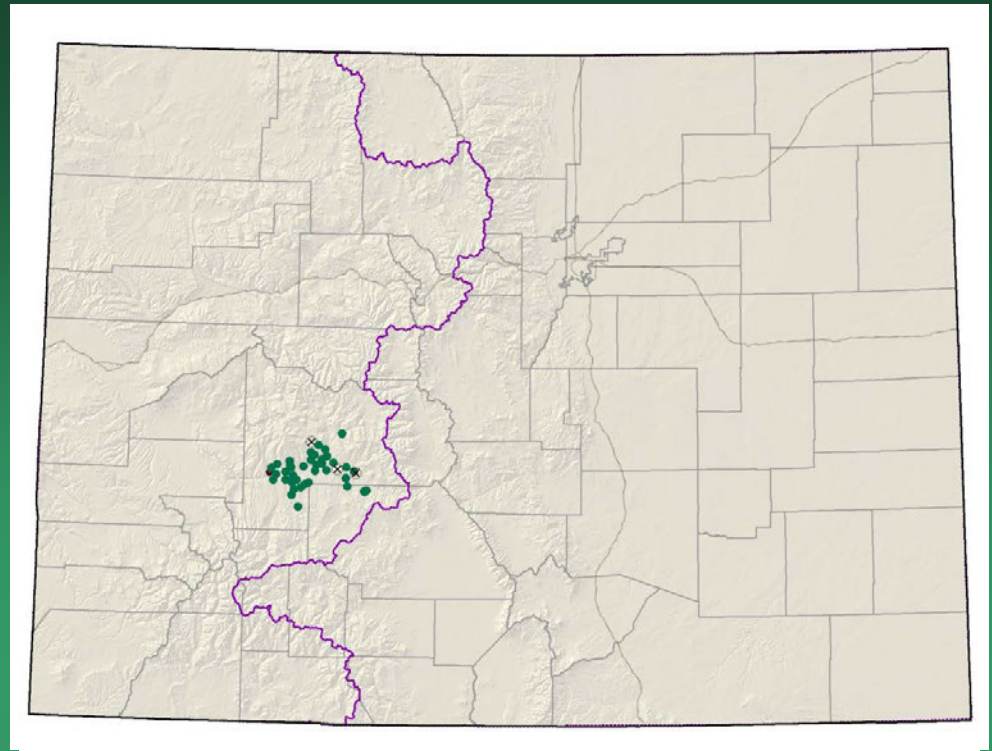


2008
Montrose
SW Colorado
G2G3 species

Astragalus anisus Gunnison milkvetch



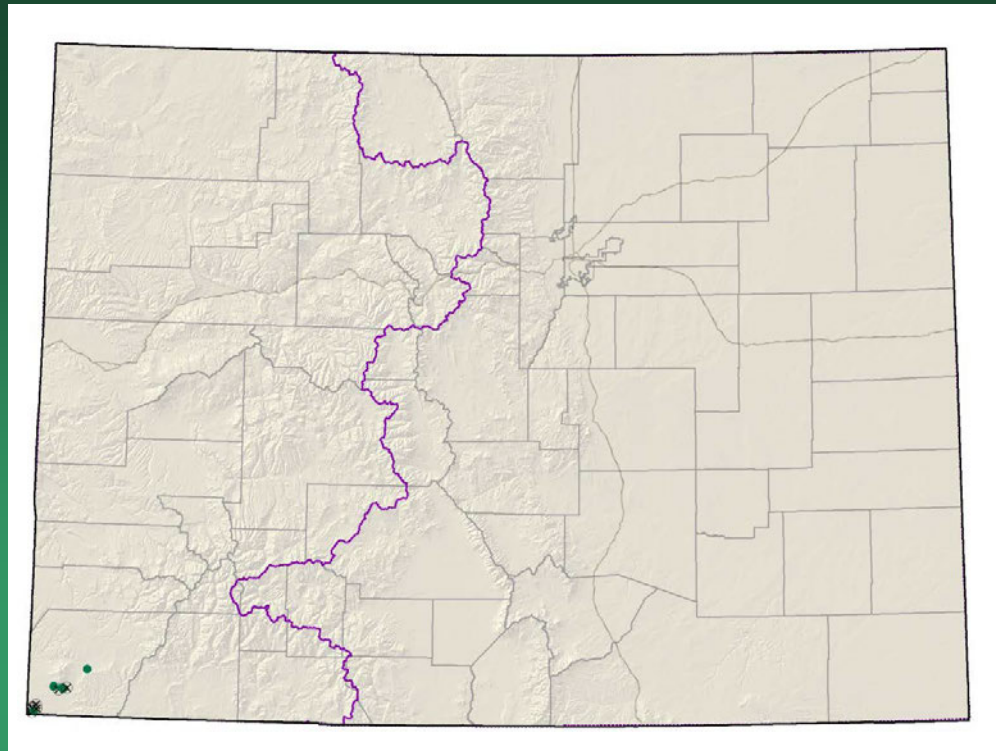
- Federal status: BLM sensitive
- Heritage ranks: G2G3/S2S3
- Global distribution: endemic to Colorado (Gunnison & Saguache counties)
- Last observed in Colorado: 2010
- Colorado occurrences: 40 (3 are historical, 1 extirpated)
- Colorado individuals: 5000-10,000?
- Primary threats: road building, off-road vehicle use, non-motorized recreation, non-native species invasion, grazing, residential development, fire suppression, resource extraction, and global climate change.
- Land ownership/management: BLM, USFS, NPS, state, private



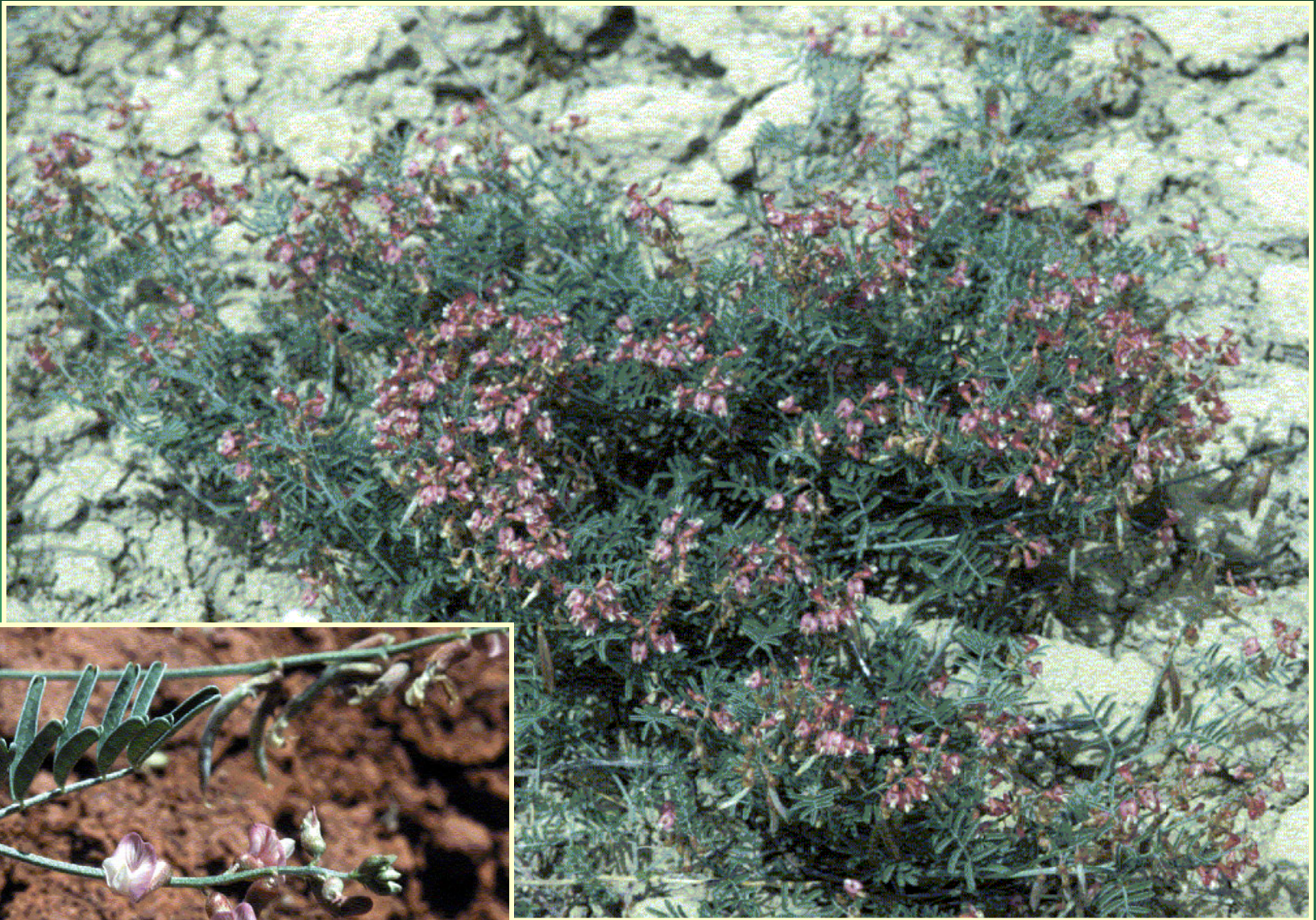
Astragalus anisus

Astragalus cronquistii

Cronquist's milkvetch



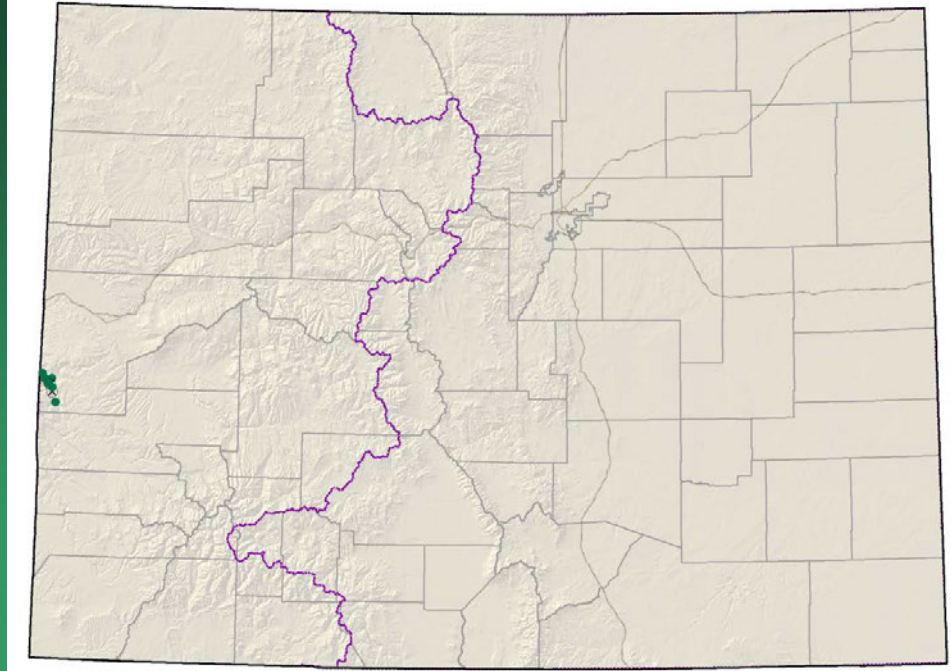
- Federal status: none
- Heritage ranks: G2/S2
- Global distribution: Utah and Colorado (Montezuma County)
- Last observed in Colorado: 1993
- Colorado occurrences: 13 (8 are historical)
- Colorado individuals: ~1500
- Primary threats: roads, unknown
- Land ownership/management: Tribal (Ute Mountain Ute)



Astragalus cronquistii

Astragalus equisolensis (= *A. desperatus* var. *neeseae*) horseshoe milkvetch

Conservation Action Plan

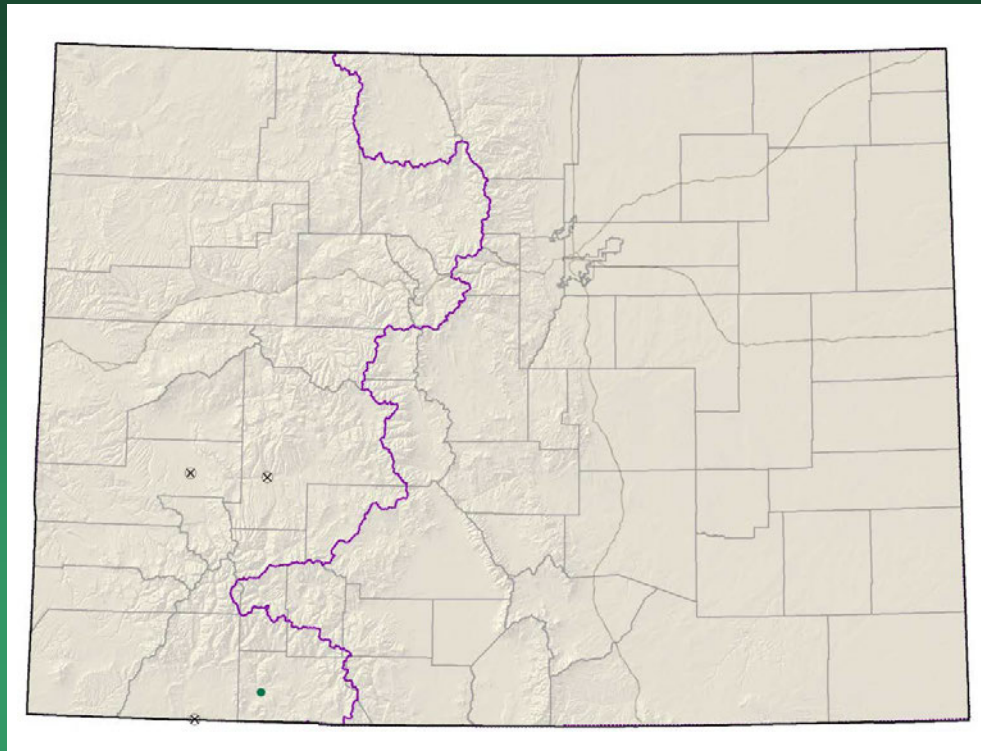


- Federal status: BLM sensitive
- Heritage ranks: G5T1/S1
- Global distribution: Utah and Colorado (Mesa County)
- Last observed in Colorado: 2012
- Colorado occurrences: 8 (2 are historical)
- Colorado individuals: 2670
- Primary threats: unknown
- Land ownership/management: BLM, private

Astragalus equisolensis



Astragalus iodopetalus violet milkvetch



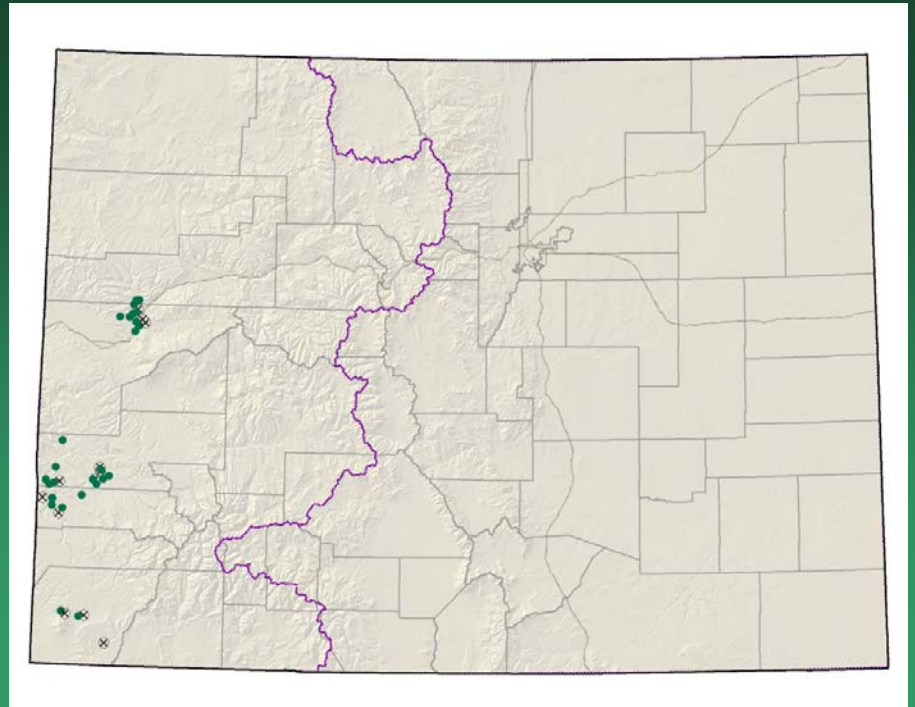
- Federal status: none
- Heritage ranks: G2/S1
- Global distribution: New Mexico (historical) and Colorado (Archuleta, Gunnison, La Plata and Montrose counties).
- Last observed in Colorado: Edwards 1993
- Colorado occurrences: 4 (3 are historical)
- Colorado individuals: unknown
- Primary threats: unknown
- Land ownership/management: USFS, Chimney Rock Archeological Area

Astragalus iodopetalus



Astragalus naturitensis

Naturita milkvetch



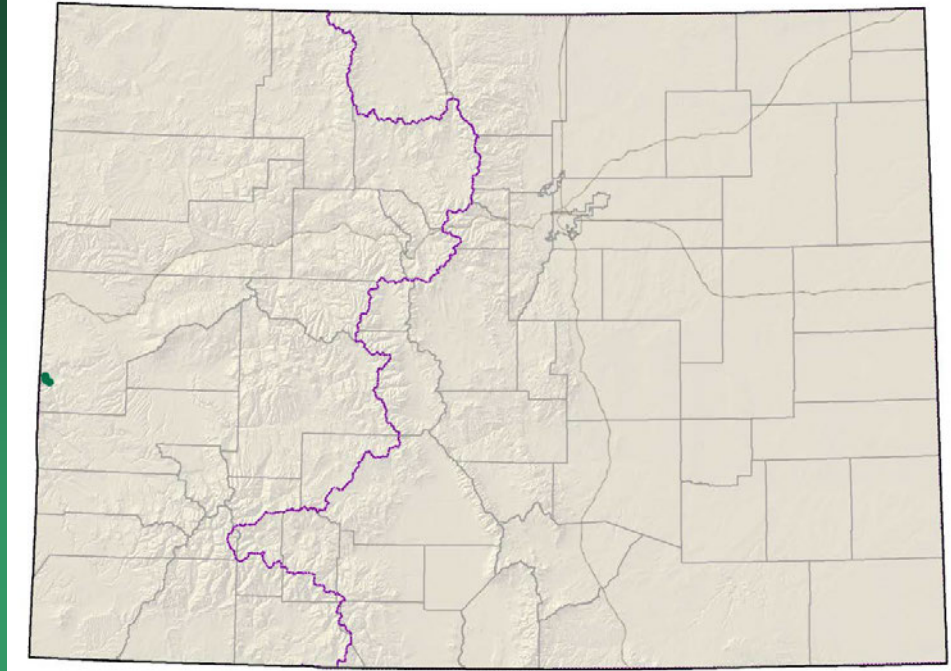
- Federal status: BLM sensitive
- Heritage ranks: G2G3/S2S3
- Global distribution: New Mexico, Utah, the Navajo Nation and Colorado (Garfield, Mesa, Montezuma, Montrose and San Miguel counties)
- Last observed in Colorado: 2012
- Colorado occurrences: 47 (11 are historical)
- Colorado individuals: 650 in 2011, + prev. ~ 6500 estimate
- Primary threats: Recreation, Oil and Gas development, Uranium claims
- Land ownership/management: BLM, USFS, private

Astragalus naturitensis



Astragalus piscator Fisher Towers milkvetch

Conservation Action Plan



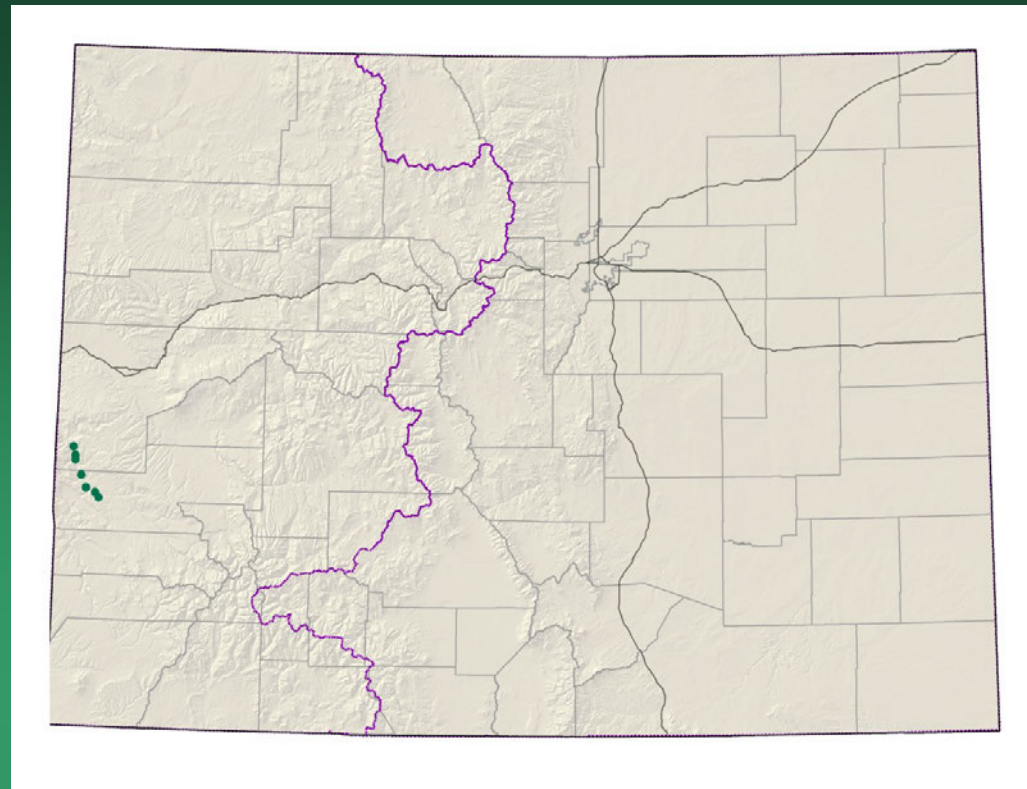
- Federal status: BLM sensitive
- Heritage ranks: G2G3/S1
- Global distribution: Utah and Colorado (Mesa County)
- Last observed in Colorado: 2012
- Colorado occurrences: 3
- Colorado individuals: 3000-5000
- Primary threats: recreation, roads
- Land ownership/management: BLM

Astragalus piscator



Astragalus rafaensis

San Rafael milkvetch

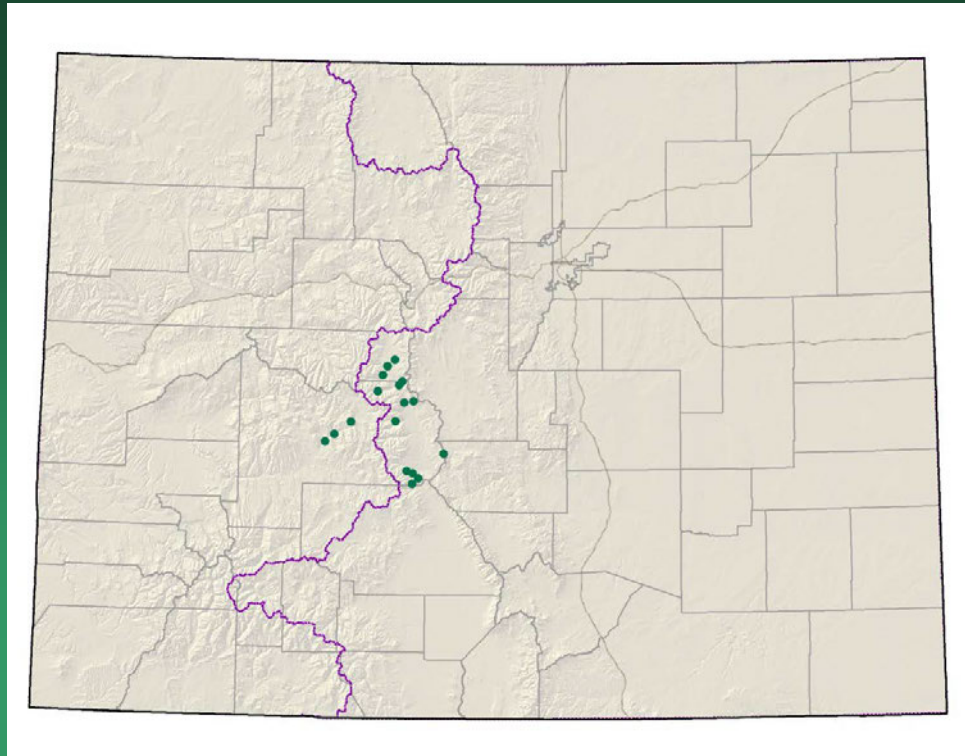


- Federal status: BLM sensitive
- Heritage ranks: G2G3/S1
- Global distribution: Utah and Colorado (Montrose and Mesa counties)
- Last observed in Colorado: 2008
- Colorado occurrences: 7
- Colorado individuals: >1000
- Primary threats: unknown
- Land ownership/management: BLM, private

Astragalus rafaensis



Boechera crandallii
= *Arabis crandallii*
Crandall's rockcress

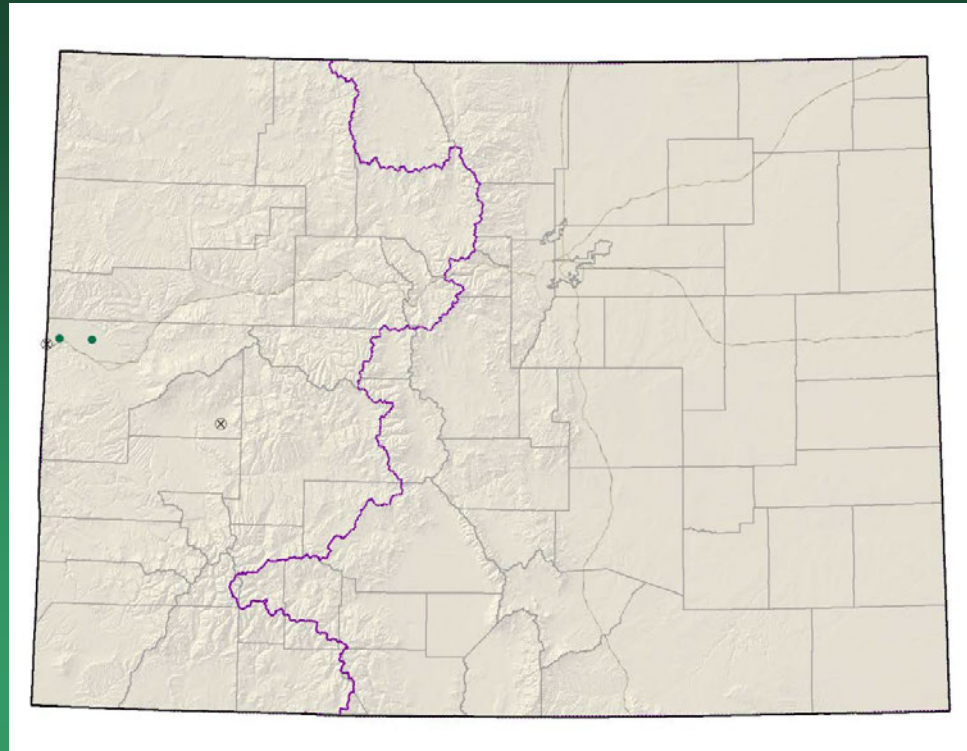


- Federal status: BLM sensitive
- Heritage ranks: G2/S2
- Global distribution: Wyoming and Colorado (Gunnison, Chaffee, and Lake counties)
- Last observed in Colorado: 2008
- Colorado occurrences: 17+
- Colorado individuals:
- Primary threats: habitat loss/degradation, road construction
- Land ownership/management: USFS, BLM, private

Boechea crandallii



Camissonia eastwoodiae
Eastwood evening
primrose

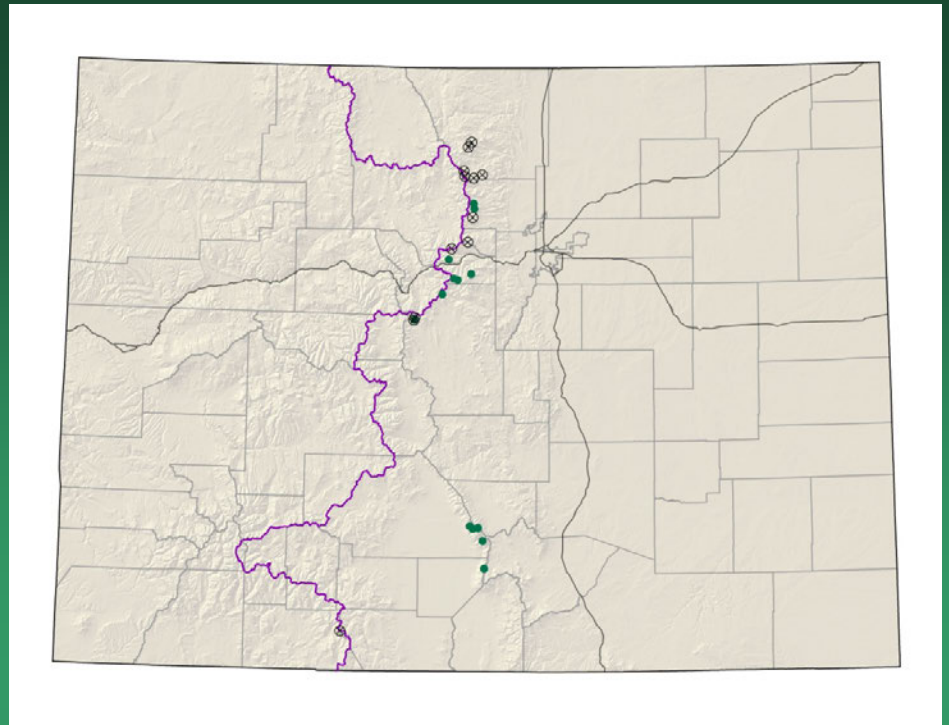


- Federal status: BLM sensitive
- Heritage ranks: G2/S1
- Global distribution: Utah and Colorado (Delta and Mesa counties)
- Last observed in Colorado: 2003
- Colorado occurrences: 4 (2 are historical)
- Colorado individuals: several thousand
- Primary threats: unknown
- Land ownership/management: BLM, private

Camissonia eastwoodiae

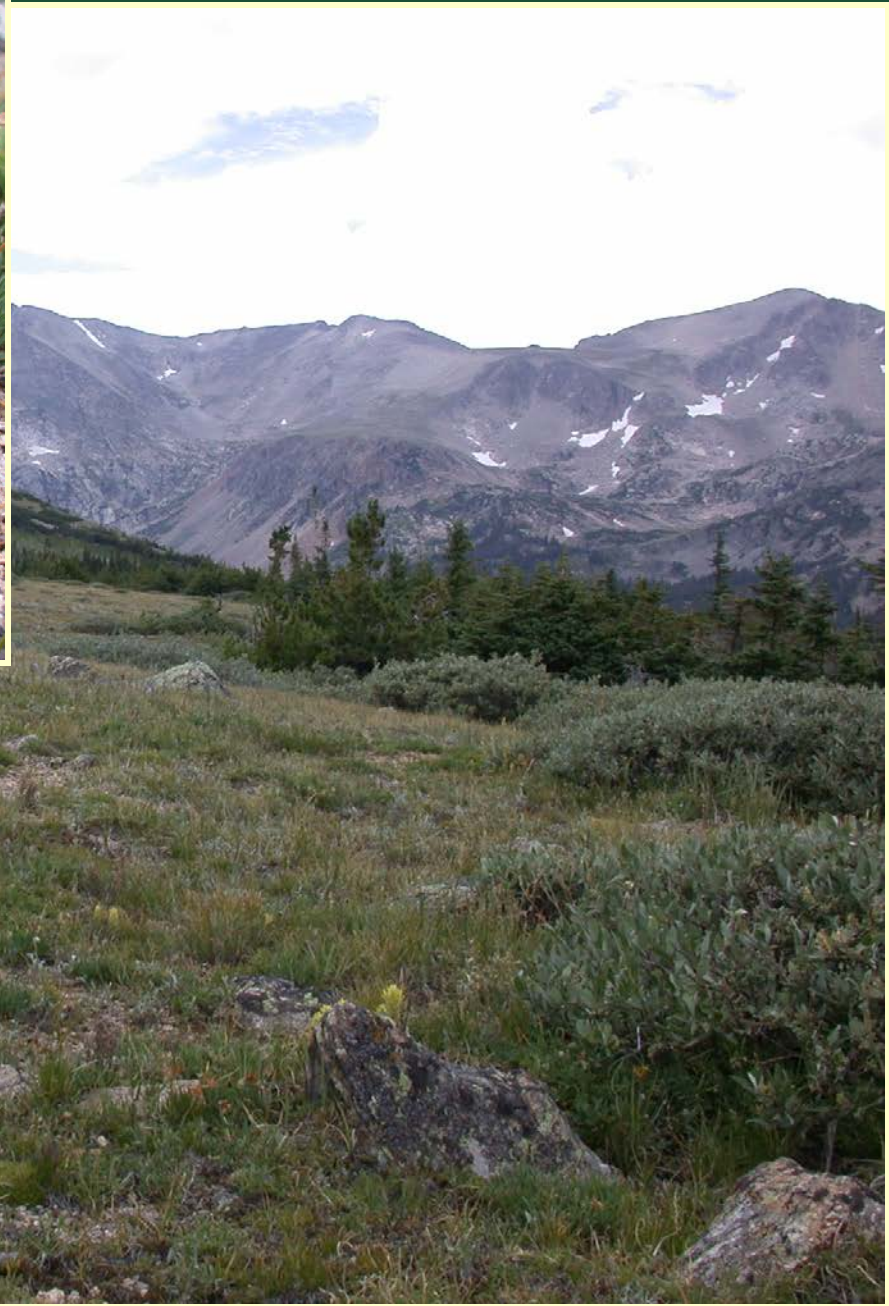


Castilleja puberula downy indian paintbrush

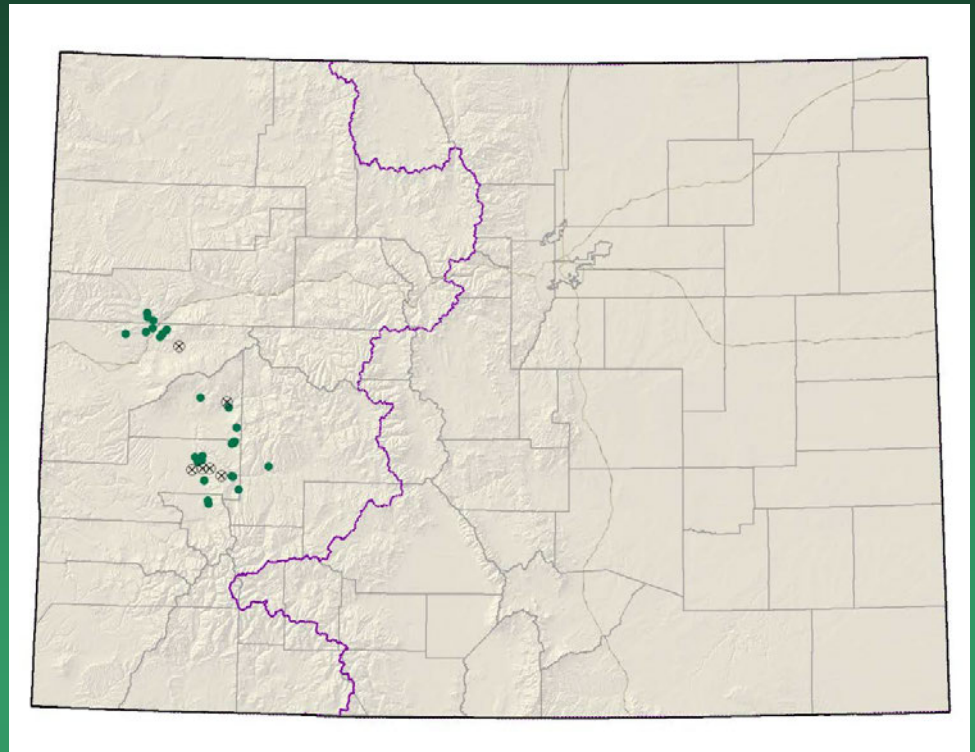


- Federal status: none
- Heritage ranks: G2G3/S2S3
- Global distribution: Colorado endemic (Alamosa, Boulder , Clear Creek, Grand, Larimer, Park, and Saguache counties)
- Last observed in Colorado: 2011
- Colorado occurrences: 25 (12 are historical)
- Colorado individuals: >250
- Primary threats: May be threatened by off-road-vehicle use
- Land ownership/management: USFS, private

Castilleja puberula



Cirsium perplexans adobe thistle



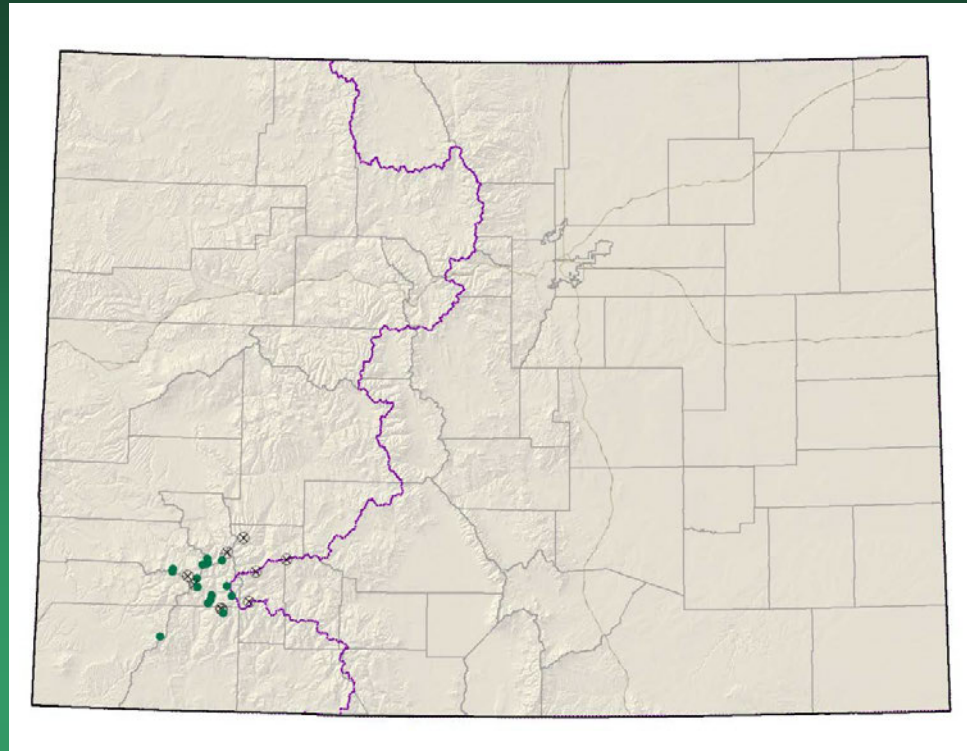
- Federal status: **None**
- Heritage ranks: G2G3/S2S3
- Global distribution: Colorado endemic (Delta, Mesa, Montrose, Gunnison, Garfield, and Ouray counties)
- Last observed in Colorado: 2011
- Colorado occurrences: **48** (5 are historical)
- Colorado individuals: 10,000+
- Primary threats: Bio or other control for non-native thistles
- Land ownership/management: BLM, private, USFS, NPS, state

Cirsium perplexans



Draba graminea

San Juan whitlow-grass

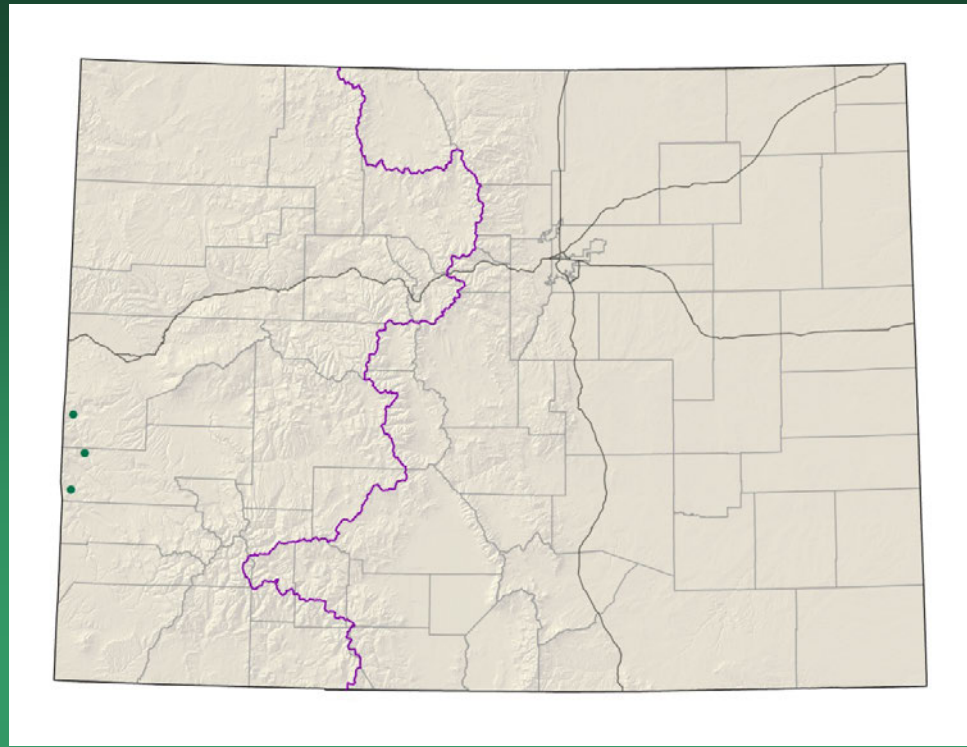


- Federal status: none
- Heritage ranks: G2/S2
- Global distribution: Colorado endemic (Dolores, Hinsdale, La Plata, Montezuma, Ouray, San Juan, and San Miguel counties)
- Last observed in Colorado: 2011
- Colorado occurrences: 25 (9 are historical)
- Colorado individuals: >8000
- Primary threats: Non-motorized recreation
- Land ownership/management: USFS, private

Draba graminea



Erigeron kachinensis kachina daisy

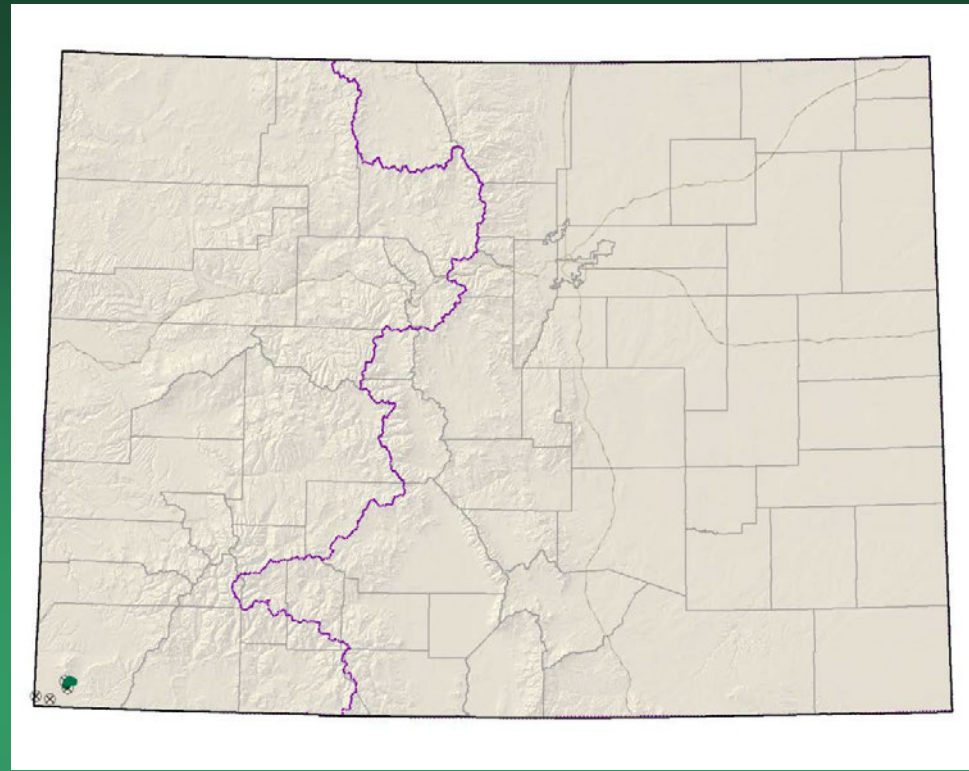


- Federal status: BLM sensitive
- Heritage ranks: G2/S1
- Global distribution: Utah and Colorado (Montrose county)
- Last observed in Colorado: 2010
- Colorado occurrences: 3
- Colorado individuals: est. 7,600
- Primary threats: mining, energy development, or water projects could affect water supplies to habitat
- Land ownership/management: BLM, Colorado Natural Area, ACEC



Erigeron kachinensis

Eriogonum clavellatum Comb Wash buckwheat

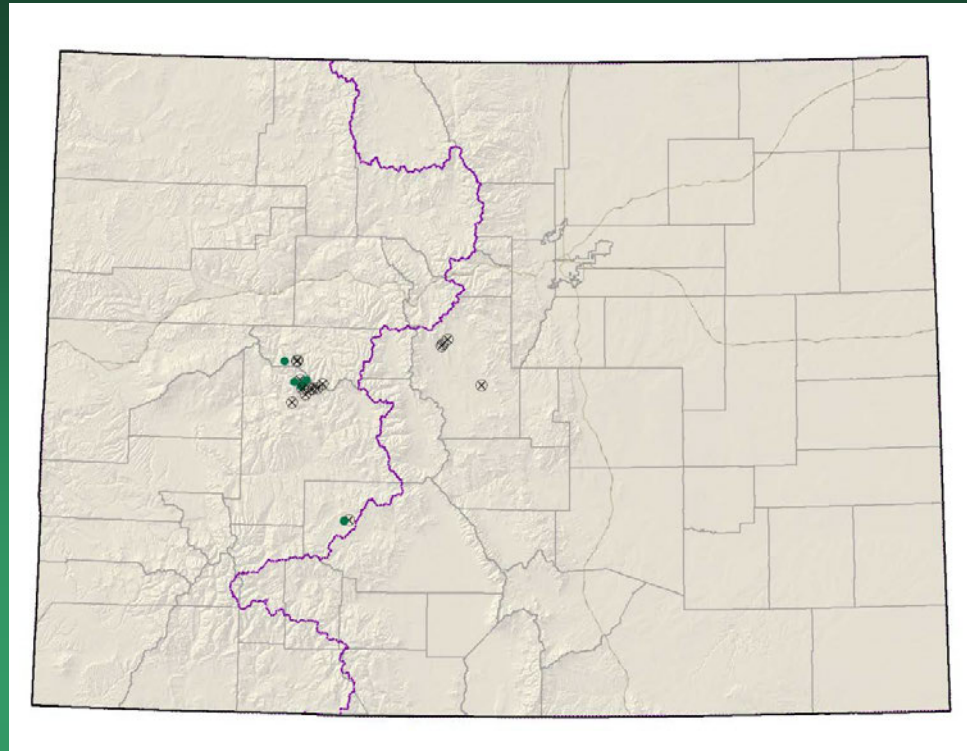


- Federal status: BLM sensitive
- Heritage ranks: G2/S1
- Global distribution: Utah and Colorado (Montezuma County)
- Last observed in Colorado: 1990
- Colorado occurrences: 8 (all are historical)
- Colorado individuals: unknown
- Primary threats: road construction, exploration for oil and gas, and a proposed system of irrigation canals on the Reservation
- Land ownership/management: Ute Mountain Ute

Eriogonum clavellatum



Eriogonum coloradense Colorado wild buckwheat

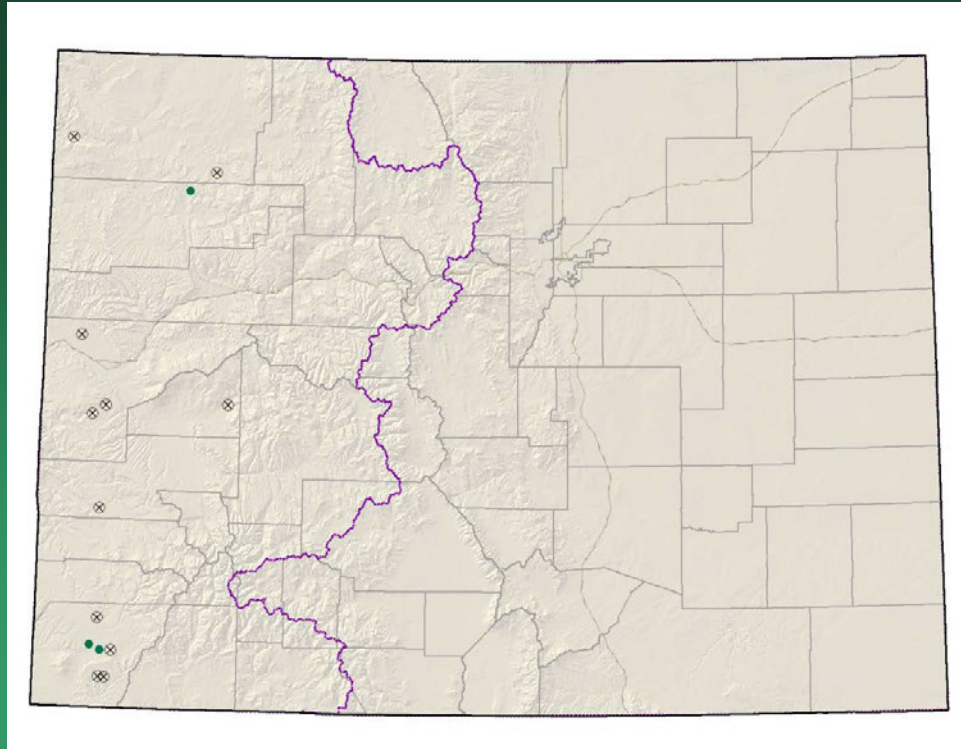


- Federal status: BLM sensitive
- Heritage ranks: G2/S2
- Global distribution: Colorado endemic (Gunnison, Park, Pitkin, and Saguache counties)
- Last observed in Colorado: 2012
- Colorado occurrences: 22 (16 are historical)
- Colorado individuals: ~5000
- Primary threats: recreation
- Land ownership/management: USFS, BLM, private

Eriogonum coloradense



Lepidium crenatum alkaline pepperwort

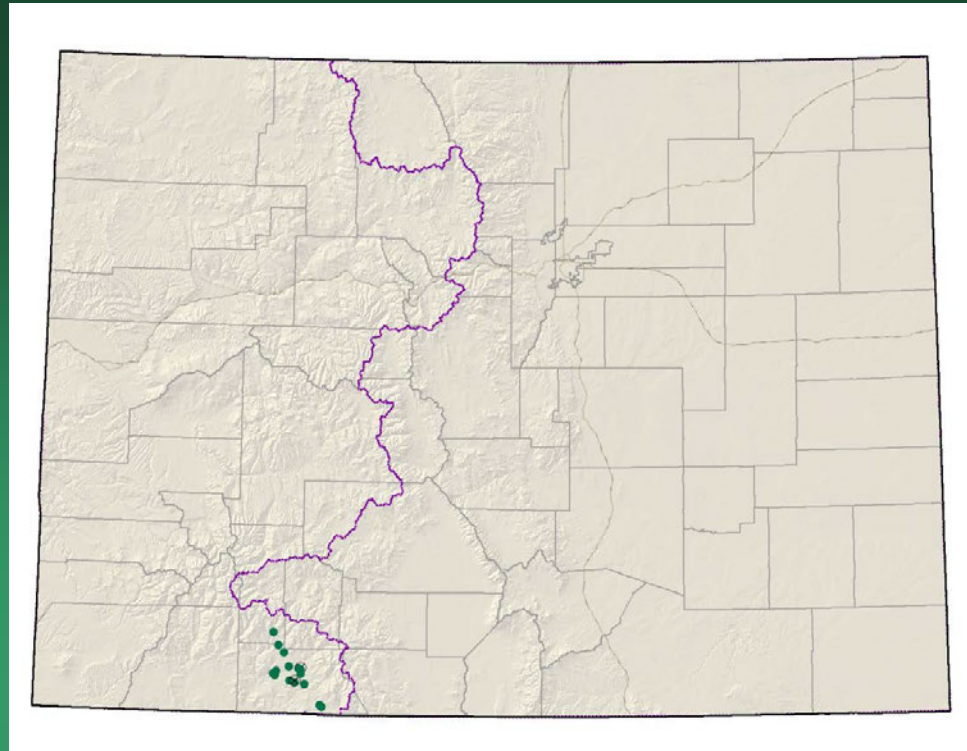


- Federal status: none
- Heritage ranks: G2/S2
- Global distribution: documented from Moffat, Rio Blanco, Mesa, Delta, Montrose and Montezuma counties in Colorado, may be present in Utah and New Mexico.
- Last observed in Colorado: 2012
- Colorado occurrences: 16 (13 are historical)
- Colorado individuals: thousands
- Primary threats: unknown
- Land ownership/management: BLM, private

Lepidium crenatum



Lesquerella pruinosa
Pagosa bladderpod

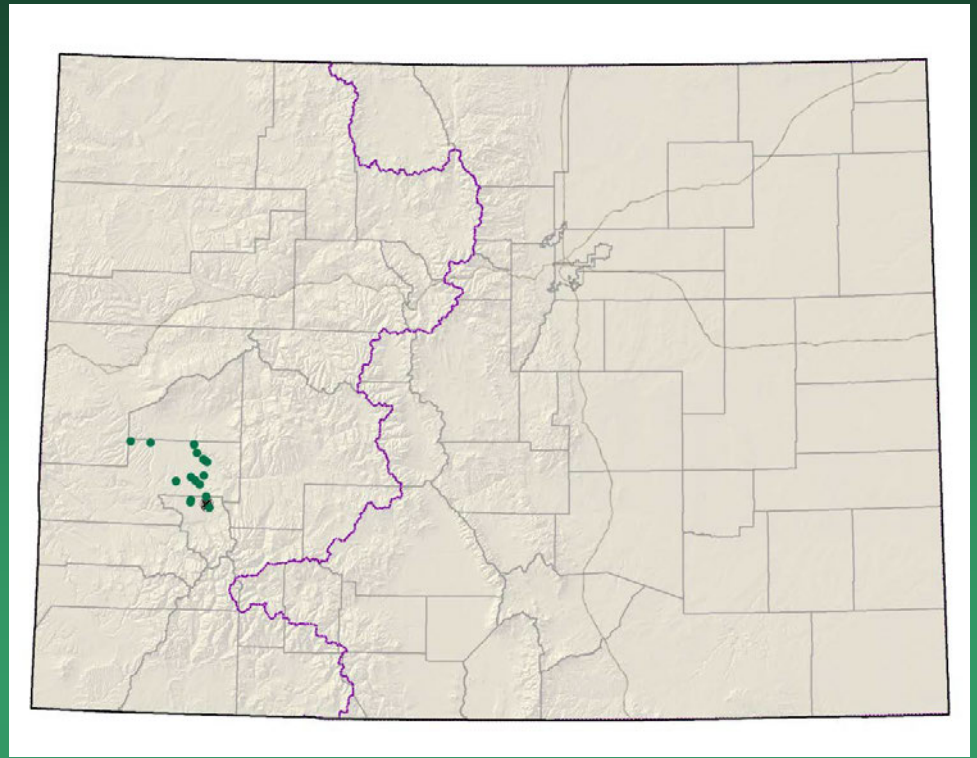


- Federal status: USFS and BLM sensitive
- Heritage ranks: G2/S2
- Global distribution: New Mexico and Colorado (Archuleta County, and the extreme southern portion of Hinsdale County)
- Last observed in Colorado: 2009
- Colorado occurrences: 17 (2 are historical)
- Colorado individuals: 5,000 to 20,000
- Primary threats: Residential and commercial development
- Land ownership/management: USFS, private, BLM

Lesquerella pruinosa



Lesquerella vicina
Montrose bladderpod

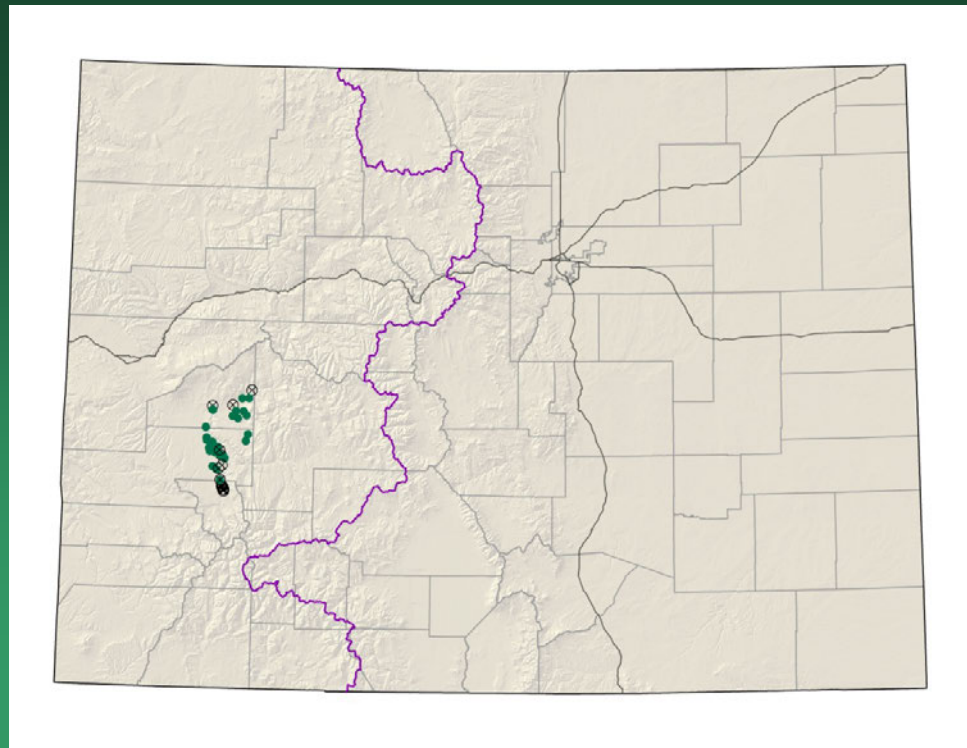


- Federal status: BLM sensitive
- Heritage ranks: G2/S2
- Global distribution: Colorado endemic (Montrose and Ouray counties)
- Last observed in Colorado: 2008
- Colorado occurrences: 22 (one is historical)
- Colorado individuals: >9,000
- Primary threats: Roads and recreational uses
- Land ownership/management: BLM, state, private

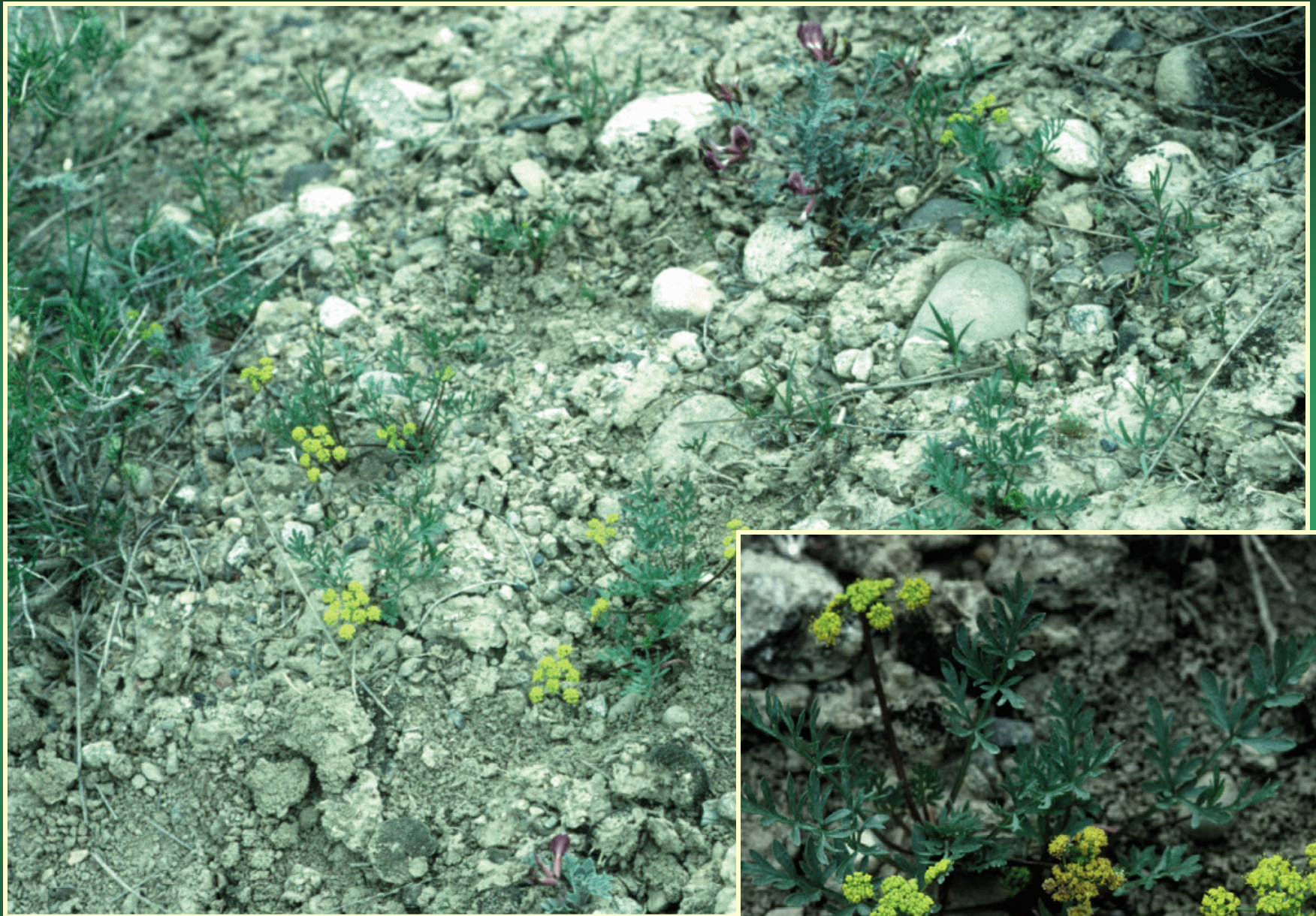


Lesquerella vicina

Lomatium concinnum Colorado desert-parsley



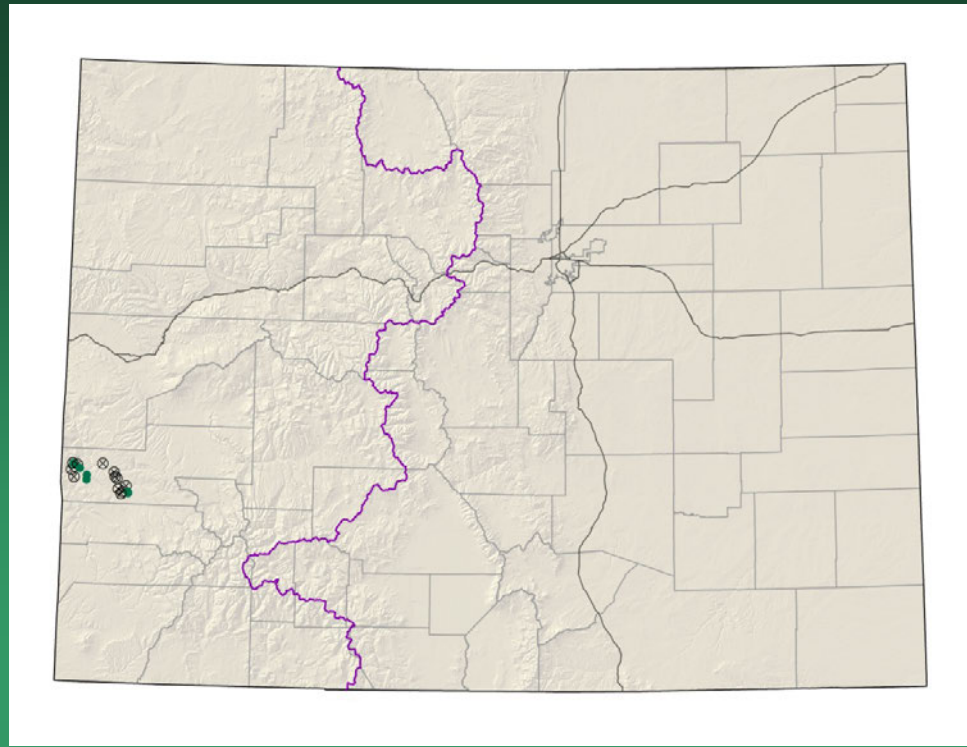
- Federal status: BLM sensitive
- Heritage ranks: G2G3/S2S3
- Global distribution: Colorado endemic (Delta, Montrose, and Ouray counties)
- Last observed in Colorado: 2008
- Colorado occurrences: 38 (4 are historical)
- Colorado individuals: >70,000
- Primary threats: Motorized recreation
- Land ownership/management: BLM, private



Lomatium concinnum



Lupinus crassus Payson lupine

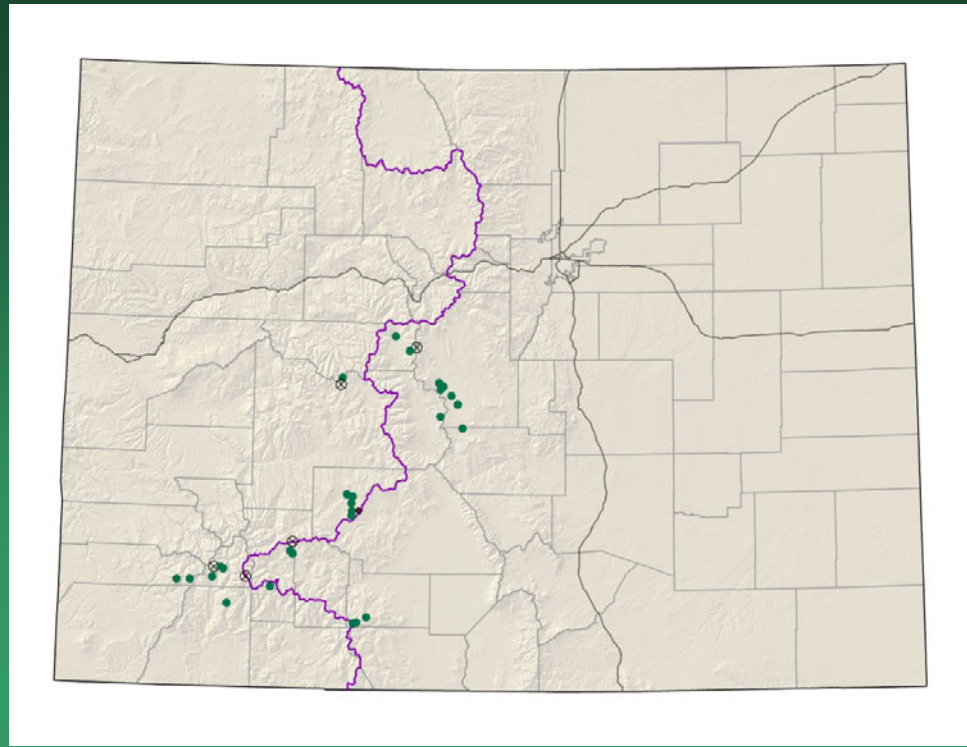


- Federal status: BLM sensitive
- Heritage ranks: G2/S2
- Global distribution: Colorado endemic (Montrose and Gunnison counties)
- Last observed in Colorado: 2010
- Colorado occurrences: 18 (12 are historical)
- Colorado individuals: >100,000
- Primary threats: Incompatible grazing
- Land ownership/management: BLM, private

Lupinus crassus

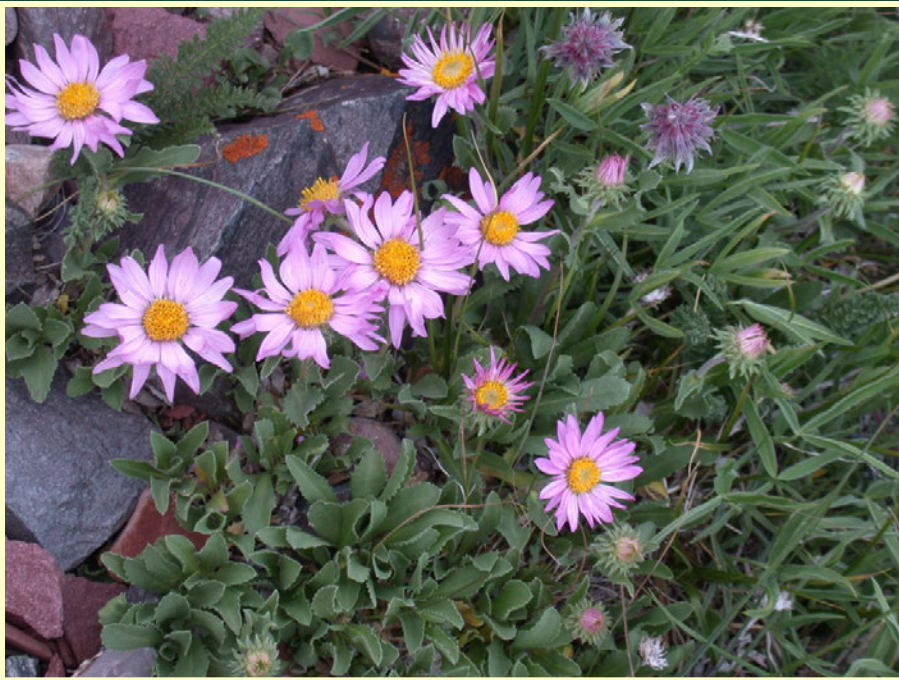


*Machaeranthera
coloradoensis*
Colorado tansy-aster



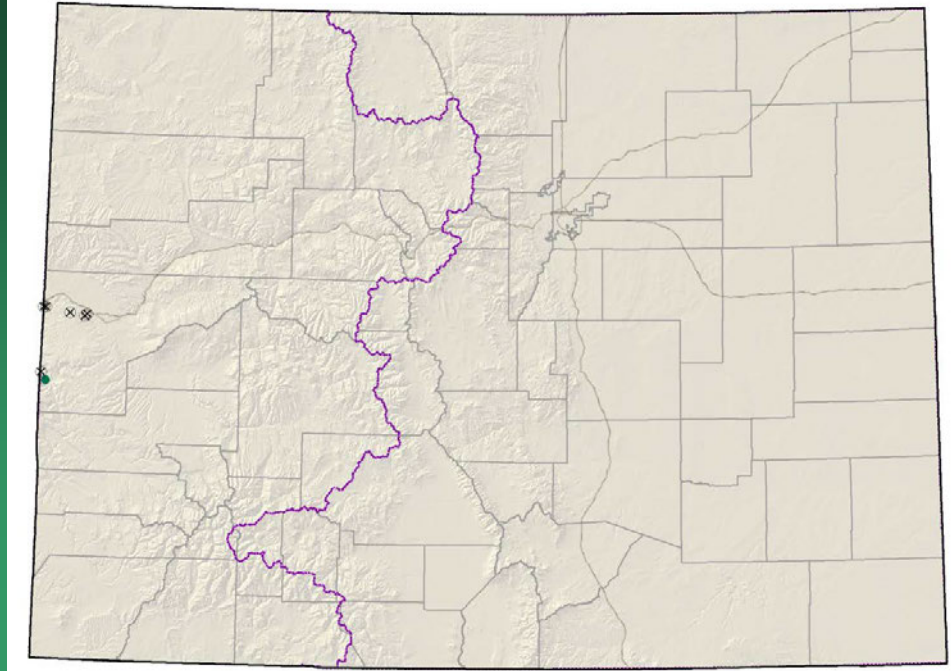
- Federal status: USFS sensitive
- Heritage ranks: G3/S3
- Global distribution: Wyoming and Colorado (Chaffee, Dolores, **Fremont**, Gunnison, Hinsdale, La Plata, Lake, Park, Pitkin, Rio Grande, Saguache, San Juan counties)
- Last observed in Colorado: **2011**
- Colorado occurrences: **33** (5 are historical)
- Colorado individuals: unknown
- Primary threats: unknown
- Land ownership/management: USFS, private

Machaeranthera coloradoensis



Oreocarya osterhoutii=
Cryptantha osterhoutii
Osterhout cat's-eye

Conservation Action Plan

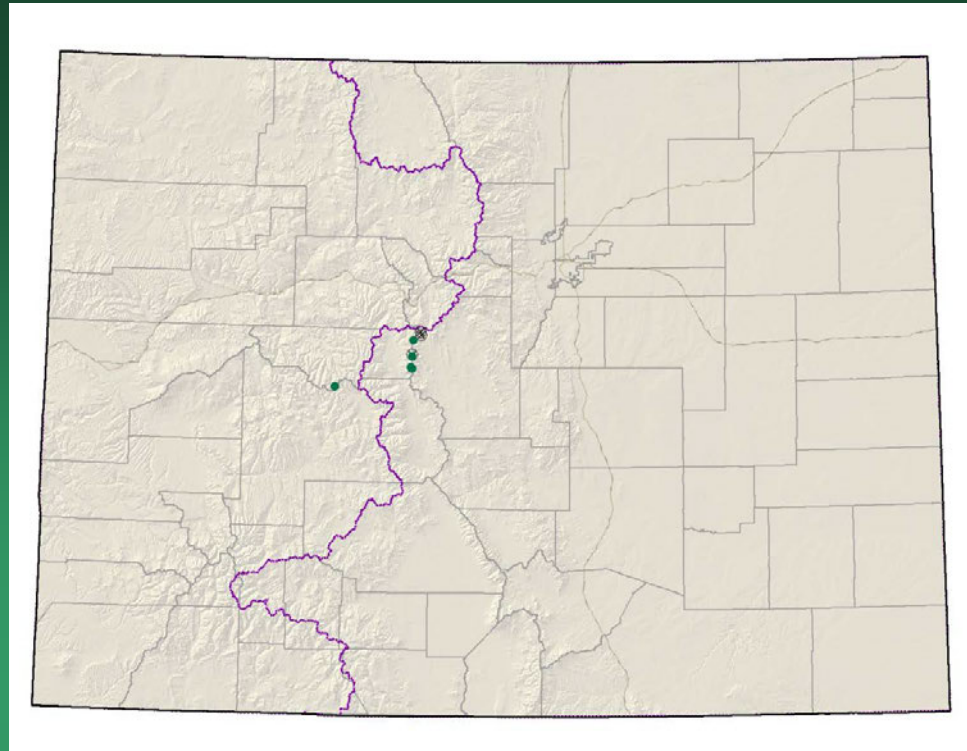


- Federal status: BLM sensitive
- Heritage ranks: G2G3/S2
- Global distribution: Utah and Colorado (Mesa County)
- Last observed in Colorado: 2011
- Colorado occurrences: 7 (6 are historical)
- Colorado individuals: ~1500?
- Primary threats: unknown
- Land ownership/management: BLM, private

Oreocarya osterhoutii



Physaria alpina
Avery Peak twinpod

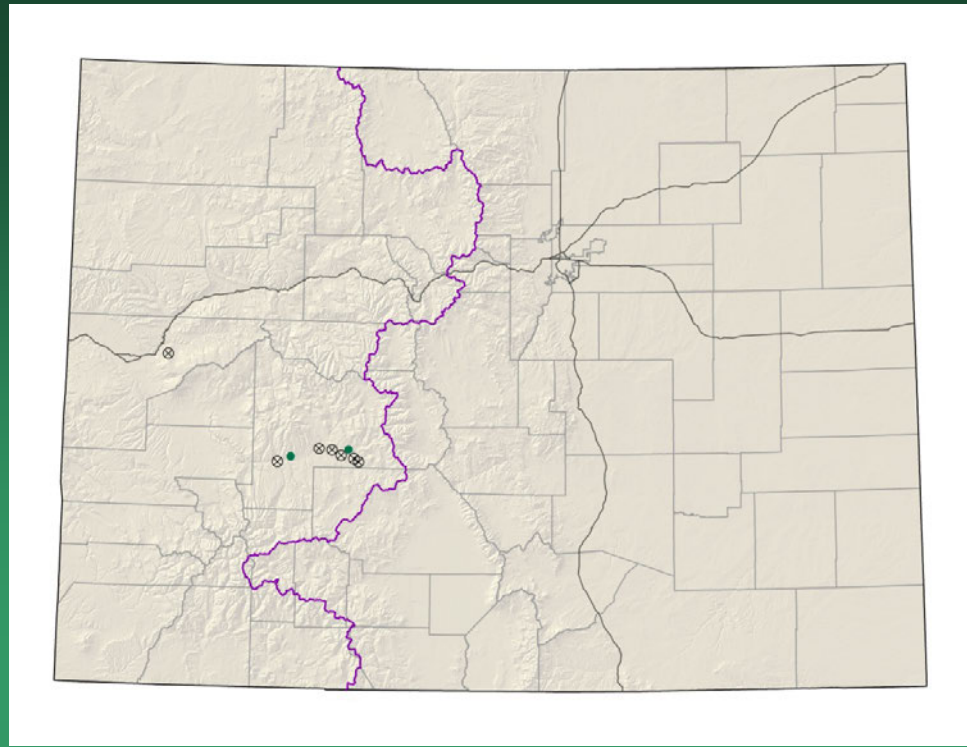


- Federal status: none
- Heritage ranks: G2/S2
- Global distribution: Colorado endemic (Lake, Gunnison, Pitkin and Park counties)
- Last observed in Colorado: 2010
- Colorado occurrences: 7 (3 are historical)
- Colorado individuals: >4000
- Primary threats: off-road vehicle use
- Land ownership/management: USFS, private

Physaria alpina



Physaria rollinsii
Rollins' twinpod



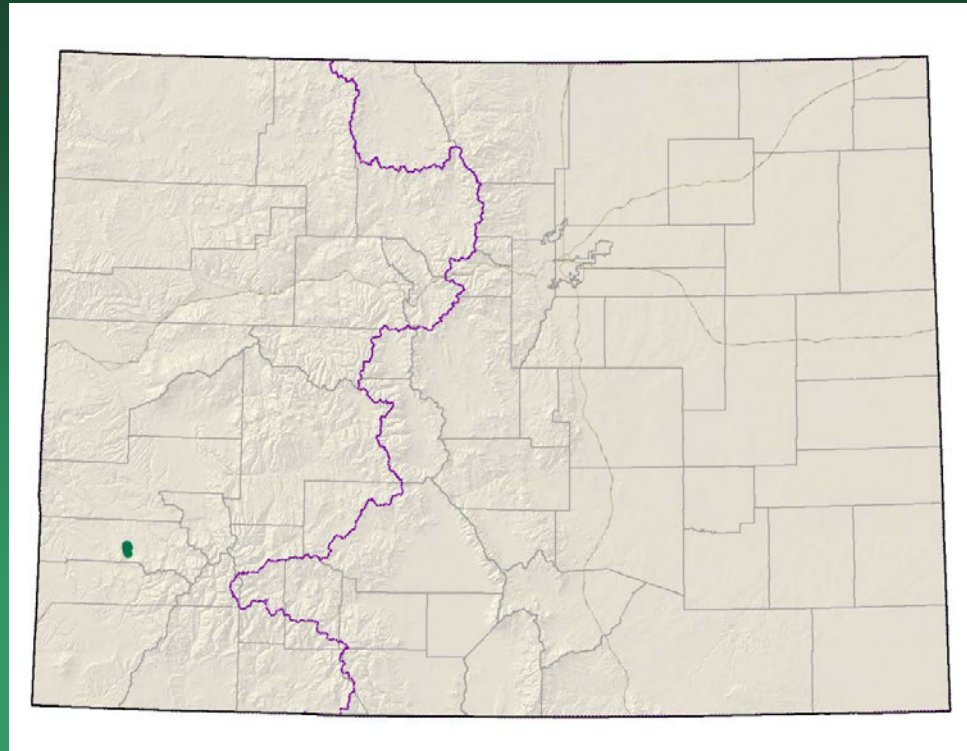
- Federal status: none
- Heritage ranks: G1/S1
- Global distribution: Colorado endemic (Mesa and Gunnison counties)
- Last observed in Colorado: 2011
- Colorado occurrences: 9 (7 are historical)
- Colorado individuals: unknown
- Primary threats: unknown
- Land ownership/management: Forest Service

Physaria rollinsii



Puccinellia parishii Parish's alkali grass

Conservation Action Plan

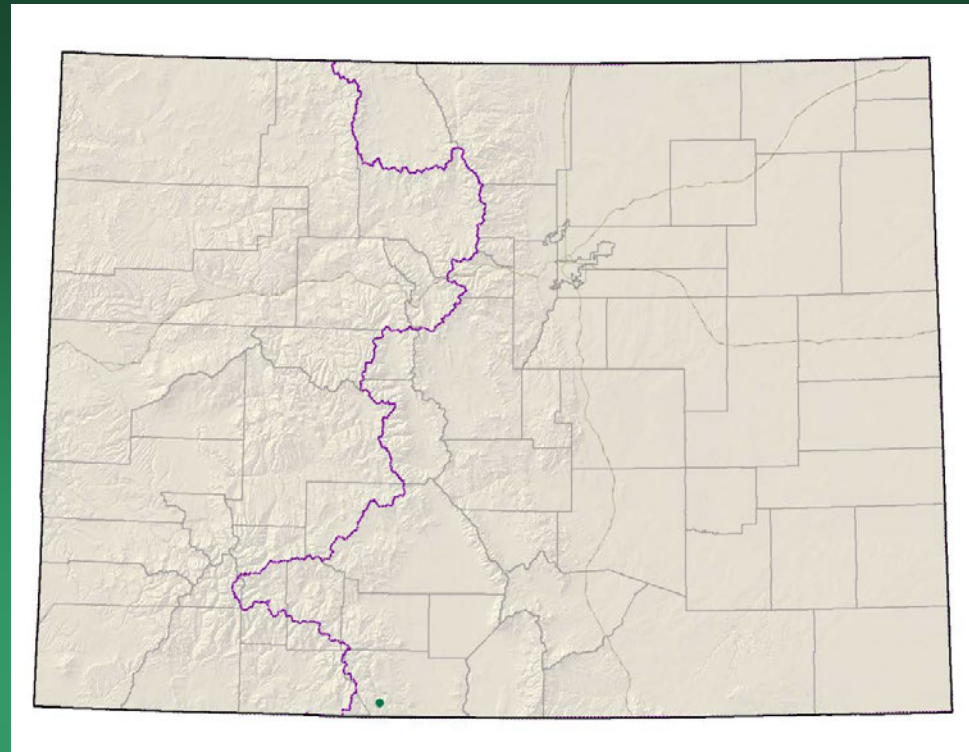


- Federal status: none
- Heritage ranks: G2G3/S1
- Global distribution: New Mexico, Arizona, California, and Colorado (San Miguel County)
- Last observed in Colorado: 2009
- Colorado occurrences: 2
- Colorado individuals: 20,000-35,000
- Primary threats: altered hydrology
- Land ownership/management: private, state

Puccinellia parishii



Salix arizonica Arizona willow

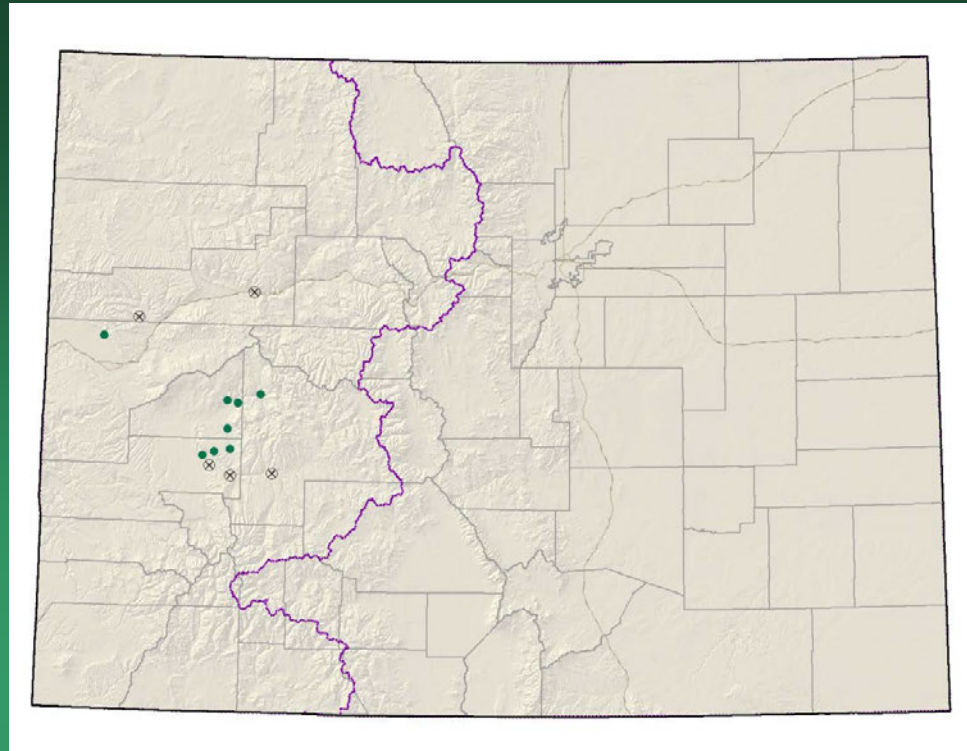


- Federal status: USFS sensitive
- Heritage ranks: G2G3/S1
- Global distribution: Arizona, New Mexico, Utah, and Colorado (Conejos Co.)
- Last observed in Colorado: 2004
- Colorado occurrences: 1
- Colorado individuals: unknown – 2 dense clumps
- Primary threats: incompatible grazing, hydrologic alteration
- Land ownership/management: USFS – Rio Grande NF

Salix arizonica



*Thelypodopsis
juniperorum*
juniper tumble mustard

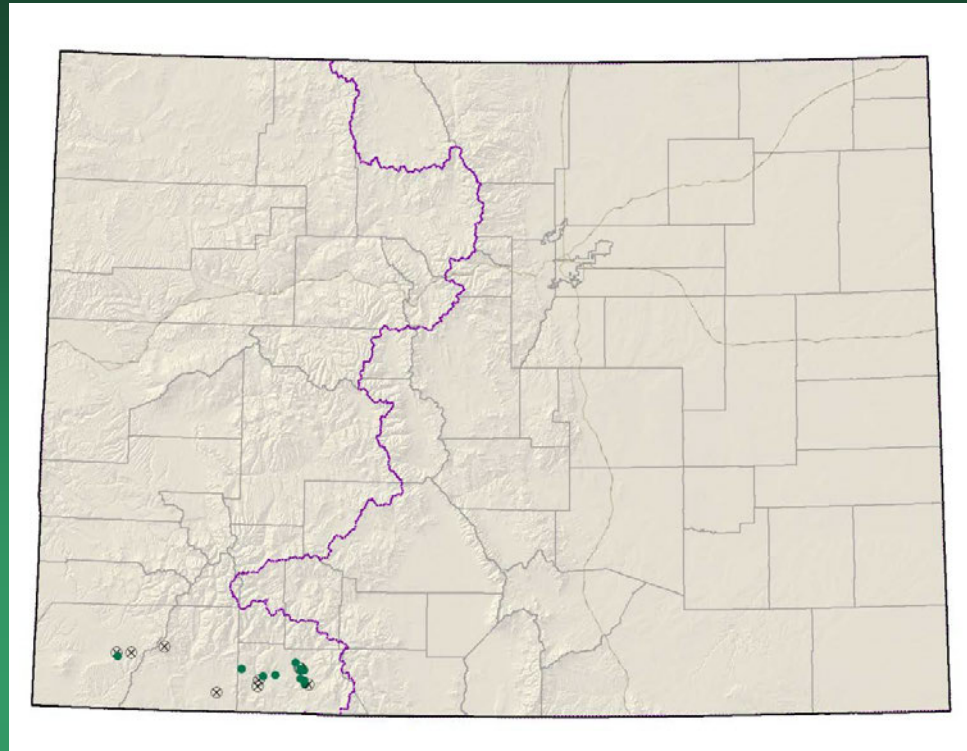


- Federal status: none
- Heritage ranks: G2/S2
- Global distribution: Colorado endemic (Montrose, Gunnison and Delta counties)
- Last observed in Colorado: 2012
- Colorado occurrences: 13 (5 are historical)
- Colorado individuals: 100's
- Primary threats: grazing, off-road vehicle use, non-native species invasion
- Land ownership/management: BLM, NPS, USFS, State, private

Thelypodopsis juniperorum



Townsendia glabella Gray's townsend-daisy



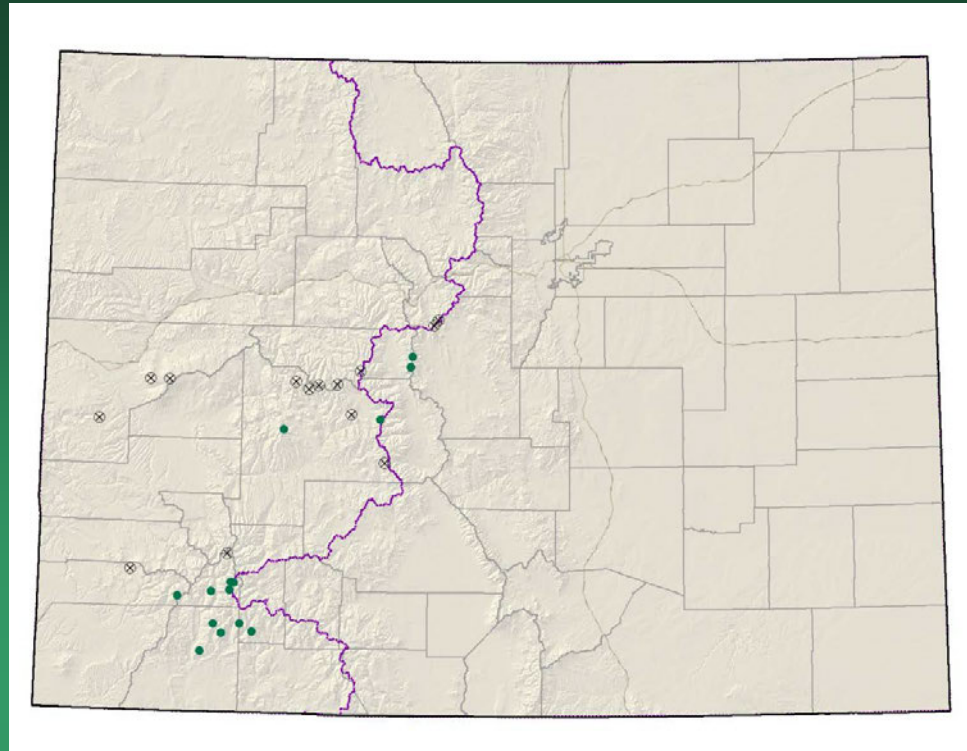
- Federal status: none
- Heritage ranks: G2/S2
- Global distribution: Colorado endemic (Archuleta, La Plata and Montezuma counties)
- Last observed in Colorado: 2012
- Colorado occurrences: 19 (9 are historical)
- Colorado individuals: >1,250
- Primary threats: Residential development
- Land ownership/management: USFS, private

Townsendia glabella



Townsendia rothrockii

Rothrock townsend-daisy



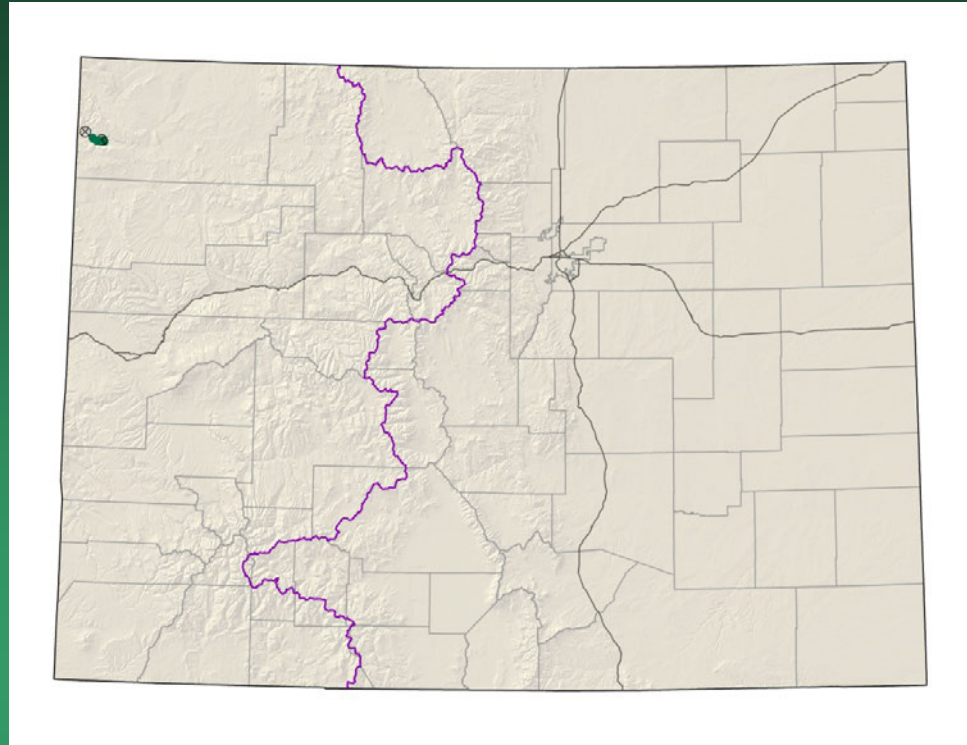
- Federal status: none
- Heritage ranks: G2G3/S2S3
- Global distribution: Colorado endemic (Dolores, Gunnison, Hinsdale, La Plata, Lake, Mesa, Ouray, Park, Pitkin, San Juan, and Summit counties)
- Last observed in Colorado: 2011
- Colorado occurrences: 28 (14 are historical)
- Colorado individuals: >4300
- Primary threats: motorized recreation
- Land ownership/management: USFS, private

Townsendia rothrockii



2009
Loveland
NW & Central Colorado
G2G3 species

Anticlea vaginatus
=*Zigadenus vaginatus*
sheathed deathcamas



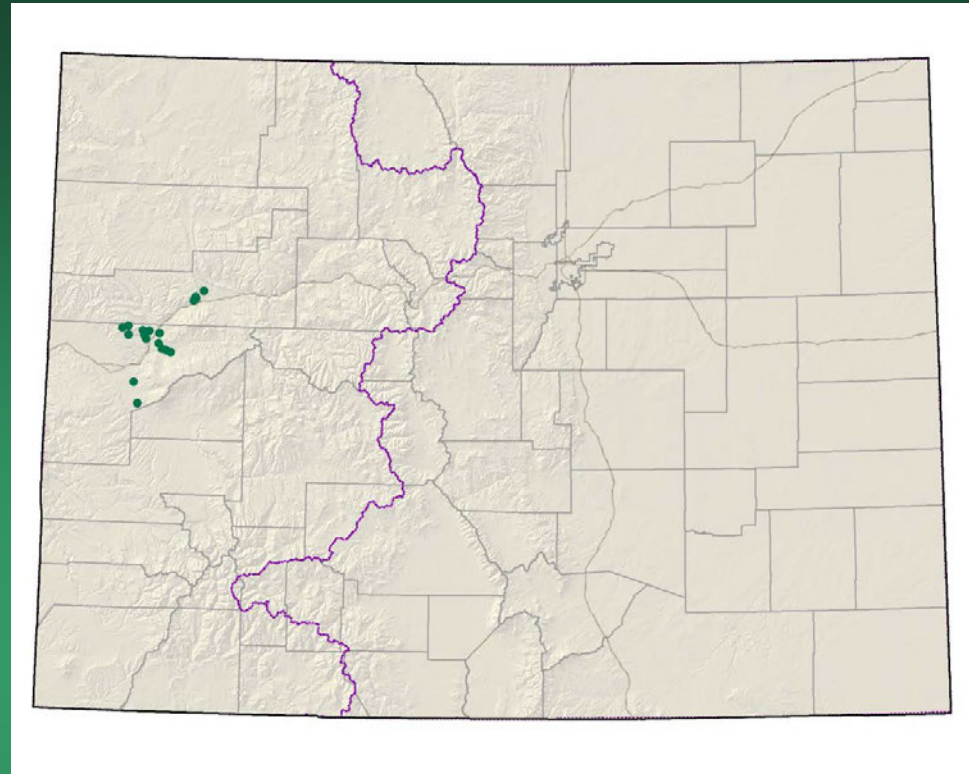
- Federal status: none
- Heritage ranks: G2/S2
- Global distribution: Utah and Colorado (Moffat county)
- Last observed in Colorado: 2012
- Colorado occurrences: 7 (2 historical)
- Colorado individuals: 1100+
- Primary threats: hydrologic alteration
- Land ownership/management: NPS

Anticlea vaginatus



Astragalus debequaeus

Debeque milkvetch

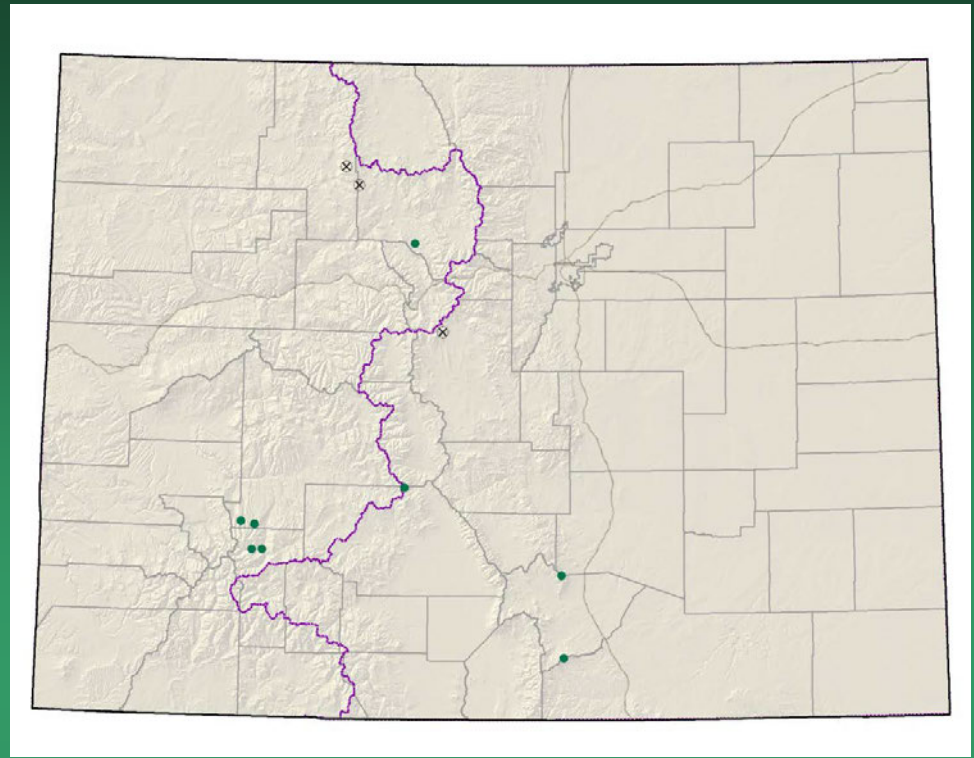


- Federal status: BLM sensitive
- Heritage ranks: G2/S2
- Global distribution: Colorado endemic (Garfield and Mesa counties)
- Last observed in Colorado: 2012
- Colorado occurrences: 17
- Colorado individuals: >62,000
- Primary threats: Disturbance by oil and gas development
- Land ownership/management: BLM, private



Astragalus debequaeus

Carex stenoptila small-winged sedge



- Federal status: none
- Heritage ranks: G2/S2
- Global distribution: Montana, Wyoming, and Colorado (Park, Routt, Grand, Gunnison, Hinsdale, Saguache, and Huerfano counties)
- Last observed in Colorado: 1999
- Colorado occurrences: 11 (3 are historical)
- Colorado individuals: unknown
- Primary threats: none known
- Land ownership/management: USFS, BLM, private

Carex stenoptila

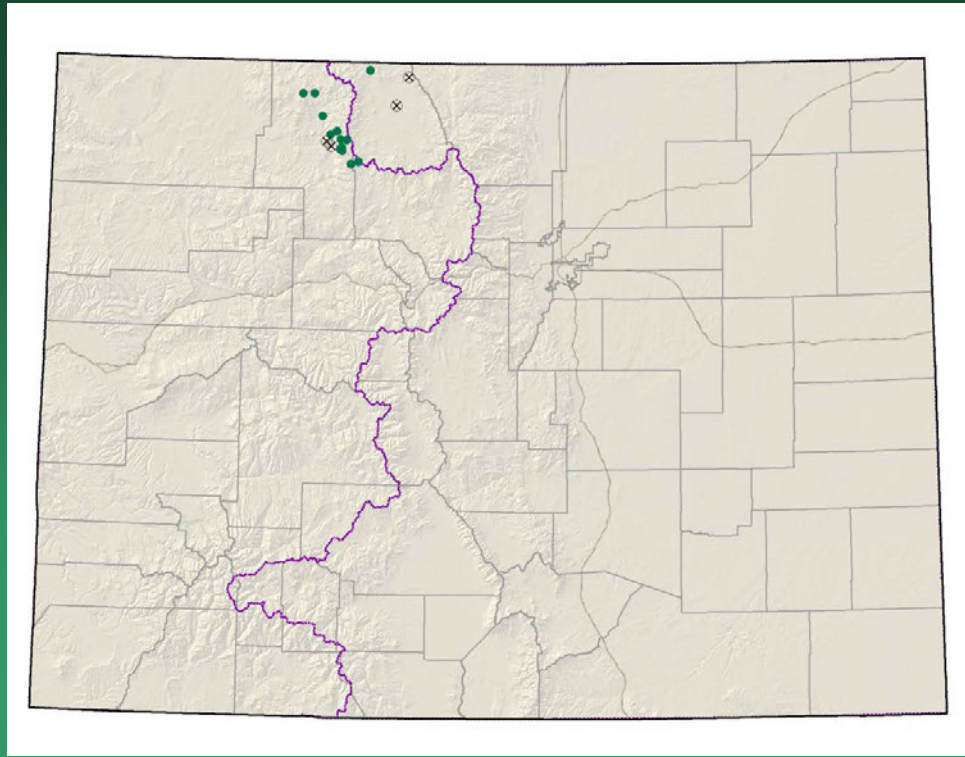


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Ipomopsis aggregata
ssp. weberi
Weber's scarlet gilia

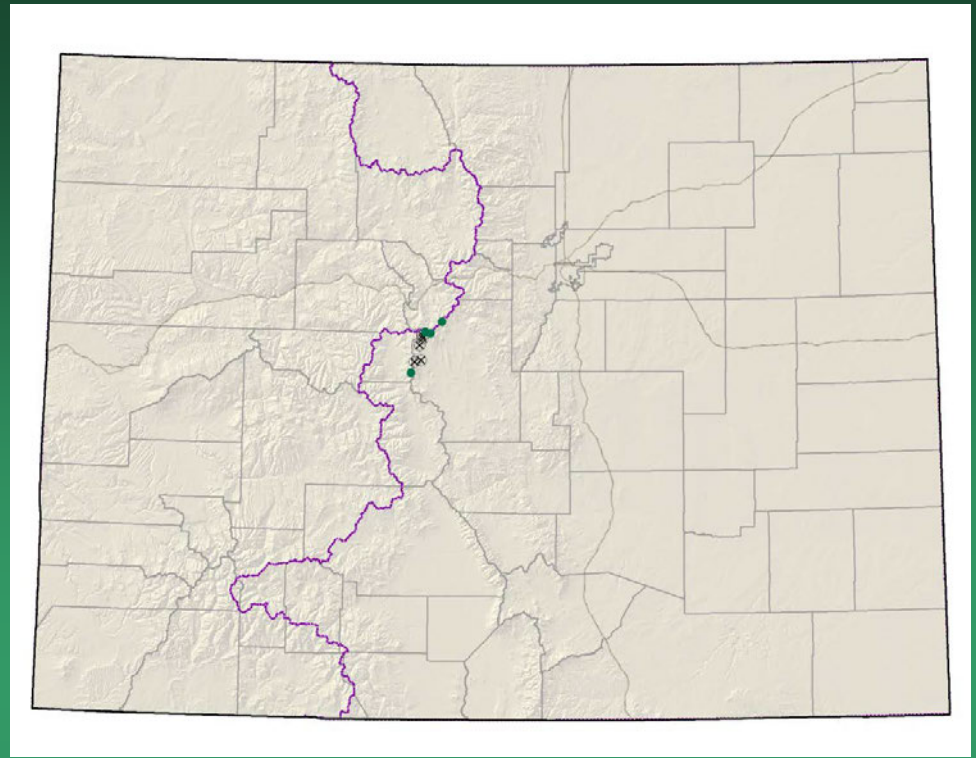


- Federal status: USFS sensitive
- Heritage ranks: G5T2/S2
- Global distribution: Regional endemic of northern Idaho, south-central Wyoming, and north-central Colorado (Grand, Routt and Jackson counties)
- Last observed in Colorado: 2009
- Colorado occurrences: 17 (4 are historical)
- Colorado individuals: >5300
- Primary threats: recreational use of habitat
- Land ownership/management: USFS, state, private

Ipomopsis aggregata ssp. *weberi*



Ipomopsis globularis globe gilia

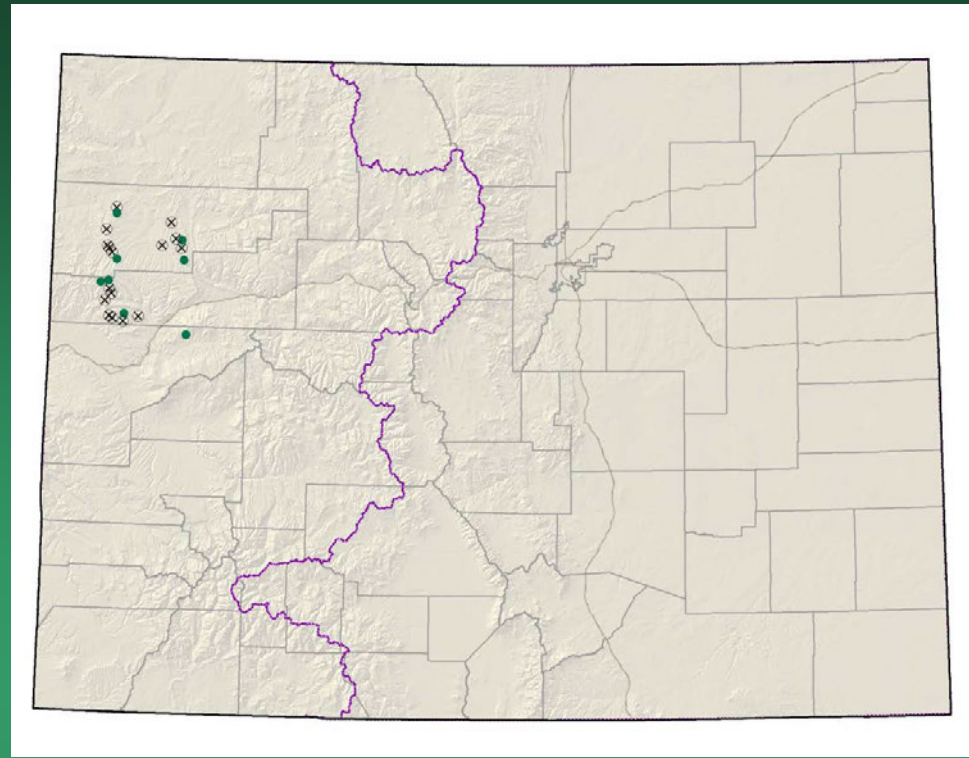


- Federal status: none
- Heritage ranks: G2/S2
- Global distribution: Colorado endemic (Lake, Park, and Summit counties)
- Last observed in Colorado: 2011
- Colorado occurrences: 9 (2 are historical)
- Colorado individuals: estimated 6,000 - 11,000
- Primary threats: motorized recreation, mining development
- Land ownership/management: USFS

Ipomopsis globularis



Lesquerella parviflora
Piceance bladderpod

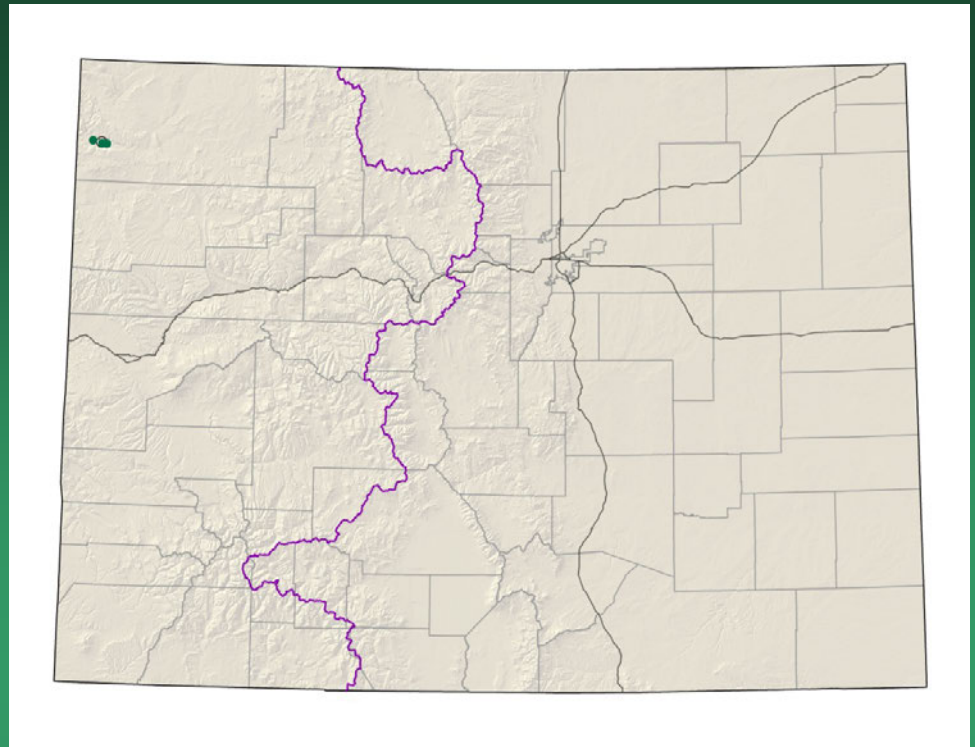


- Federal status: BLM sensitive
- Heritage ranks: G2/S2
- Global distribution: Colorado endemic (Rio Blanco, Garfield, and Mesa counties)
- Last observed in Colorado: 2010
- Colorado occurrences: 24 (16 are historical)
- Colorado individuals: >230,000
- Primary threats: Oil shale mining and oil and gas development
- Land ownership/management: BLM, private, state, USFS



Lesquerella parviflora

Limnorchis zothecina
(=*Platanthera zothecina*)
alcove bog orchid

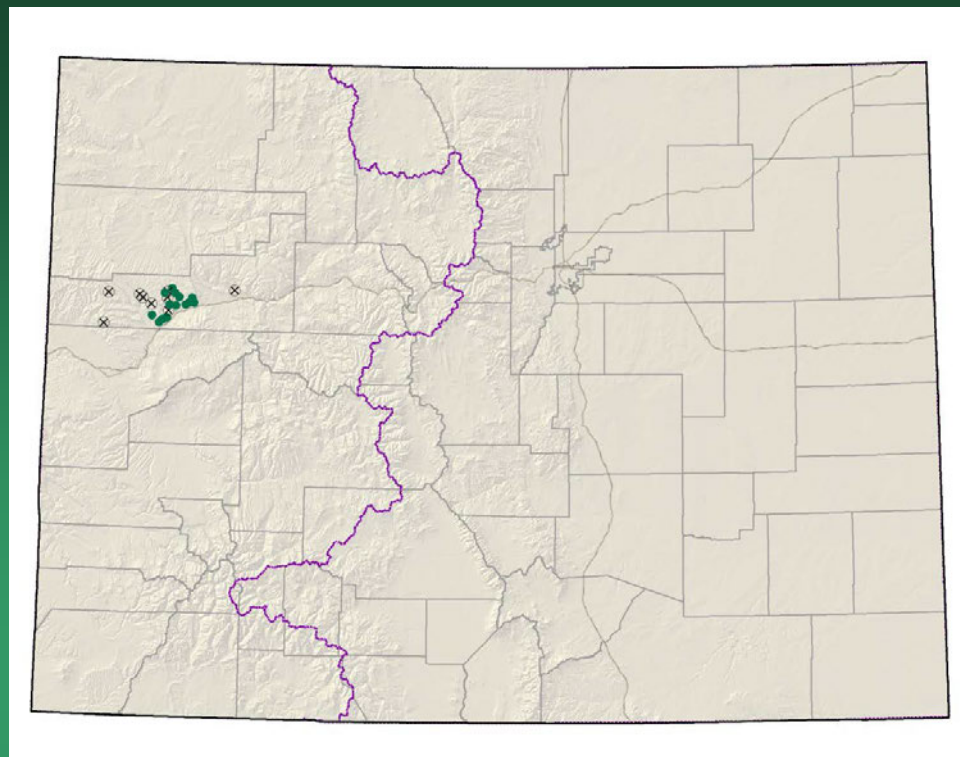


- Federal status: none
- Heritage ranks: G2/S1
- Global distribution: Utah, Arizona, and Colorado (Moffat County)
- Last observed in Colorado: 2012
- Colorado occurrences: 4 (1 is historical)
- Colorado individuals: ~250
- Primary threats: none known
- Land ownership/management: NPS

Limnorchis zothecina



Nuttallia (*Mentzelia*)
rhizomata
Roan Cliffs blazing star



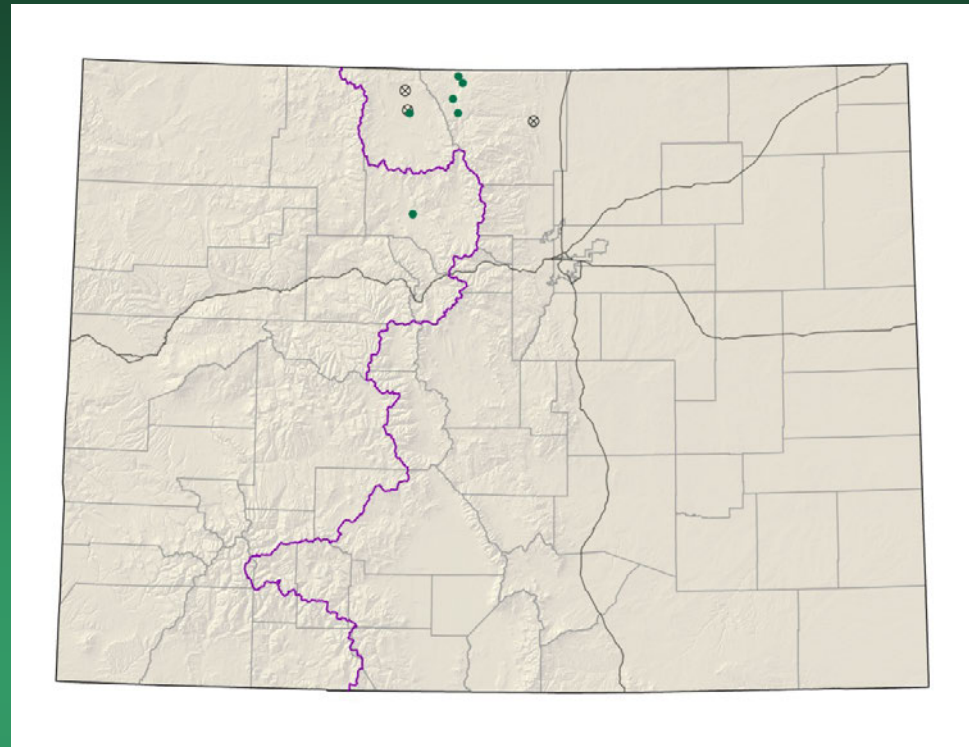
- Federal status: BLM sensitive
- Heritage ranks: G2/S2
- Global distribution: Colorado endemic (Rio Blanco County)
- Last observed in Colorado: 2011
- Colorado occurrences: 24 (9 are historical)
- Colorado individuals: >24,500
- Primary threats: Oil shale mining and oil and gas development
- Land ownership/management: BLM, private

Mentzelia rhizomata



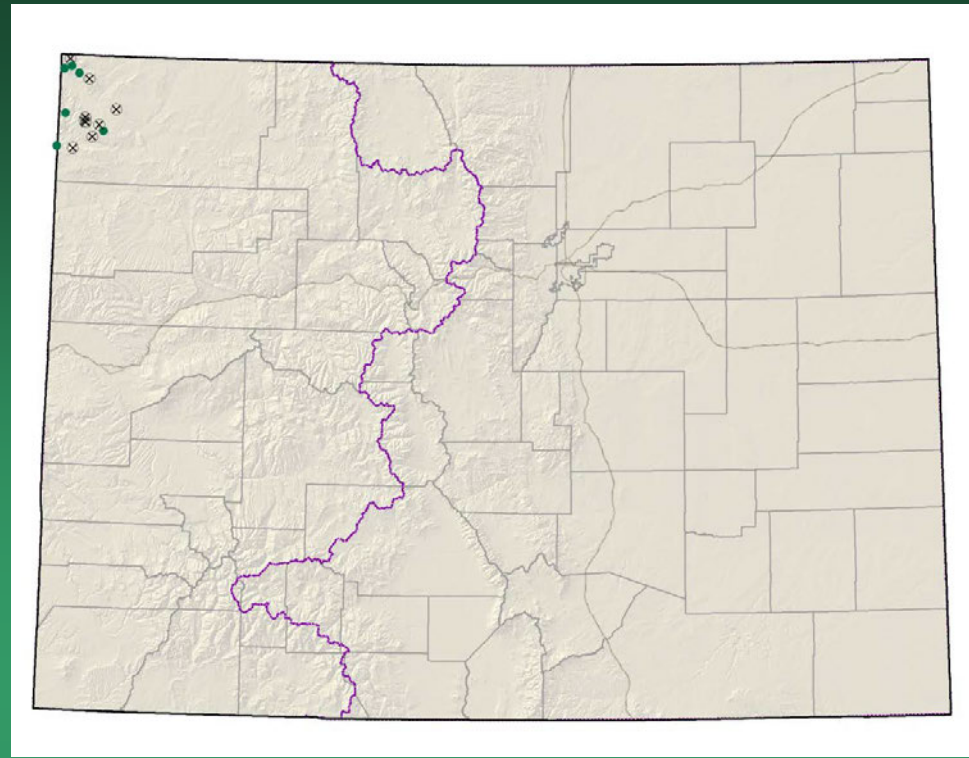
Mertensia humilis

Rocky Mountain bluebells



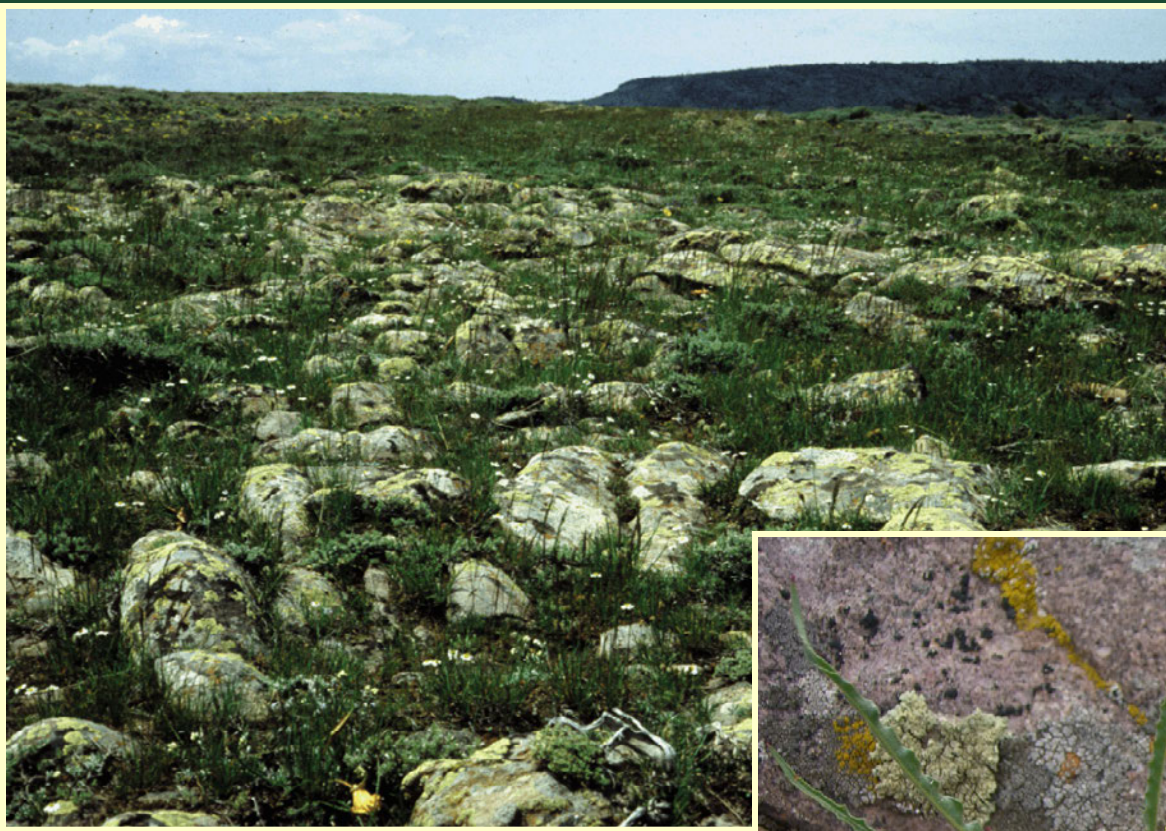
- Federal status: none
- Heritage ranks: G2/S1
- Global distribution: Wyoming and Colorado (Jackson and Larimer counties)
- Last observed in Colorado: 2011
- Colorado occurrences: 9 (3 are historical)
- Colorado individuals: unknown
- Primary threats: none known
- Land ownership/management: private, USFS

Oenothera acutissima
narrow-leaf
evening-primrose

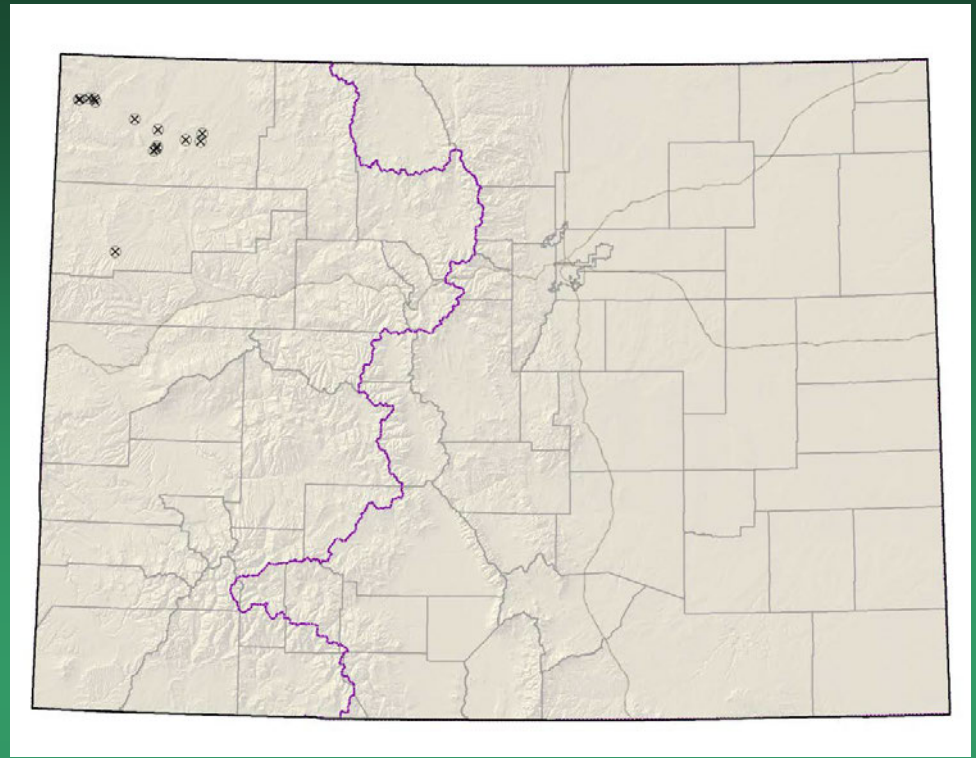


- Federal status: BLM sensitive
- Heritage ranks: G2/S2
- Global distribution: Utah and Colorado (Moffat County)
- Last observed in Colorado: 2012
- Colorado occurrences: 15 (9 are historical)
- Colorado individuals: >4,000
- Primary threats: hydrologic alteration, habitat degradation from livestock use
- Land ownership/management: BLM, state, private, NPS

Oenothera acutissima



Oxytropis besseyi var.
obnapiformis
Bessey's locoweed



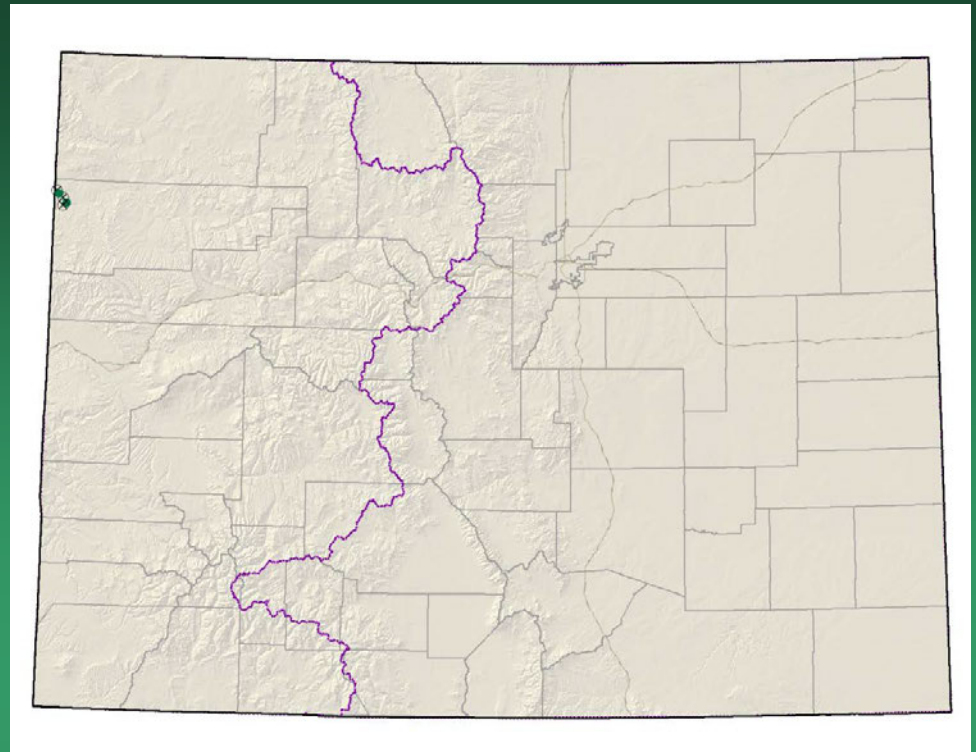
- Federal status: none
- Heritage ranks: G5T2/S2
- Global distribution: Utah, Wyoming, and Colorado (Moffat and Rio Blanco Cos.)
- Last observed in Colorado: 2012
- Colorado occurrences: 14 (**most** are historical)
- Colorado individuals: unknown, perhaps in the 100s
- Primary threats: oil and gas development
- Land ownership/management: BLM, NPS, private

Oxytropis besseyi var. *obnapiformis*



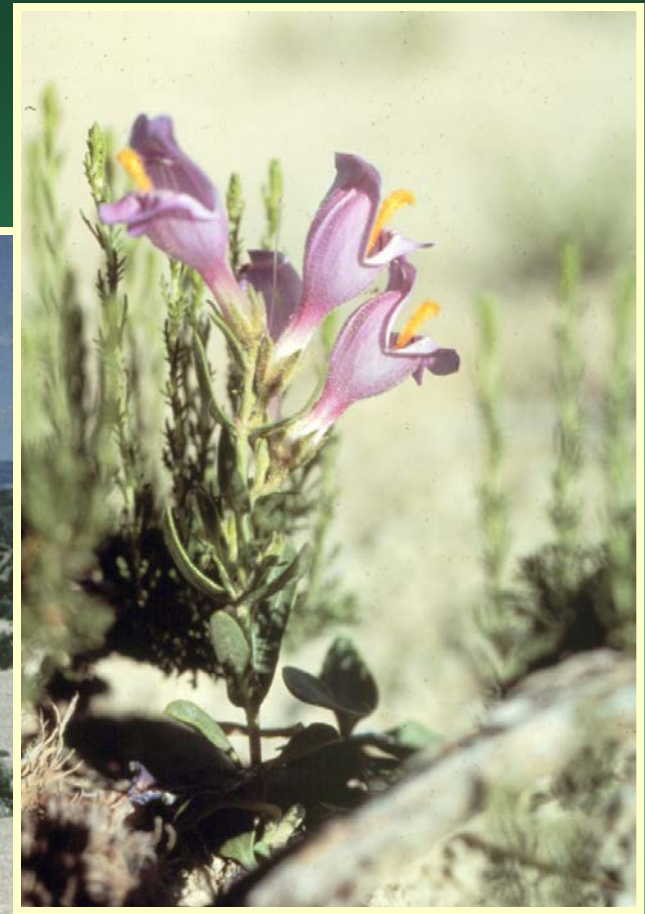
Penstemon grahamii

Graham beardtongue

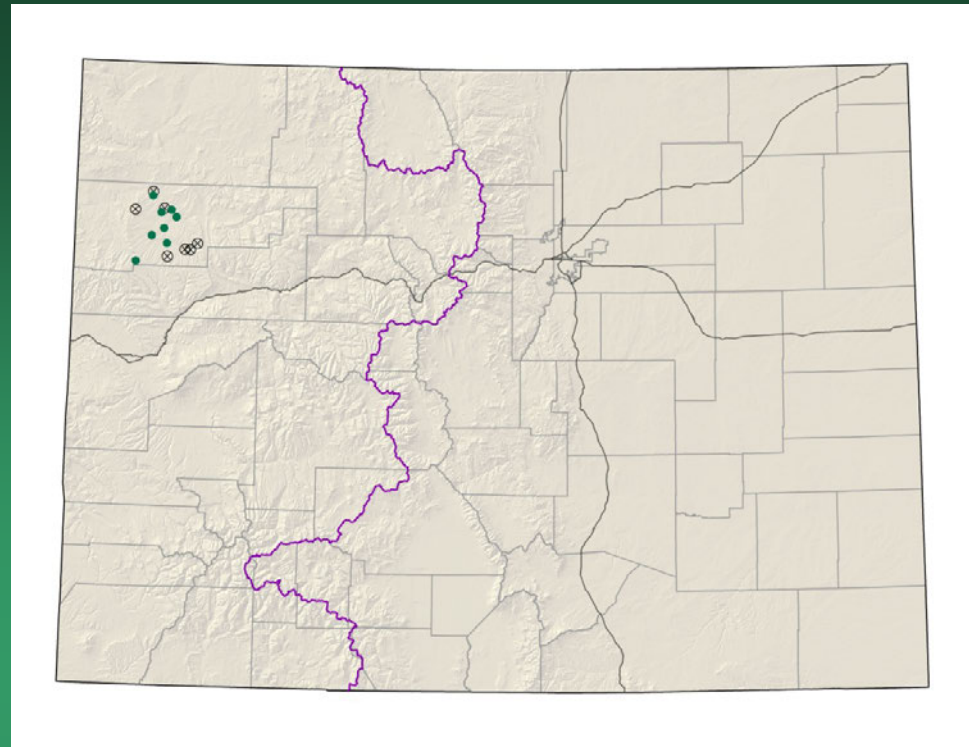


- Federal status: BLM sensitive, Proposed Threatened
- Heritage ranks: G2/S1
- Global distribution: Utah and Colorado (Rio Blanco County); 5100-6000 ft.
- Last observed in Colorado: 2011-12
- Colorado occurrences: 7 (3 are historical)
- Colorado individuals: 5,000
- Primary threats: oil and gas development,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

Penstemon grahamii



Penstemon fremontii
var. glabrescens
Fremont's beardtongue



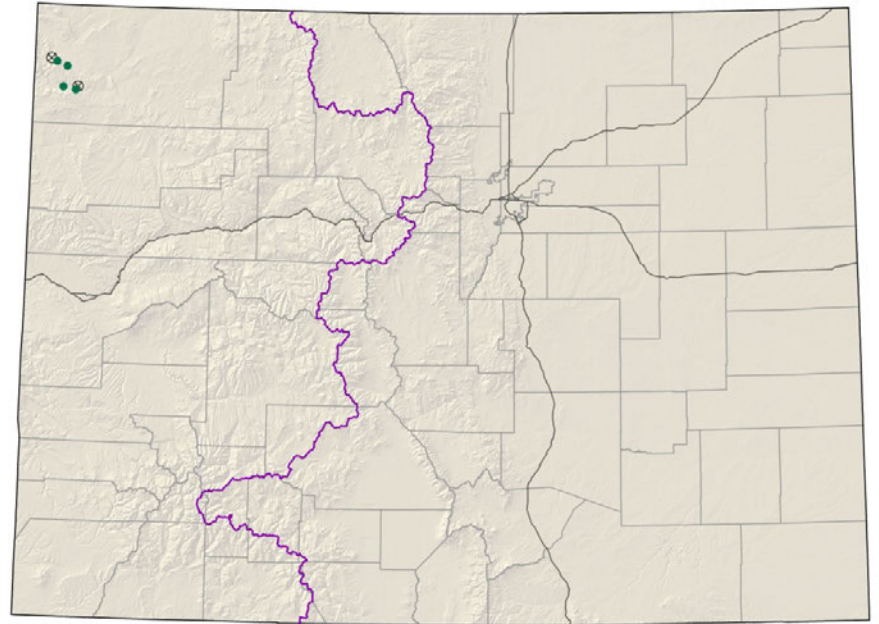
- Federal status: none
- Heritage ranks: G3G4T2/S2
- Global distribution: Colorado endemic (Rio Blanco County)
- Last observed in Colorado: 2010
- Colorado occurrences: 15 (6 are historical)
- Colorado individuals: unknown
- Primary threats: oil and gas development
- Land ownership/management: BLM, state

Penstemon fremontii var. *glabrescens*



Penstemon scariosus
var. cyanomontanus

Blue Mountain beardtongue

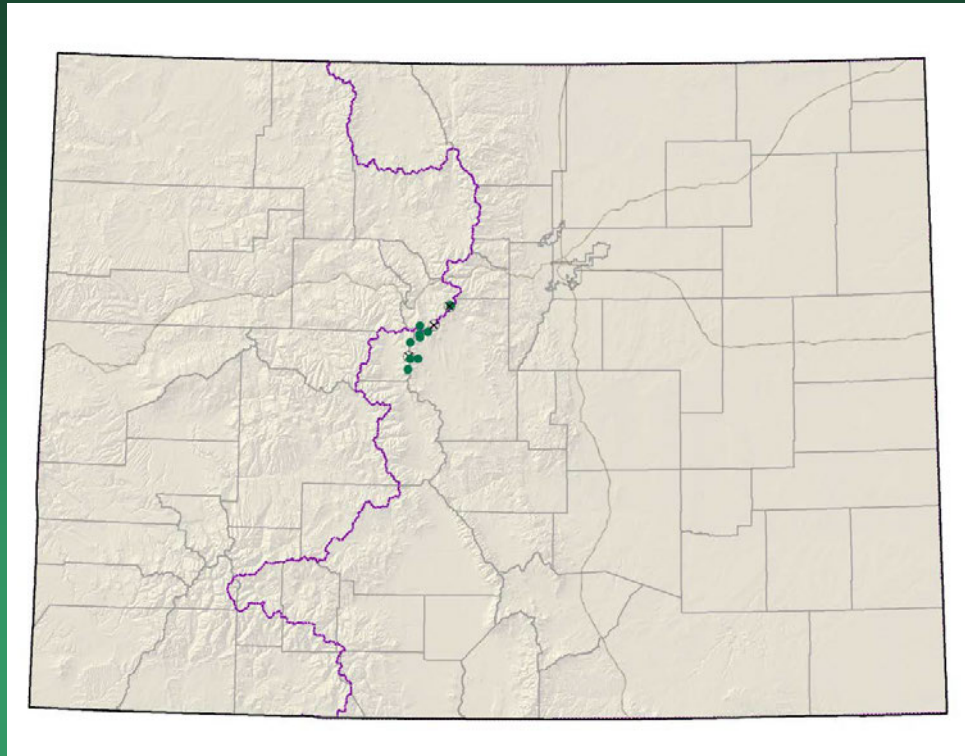


- Federal status: none
- Heritage ranks: G4T2/S2
- Global distribution: Utah and Colorado (Moffat County)
- Last observed in Colorado: 2011
- Colorado occurrences: 6 (2 are historical)
- Colorado individuals: >19,000
- Primary threats: incompatible grazing
- Land ownership/management: NPS, BLM



Penstemon scariosus var. *cyanomontanus*

Saussurea weberi Weber's saw-wort



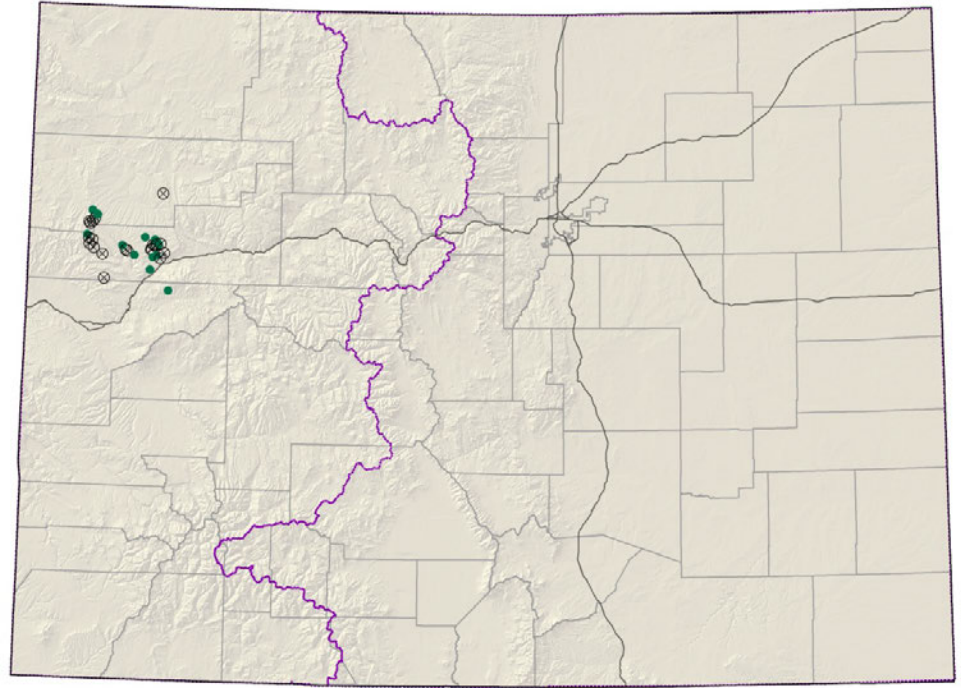
- Federal status: none
- Heritage ranks: G2G3/S2
- Global distribution: Regional endemic of southwest Montana, northwest Wyoming, and central Colorado (Custer, Fremont, Park and Summit counties)
- Last observed in Colorado: 2009
- Colorado occurrences: 13 (3 are historical)
- Colorado individuals: >6300
- Primary threats: may be threatened by mining and alpine grazing
- Land ownership/management: USFS, private

Saussurea weberi



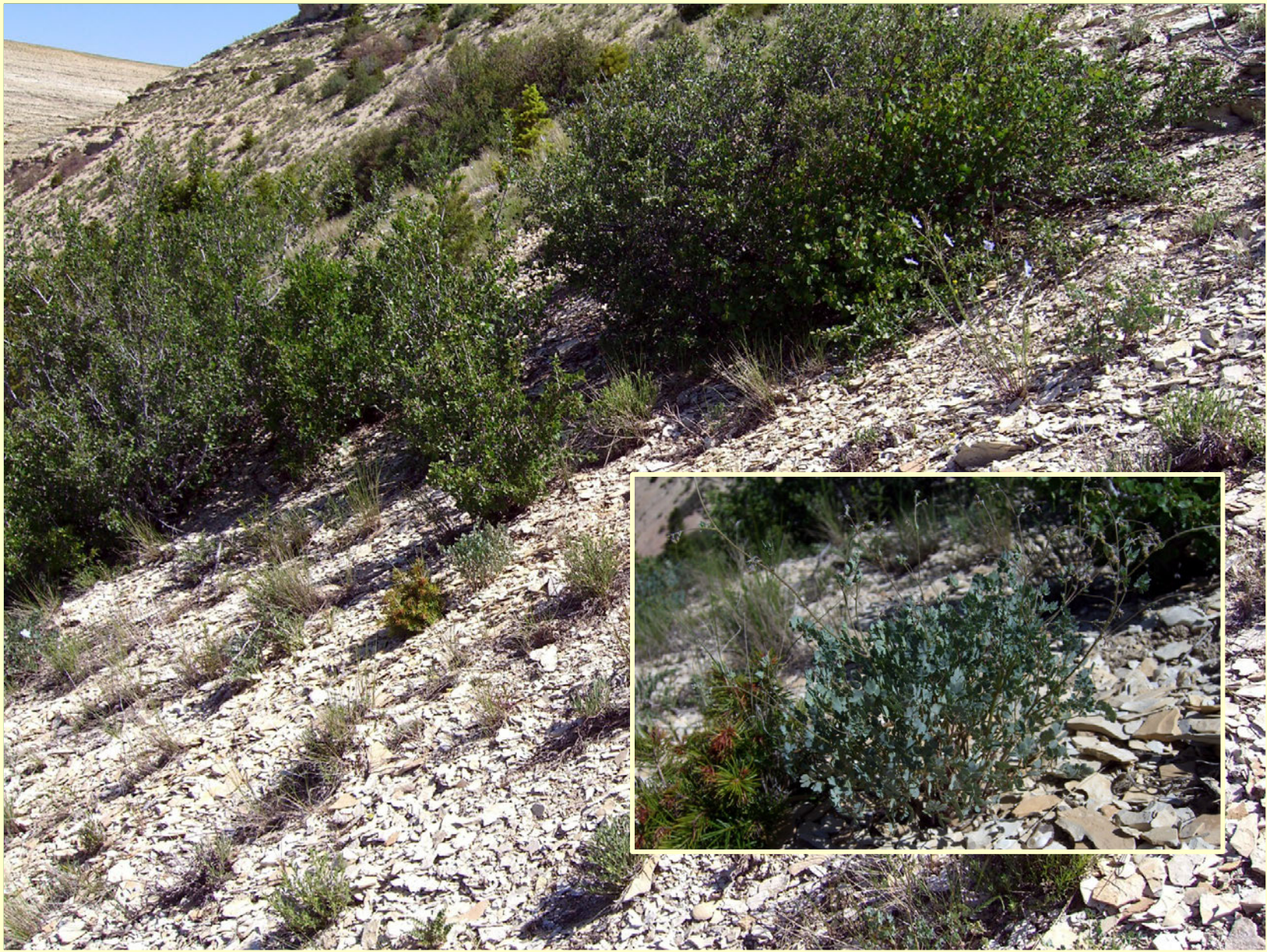
Thalictrum heliophilum

Sun-loving meadowrue



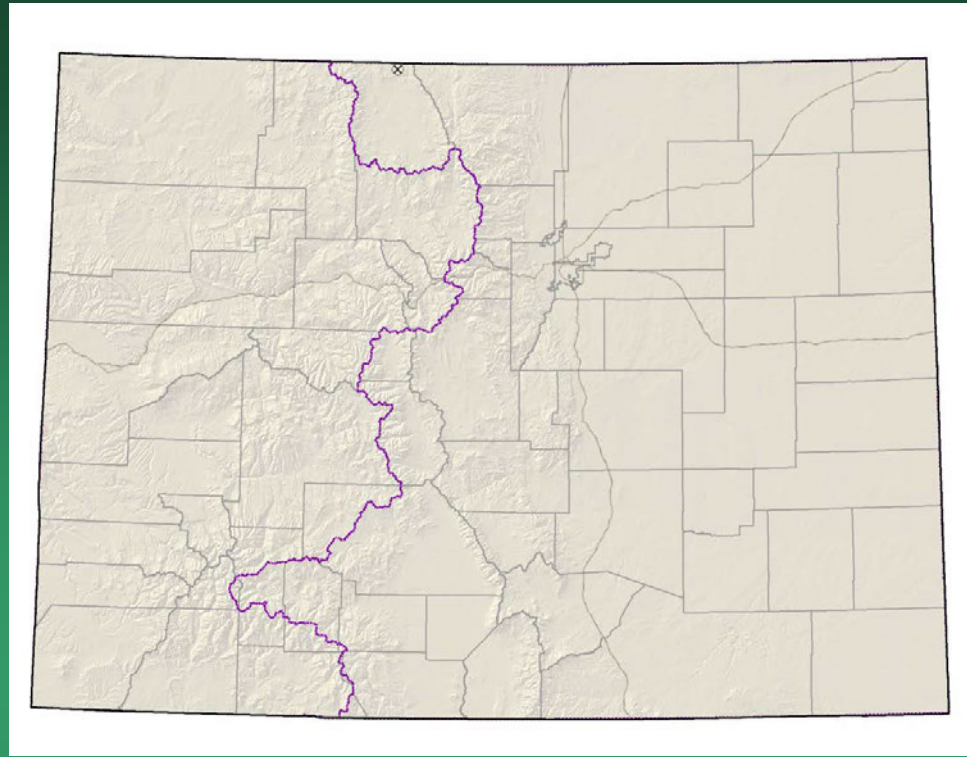
- Federal status: BLM & USFS sensitive
- Heritage ranks: G2/S2
- Global distribution: Colorado endemic (Garfield, Mesa, and Rio Blanco counties)
- Last observed in Colorado: 2011
- Colorado occurrences: 33 (21 are historical)
- Colorado individuals: <200,000
- Primary threats: Oil and gas development, grazing, weeds
- Land ownership/management: BLM, USFS, private

Thalictrum heliophilum



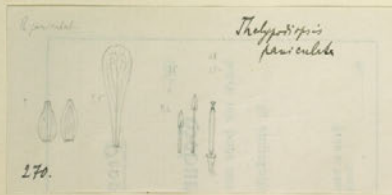
Thelypodium paniculatum

Northwest thelypody



- Federal status: none
- Heritage ranks: G2/S1
- Global distribution: Idaho, Montana, Wyoming, and Colorado (Jackson County)
- Last observed in Colorado: 1903
- Colorado occurrences: 1 historical
- Colorado individuals: unknown
- Primary threats: altered hydrology?
- Land ownership/management: USFS

Thelypodium paniculatum



Jun. gebelii (p. 18) *Thelypodium*
alpina, *Thelypodium*

Thelypodium in the Rocky Mts.
died like, very common in the
low grassy hills, long stems, purple flowers

PLANTS OF WYOMING.
FROM THE ROCKY MOUNTAIN HERBARIUM.
University of Wyoming, Laramie.
NO. 7164.
Thelypodium paniculatum Aven Nelson.
Rolle's Bot. Kammerer, Uinta Co., June 13, 1900.
Collector: Aven Nelson. DEC. 17 VII. 1896

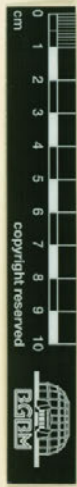


IMAGE 2008

Miss. Bot. Berol.
B 10 027015

Mes. bot. Berol.

Thanks to all who have contributed pictures to the presentations

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The Nature Conservancy

And others – let us know if you recognize a photo

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