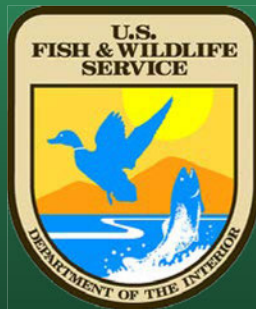


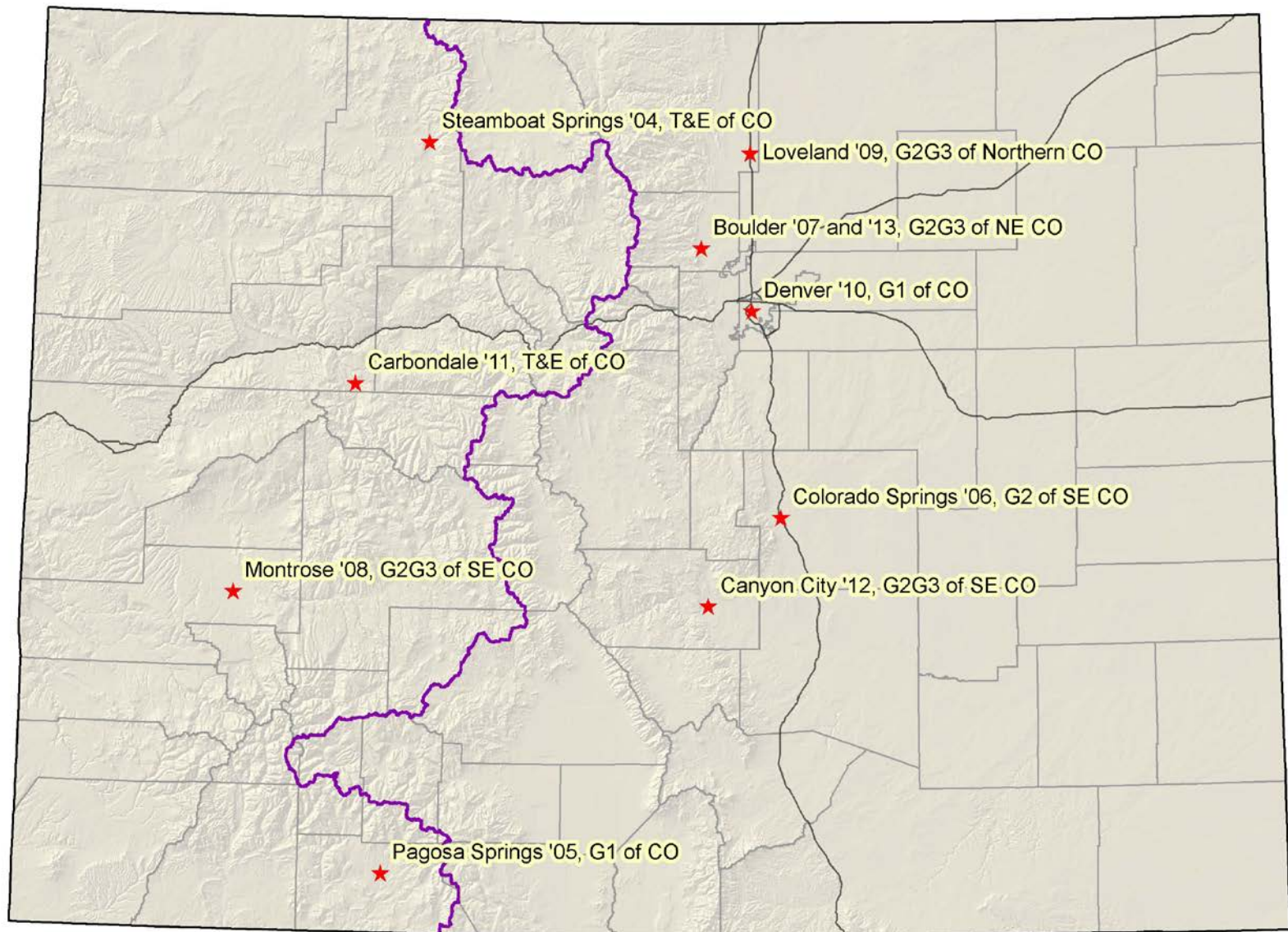
The Colorado Rare Plant Technical Committee presents:

10th Annual Colorado Rare Plant Symposium

September 27, 2013
Boulder, Colorado

Sponsored by:
Colorado Native Plant Society
US Fish and Wildlife Service
Colorado Natural Heritage Program
USDA Forest Service
University of Colorado Herbarium





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**

**2007/2013 - 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

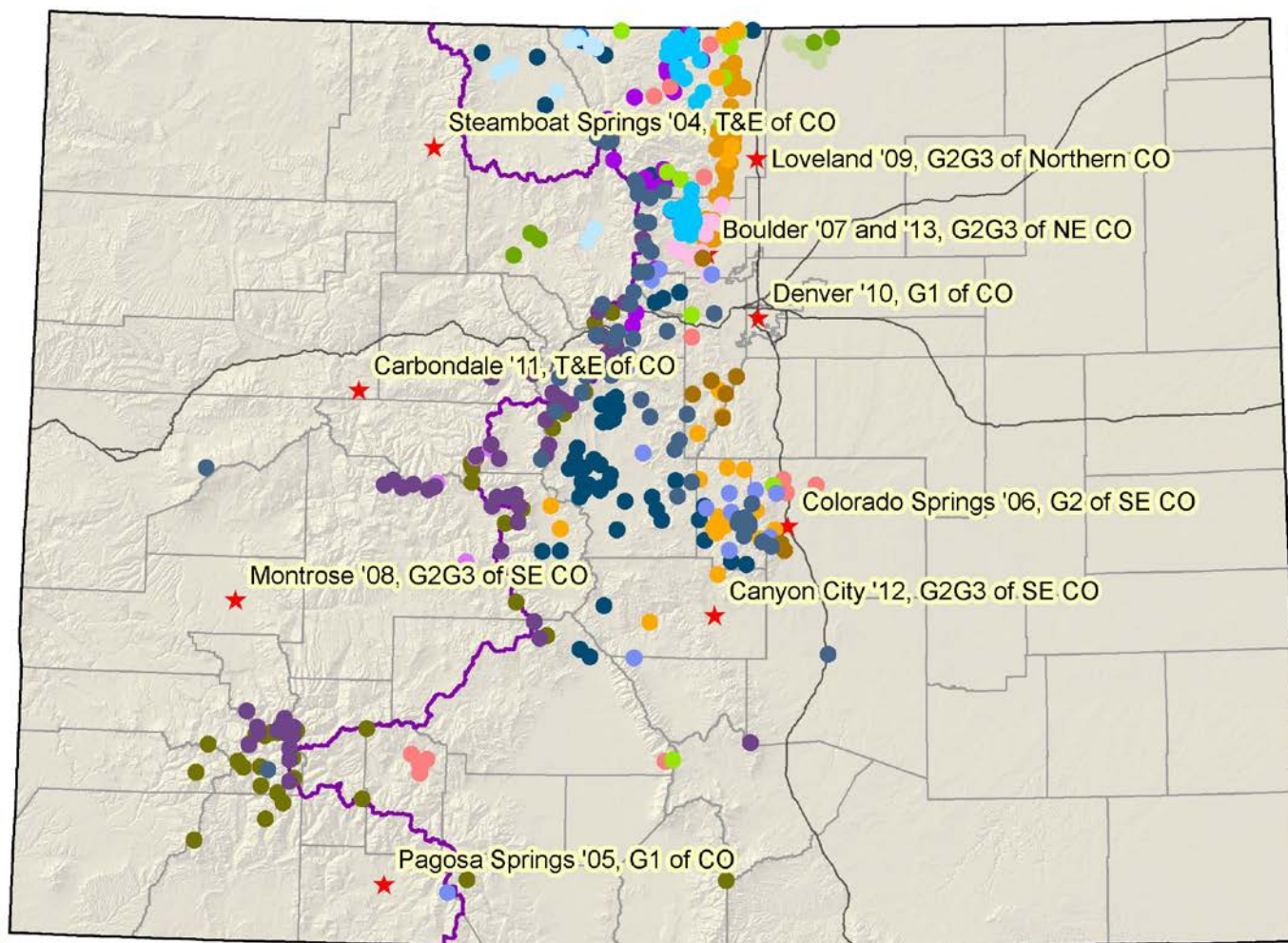
Thalictrum heliophilum

Thelypodium paniculatum

Review of Previous Meetings

Colorado Rare Plant Symposia
NE Colorado G2-G3 (2007)
Statewide T,E&C (2004/2011)





Legend

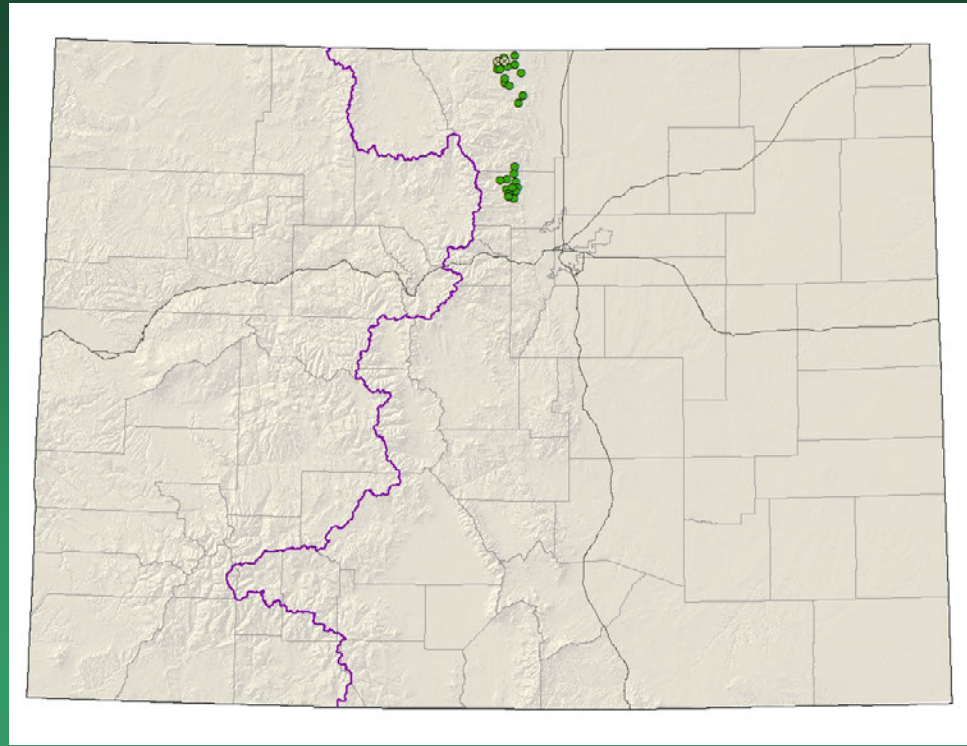
- *Aletes humilis*
- *Aletes nuttallii*
- *Aquilegia saximontana*
- *Astragalus sparsiflorus*
- *Bolophyta alpina*
- *Carex oreocharis*
- *Draba crassa*
- *Draba globosa*
- *Draba streptobrachia*
- *Eriogonum exilifolium*
- *Nuttallia sinuata*
- *Nuttallia speciosa*
- *Oonopsis wardii*
- *Oreoxis humilis*
- *Phacelia denticulata*
- *Physaria bellii*
- *Potentilla ambigens*
- *Potentilla rupincola*
- *Sisyrinchium pallidum*

2007/2013

NE Colorado
G2G3 species

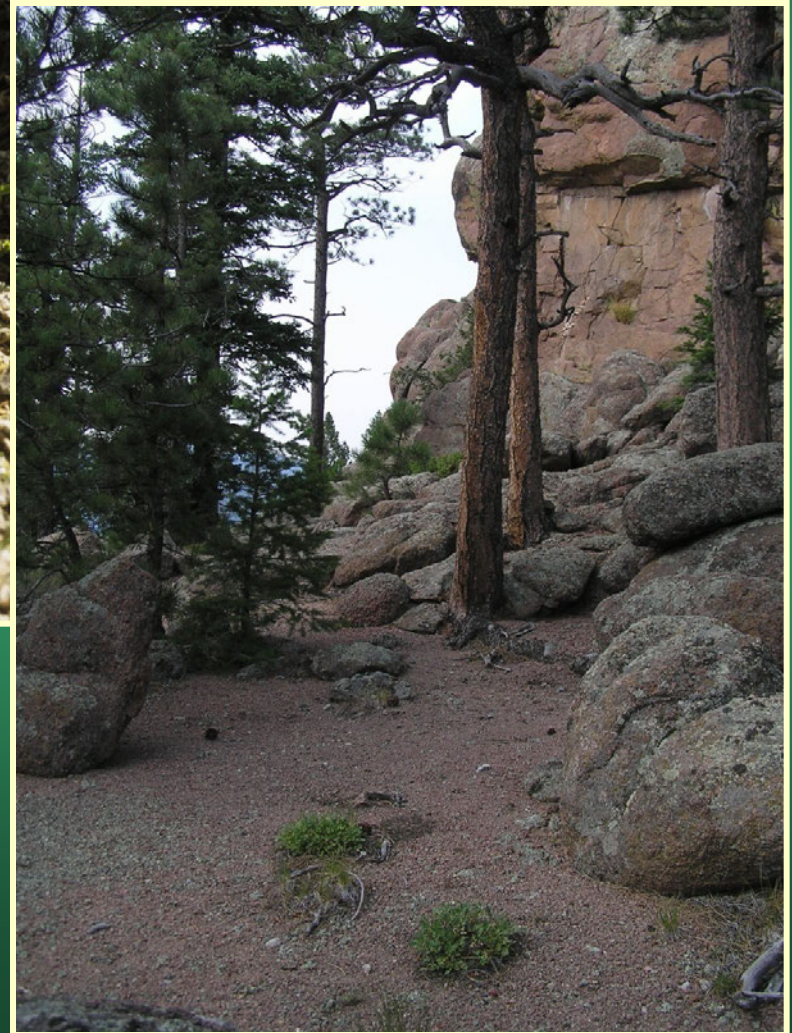
Aletes humilis

Larimer aletes



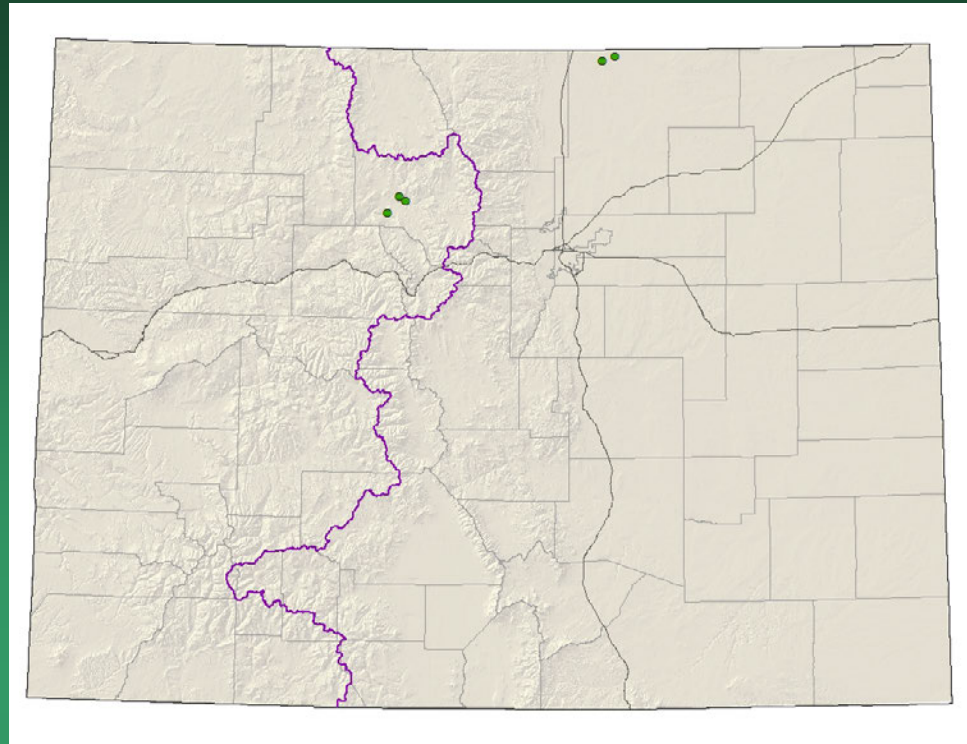
- Federal status: None
- Heritage ranks: G2G3/S2S3
- Global distribution: Colorado (Larimer and Boulder counties). Possibly extending into southern Wyoming.
- Elevation range: 6,150 to 8,830 ft.
- Last observed in Colorado: 2013
- Colorado occurrences: 27 (2 are historical)
- Colorado individuals: 15,000+
- Primary threats: Recreational uses are the primary threat.
- Land ownership/management: USFS, private, local government

Aletes humilis



Aletes nuttallii =
Lomatium nuttallii

Nuttall's desert-parsley



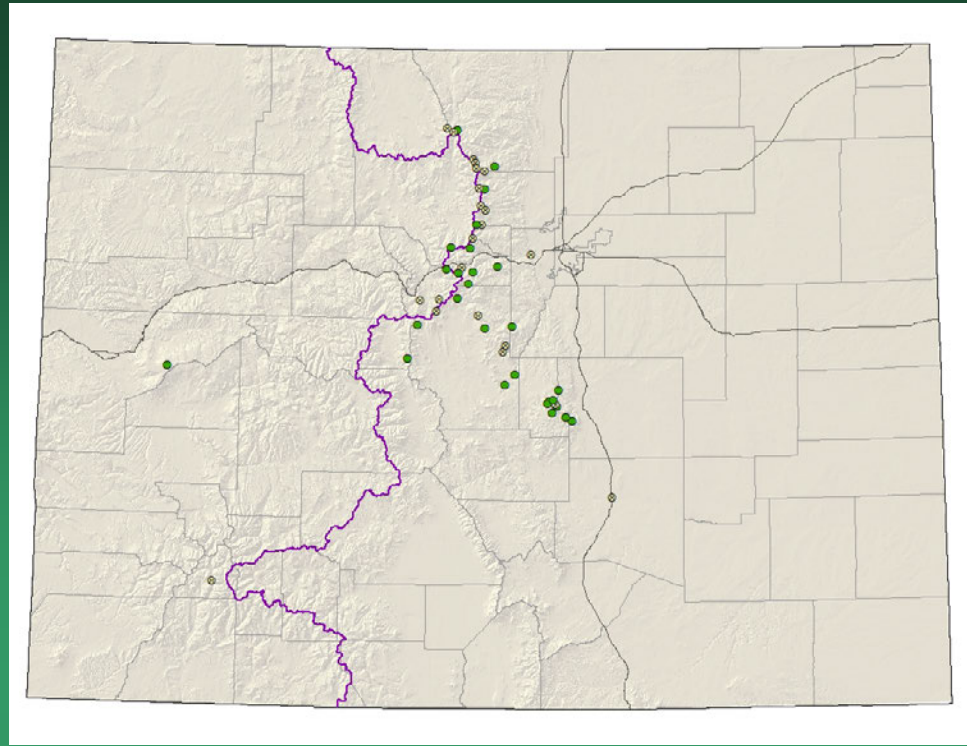
- Federal status: None
- Heritage ranks: **G3/S1**
- Global distribution: Montana, Wyoming, Nebraska, South Dakota (historical), Colorado (Grand and Weld counties).
- Elevation range: 5,590 to 7,800 ft.
- Last observed in Colorado: **2013**
- Colorado occurrences: **5**
- Colorado individuals: 6,500
- Primary threats: ORV use, weeds, cattle trampling
- Land ownership/management: State 50%, Private 50%

Aletes nuttallii



Aquilegia saximontana

Rocky Mountain columbine



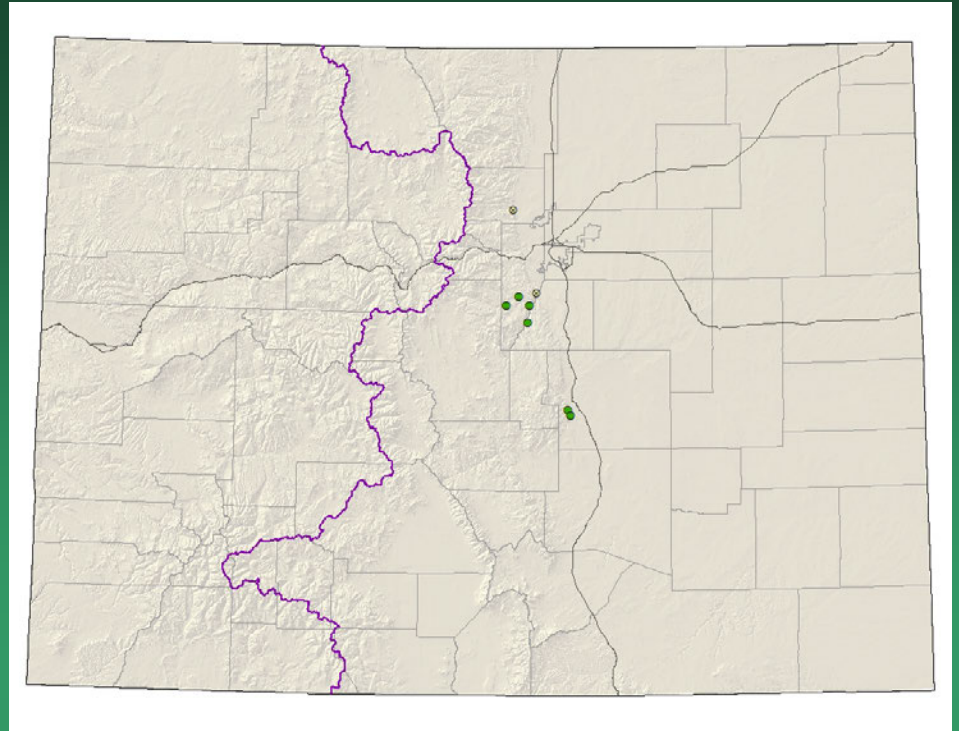
- Federal status: None
- Heritage ranks: G3/S3
- Global distribution: Colorado (Boulder, Clear Creek, El Paso, Gilpin, Jackson, **Jefferson**, Lake, Larimer, **Mesa**, Park, Pueblo, San Juan, Summit, and Teller counties).
- Elevation range: 7,620 to 14,260 ft.
- Last observed in Colorado: **2013**
- Colorado occurrences: **50** (**22** are historical)
- Colorado individuals: 1,500
- Primary threats: recreational uses, road work pika grazing, rock garden collecting
- Land ownership/management: USFS 70%, NPS 15%, Private 12%, State 4%

Aquilegia saximontana



Astragalus sparsiflorus

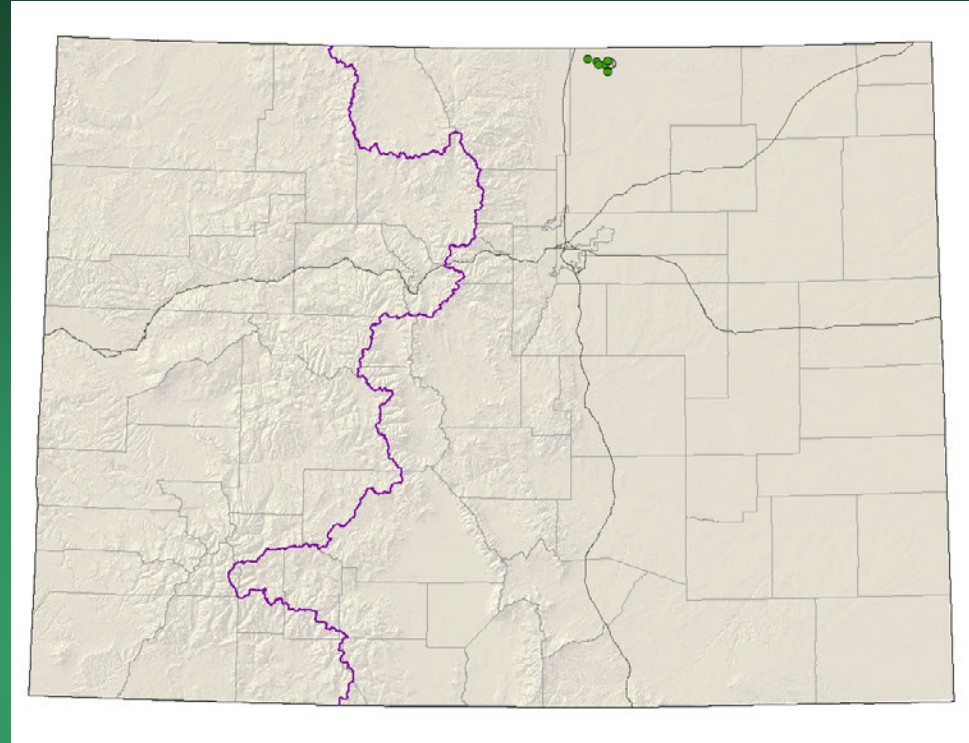
Front Range milk-vetch



- Federal status: None
- Heritage ranks: G2/S2
- Global distribution: Colorado endemic (Douglas, Denver, El Paso, Park, Fremont, Teller, Boulder, and Jefferson counties).
- Elevation range: 5,510 to 9,220 ft.
- Last observed in Colorado: 2010
- Colorado occurrences: 8 (2 are historical)
- Colorado individuals: 330+
- Primary threats: recreation
- Land ownership/management: Private, local gov., USFS



Bolophyta alpina =
Parthenium alpinum
Alpine fever-few



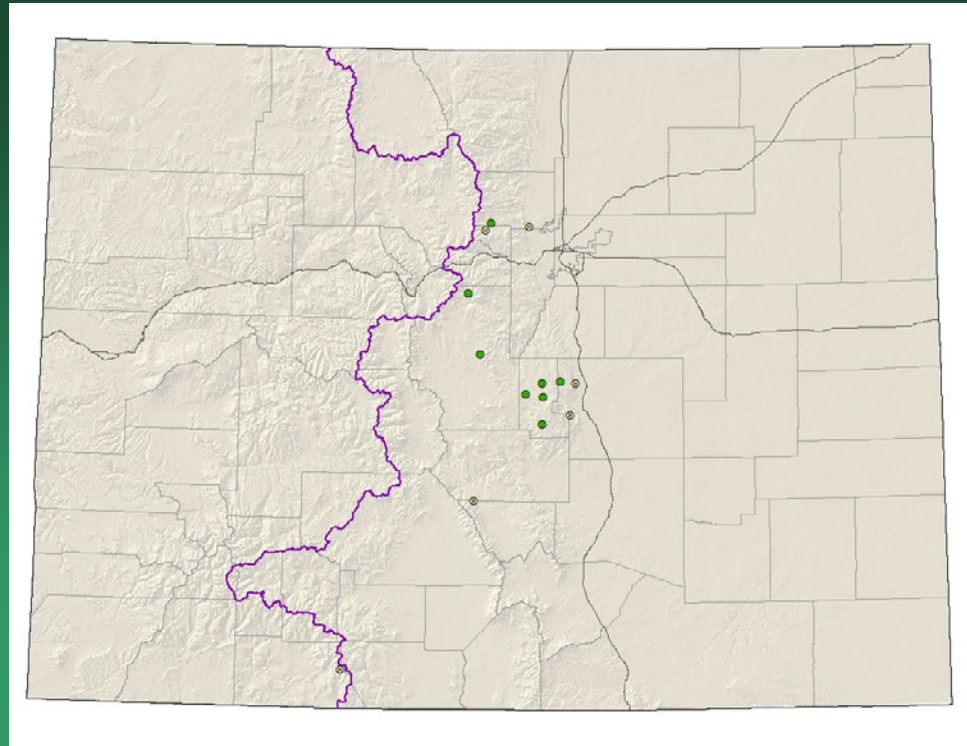
- Federal status: None
- Heritage ranks: G3/S3
- Global distribution: Wyoming, New Mexico, Colorado (Weld County)
- Elevation range: 5,500 to 5,820 ft.
- Last observed in Colorado: June 2007
- Colorado occurrences: 1 large metapopulation (numerous subpopulations, 1 historical)
- Colorado individuals: 100,000+
- Primary threats: Incidental grazing, hay dumping (State), pipelines
- Land ownership/management: State, Private, USFS/Pawnee NG

Bolophyta alpina



Carex oreocharis

Grassy slope sedge



- Federal status: None
- Heritage ranks: G3/S2
- Global distribution: Arizona, New Mexico, Wyoming, Colorado (Boulder, Conejos, Custer, El Paso, **Fremont**, Gilpin, Park, and Teller counties).
- Elevation range: 5,980 to 10,540 ft.
- Last observed in Colorado: **2010**
- Colorado occurrences: **14** (6 are historical)
- Colorado individuals: several thousand
- Primary threats: weeds, road construction, grazing
- Land ownership/management: USFS 80%, Private 20%



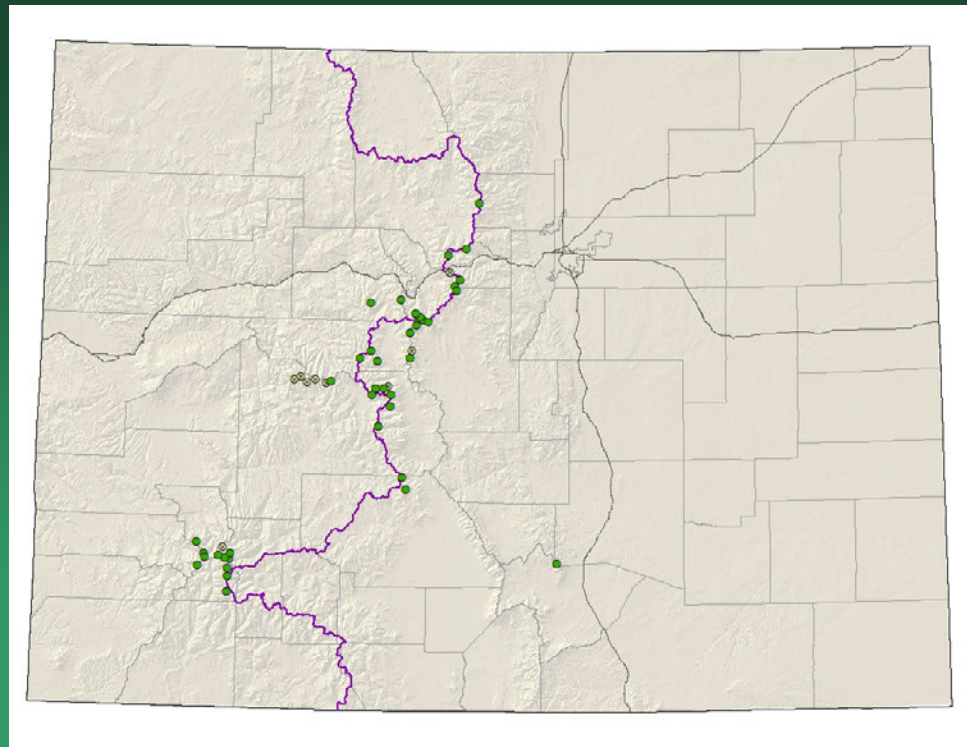
Draba crassa

Thick-leaf whitlow-grass

- Federal status: None
- Heritage ranks: G3G4/S3

Watchlisted

- Global distribution: Montana, Wyoming, Utah, Colorado (Chaffee, Clear Creek, Eagle, Grand, Gunnison, **Hinsdale**, Huerfano, Lake, Ouray, Park, Pitkin, Pueblo, Saguache, San Juan, San Miguel, and Summit counties).
- Elevation range: 9,870 to 14,140 ft.
- Last observed in Colorado: **2013**
- Colorado occurrences: **48** (9 are historical)
- Colorado individuals: 2,700 +
- Primary threats: recreational uses
- Land ownership/management: USFS 85%, Private 15%

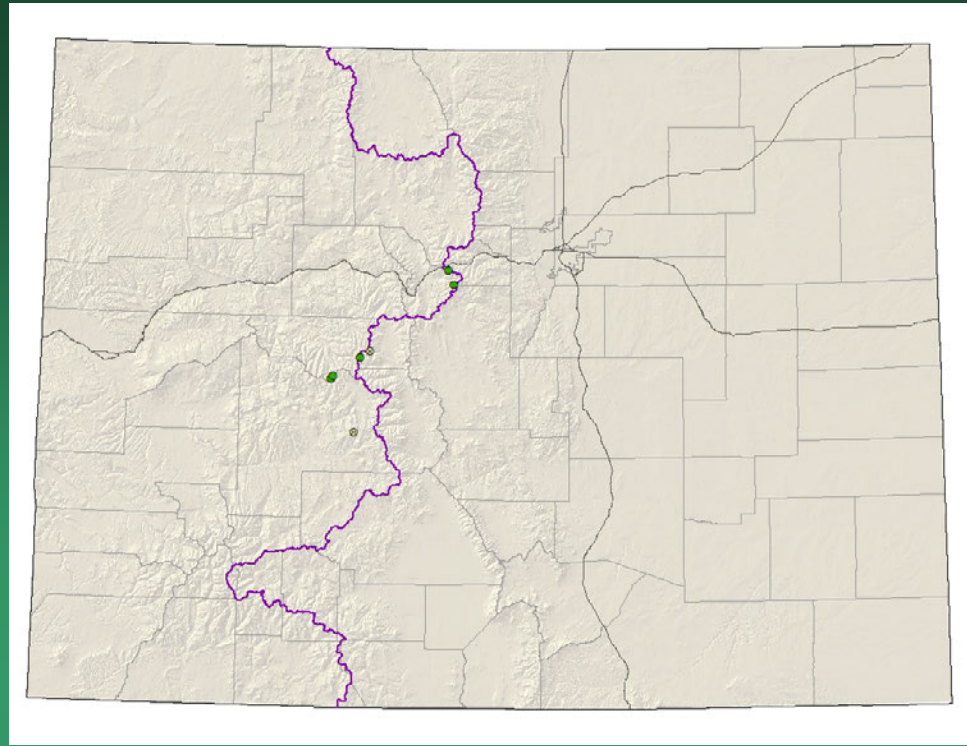




Draba crassa

Draba globosa

Rockcress draba



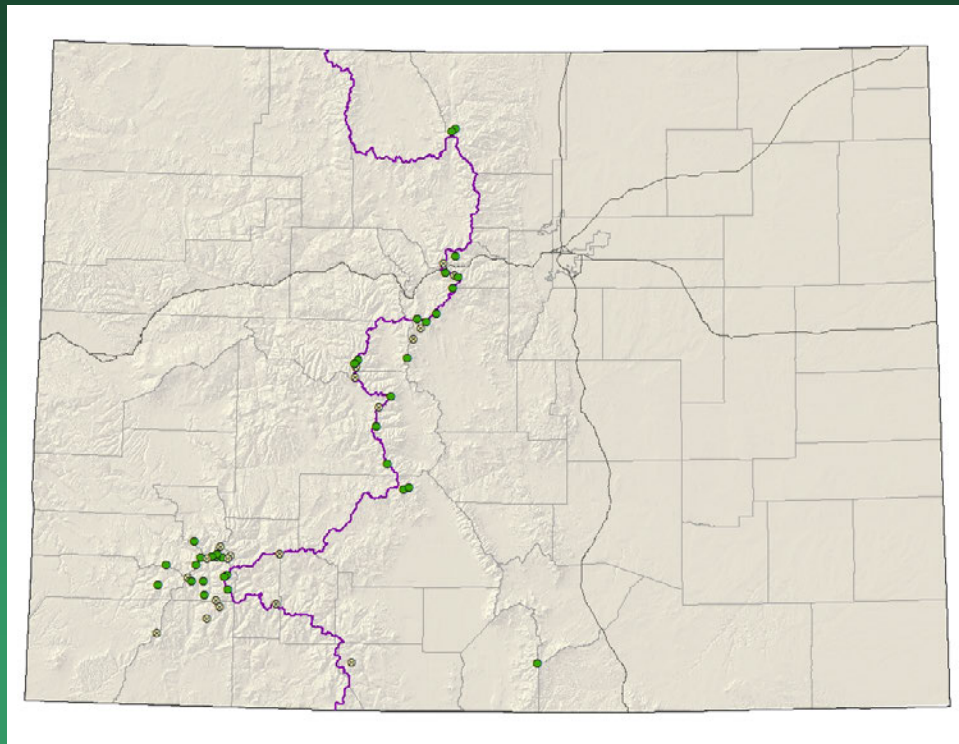
- Federal status: None
- Heritage ranks: G3/S1
- Global distribution: Idaho, Montana, Utah, Wyoming, Colorado (Clear Creek, Gunnison, Lake, Pitkin, and **Summit** counties).
- Elevation range: 10,560 to 13,370 ft.
- Last observed in Colorado: **2013**
- Colorado occurrences: 7 (**2** are historical)
- Colorado individuals: 150
- Primary threats: recreational use, potential mining
- Land ownership/management: USFS

Draba globosa



Draba streptobrachia

Colorado Divide whitlow-grass



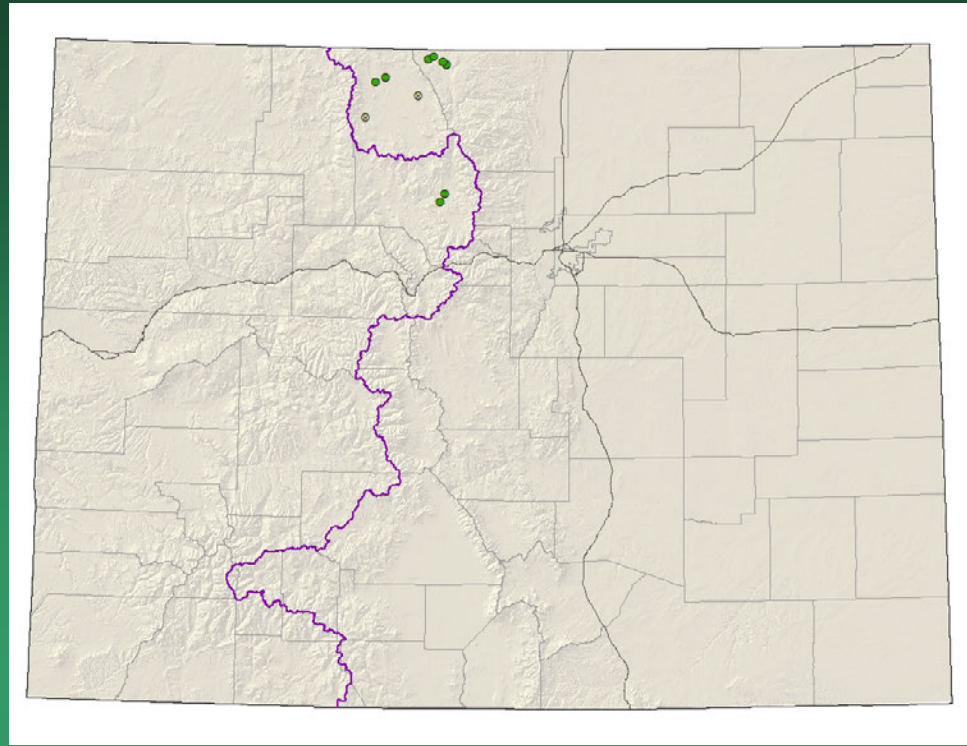
- Federal status: None
- Heritage ranks: G3/S3
- Global distribution: Colorado endemic (Chaffee, Clear Creek, Conejos, Costilla, Dolores, Gunnison, Hinsdale, Huerfano, La Plata, Lake, Larimer, Mineral, Ouray, Park, Pitkin, Saguache, San Juan, San Miguel, and Summit counties).
- Elevation range: 10,200 to 14,050 ft.
- Last observed in Colorado: 2013
- Colorado occurrences: 52 (19 are historical)
- Colorado individuals: unknown
- Primary threats: recreation
- Land ownership/management: USFS 63%, BLM 19%, Private 19%



Draba streptobrachia

Eriogonum exilifolium

Dropleaf wild buckwheat



- Federal status: USFS sensitive
- Heritage ranks: G3/S2
- Global distribution: Wyoming, Colorado (Grand, Jackson, and Larimer counties).
- Elevation range: 7,820 to 8,770 ft.
- Last observed in Colorado: 2013
- Colorado occurrences: 10 (2 are historical)
- Colorado individuals: greater than 1,000,000
- Primary threats: weeds, incompatible grazing, roads
- Land ownership/management: BLM, state and private

Eriogonum exilifolium



Heuchera hallii

Front Range alum-root

No longer tracked

- Federal status: None
- Heritage ranks: G4/S4
- Global distribution: Colorado endemic (Chaffee, Custer, Douglas, El Paso, Huerfano, Jefferson, Lake, Park, and Teller counties).
- Last observed in Colorado: **2013**
- Colorado occurrences: 21+ (4 are historical)
- Colorado individuals: unknown, locally common
- Primary threats: unknown
- Land ownership/management: USFS 100%

Heuchera hallii



Nuttallia (Mentzelia)
sinuata
Wavy-leaf stickleaf

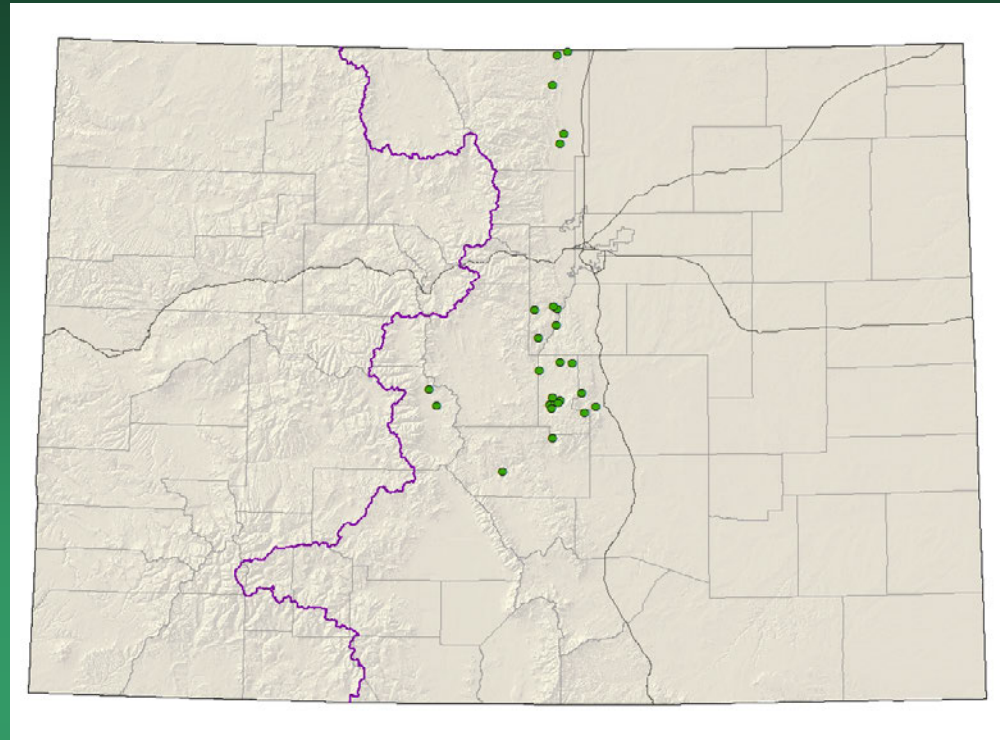


- Federal status: None
- Heritage ranks: G3/S3
- Global distribution: Wyoming and Colorado (Boulder, Clear Creek, El Paso, Larimer, Teller, and Weld counties).
- Elevation range: 5,320 to 8,600 ft.
- Last observed in Colorado: 2008
- Colorado occurrences: 12 (4 are historical)
- Colorado individuals: hundreds+
- Primary threats: road work, misidentification as weeds
- Land ownership/management: USFS 67%, City 33%

Nuttallia sinuata



Nuttallia (Mentzelia) speciosa Jeweled blazingstar



- Federal status: None
- Heritage ranks: G3/S3
- Global distribution: Wyoming and Colorado (Arapahoe, **Boulder**, Chaffee, Clear Creek, **Denver**, Douglas, El Paso, Fremont, Gilpin, Jefferson, **Larimer**, Mineral, Saguache, and Teller counties).
- Elevation range: 5,390 to 10,850 ft.
- Last observed in Colorado: **2013**
- Colorado occurrences: **26**
- Colorado individuals: ~10,000
- Primary threats: road work, recreation, weeds
- Land ownership/management: BLM, USFS, Private, State

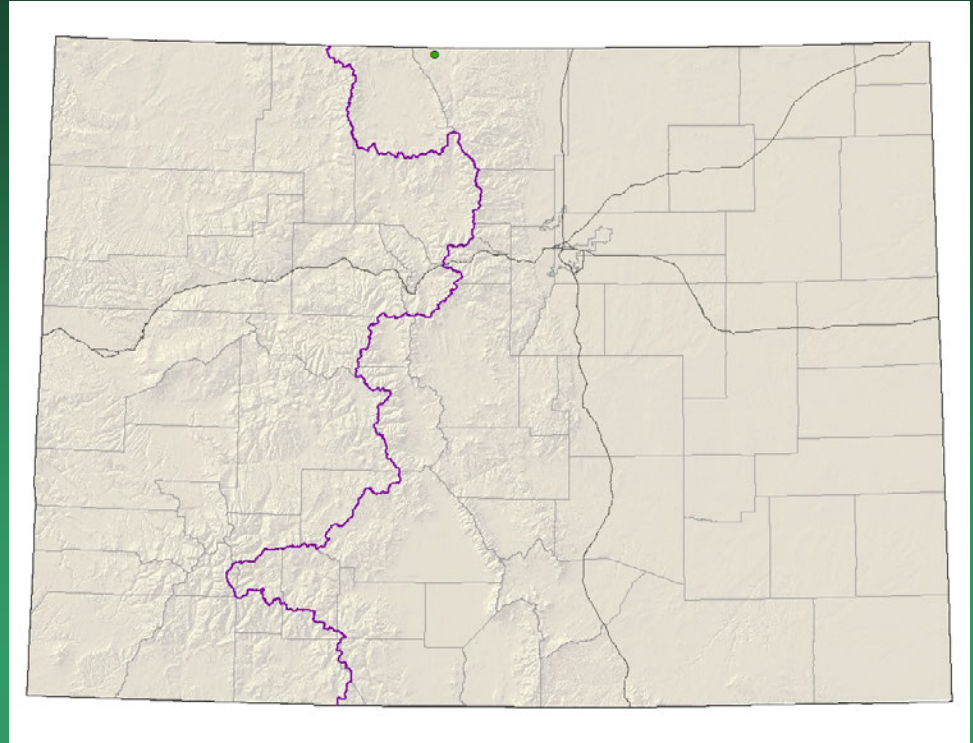
Nuttallia speciosa



Oenopsis wardii

Ward's golden-weed

- Federal status: None
- Heritage ranks: G3/S1
- Global distribution: Wyoming and Colorado (Larimer County).
- Elevation range: 7,830 to 7,850 ft.
- Last observed in Colorado: August 2004
- Colorado occurrences: 1
- Colorado individuals: 300+
- Primary threats: incompatible grazing
- Land ownership/management: BLM



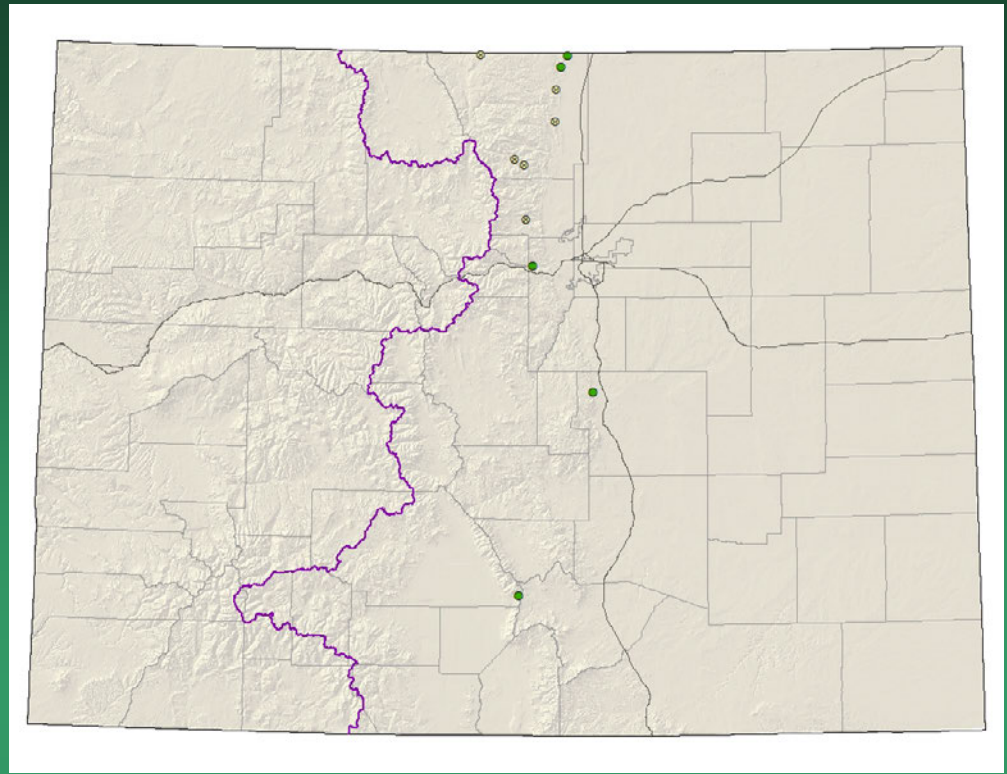
Oönopsis wardii



Phacelia denticulata

Rocky Mountain phacelia

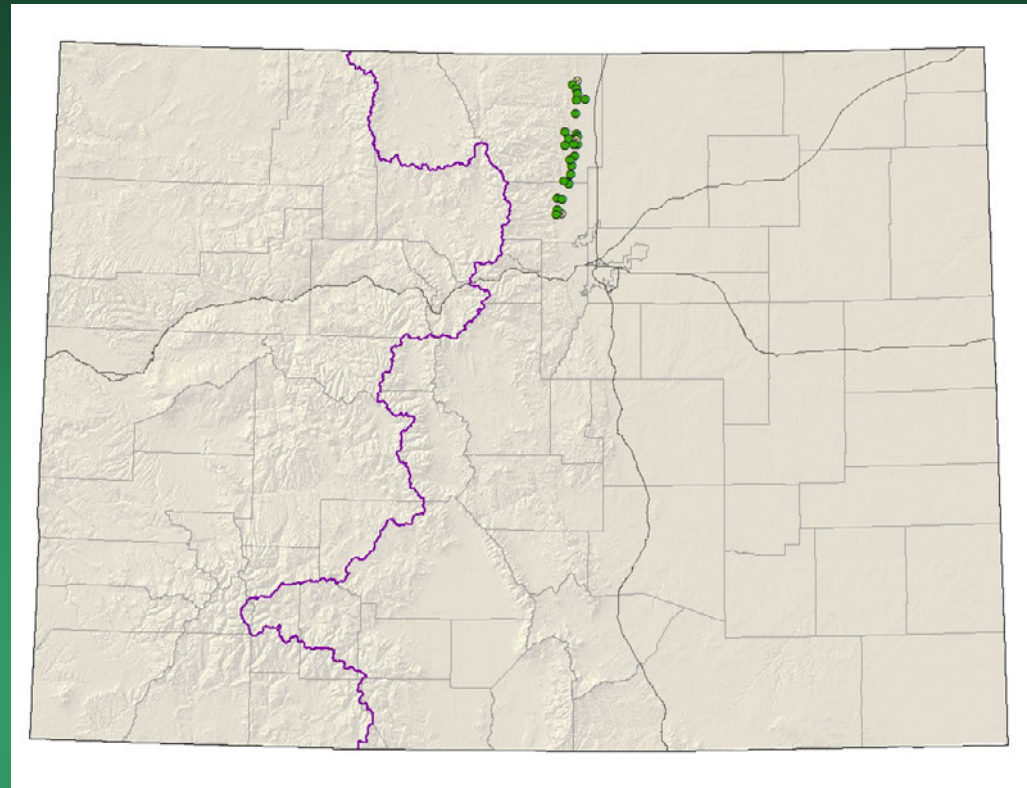
- Federal status: None
- Heritage ranks: G3/SU
- Global distribution: Wyoming, New Mexico, Colorado (Boulder, Clear Creek, Costilla, Douglas, El Paso, **Jefferson**, Larimer, Las Animas, Park, and **Saguache** counties).
- Elevation range: 7,470 to 8,720 ft.
- Last observed in Colorado: **2012**
- Colorado occurrences: **11** (6 are historical)
- Colorado individuals: unknown
- Primary threats: unknown
- Land ownership/management: USFS, BLM, Private





Physaria bellii

Bell's twinpod



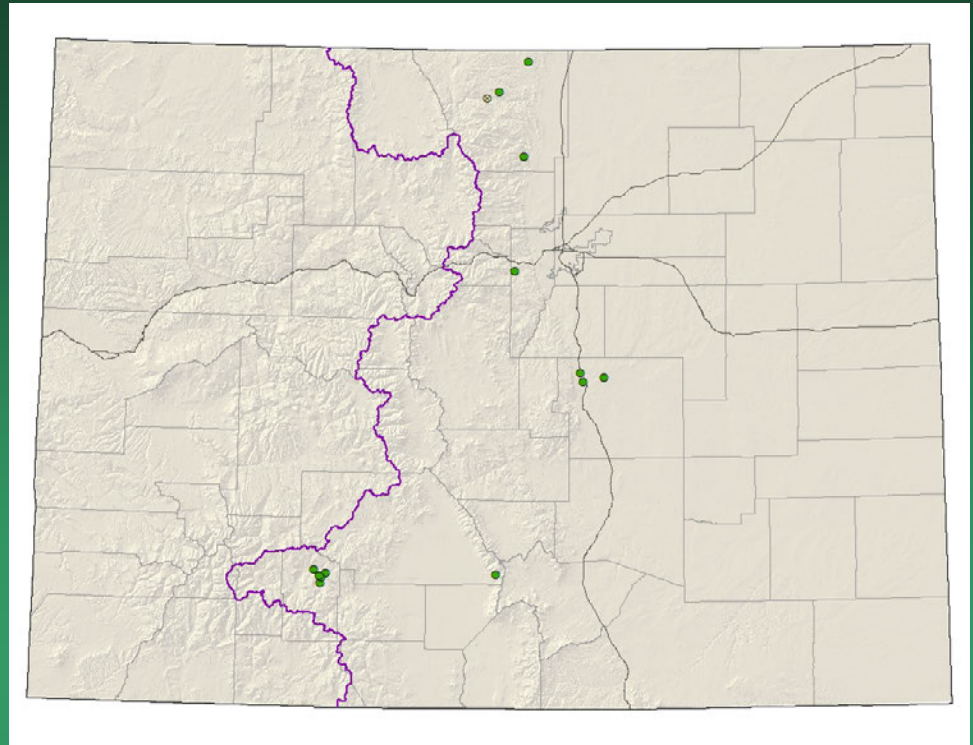
- Federal status: None
- Heritage ranks: G2G3/S2S3
- Global distribution: Colorado endemic (Boulder and Larimer counties). Jefferson and El Paso County records annotated to a different species.
- Elevation range: 5,090 to 6,550 ft.
- Last observed in Colorado: **2013**
- Colorado occurrences: **28** (3 are historical)
- Colorado individuals: Approximately 1 million
- Primary threats: Residential development, limestone mining, road work, weeds
- Land ownership/management: Private 67%, Local government 33%

Physaria bellii



Potentilla ambigens

Southern Rocky Mountain cinquefoil



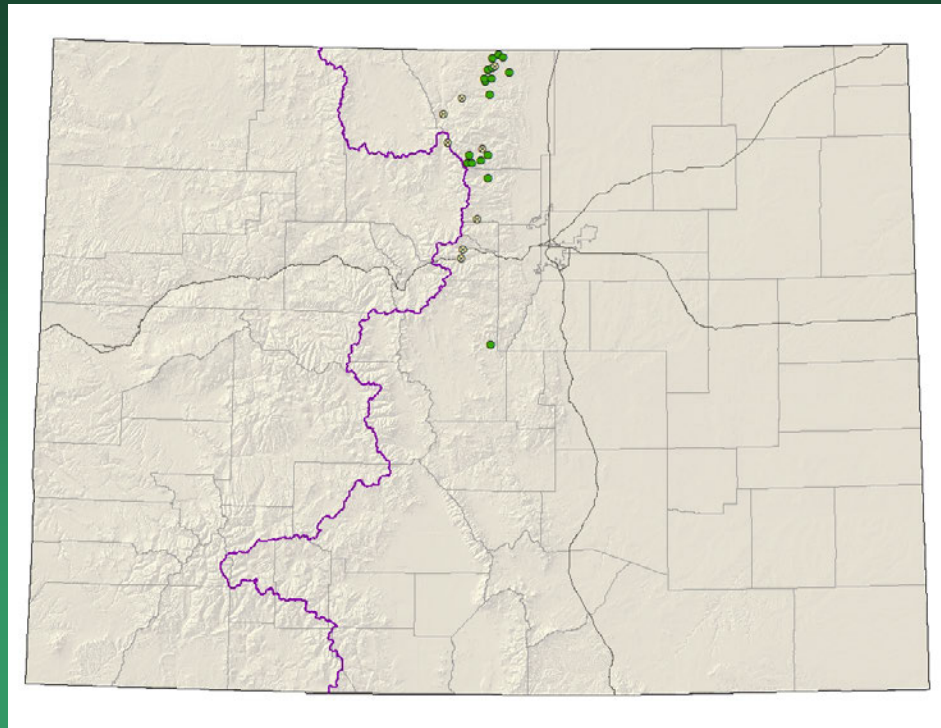
- Federal status: None
- Heritage ranks: G3/S2
- Global distribution: New Mexico, Wyoming (historical), and Colorado (El Paso, Jefferson, Larimer, Mineral, and Saguache counties).
- Elevation range: 6,610 to 9,060 ft.
- Last observed in Colorado: **2013**
- Colorado occurrences: **15** (1 is historical)
- Colorado individuals: 5,000
- Primary threats: recreation, grazing, weeds
- Land ownership/management: USFS, DoD, local government, state, private

Potentilla ambigens



Potentilla rupincola

Rocky Mountain cinquefoil



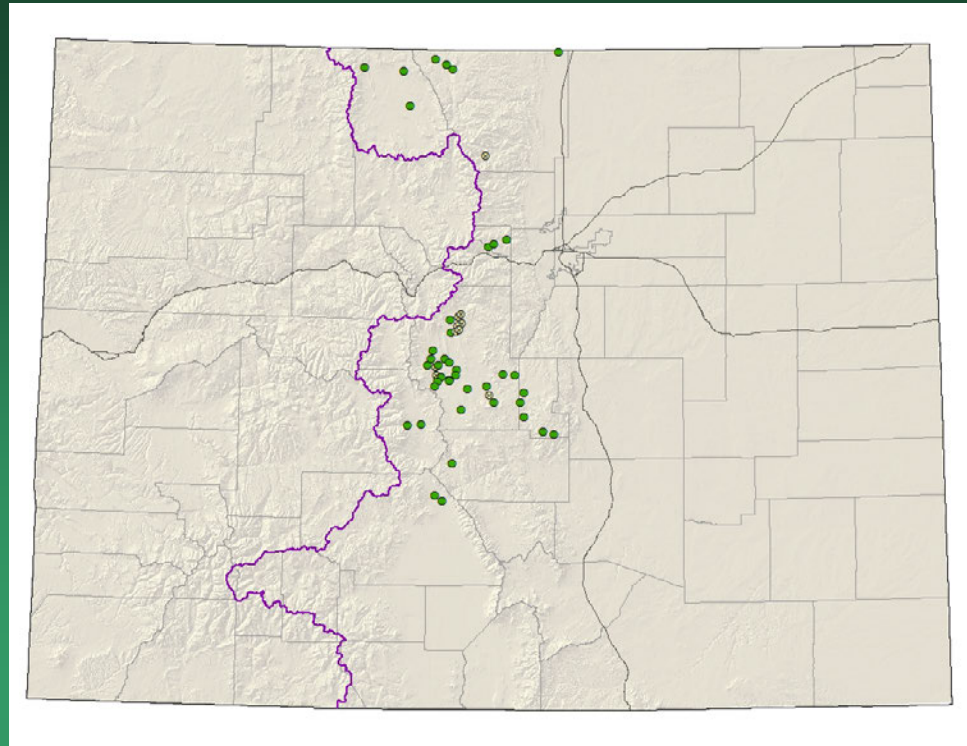
- Federal status: USFS Sensitive
- Heritage ranks: G2/S2
- Global distribution: Colorado endemic. Boulder, Clear Creek, Larimer, and Park counties. Historically from Gilpin county.
- Elevation range: 6,240 to 10,930 ft.
- Last observed in Colorado: 2013
- Colorado occurrences: 25 (8 are historical)
- Colorado individuals: 36,000+
- Primary threats: weeds, residential and commercial development, road work, recreation.
- Land ownership/management: Private, USFS, NPS, State, Local

Potentilla rupincola



Sisyrinchium pallidum

Pale blue-eyed grass



- Federal status: BLM Sensitive
- Heritage ranks: G3/S2
- Global distribution: Wyoming and Colorado (Chaffee, El Paso, Fremont, Gilpin, Jackson, Larimer, Park, Saguache, and Teller counties).
- Elevation range: 6,320 to 9,710 ft.
- Last observed in Colorado: **2013**
- Colorado occurrences: 52 (10 are historical)
- Colorado individuals: 11,000
- Primary threats: road work, residential development, grazing, peat mining, and recreational activities.
- Land ownership/management: Private 54%, BLM 23%, State 15%, NGO 8%

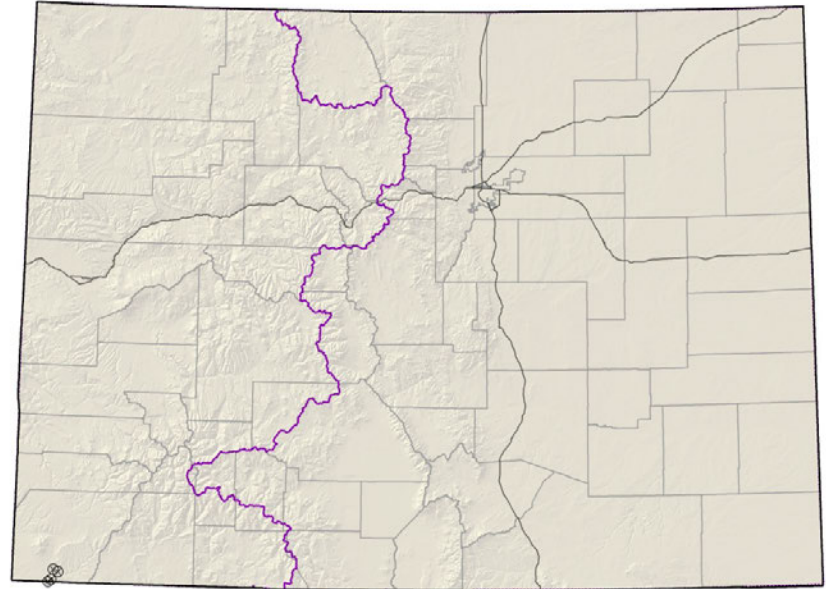
Sisyrinchium pallidum



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

Astragalus humillimus

Mancos milkvetch



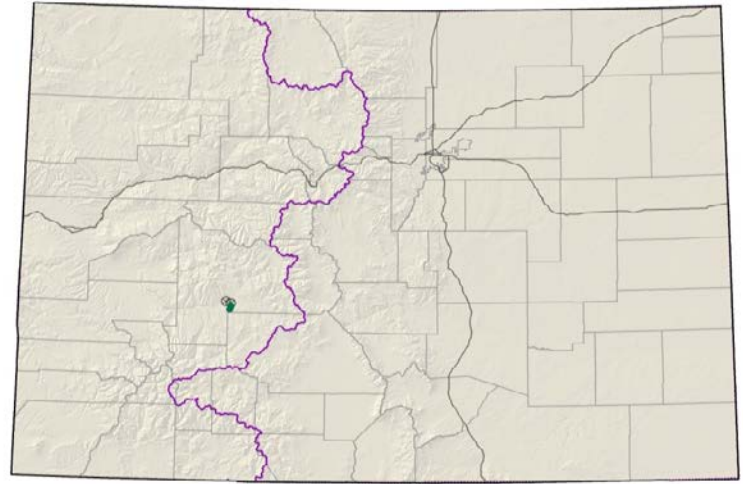
- Federal status: Endangered
- Heritage ranks: G1/S1
- Global distribution: New Mexico and Colorado (Montezuma County); 5200-6100 ft.
- Last observed in Colorado: 1989
- Colorado occurrences: 4 (all are historical)
- Colorado individuals: 25,000
- Primary threats: mineral, oil, and gas development, seismic 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: **2013**
- 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

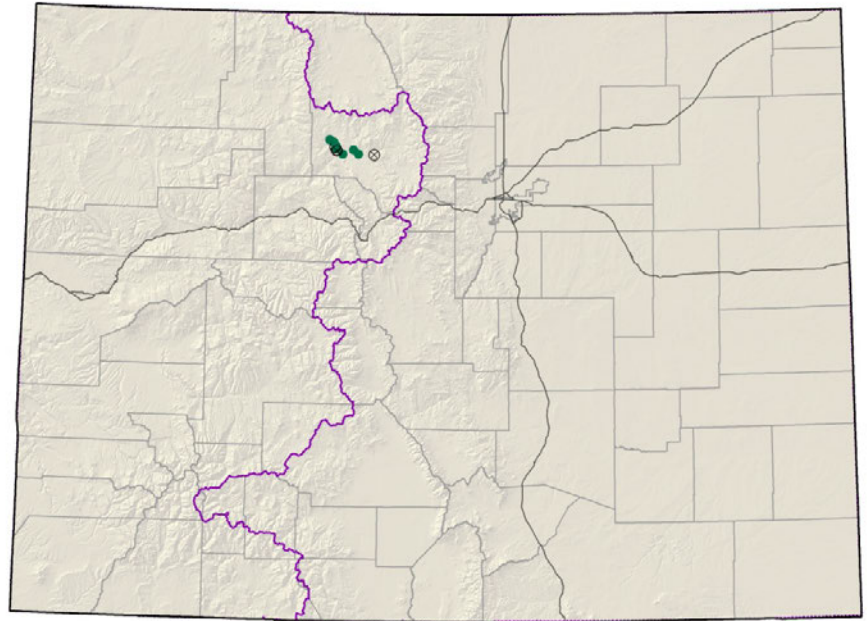
Astragalus microcymbus



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: **2013**
- Occurrences: 6 (1 is historical)
- Individuals: 10,000-12,000
- Primary threats: recreation, mining, oil and gas development
- Land ownership/management: BLM, private, state

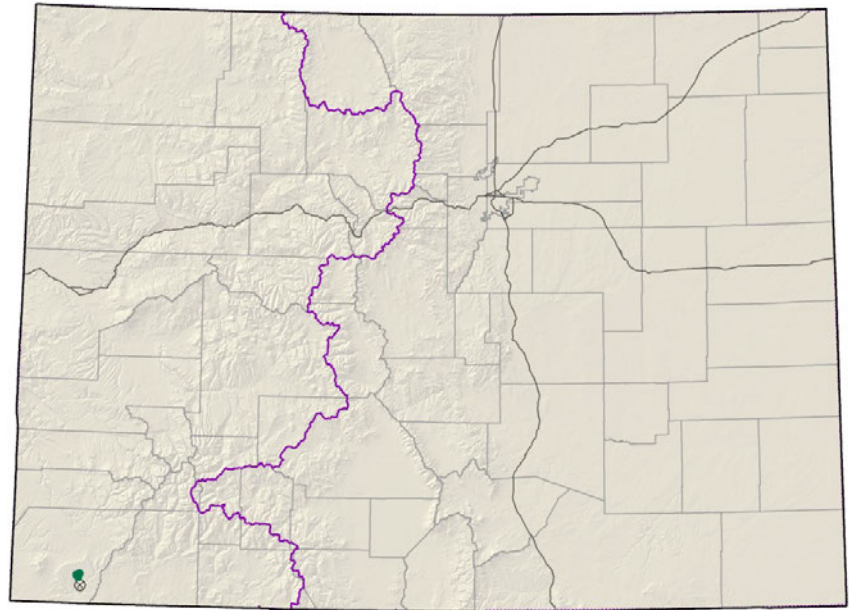
Astragalus osterhoutii



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

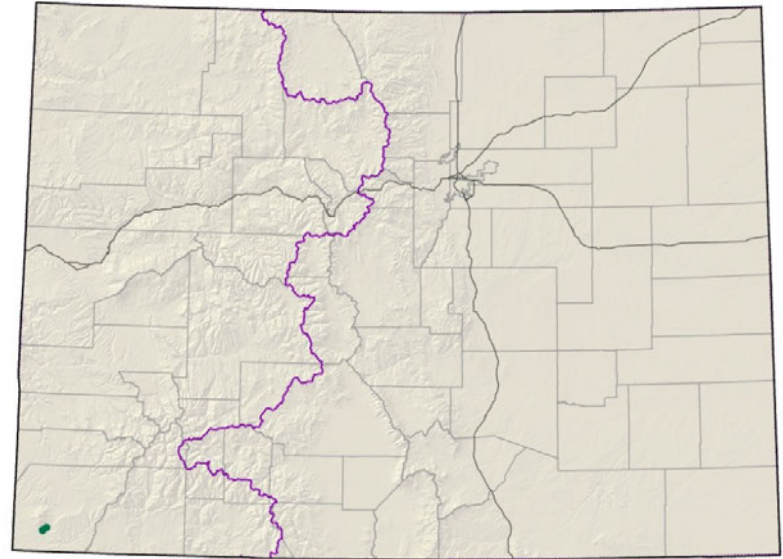


Astragalus schmolliae



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

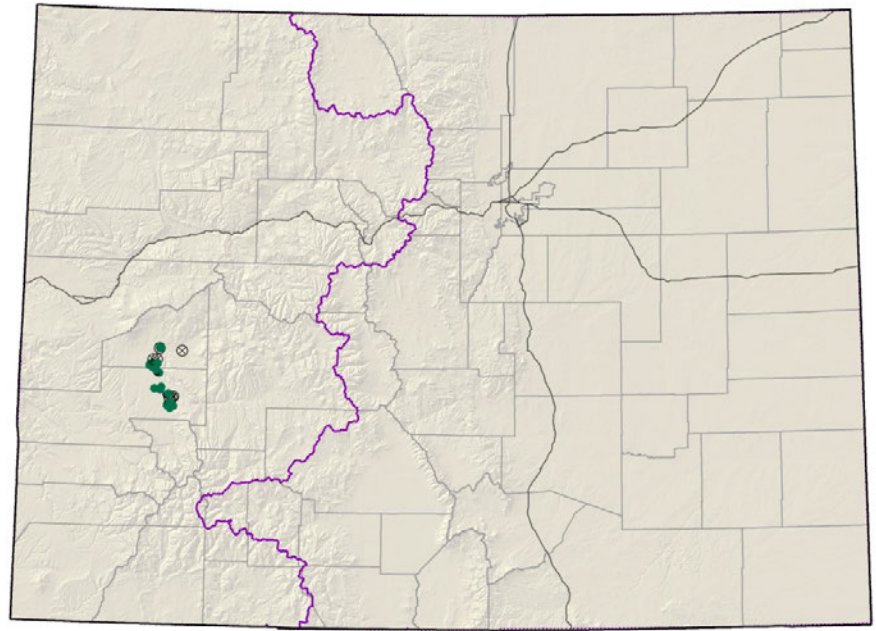
Astragalus tortipes



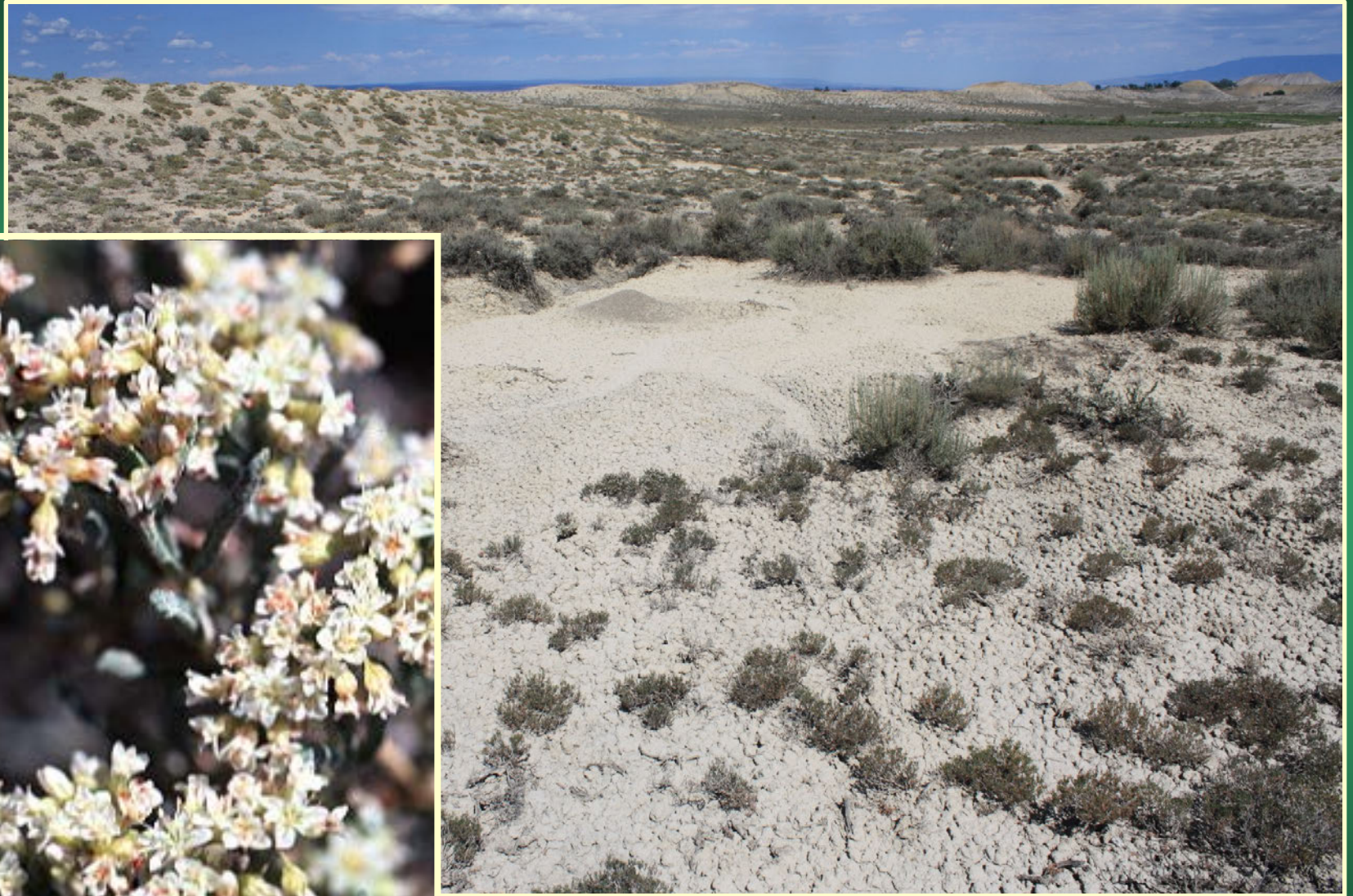
Eriogonum pelinophilum

Clay-loving wild buckwheat

- Federal status: Endangered
- Heritage ranks: G2/S2
- Global distribution: Colorado endemic (Delta and Montrose counties); 5200-6400 ft.
- Last observed: **2013**
- 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)



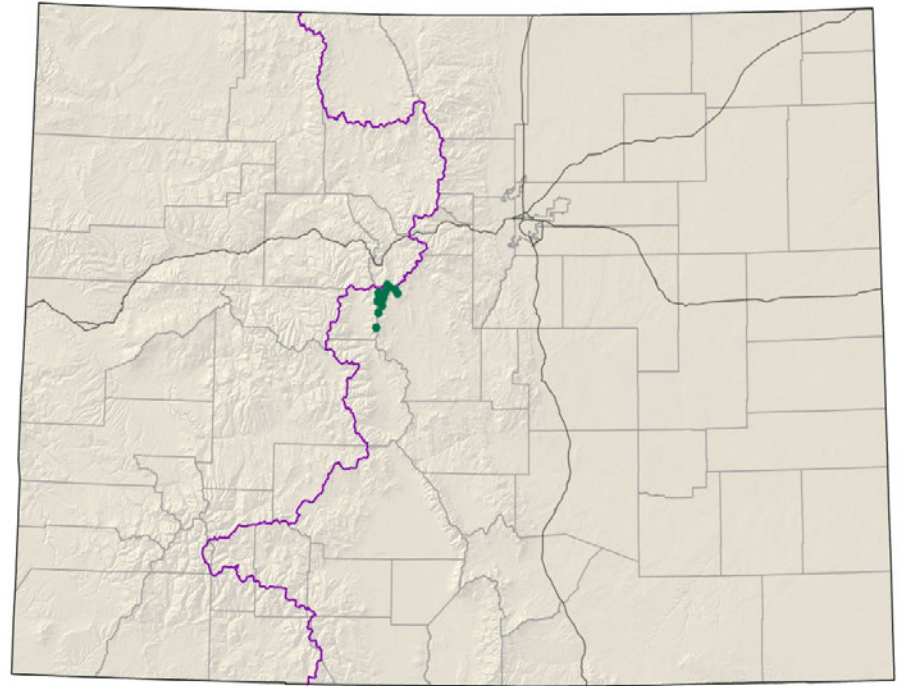
Eriogonum pelinophilum



Eutrema penlandii=
E. edwardsii

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: **2013**
- Occurrences: **13**
- Individuals: **20,000**
- Primary threats: mining, recreation
- Land ownership/management: private, USFS, BLM



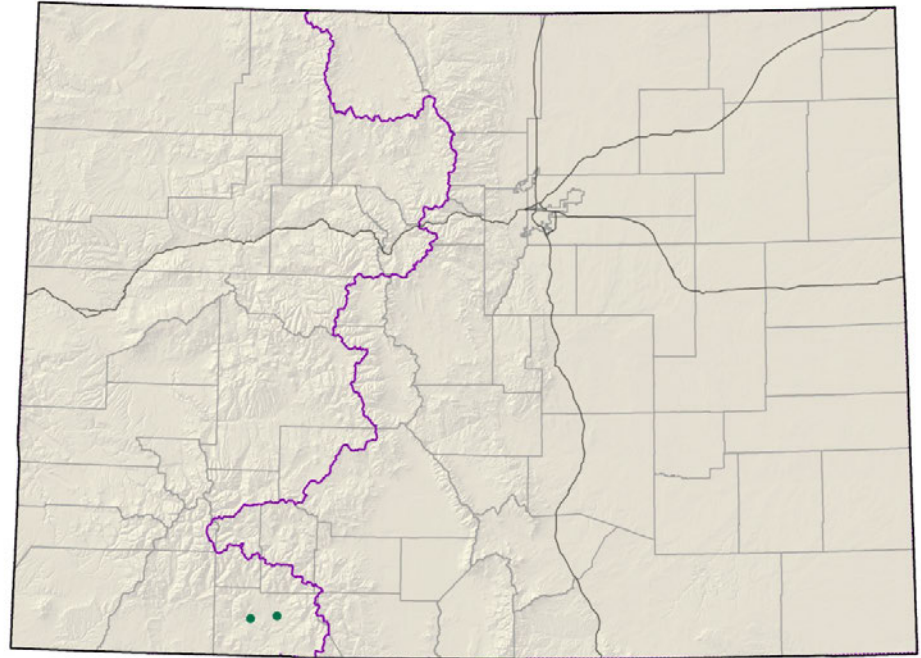
Eutrema penlandii



Ipomopsis polyantha Pagosa gilia

Conservation Action Plan

- Federal status: Endangered
- 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

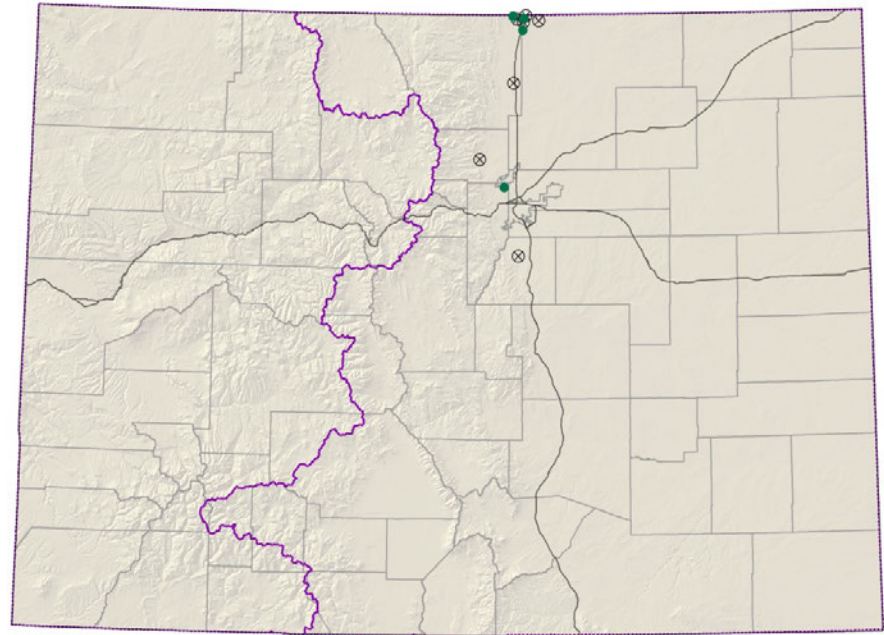


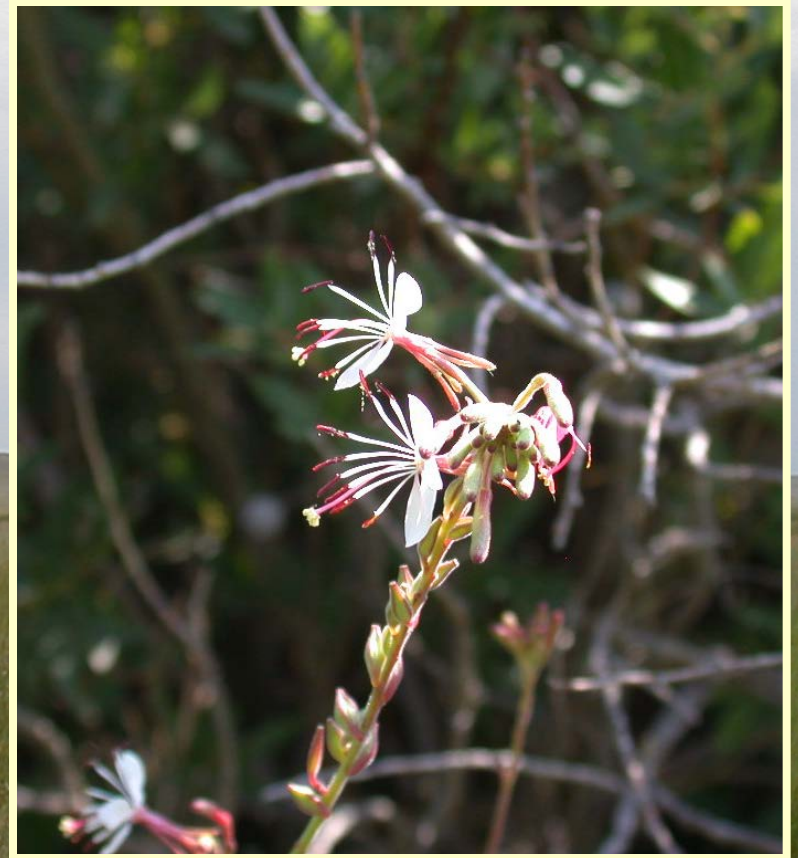
Oenothera coloradensis ssp. *coloradensis*

= *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

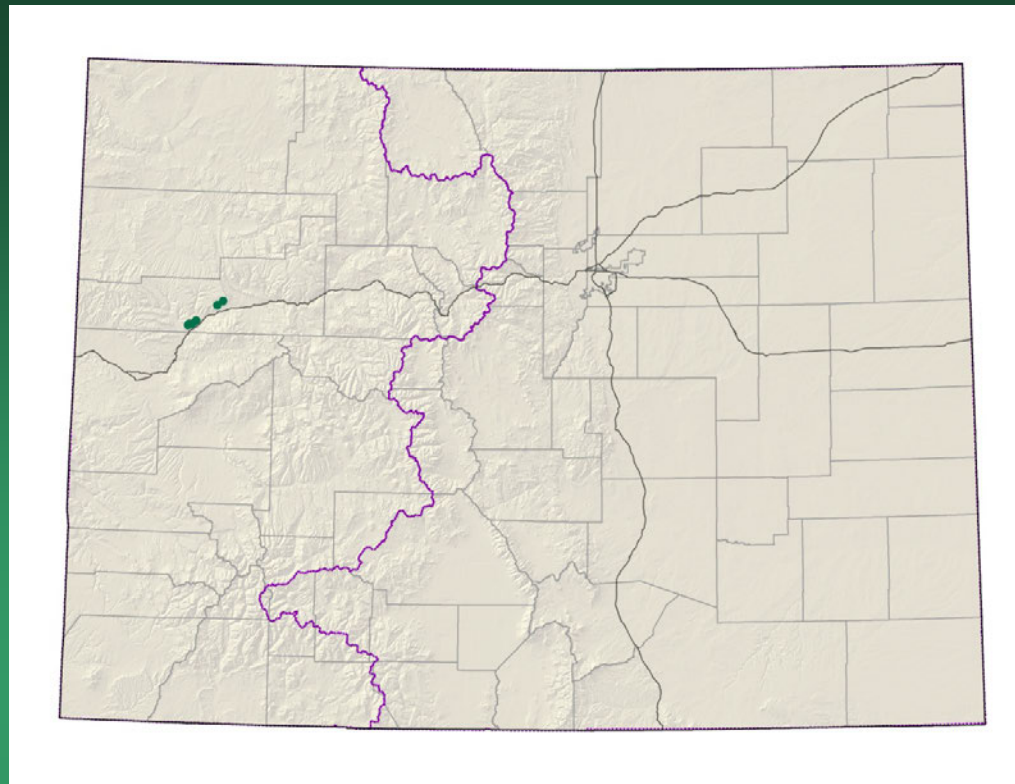
Knowlton's cactus

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



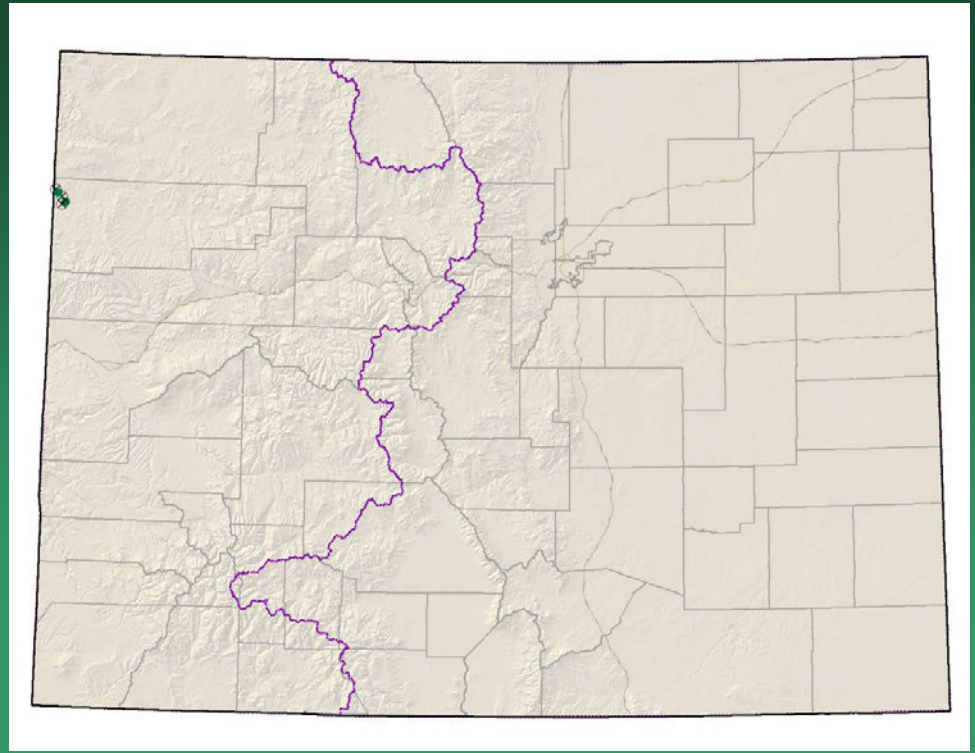
- Federal status: Threatened
- Heritage ranks: G1/S1
- Global distribution: Colorado endemic (Garfield County); 5600-9250 ft.
- Last observed: 2011-13
- Occurrences: 6
- Individuals: 4000-6000
- Primary threats: oil and gas development, oil shale development, recreation
- Land ownership/management: private, BLM

Penstemon debilis



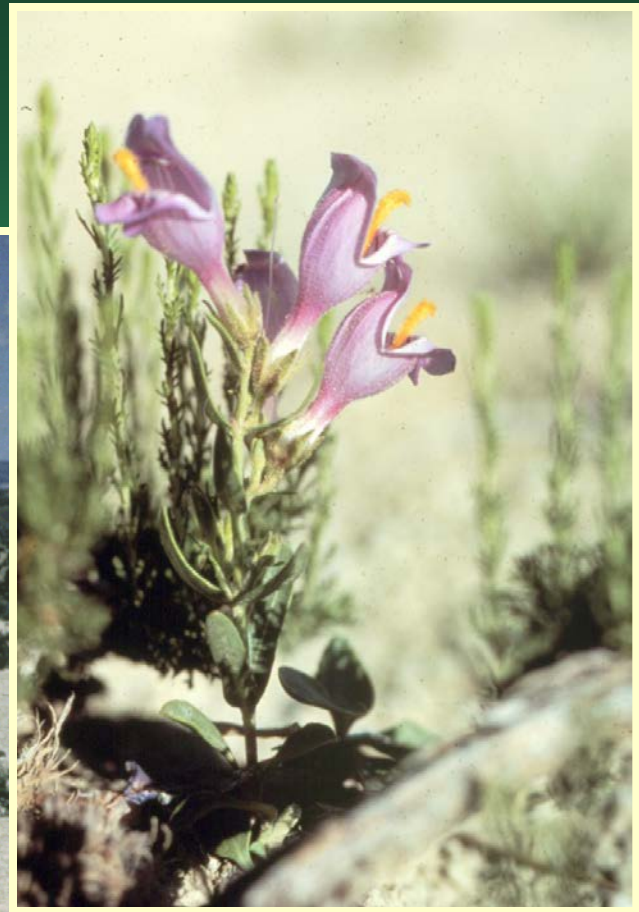
Penstemon grahamii

Graham beardtongue



- Federal status: BLM sensitive, Proposed Threatened
- Heritage ranks: G2/S1
- Global distribution: Utah and Colorado (Rio Blanco County); 5100-6000 ft.
- Last observed in Colorado: 2011-12
- Colorado occurrences: 7 (3 are historical)
- Colorado individuals: 5,000
- Primary threats: oil and gas development, overgrazing
- Land ownership/management: BLM

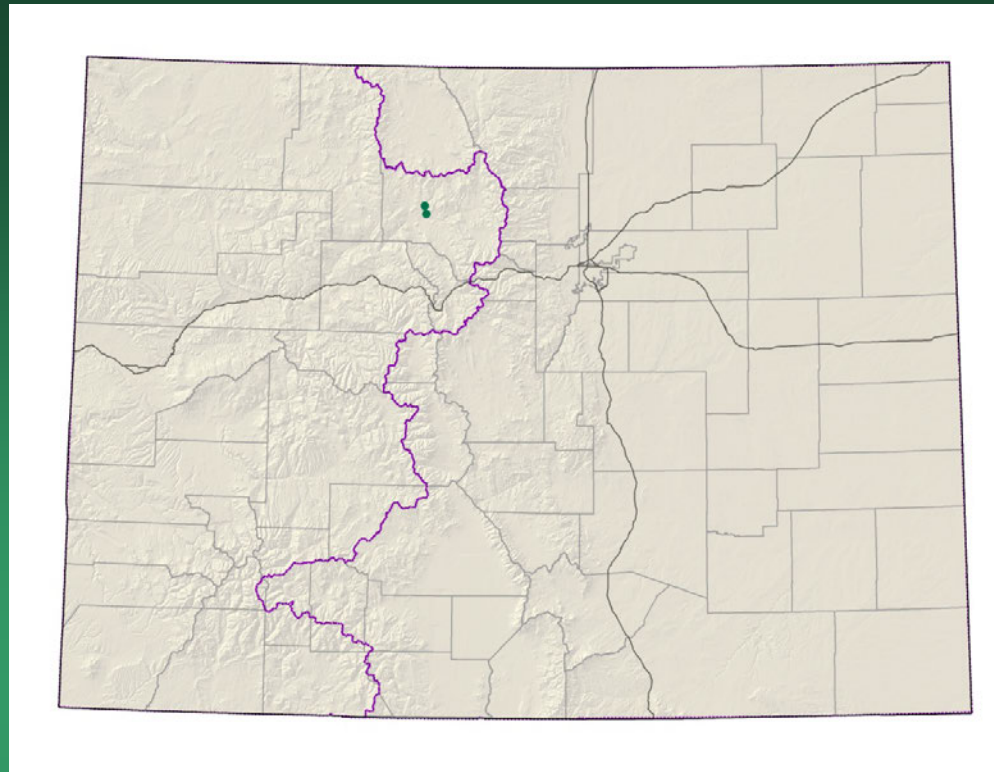
Penstemon grahamii



Penstemon penlandii

Penland beardtongue

Conservation Action Plan

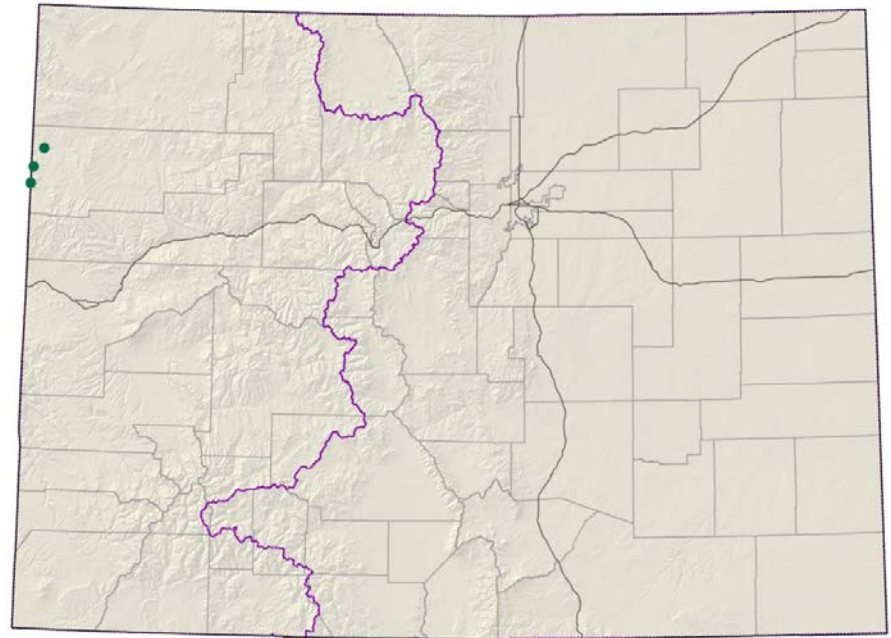


- Federal status: Endangered
- Heritage ranks: G1/S1
- Global distribution: Colorado endemic (Grand County); 7400-7900 ft.
- Last observed: 2012
- Occurrences: 2
- Individuals: 8600+
- Primary threats: road maintenance (grading, spraying, snow plowing), ORV use
- Land ownership/management: BLM, private

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: 2013
- Colorado occurrences: 3
- Colorado individuals: 200+
- Primary threats: overgrazing, oil and gas development, ORV use
- Land ownership/management: BLM, private



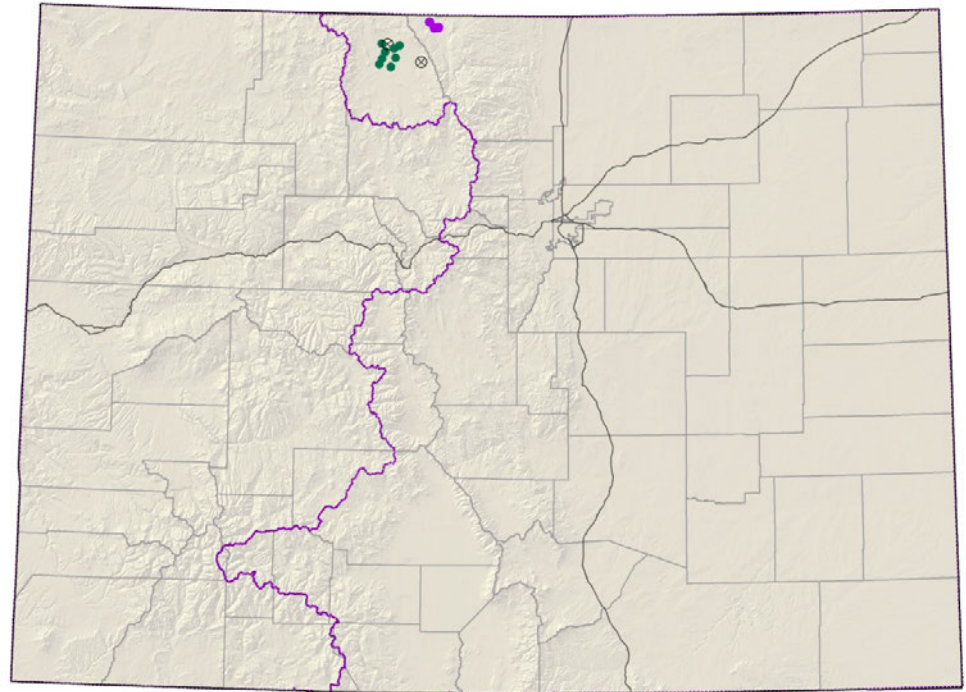
Penstemon scariosus var. *albifluvis*

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: 2013
- 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

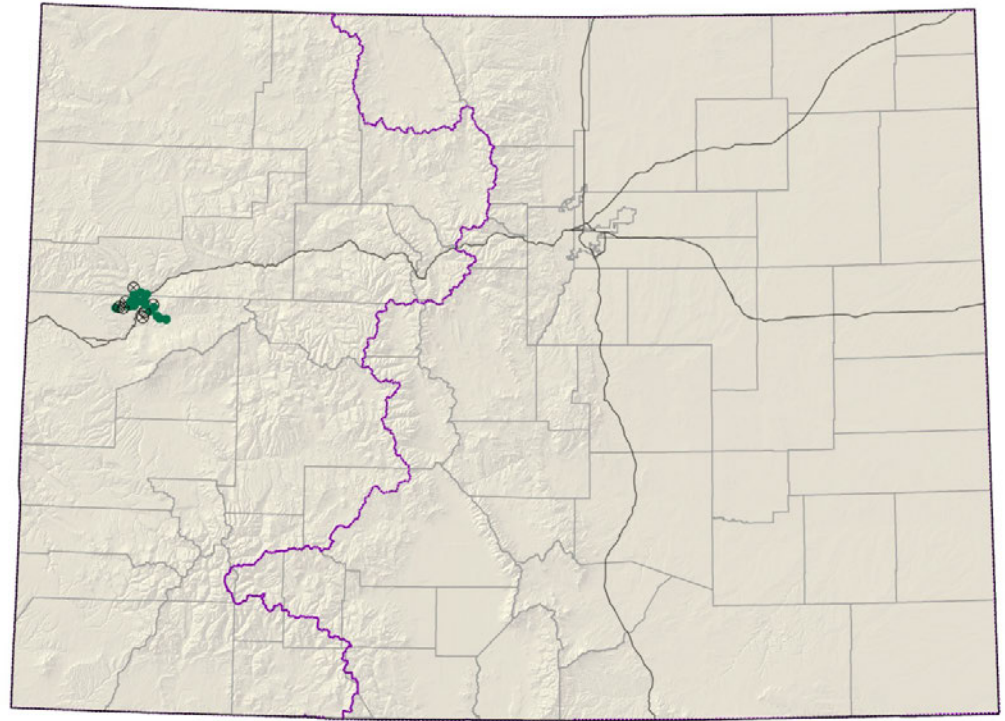




Phacelia formosula

Phacelia submutica

DeBeque phacelia



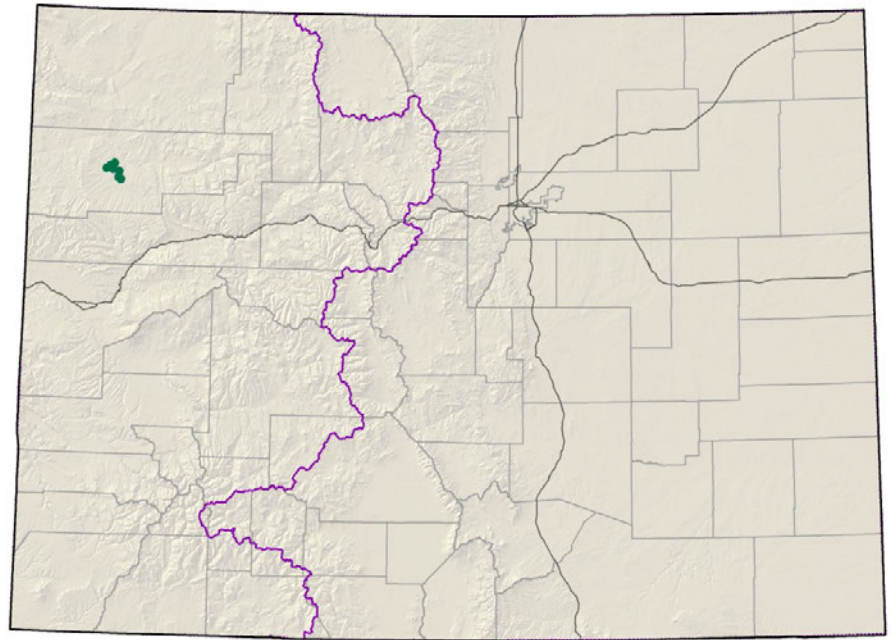
- Federal status: Threatened
- Heritage ranks: G2/S2
- Global distribution: Colorado endemic (Garfield and Mesa counties); 5000-7100 ft.
- Last observed: **2013**
- Occurrences: 22 (6 are historical)
- Individuals: 25,000-68,000
- Primary threats: oil and gas development, ORV use, overgrazing, oil shale mining
- Land ownership/management: BLM, private, USFS



Phacelia submutica

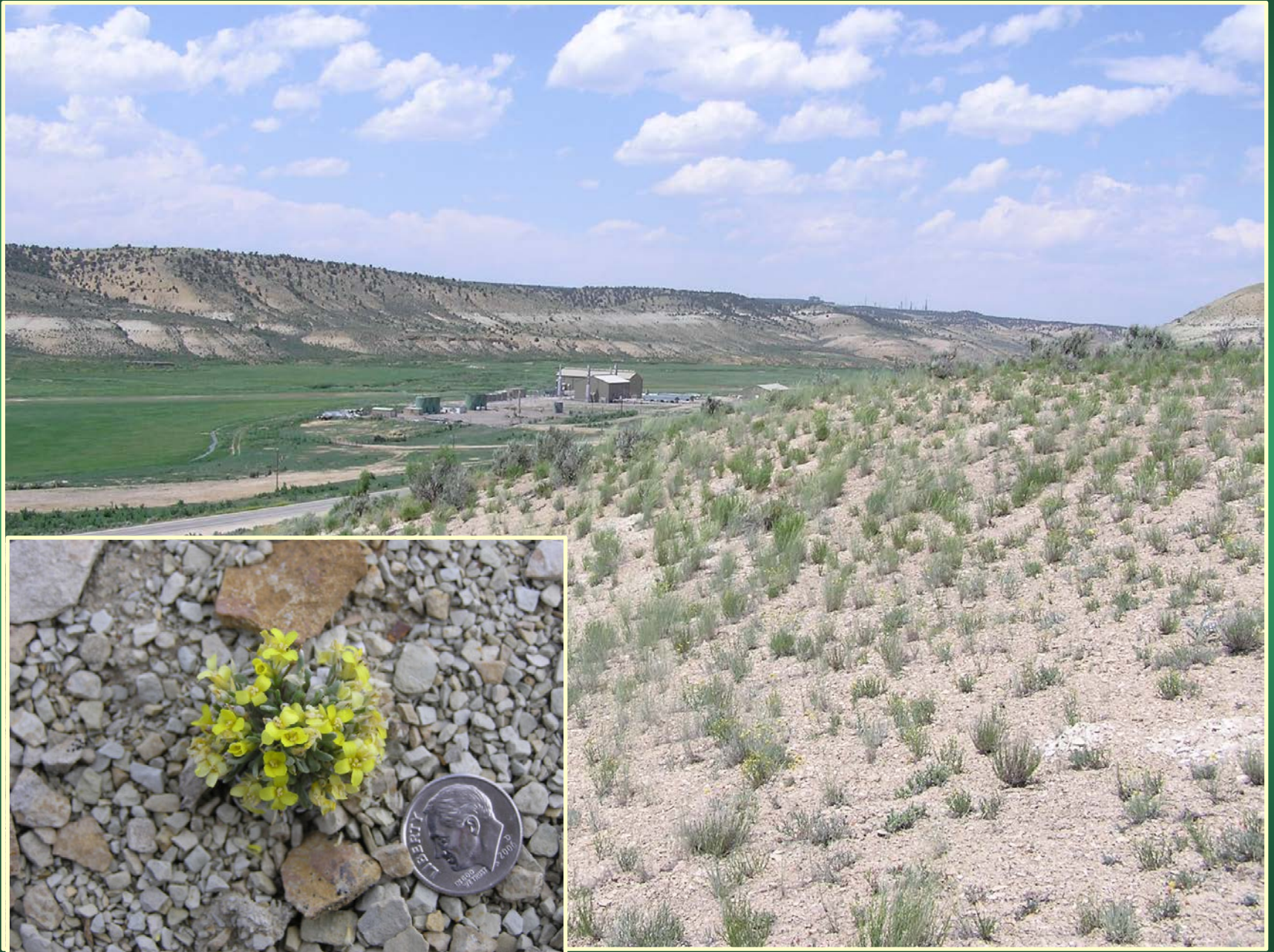
Physaria congesta
= *Lesquerella congesta*
Dudley Bluffs bladderpod

Conservation Action Plan



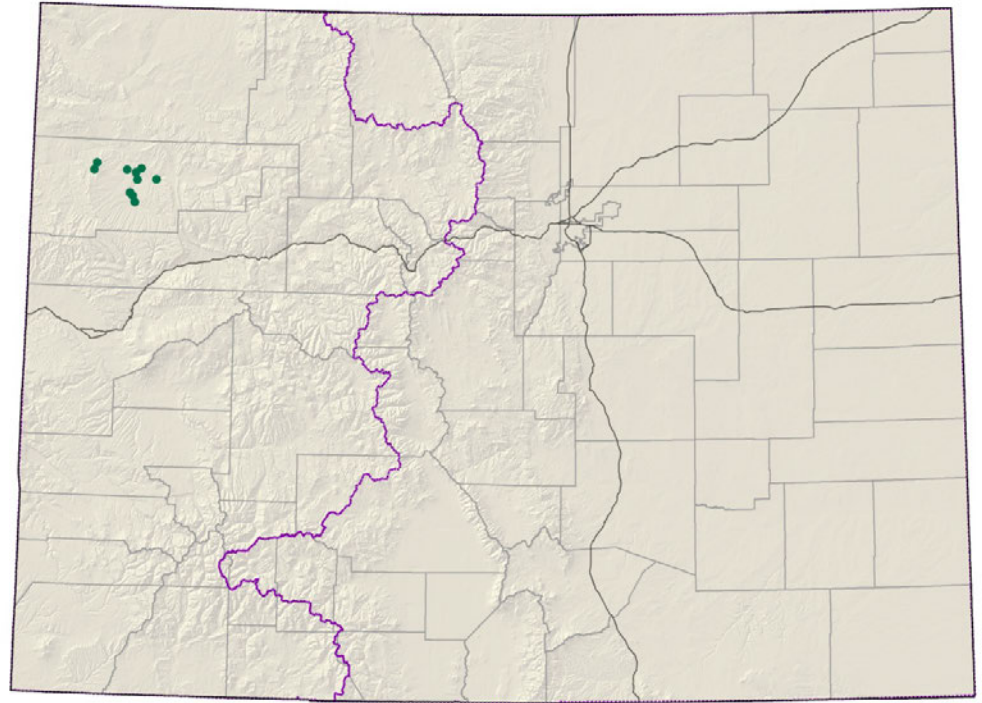
- Federal status: Threatened
- Heritage ranks: G1/S1
- Global distribution: Colorado endemic (Rio Blanco County); 6000-6500 ft.
- Last observed: 2012
- Occurrences: 7
- Individuals: 650,000
- Primary threats: oil and gas development, oil shale and nahcolite mining, ORV use, overgrazing, trampling by wild horses
- Land ownership/management: BLM, state, private

Physaria (Lesquerella) congesta



Physaria obcordata Piceance twinpod

Conservation Action Plan



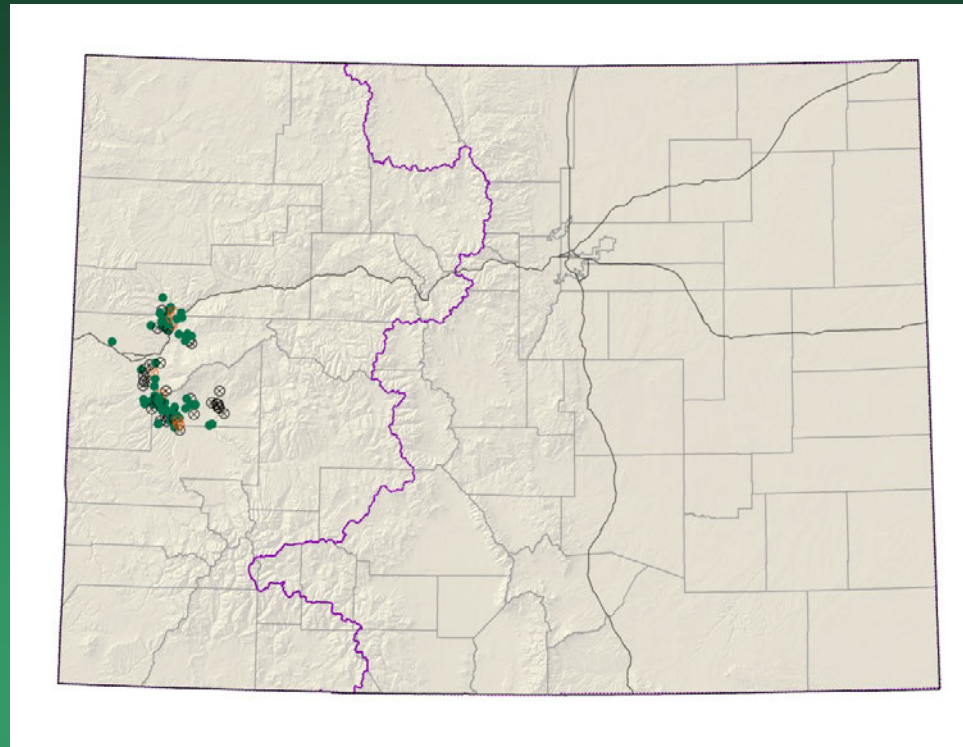
- Federal status: Threatened
- Heritage ranks: G1G2/S1S2
- Global distribution: Colorado endemic (Rio Blanco County); 5900-7500 ft.
- Last observed: 2012
- Occurrences: 11
- Individuals: 30,000
- Primary threats: oil and gas development, oil shale and nahcolite mining, ORV use, trampling by wild horses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



Physaria obcordata

Sclerocactus glaucus

Colorado hookless cactus



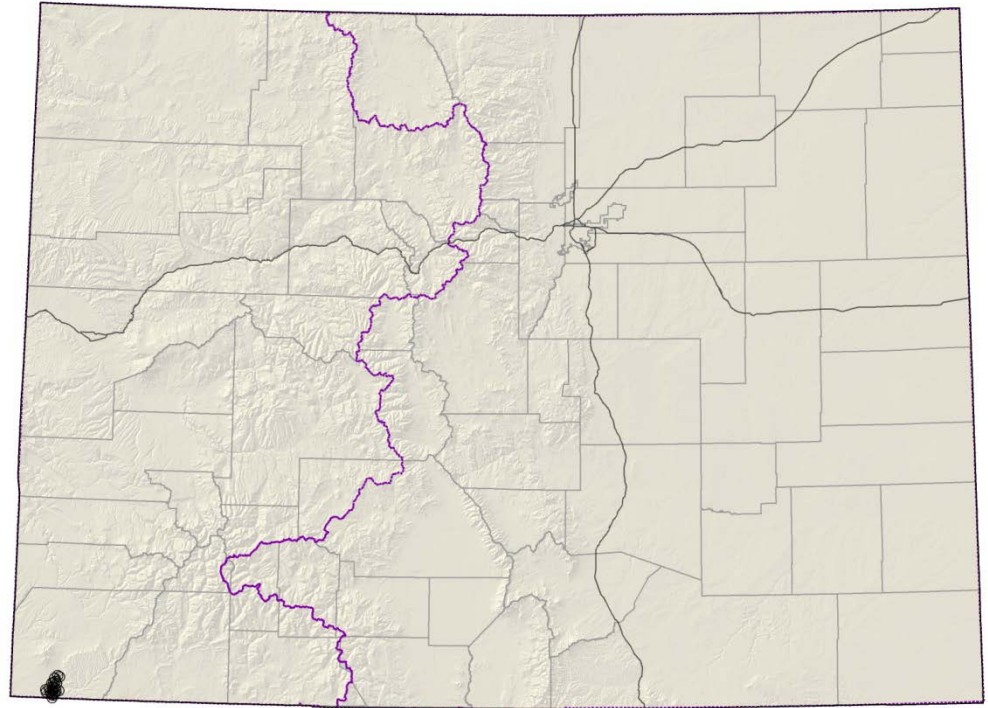
- Federal status: Threatened
- Heritage ranks: G2G3/S2S3
- Global distribution: Colorado (Delta, Garfield, Mesa, and Montrose counties); 4600-7100 ft.
- Last observed in Colorado: 2013
- Colorado occurrences: 82 (29 are historical or unrankable)
- Colorado individuals: ~15,000
- Primary threats: oil 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

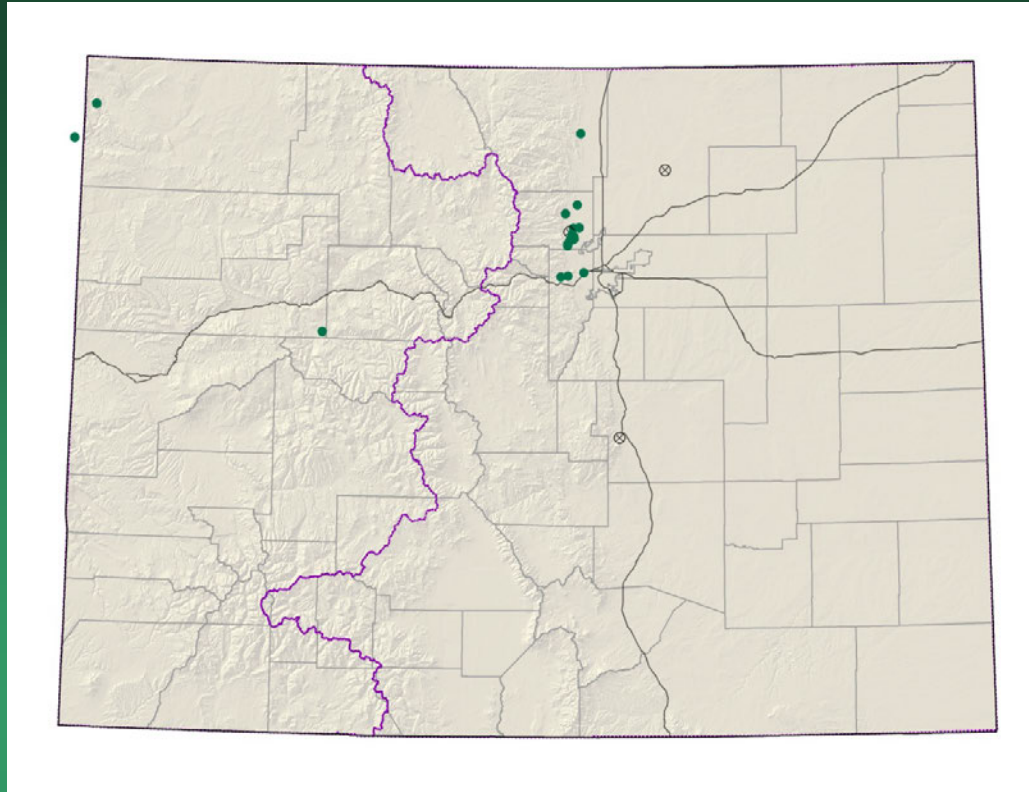


Sclerocactus mesae-verdae

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: 2013
- 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

