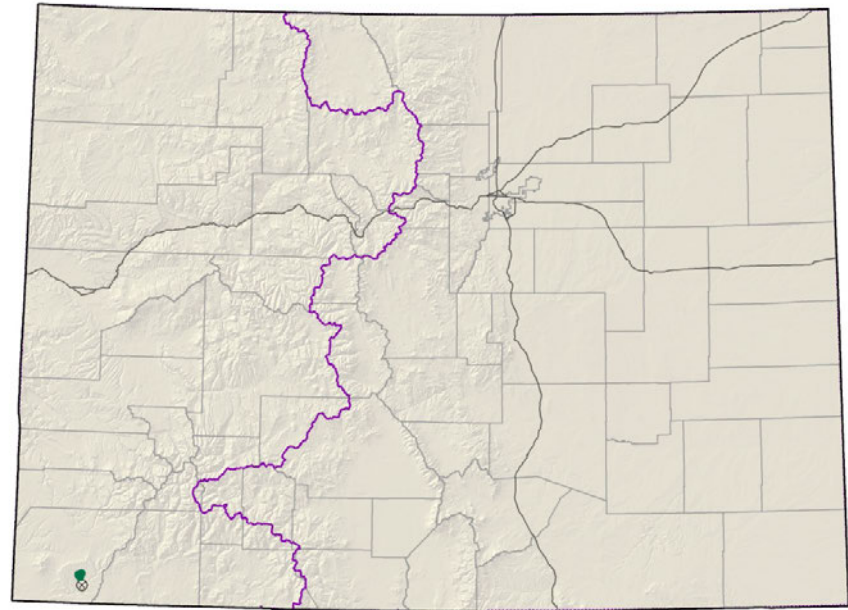
- Federal status: Endangered
- Heritage ranks: G1/S1
- Global distribution: Colorado endemic (Grand County); 7300-8000 ft.
- Last observed: **2012**
- Occurrences: 6 (1 is historical)
- Individuals: 10,000-12,000
- Primary threats: recreation, mining, oil and gas development
- Land ownership/management: BLM, private, state

Astragalus osterhoutii



Astragalus schmolliae

Schmoll's milkvetch



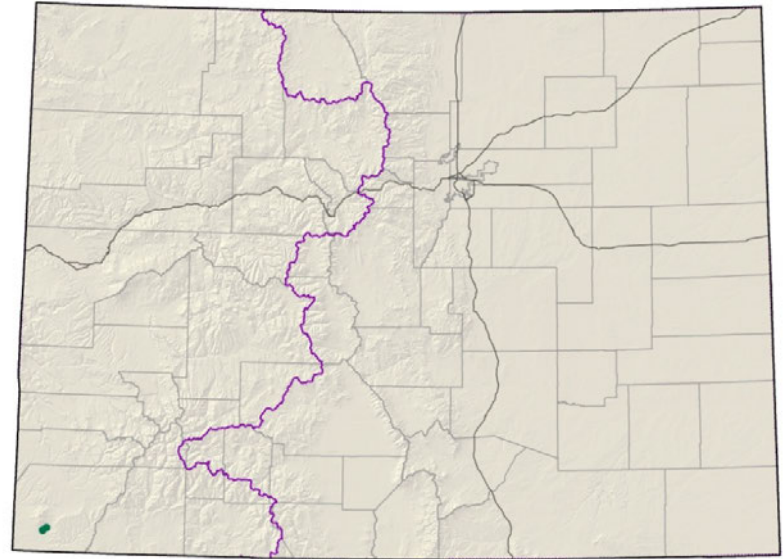
- Federal status: Candidate
- Heritage ranks: G1/S1
- Global distribution: Colorado endemic (Chapin Mesa - Montezuma County); 5700-7400 ft.
- Last observed: 2012
- Occurrences: 4 (1 is historical)
- Individuals: 294,499 in Mesa Verde, Tribal lands unsurveyed
- Primary threats: Noxious weed invasions, Park developments, grazing and road construction outside NP
- Land ownership/management: Mesa Verde National Park, Ute Mountain Ute Tribal lands

Astragalus schmolliae



Astragalus tortipes

Sleeping Ute milkvetch



- Federal status: Candidate, BLM Sensitive
- Heritage ranks: G1/S1
- Global distribution: Colorado endemic (Montezuma County); 5400-5700 ft.
- Last observed: 2000
- Occurrences: 2
- Individuals: 2,000-3,000
- Primary threats: McPhee Reservoir canals, agricultural development
- Land ownership/management: Ute Mountain Ute

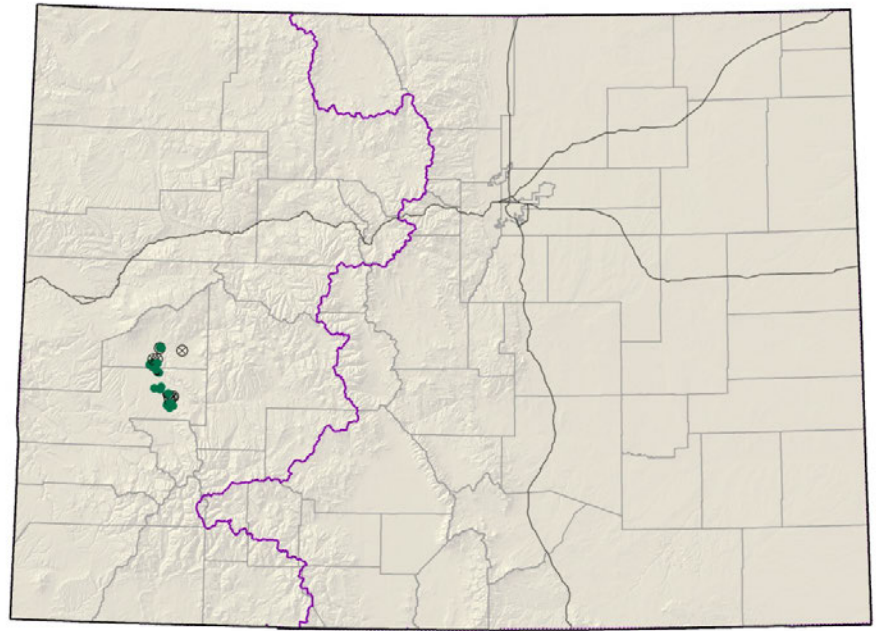
Astragalus tortipes



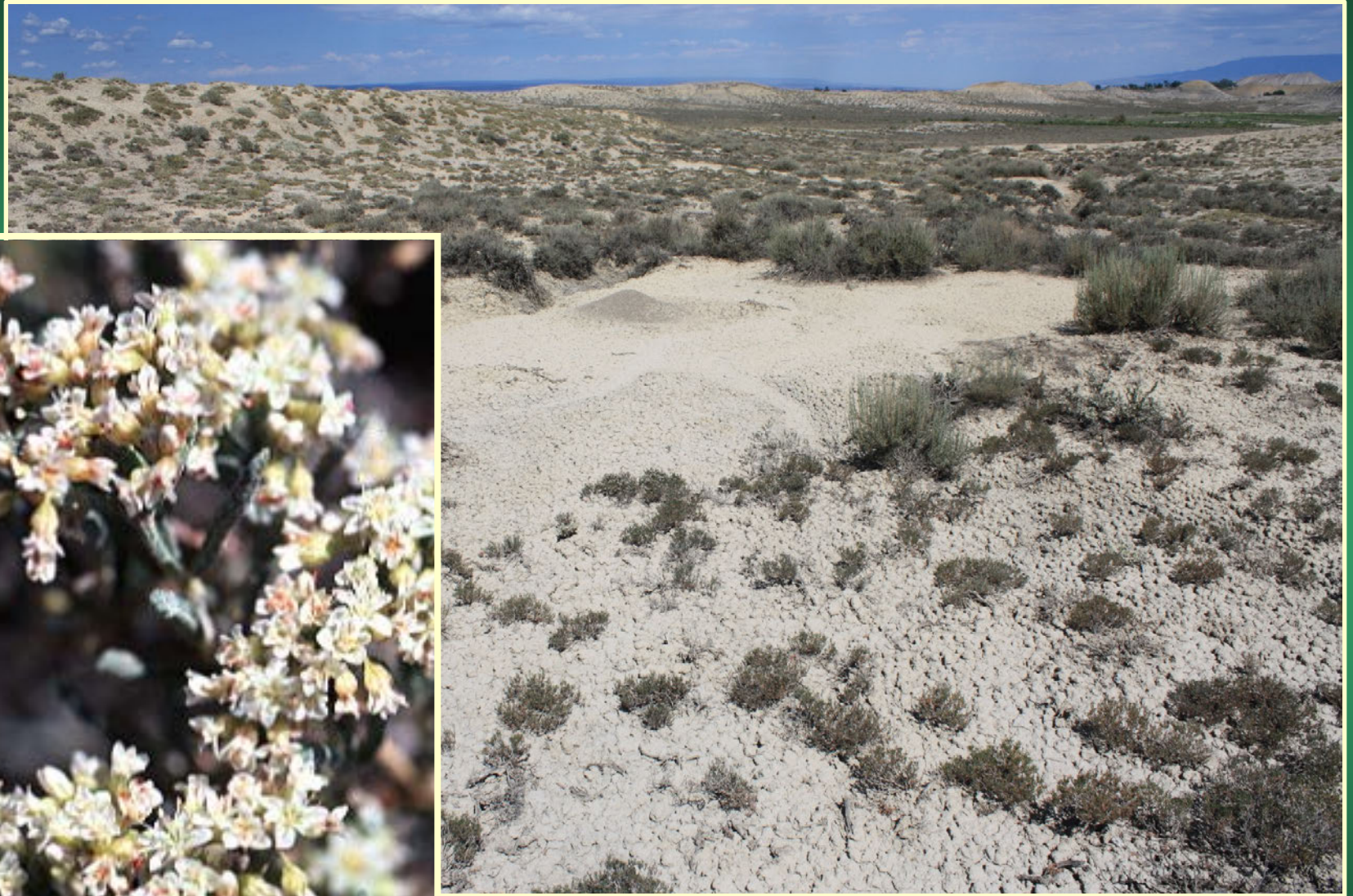
Eriogonum pelinophilum

Clay-loving wild buckwheat

- Federal status: Endangered
- Heritage ranks: G2/S2
- Global distribution: Colorado endemic (Delta and Montrose counties); 5200-6400 ft.
- Last observed: 2012
- Occurrences: 19 (6 are historical)
- Individuals: 280,000
- Primary threats: residential and agricultural developments, ORV use, overgrazing, oil and gas exploration
- Land ownership/management: private, BLM, CPW (purchased Wacker property for conservation easement)

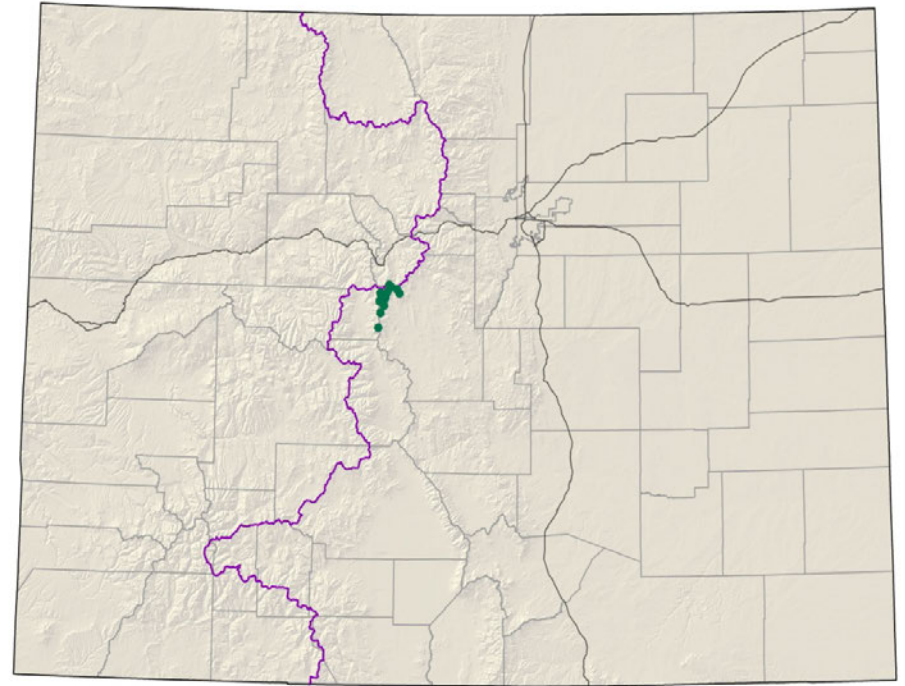


Eriogonum pelinophilum



Eutrema penlandii

Penland alpine fen mustard



- Federal status: Threatened
- Heritage ranks: G1G2/S1S2
- Global distribution: Colorado endemic (Lake, Park, and Summit counties); 11,850-13,320 ft.
- Last observed: 2012
- Occurrences: 13
- Individuals: 20,000
- Primary threats: mining, recreation
- Land ownership/management: private, USFS, BLM

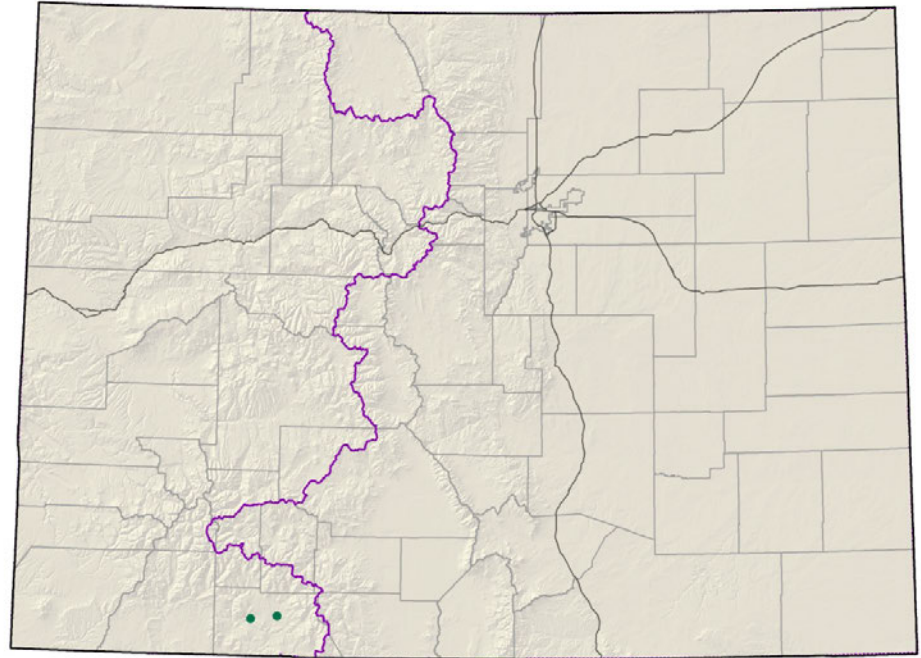
Eutrema penlandii



Ipomopsis polyantha Pagosa gilia

Conservation Action Plan

- Federal status: Endangered, BLM sensitive
- Heritage ranks: G1/S1
- Global distribution: Colorado endemic (Archuleta County); 6750-7775 ft.
- Last observed: 2012
- Individuals: ~300,000
- Occurrences: 2
- Primary threats: residential development, road construction and maintenance, overgrazing
- Land ownership/management: BLM, private, highway right of way



Ipomopsis polyantha



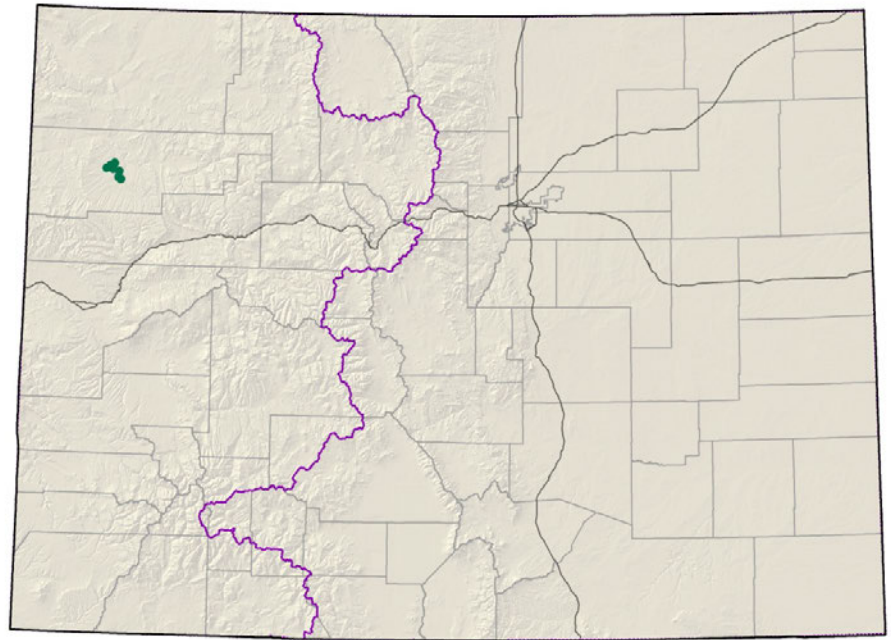
Physaria congesta

Dudley Bluffs bladderpod

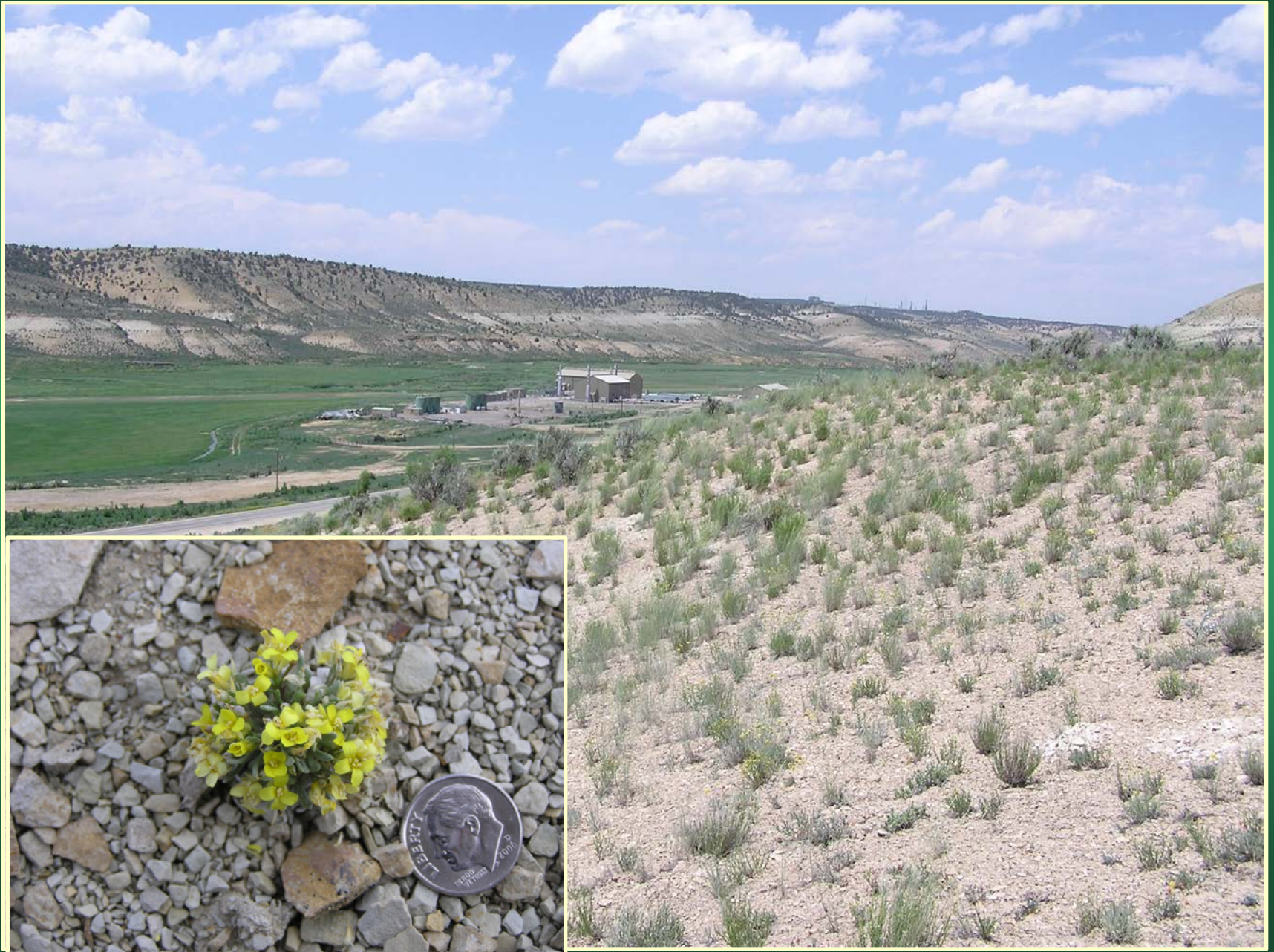
= *Lesquerella congesta*

Conservation Action Plan

- Federal status: Threatened
- Heritage ranks: G1/S1
- Global distribution: Colorado endemic (Rio Blanco County); 6000-6500 ft.
- Last observed: 2012
- Occurrences: 8
- Individuals: 650,000
- Primary threats: oil and gas development, oil shale and nahcolite mining, ORV use, overgrazing, trampling by wild horses
- Land ownership/management: BLM, state, private



Physaria (Lesquerella) congesta

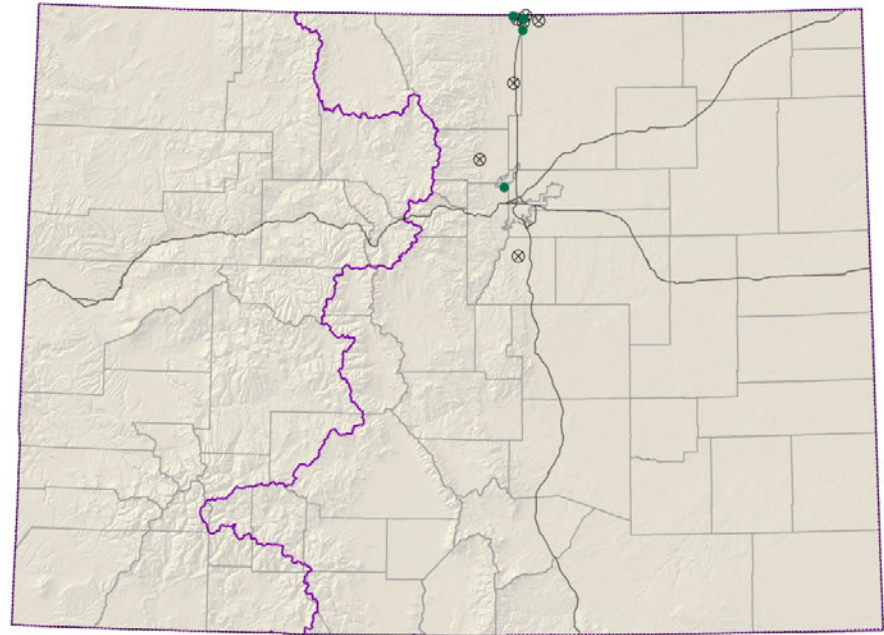


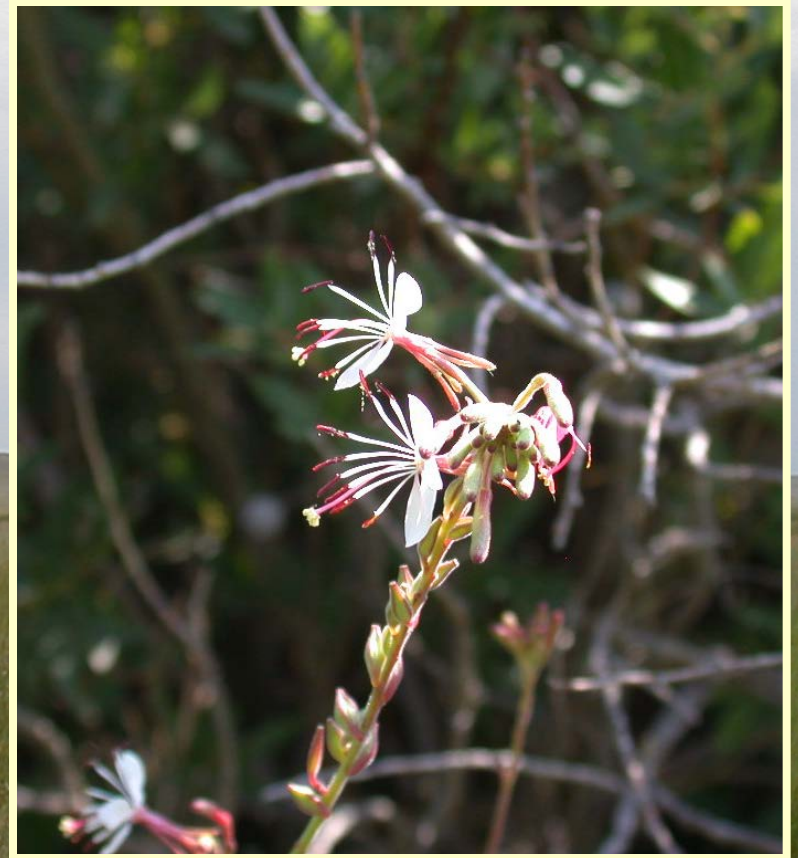
Oenothera coloradensis ssp. *coloradensis*

= *Gaura neomexicana* ssp. *coloradensis*

Colorado butterfly plant

- Federal status: Threatened
- Heritage ranks: G3T2/S1
- Global distribution: Wyoming, Nebraska, and Colorado (Adams, Boulder, Douglas, Jefferson, Larimer and Weld counties); 4800-6300 ft.
- Last observed in Colorado: 2011
- Colorado occurrences: 14 (6 are historical)
- Colorado individuals: 18,000
- Primary threats: grazing, hydrological alterations, weeds, Interstate 25, oil & gas
- Land ownership: City of Fort Collins, private, state





Gaura neomexicana ssp. *coloradensis*

Pediocactus knowltonii

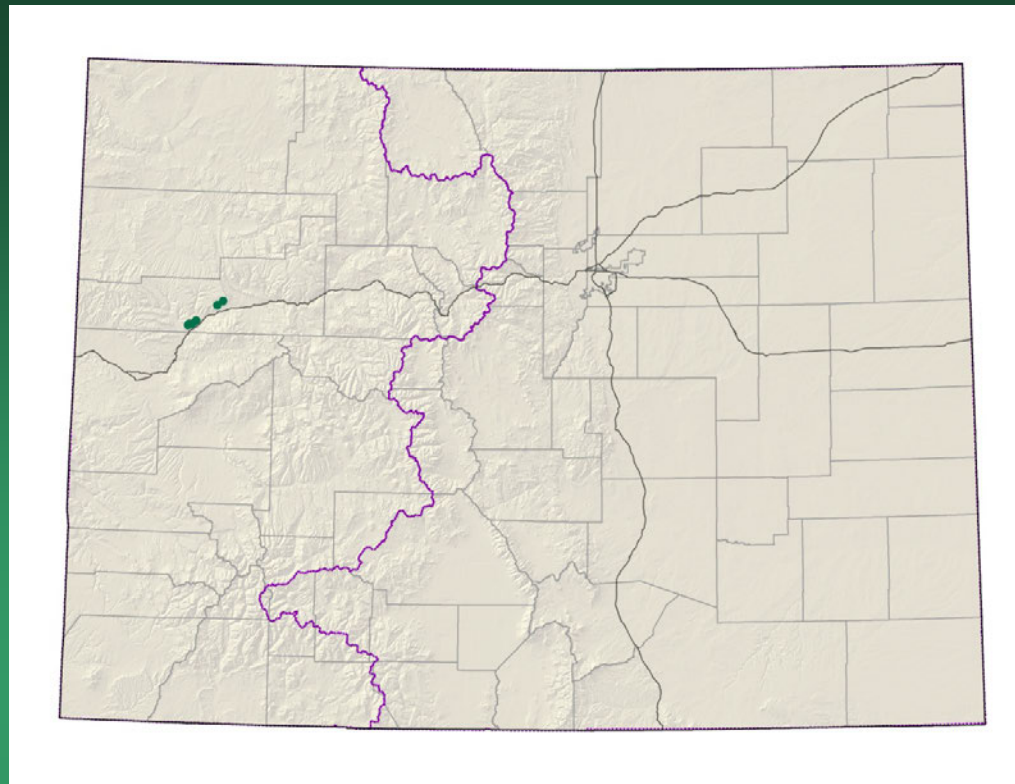
Knowlton's cactus

GIS analysis determined that the species does not actually occur in Colorado.

- Federal status: Endangered
- Heritage ranks: G1/SNA
- Global distribution: New Mexico
- Last observed in Colorado:
- Colorado occurrences: 0
- Individuals: 9,000 in NM
- Primary threats: cactus collection
- Land ownership: private, Ute



Penstemon debilis
Parachute penstemon



- Federal status: Threatened
Heritage ranks: G1/S1
- Global distribution: Colorado endemic (Garfield County); 5600-9250 ft.
- Last observed: 2011
- Occurrences: 6
- Individuals: 4000-6000
- Primary threats: oil and gas development, oil shale development, recreation
- Land ownership/management: private, BLM

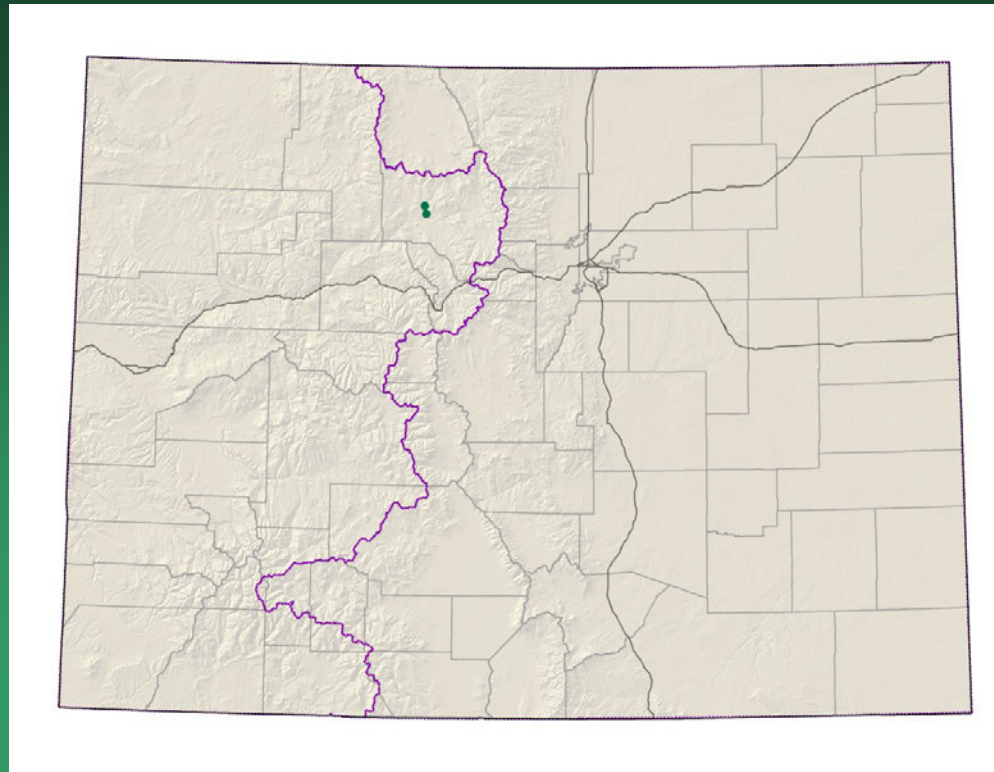
Penstemon debilis



Penstemon penlandii

Penland beardtongue

Conservation Action Plan

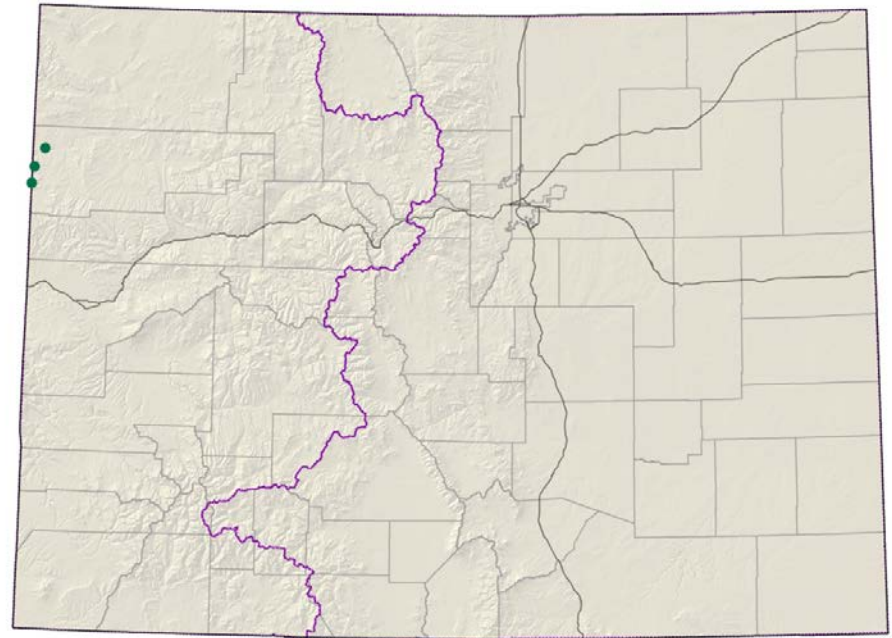


- Federal status: Endangered
- Heritage ranks: G1/S1
- Global distribution: Colorado endemic (Grand County); 7400-7900 ft.
- Last observed: 2012
- Occurrences: 2
- Individuals: 8600+
- Primary threats: road maintenance (grading, spraying, snow plowing), ORV use
- Land ownership/management: BLM, private

Penstemon penlandii



Penstemon scariosus var.
albifluvis
White River penstemon



- Federal status: Candidate, BLM sensitive
- Heritage ranks: G4T1/S1
- Global distribution: Utah and Colorado (Rio Blanco County); 5700-6700 ft.
- Last observed in Colorado: 2009
- Colorado occurrences: 3
- Colorado individuals: 200+
- Primary threats: overgrazing, oil and gas development, ORV use
- Land ownership/management: BLM, private



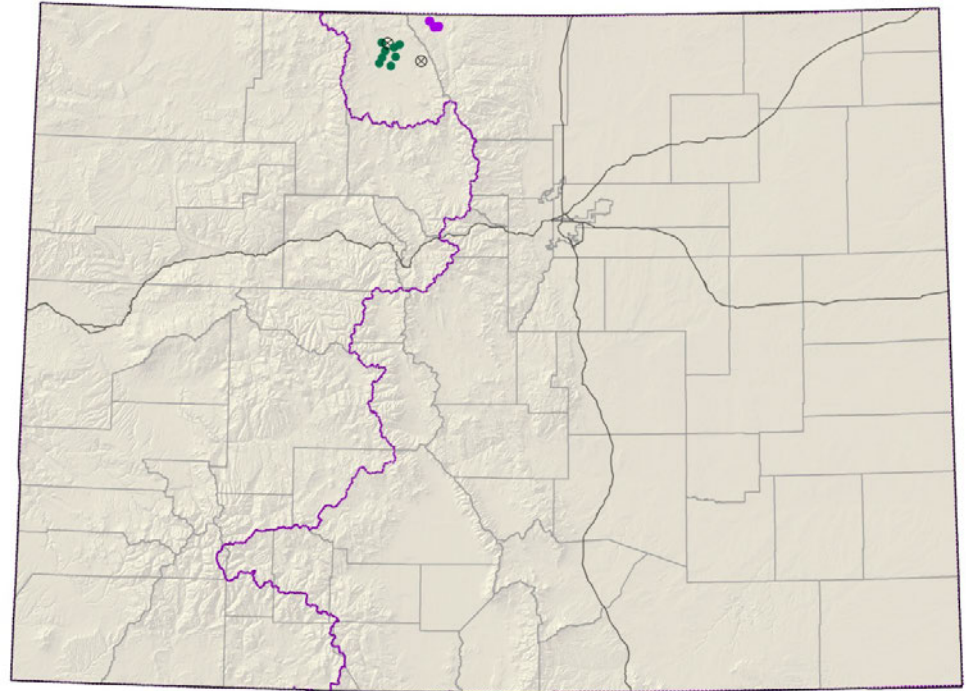
Penstemon scariosus var. *albifluvis*

Phacelia formosula

North Park phacelia

Conservation Action Plan

- Federal status: Endangered
- Heritage ranks: G1/S1
- Global distribution: Colorado endemic (Jackson and Larimer counties); 7800-8500 ft.
- Last observed: 2012
- Occurrences: 13 (2 are historical)
- Individuals: 18,000-20,000
- Primary threats: ORV use, coal extraction, overgrazing, oil and gas development
- Land ownership/management: BLM, private, USFWS

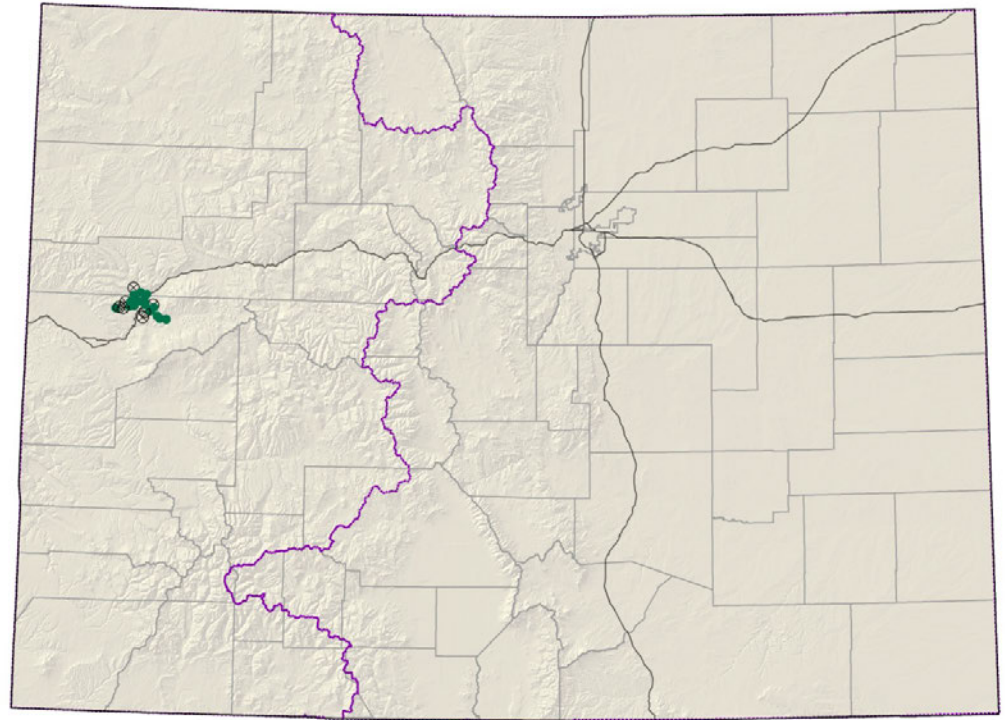




Phacelia formosula

Phacelia submutica

DeBeque phacelia



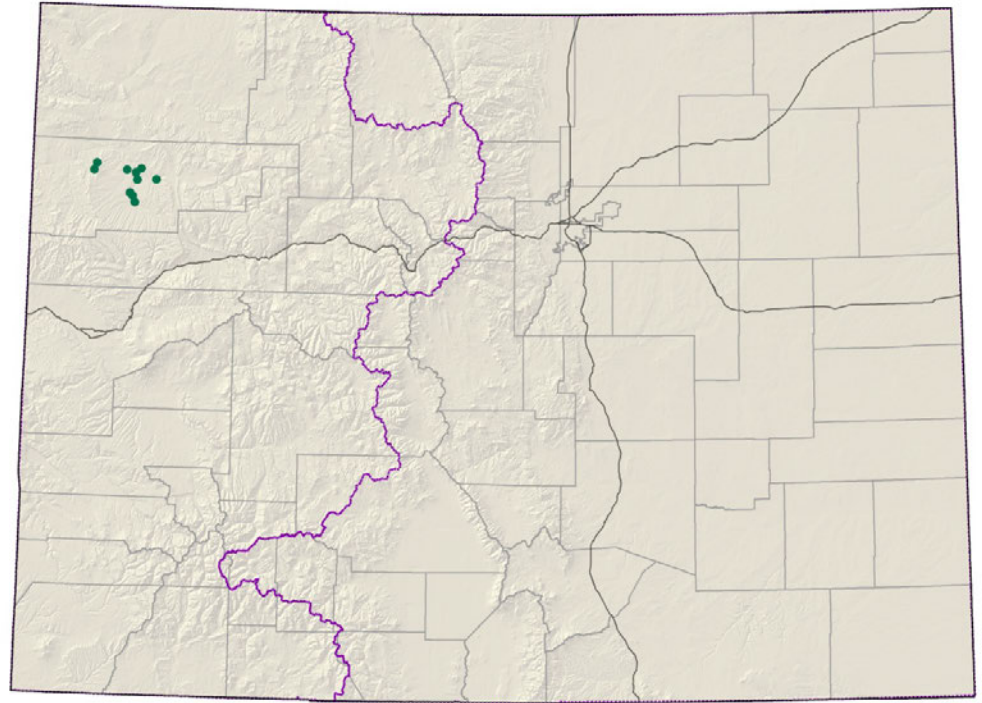
- Federal status: Threatened
BLM sensitive
- Heritage ranks: G2/S2
- Global distribution: Colorado endemic (Garfield and Mesa counties); 5000-7100 ft.
- Last observed: 2011
- Occurrences: 22 (6 are historical)
- Individuals: 25,000-68,000
- Primary threats: oil and gas development, ORV use, overgrazing, oil shale mining
- Land ownership/management: BLM, private, USFS



Phacelia submutica

Physaria obcordata Piceance twinpod

Conservation Action Plan



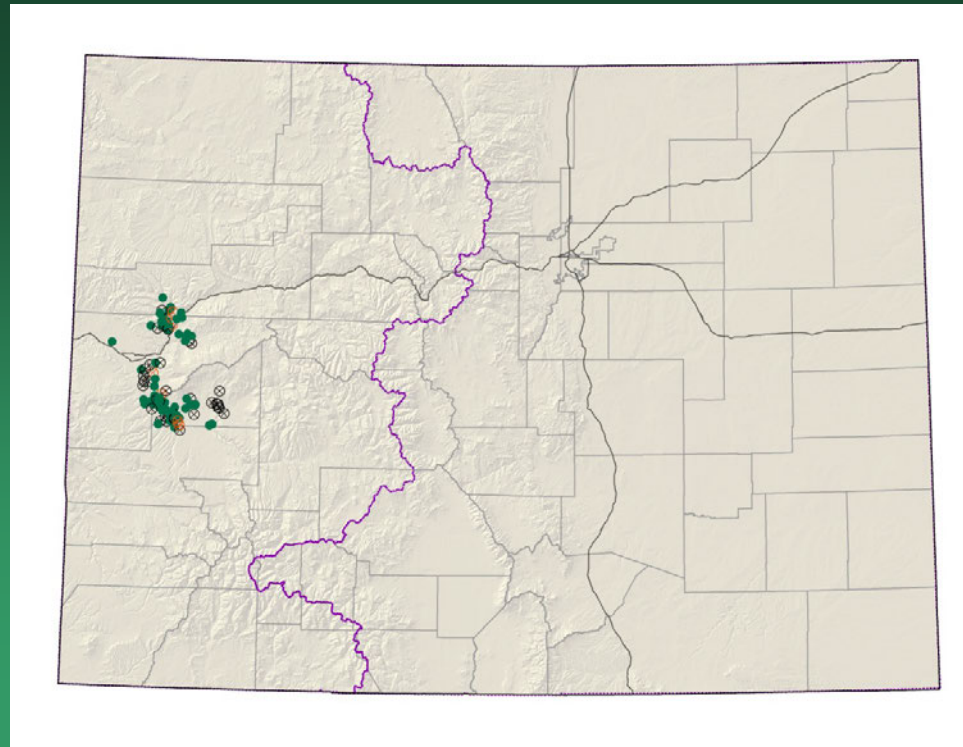
- Federal status: Threatened
- Heritage ranks: G1G2/S1S2
- Global distribution: Colorado endemic (Rio Blanco County); 5900-7500 ft.
- Last observed: 2012
- Occurrences: 11
- Individuals: 30,000
- Primary threats: oil and gas development, oil shale and nahcolite mining, ORV use, trampling by wild horses
- Land ownership/management: BLM, state, private



Physaria obcordata

Sclerocactus glaucus

Colorado hookless cactus



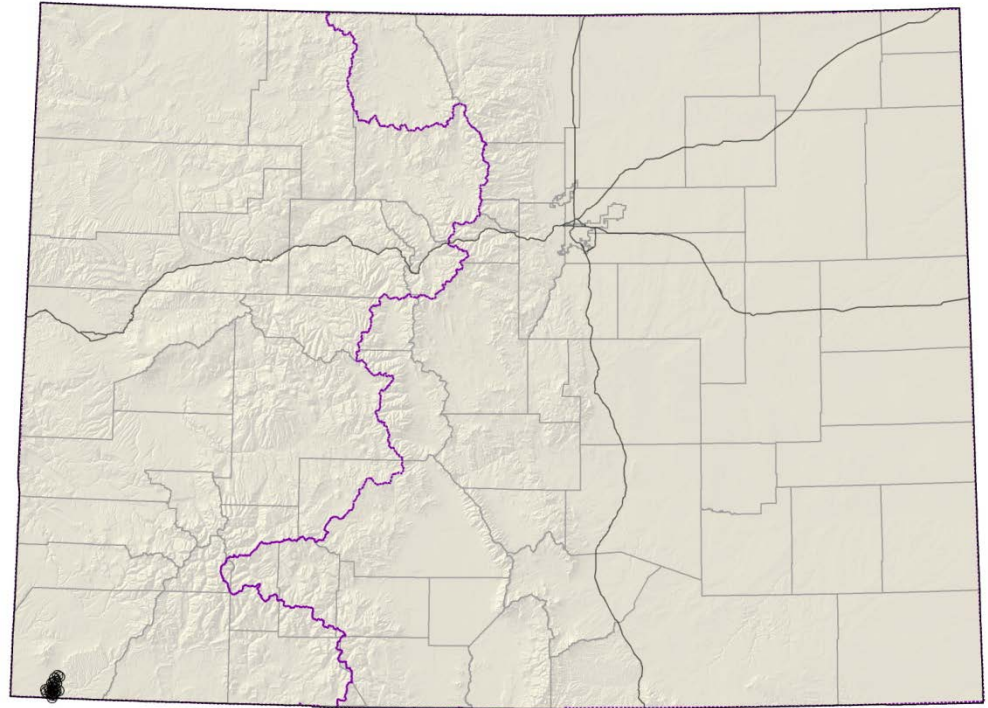
- Federal status: Threatened
- Heritage ranks: G2G3/S2S3
- Global distribution: Colorado (Delta, Garfield, Mesa, and Montrose counties); 4600-7100 ft.
- Last observed in Colorado: 2012
- Colorado occurrences: 82 (29 are historical or unrankable)
- Colorado individuals: ~15,000
- Primary threats: oil and gas development, residential development, cactus collecting
- Land ownership/management: BLM, state, private, USFS



Sclerocactus glaucus

Sclerocactus mesae-verdae

Mesa Verde cactus



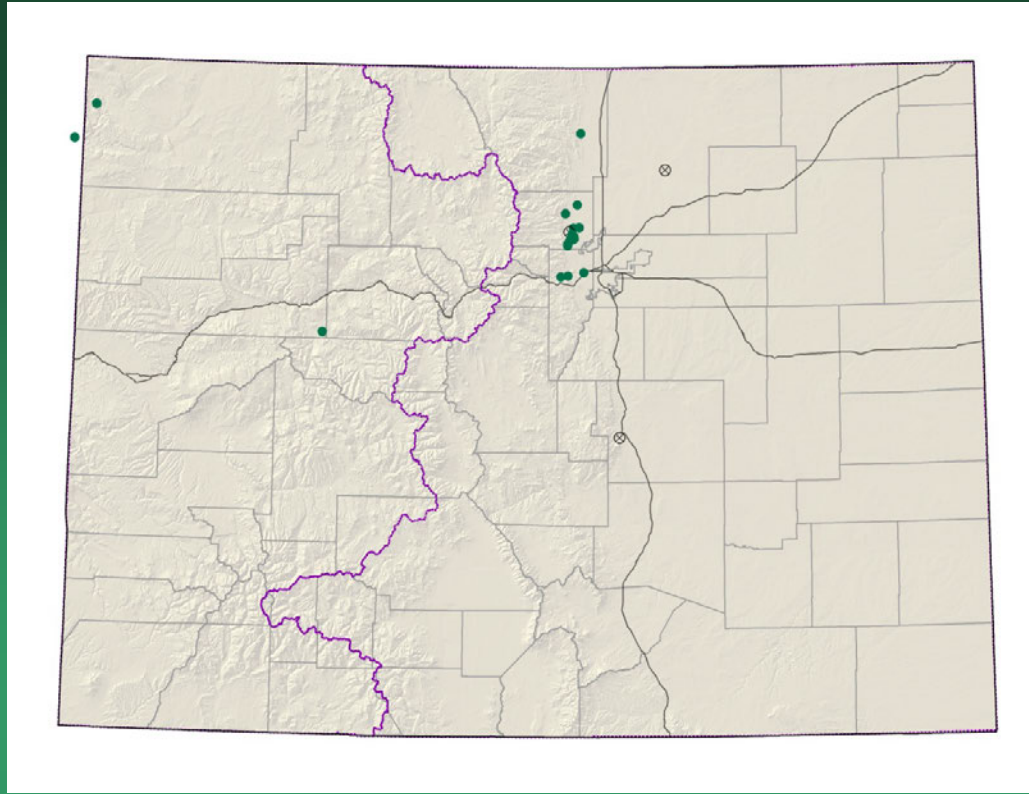
- Federal status: Threatened
- Heritage ranks: G2/S2
- Global distribution: New Mexico and Colorado (Montezuma County); 5000-5800 ft.
- Last observed in Colorado: 2005
- Colorado occurrences: 22 – probably a single large occurrence
- Colorado individuals: 2,000-10,000
- Primary threats: cactus collecting, oil and gas development, ORV use
- Land ownership/management: Ute Mountain Ute



Sclerocactus mesae-verdae

Spiranthes diluvialis Ute ladies'-tresses

- Federal status: Threatened
- Heritage ranks: G2G3/S2
- Global distribution: Washington, Idaho, Montana, Wyoming, Nevada, Utah, Nebraska, and Colorado (Boulder, El Paso, Garfield, Jefferson, Larimer, Moffat, and Weld counties); 4500-7800 ft.
- Last observed in Colorado: 2011
- Colorado occurrences: 17 (3 are historical)
- Colorado individuals: 17,500
- Primary threats: weeds, residential development, hydrological alterations
- Land ownership/management: NPS, City of Fort Collins, City of Boulder, City of Wheat Ridge, Jefferson County, USFWS, Private, BLM, City of Carbondale



Spiranthes diluvialis

