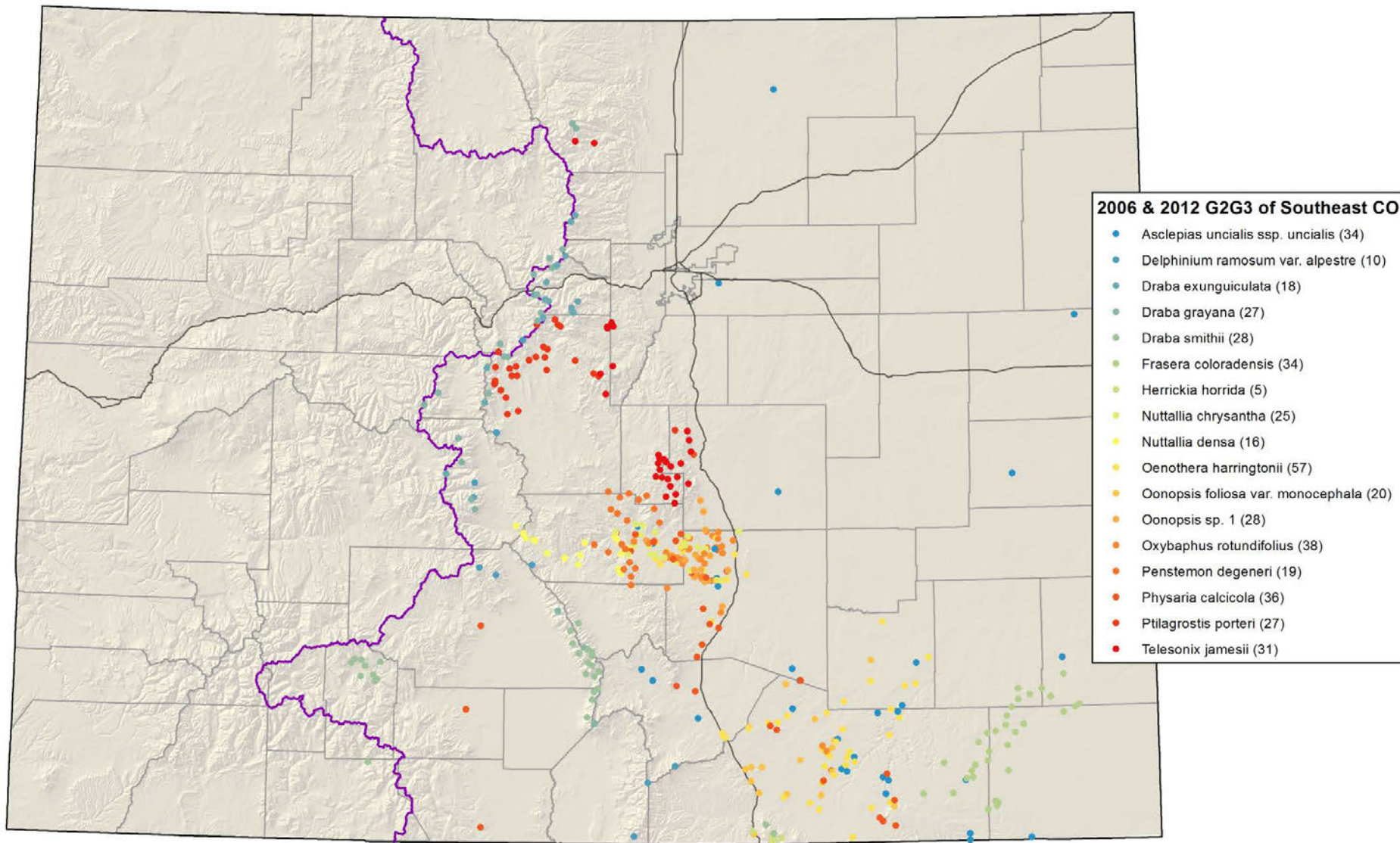
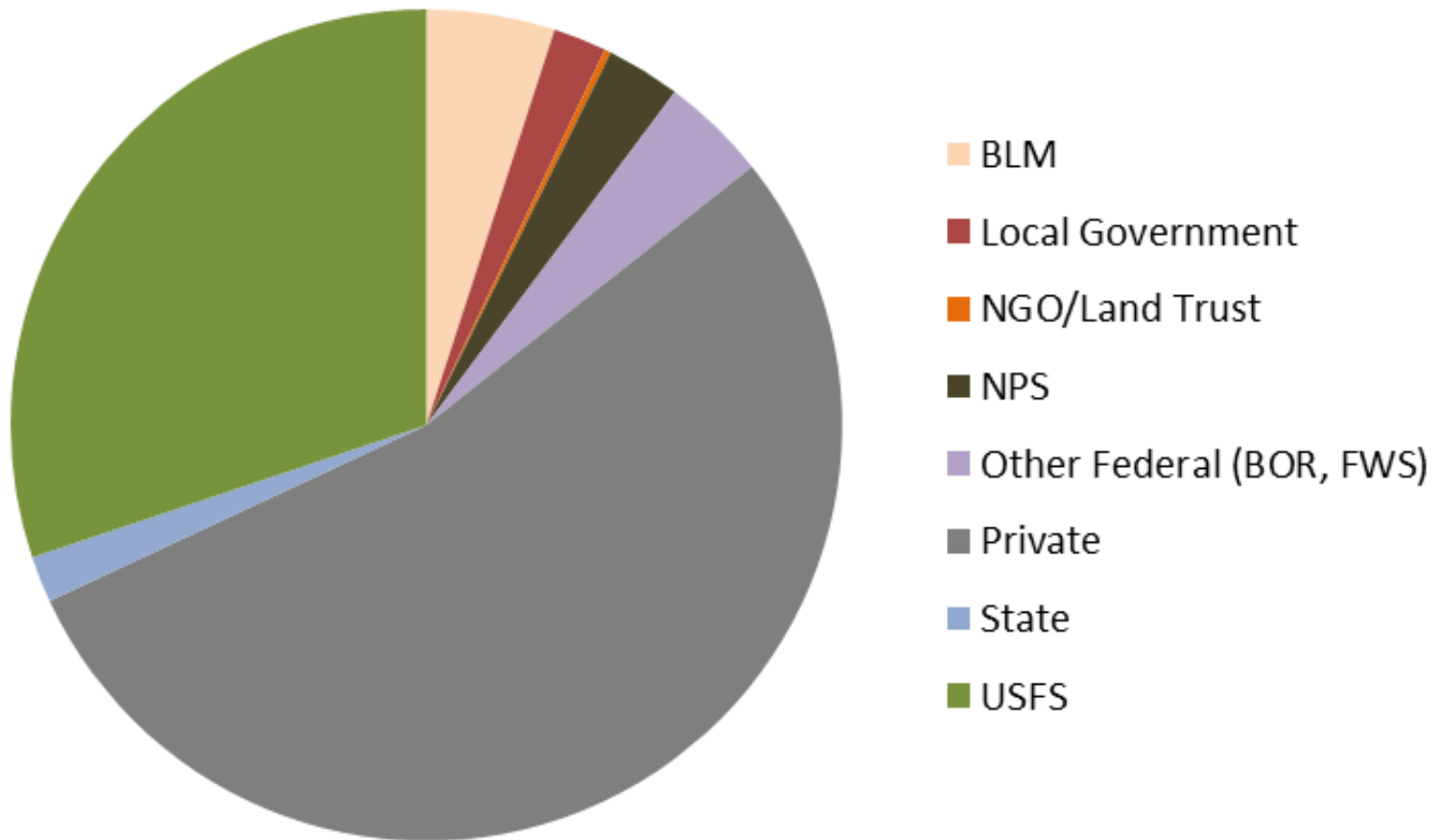


Colorado Rare Plant Symposia
2006/2012
SE Colorado
G2G3 species



Location of SE Colorado G2G3 Plant Species

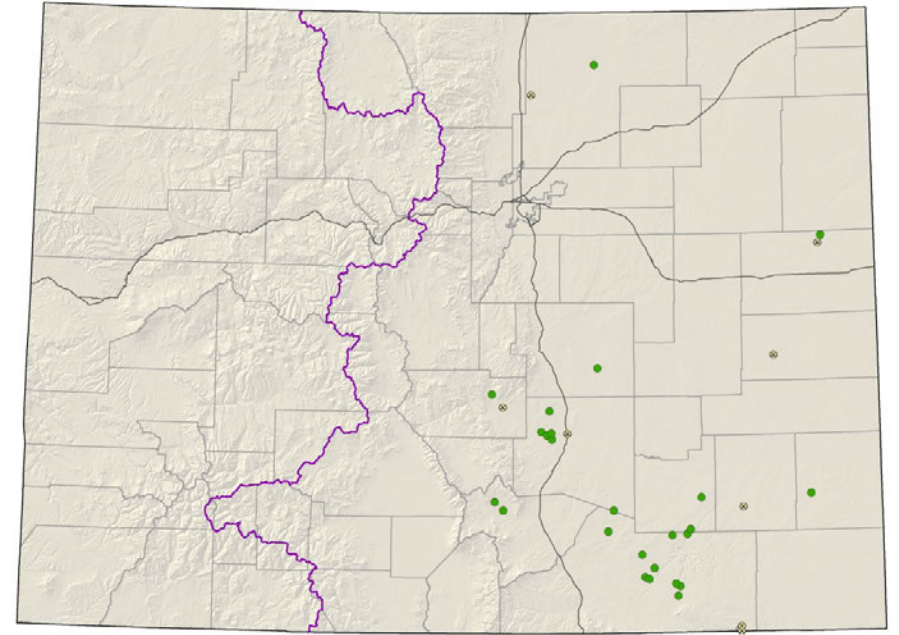
Land Ownership of G2G3 Plant Species of SE Colorado



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)
- Elevation range: 3,880-7,730 ft.
- Last observed in Colorado: 2013
- Colorado occurrences: 38 (11 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, local government, NGO/land trust, federal, state, private, USFS





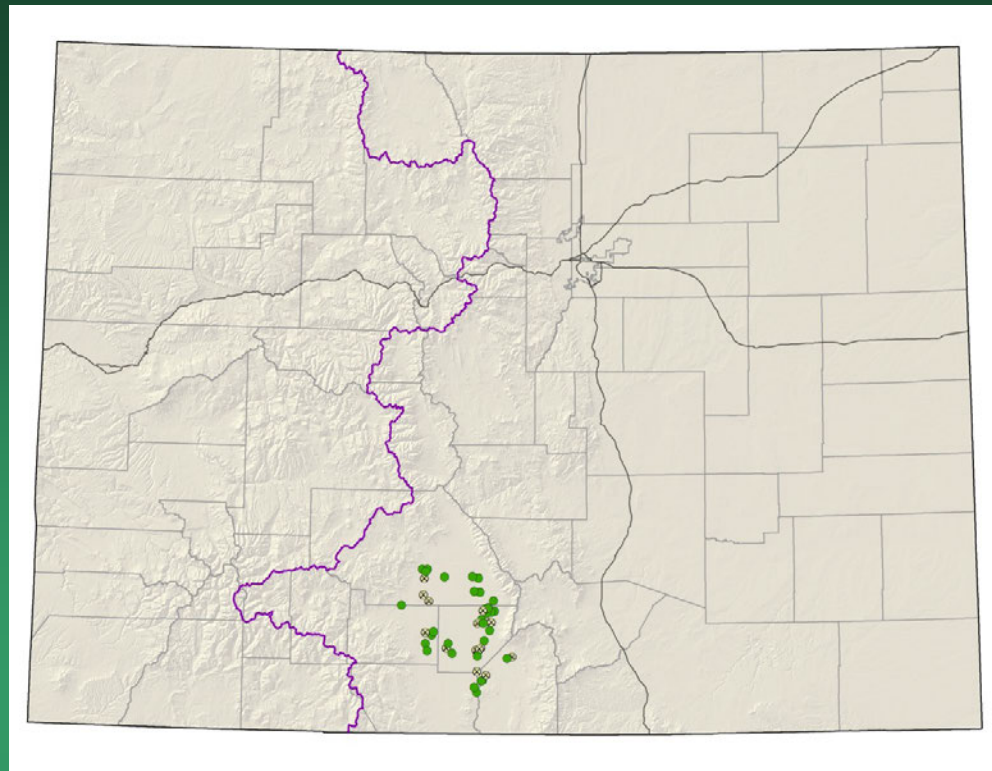
Asclepias uncialis ssp. *uncialis*

Cleome multicaulis=

Peritoma multicaulis

Many-stemmed spider-
flower

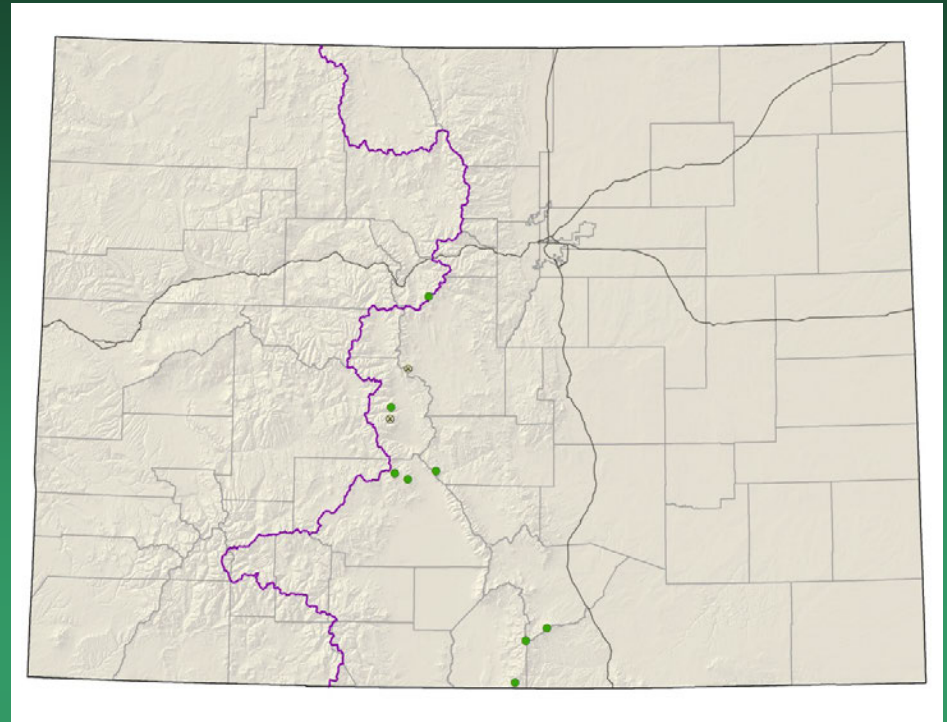
- Federal status: BLM sensitive
- Heritage ranks: G2G3/S2S3
- Global distribution: Mexico, Texas, Arizona, New Mexico, Wyoming and Colorado (Alamosa, Conejos, Costilla, Rio Grande, and Saguache counties)
- Elevation range: 7,480-8,190 ft.
- Last observed in Colorado: 2009
- Colorado occurrences: 40 (12 are historical)
- Colorado individuals: ~5,132,000
- Primary threats: draining of wetlands
- Land ownership/management: BLM, federal, NGO/land trust, NPS, state, private



Cleome multicaulis



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



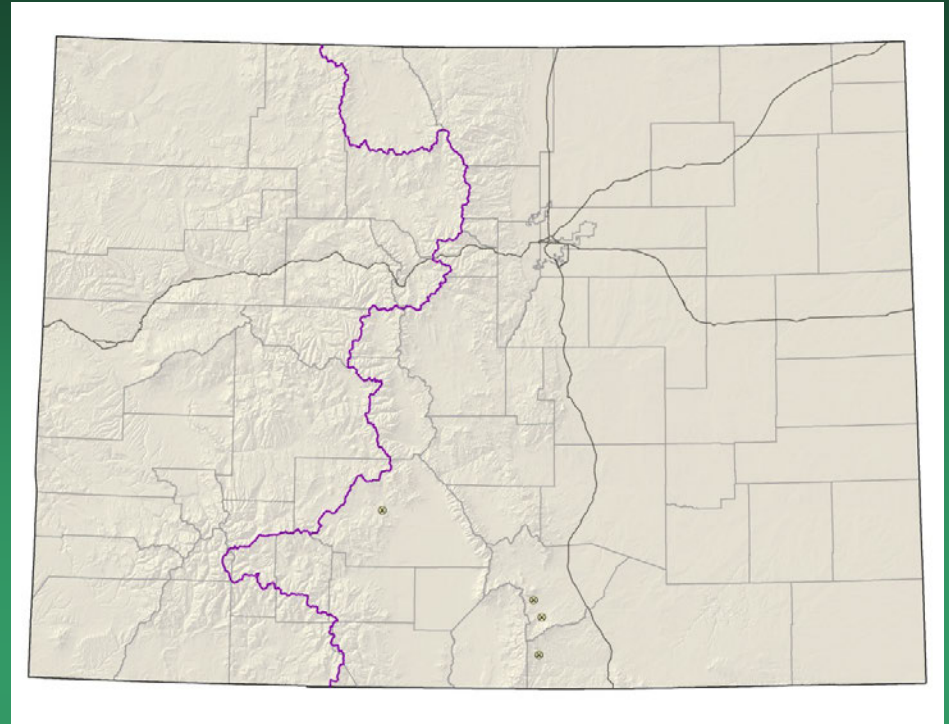
- Federal status: none
- Heritage ranks: G4T2/S2
- Global distribution: New Mexico and Colorado (Costilla, Chaffee, Fremont, Huerfano, Las Animas, Mineral, Park, Saguache, and Summit counties)
- Elevation range: 10,850-14,255 ft.
- Last observed in Colorado: 2008
- Colorado occurrences: 11 (3 are historical)
- Colorado individuals: 100+
- Primary threats: Trampling from recreational activities
- Land ownership/management: private, USFS

Delphinium ramosum var. *alpestre*



Delphinium robustum

Wahatoya Creek larkspur



- Federal status: none
- Heritage ranks: G2?/S2?
- Global distribution: New Mexico and Colorado (Huerfano, El Paso, Las Animas, **Montezuma** and Saguache counties)
- Elevation range: 7,000-8,600 ft.
- Last observed in Colorado: **2015**
- Colorado occurrences: **7** – (4 are historical)
- Colorado individuals: **100**
- 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, private

Delphinium robustum

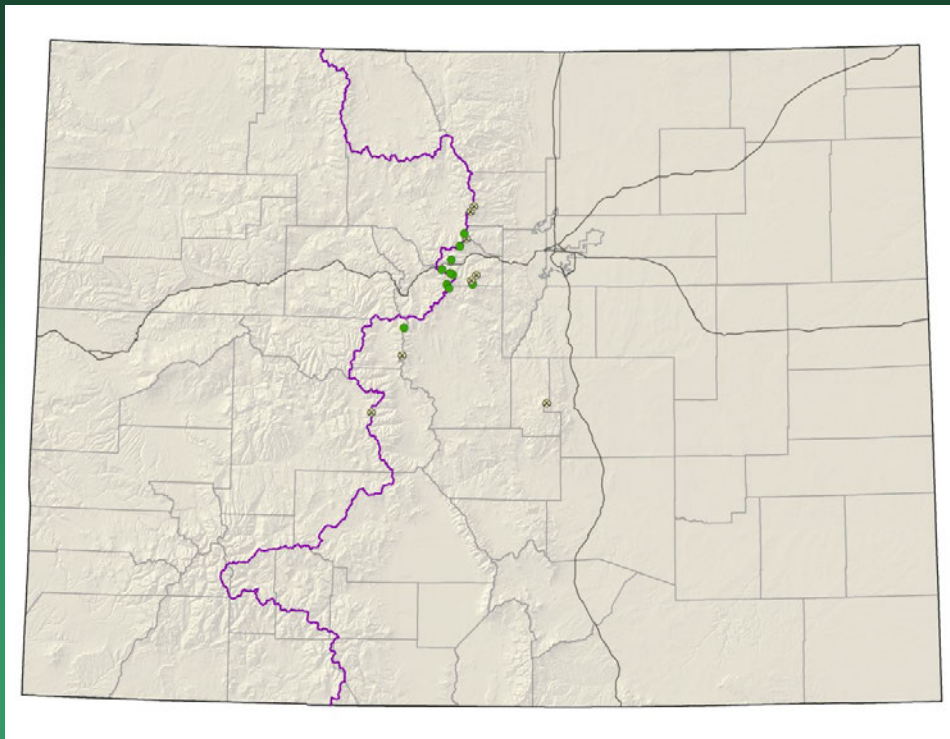


Photos ©Al Schneider,
www.swcoloradowildflowers.com

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)
- Elevation range: 10,780-14,120 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: local government, state, private, USFS



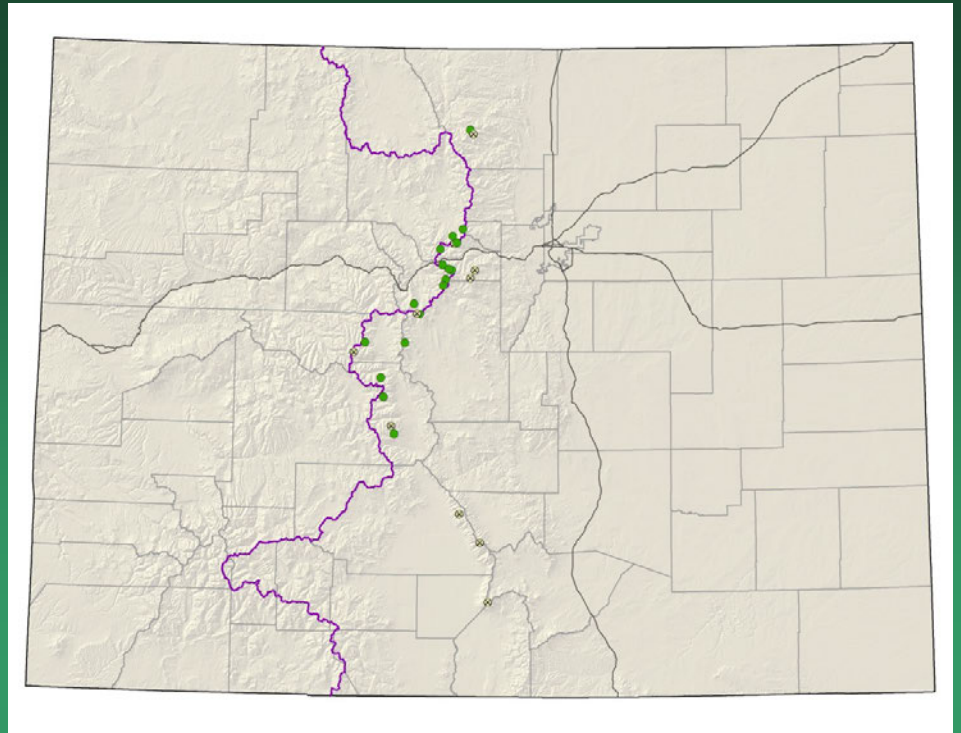


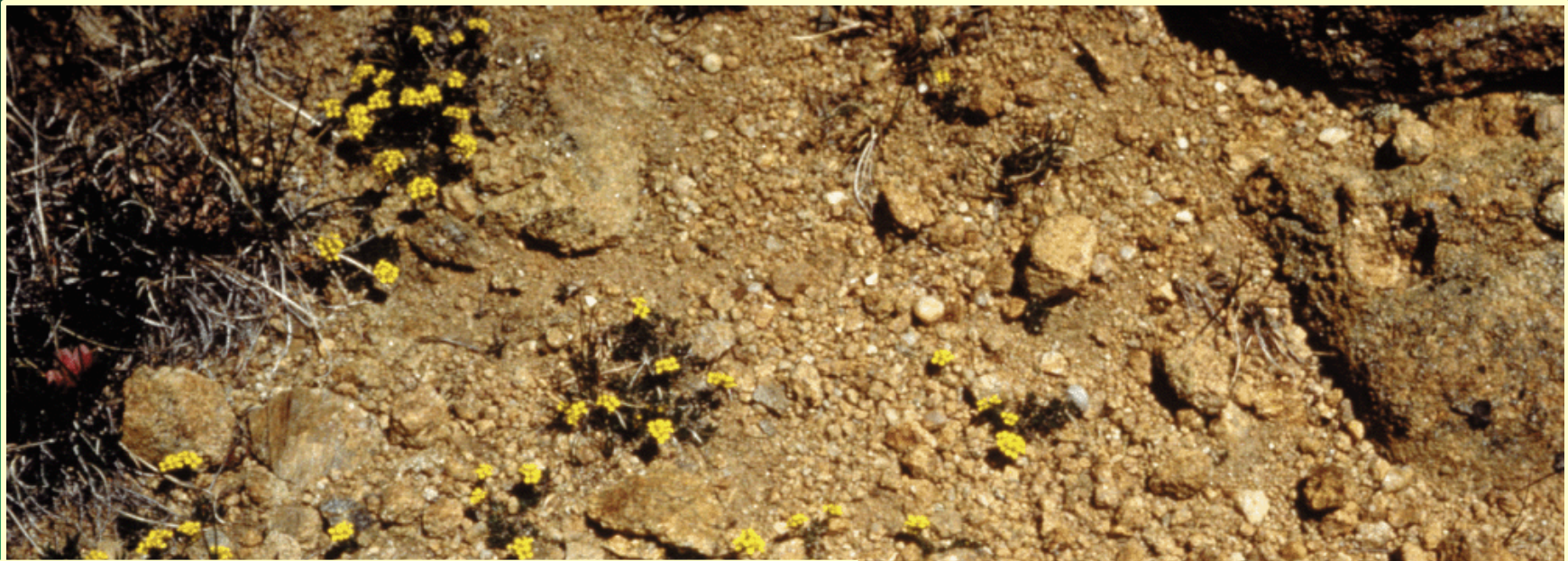
Draba exunguiculata

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)
- Elevation range: 10,630-14,350 ft.
- Last observed in Colorado: 2014
- Colorado occurrences: 27 (10 are historical)
- Colorado individuals: ~200
- Primary threats: Trampling from hikers and mountain goats, over-collection for gardens and global warming
- Land ownership/management: NPS, private, USFS

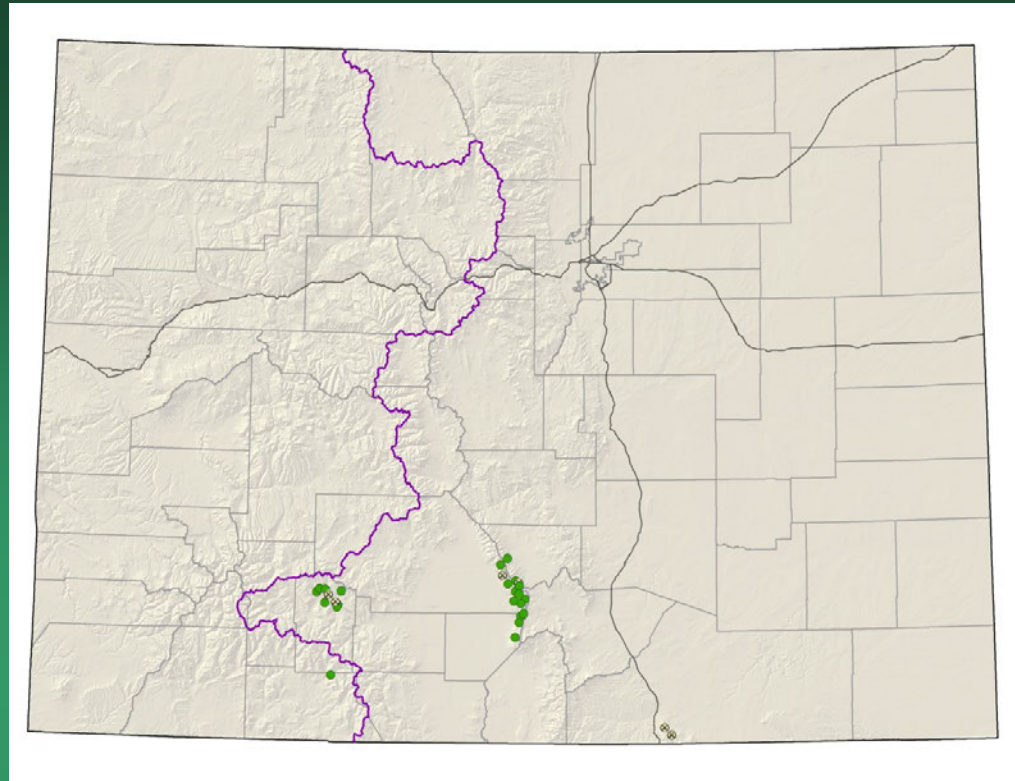




Draba grayana

Draba smithii

Smith's whitlow-grass



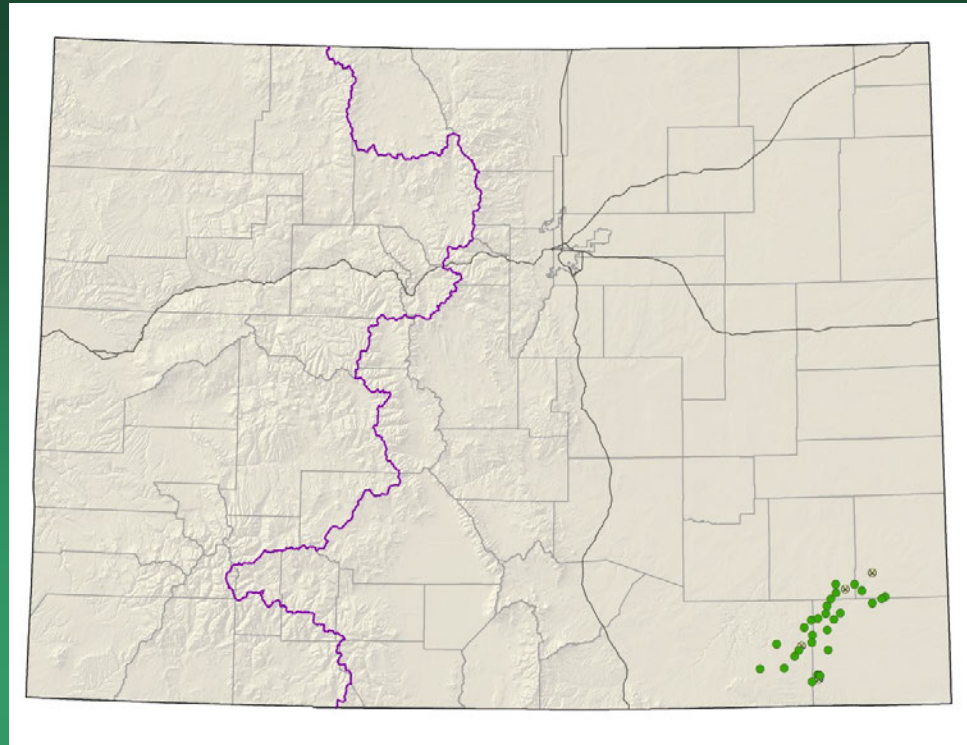
- Federal status: USFS sensitive
- Heritage ranks: G2/S2
- Global distribution: Colorado (Alamosa, Archuleta, Custer, Las Animas, Mineral, and Saguache counties), and NM
- Elevation range: 7,400-13,450 ft.
- Last observed in Colorado: 2009
- Colorado occurrences: 28 (6 are historical)
- Colorado individuals: ~3200
- Primary threats: Habitat modification from hiking and construction
- Land ownership/management: local government, NPS, private, USFS

Draba smithii



Frasera coloradnesis

Colorado gentian



- Federal status: none
- Heritage ranks: G2G3/S2S3
- Global distribution: Colorado endemic; (Baca, Bent, Prowers, and Las Animas counties)
- Elevation range: 4070-5800 ft.
- Last observed in Colorado: 2013
- Colorado occurrences: 30(3 are historical)
- Colorado individuals: 275,000
- Primary threats: wind energy, agriculture, and road maintenance
- Land ownership/management: NGO/land trust, private, state, USFS

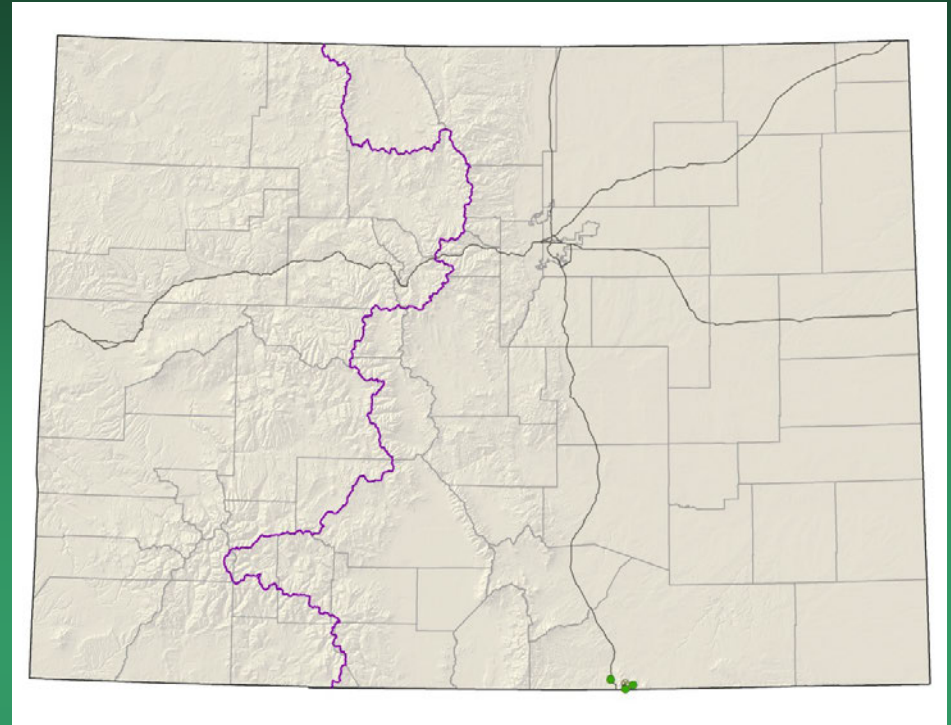


Frasera coloradensis

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)
- Elevation range: 7,870-9,320 ft.
- Last observed in Colorado: 2010
- Colorado occurrences: 5 (2 historical)
- Colorado individuals: 500+
- Primary threats: unknown
- Land ownership/management: local government, private

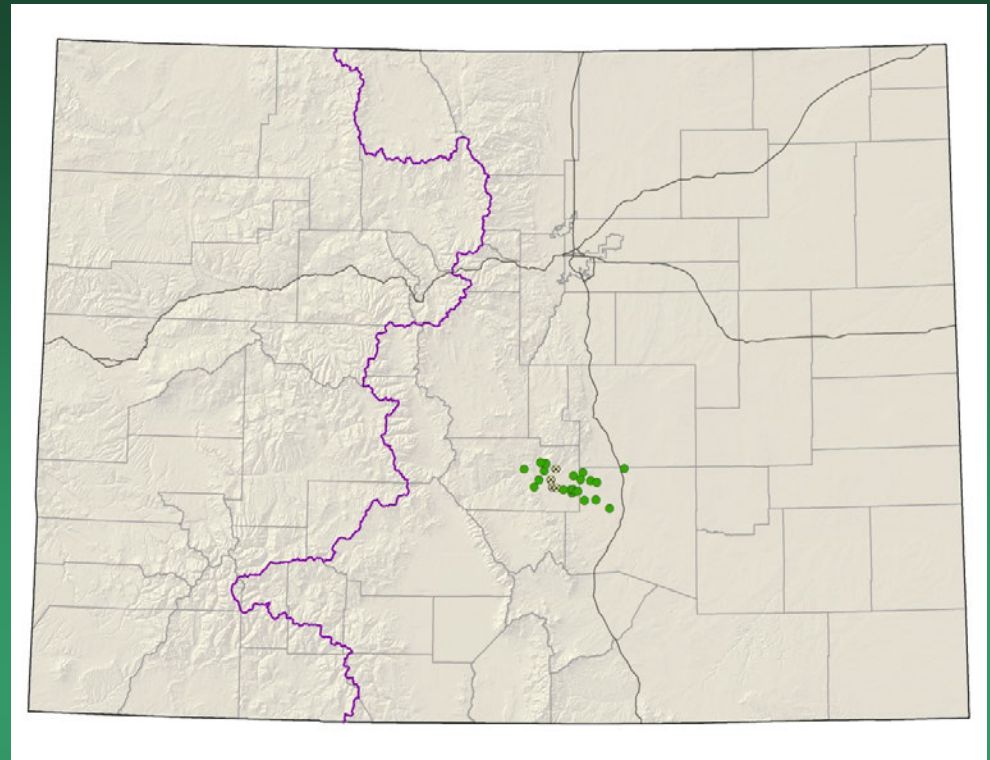


Herrickia horrida

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)
- Elevation range: 4,750-6,850 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, federal, state, private

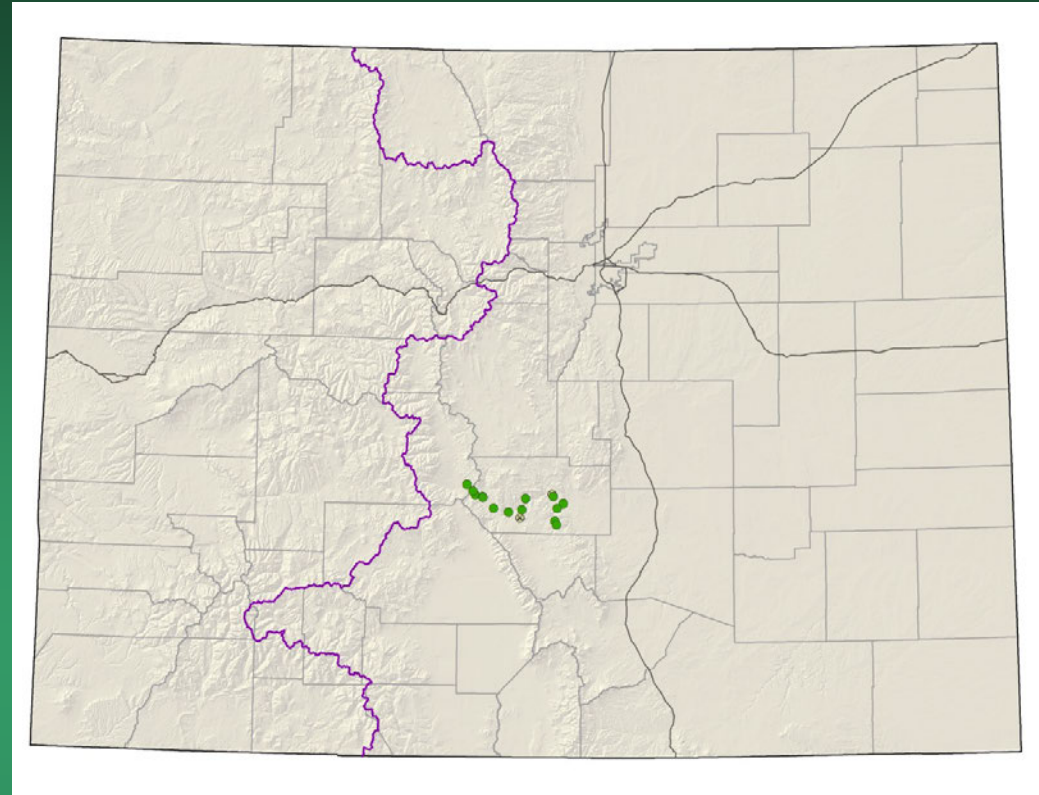




Nuttallia chrysantha

Nuttallia densa
= *Mentzelia densa*
Arkansas Canyon stickleaf

- Federal status: BLM sensitive
- Heritage ranks: G2/S2
- Global distribution: endemic to Colorado (Fremont County)
- Elevation range: 4,750-6,850 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, state, private



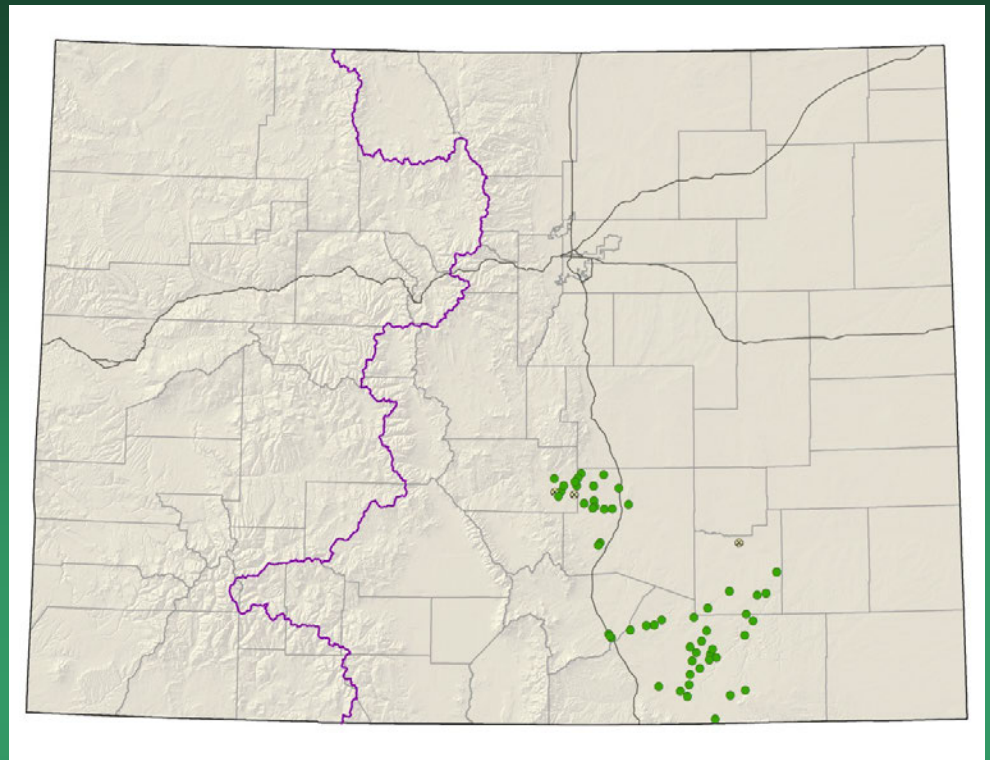


Nuttallia densa

Oenothera harringtonii

Arkansas Valley evening primrose

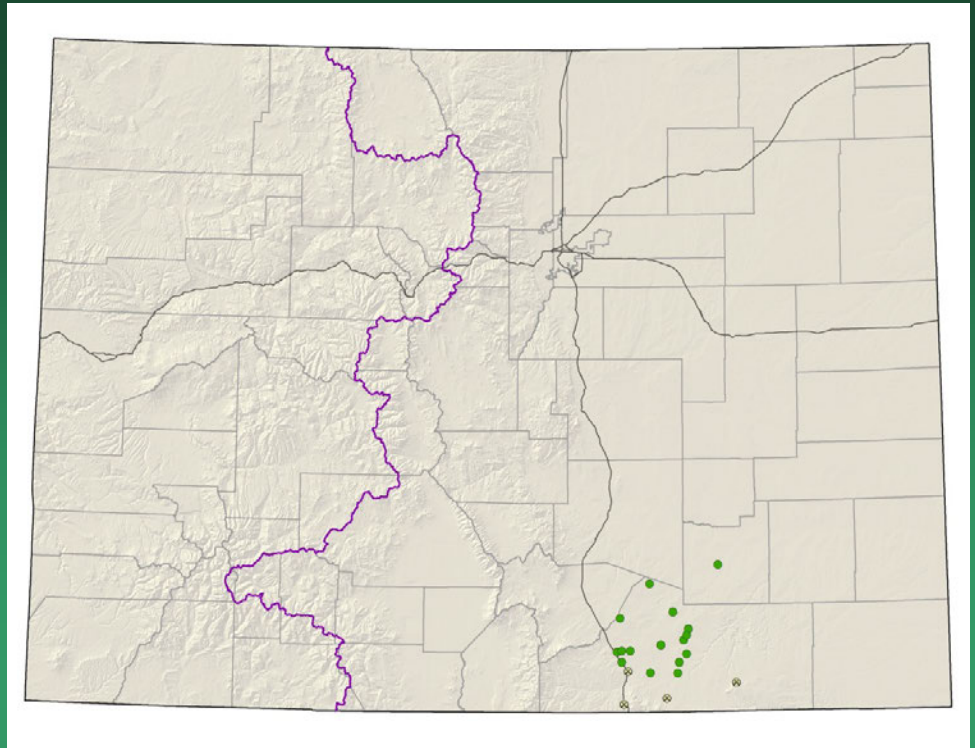
- Federal status: none
- Heritage ranks: G3/S3
- Global distribution: endemic to Colorado (El Paso, Fremont, Huerfano, Las Animas, Otero, and Pueblo counties)
- Elevation range: 4,130-6,450 ft.
- Last observed in Colorado: 2010
- Colorado occurrences: 62 (8 are historical)
- Colorado individuals: 12,000+
- Primary threats: Habitat loss due to urbanization, road development projects, and resource extraction activities, especially quarrying and surface mining
- Land ownership/management: BLM, local government, federal, state, private, USFS





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)
- Elevation range: 4,330-7,880 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: federal, state, private, USFS

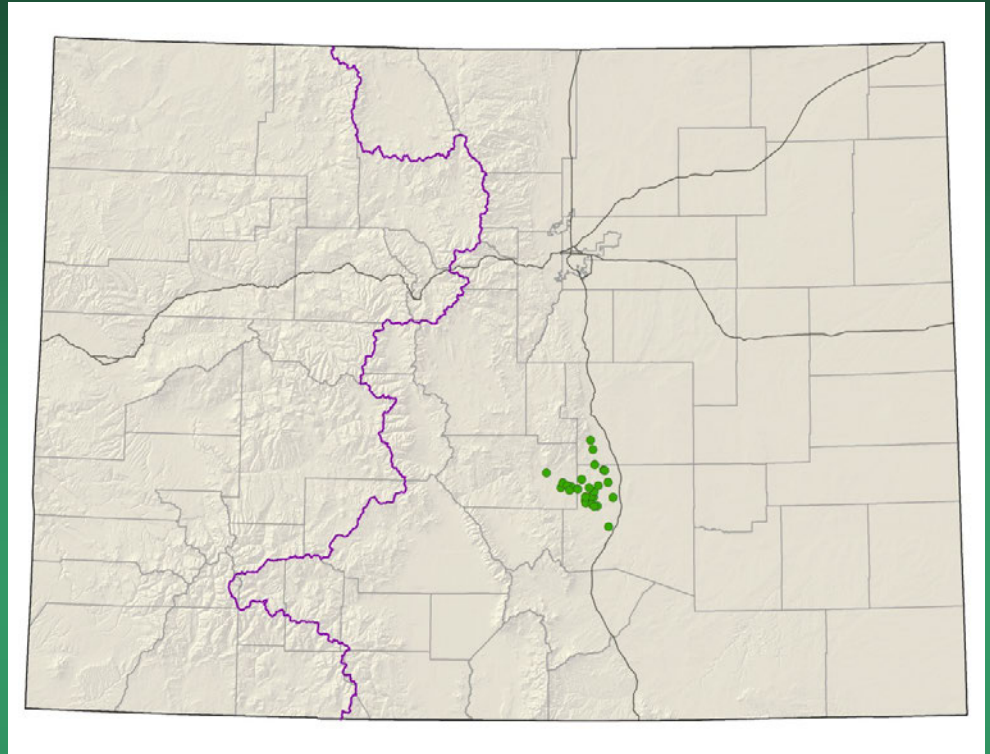


Oonopsis foliosa var. *monocephala*

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)
- Elevation range: 4,850-6,120 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: state, private



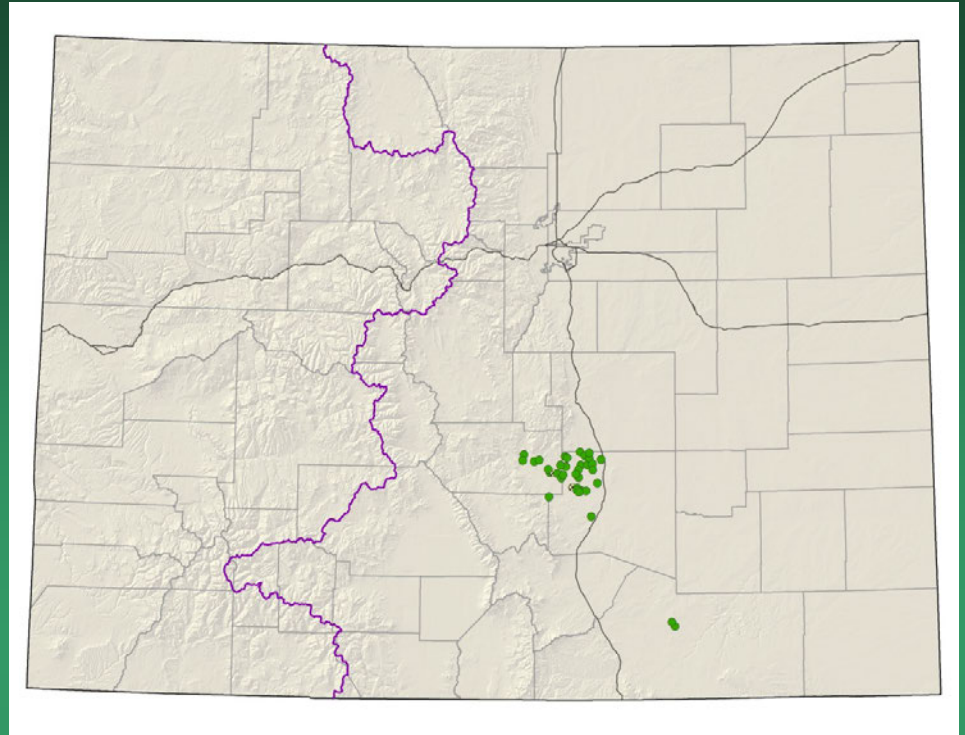


Oenopsis "puebloensis"

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)
- Elevation range: 4,900-5,900 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, federal, state, private



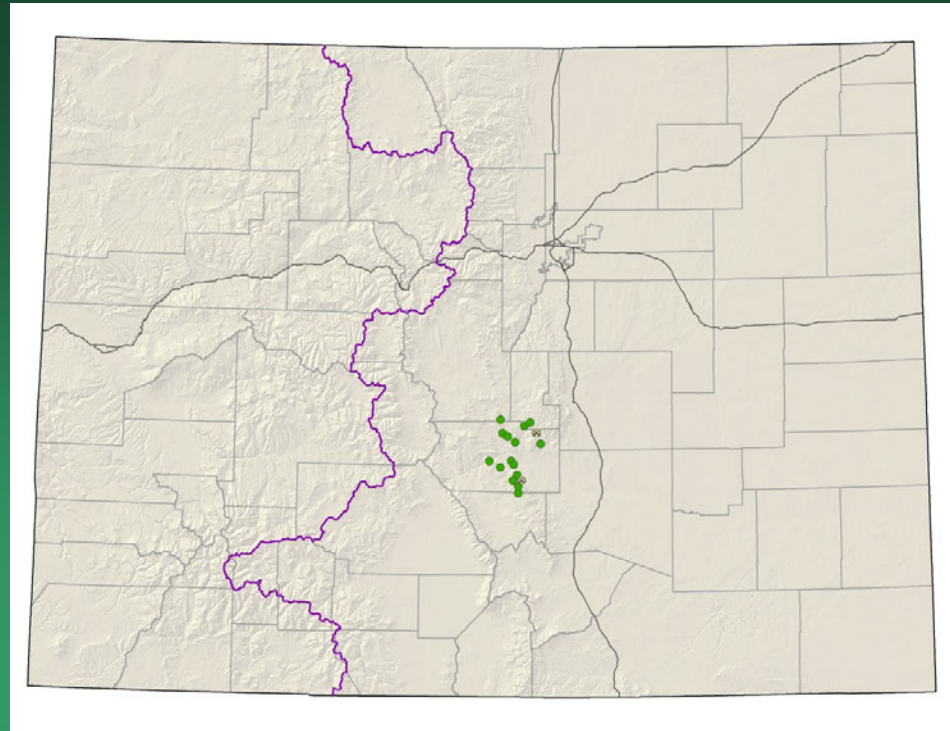


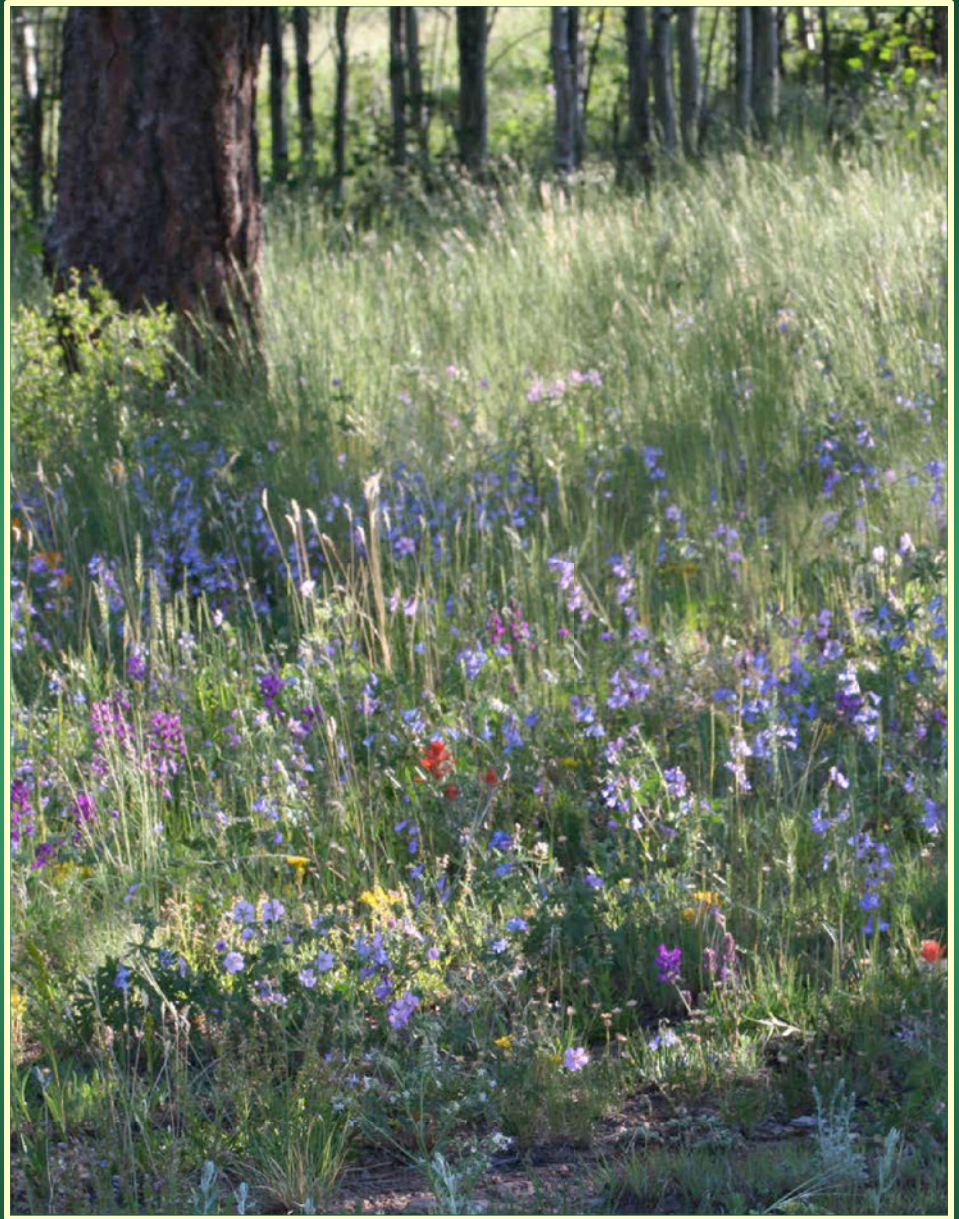
Oxybaphus rotundifolius

Penstemon degeneri

Degener beardtongue

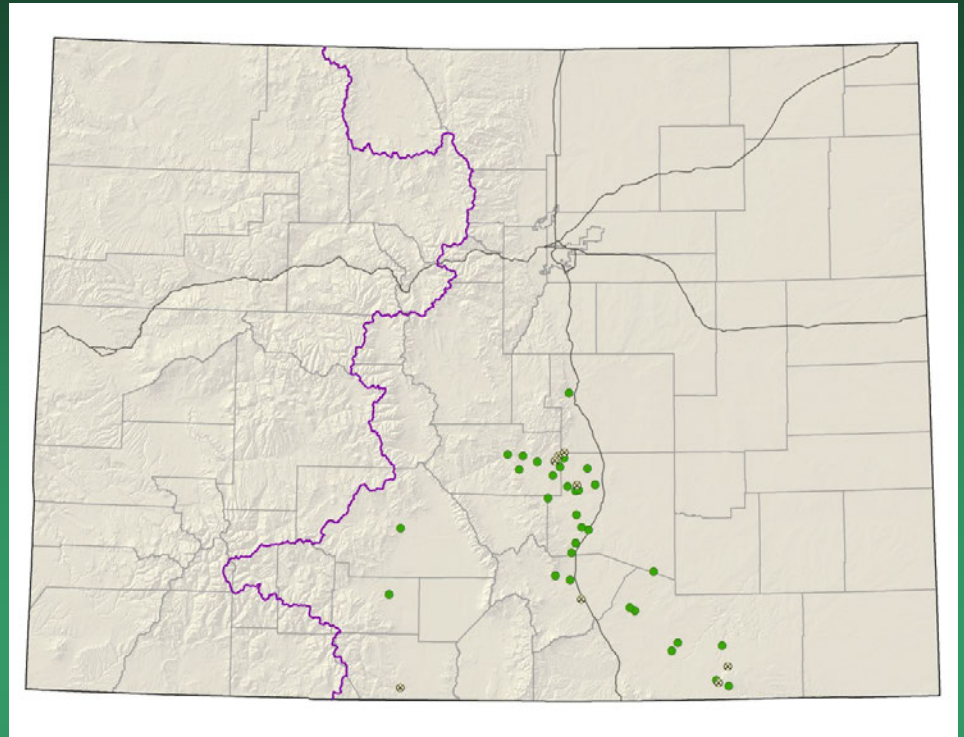
- Federal status: USFS & BLM sensitive
- Heritage ranks: G2/S2
- Global distribution: endemic to Colorado (Chaffee, Custer and Fremont counties)
- Elevation range: 6,000-9,450 ft.
- Last observed in Colorado: 2013
- Colorado occurrences: 19 (2 historical)
- Colorado individuals: ~1500
- Primary threats: Motorized and non-motorized recreation, non-native plant invasion, grazing and trampling, extensive herbivory, succession, and global environmental changes
- Land ownership/management: BLM, private, state, USFS



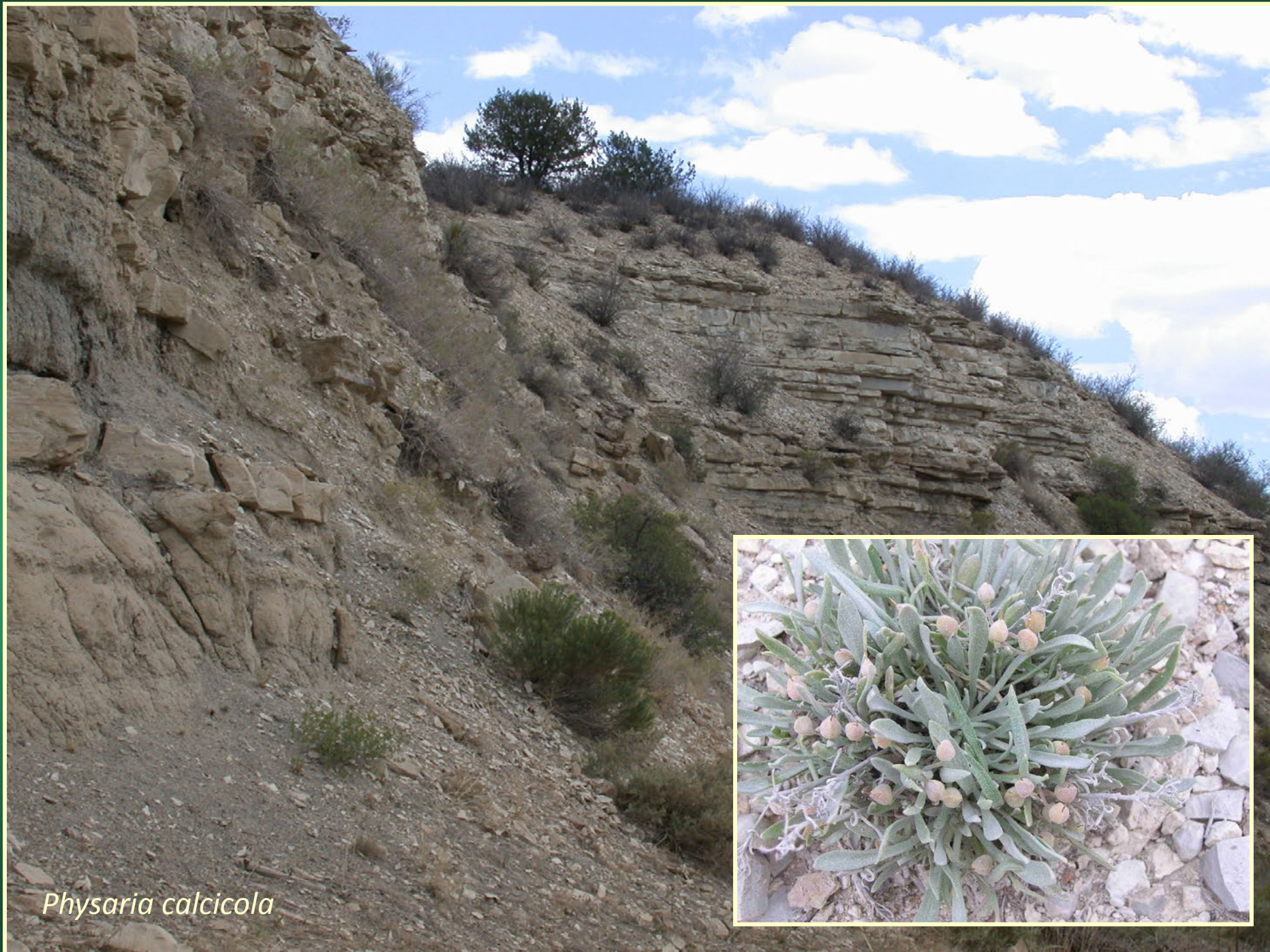


Penstemon degeneri

Physaria calcicola
= *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)
- Elevation range: 4,780-9,800 ft.
- Last observed in Colorado: 2013
- Colorado occurrences: 39 (8 are historical)
- Colorado individuals: 24,000
- Primary threats: This species occurs in areas that are experiencing rapid development pressures
- Land ownership/management: BLM, local government, federal, state, private



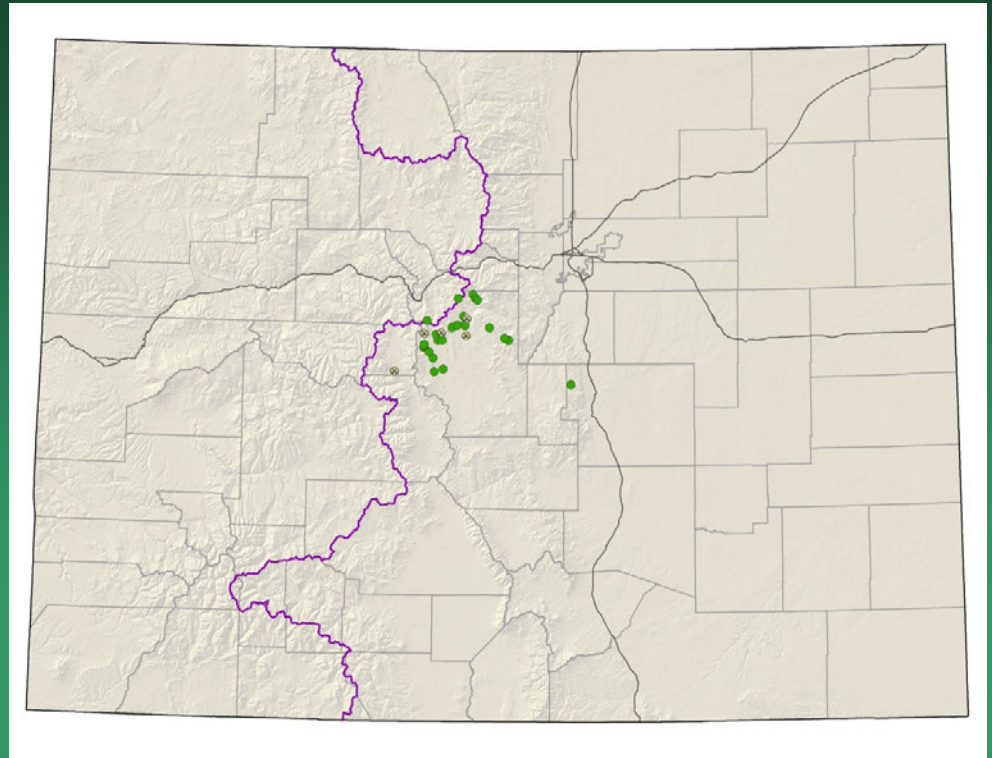
Physaria calcicola



Ptilagrostis porteri

Porter feathergrass

- Federal status: USFS sensitive
- Heritage ranks: G2/S2
- Global distribution: Colorado (El Paso, Lake, Park and Summit counties); northern NM
- Elevation range: 9,070-12,470 ft.
- Last observed in Colorado: 2011
- Colorado occurrences: 28 (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: NGO/land trust, private, USFS

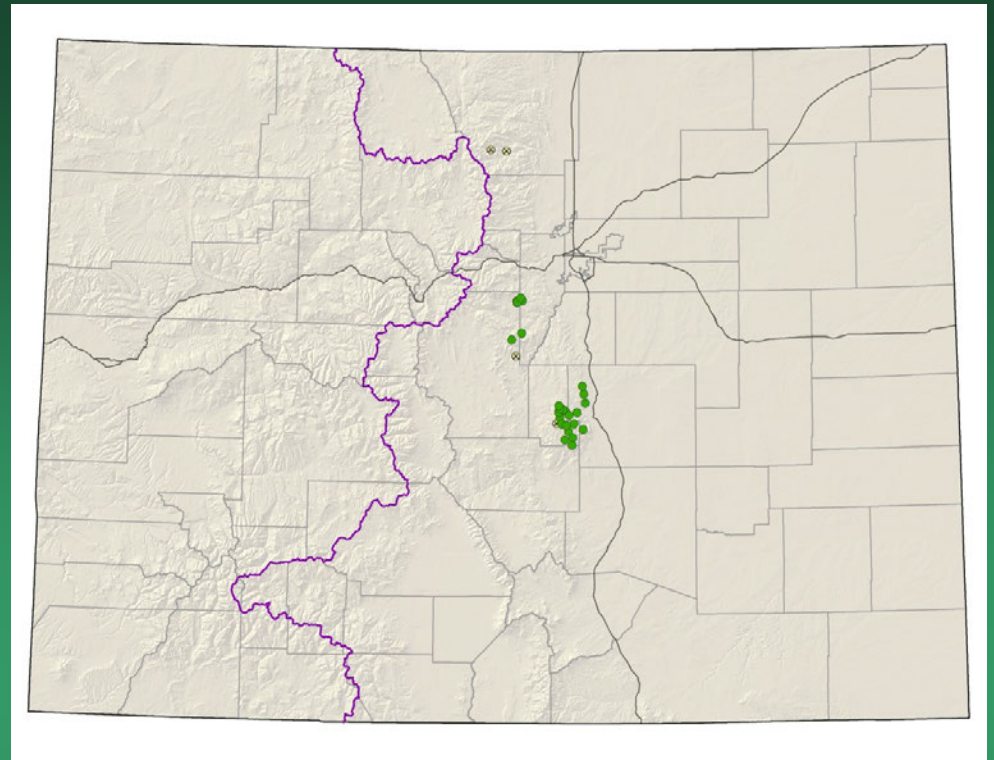




Ptilagrostis porteri

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.
- Elevation range: 6,745-13,730 ft.
- Last observed in Colorado: 2012
- Colorado occurrences: 32 (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, NGO/land trust, NPS, state, private, USFS



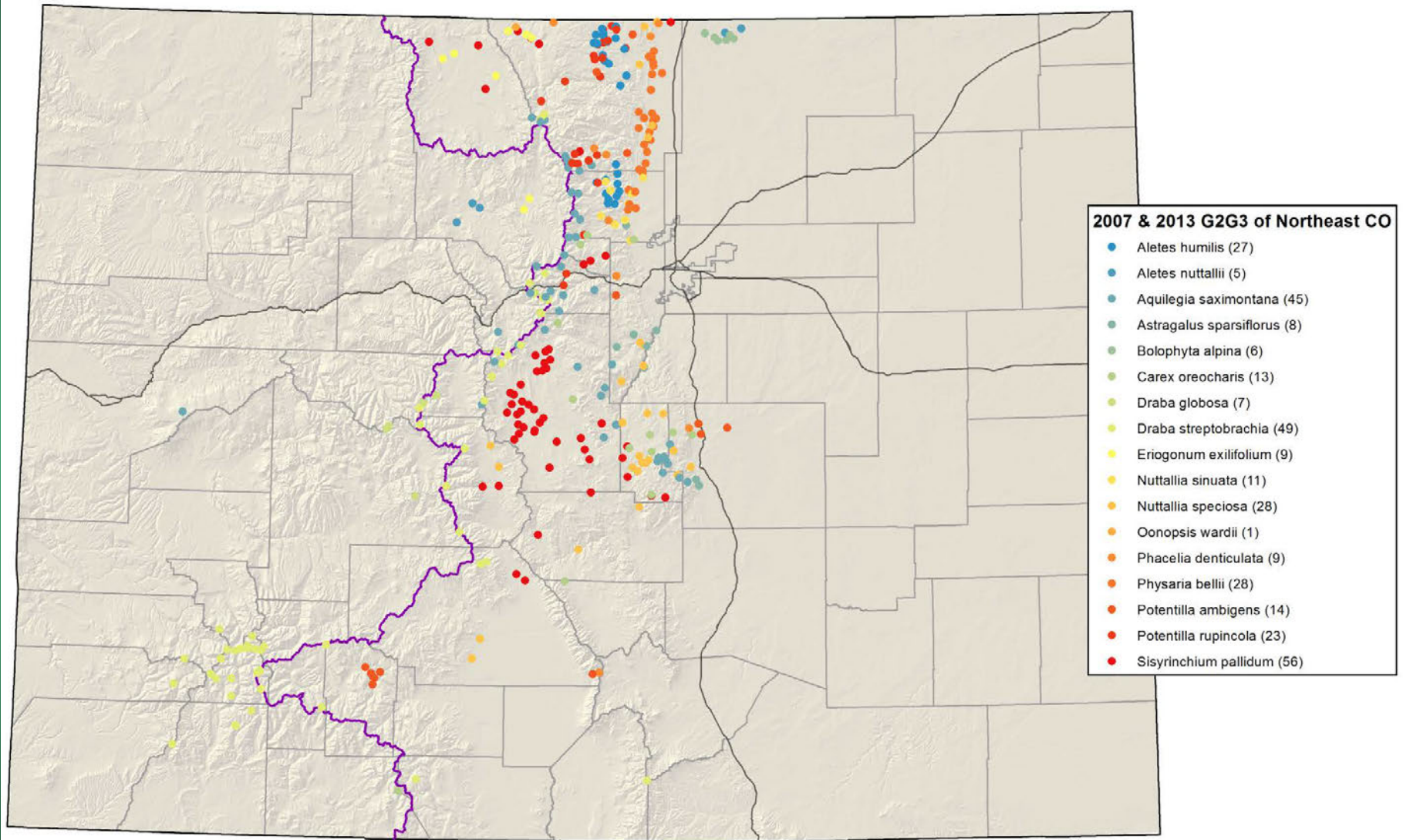
Telesonix jamesii

Colorado Rare Plant Symposia

2007/2013

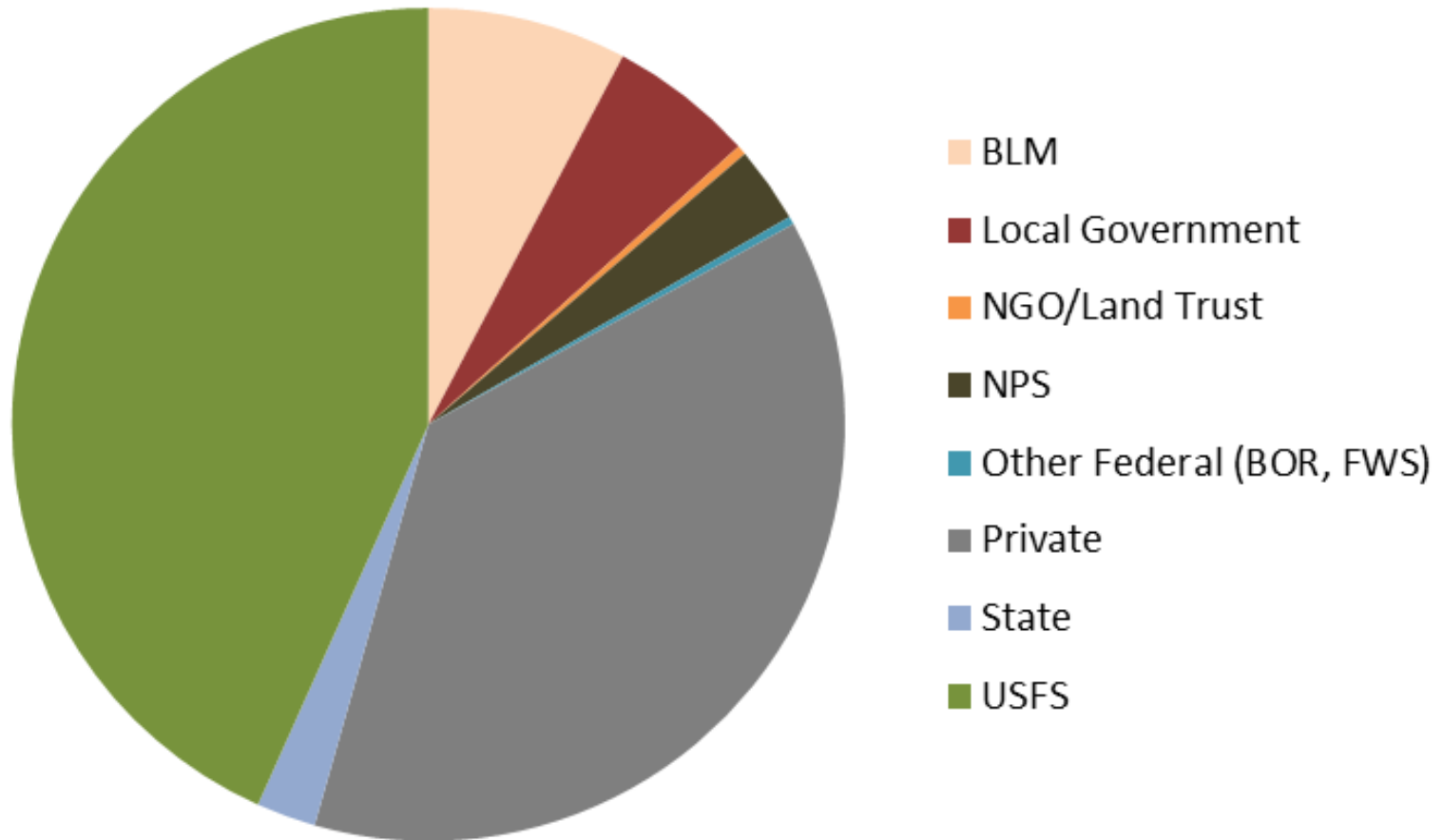
NE & Central Colorado

G2G3 Species



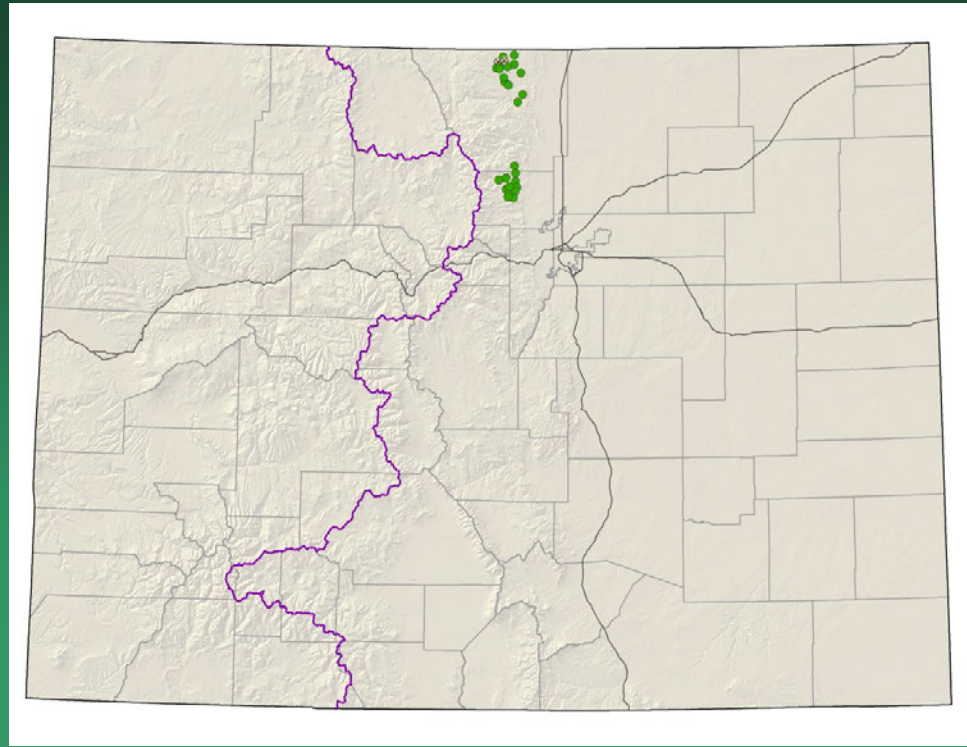
Location of NE & Central Colorado G2G3 Plant Species

Land Ownership of G2G3 Plant Species of NE Colorado



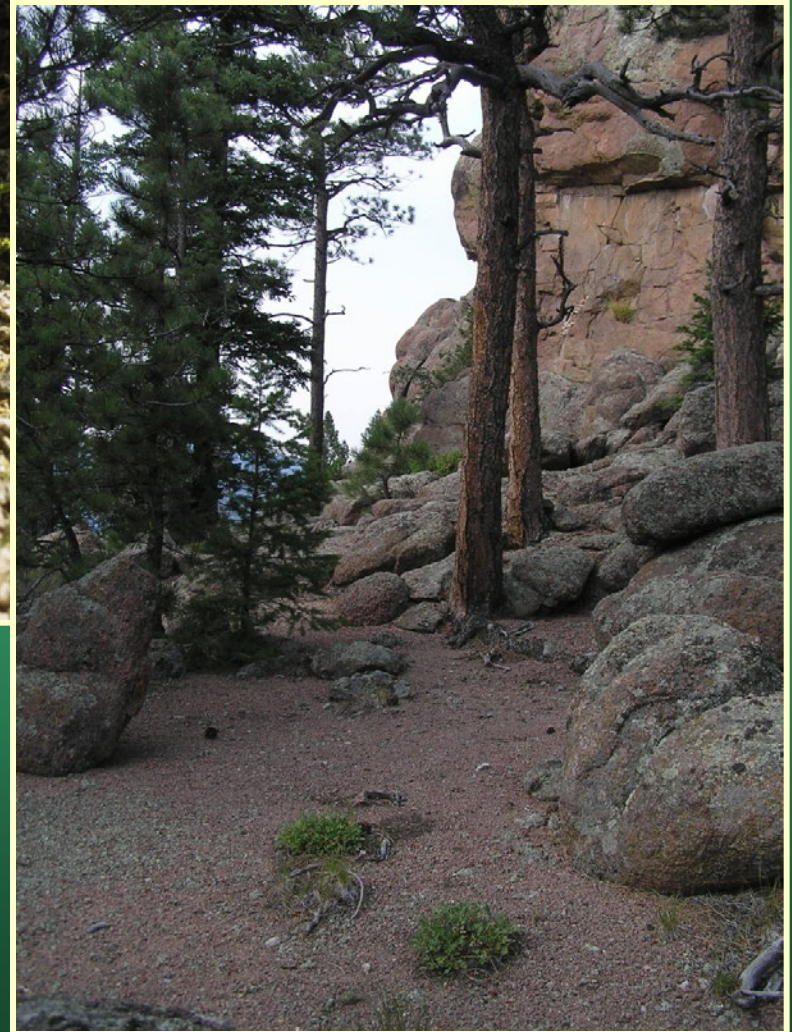
Aletes humilis

Larimer aletes



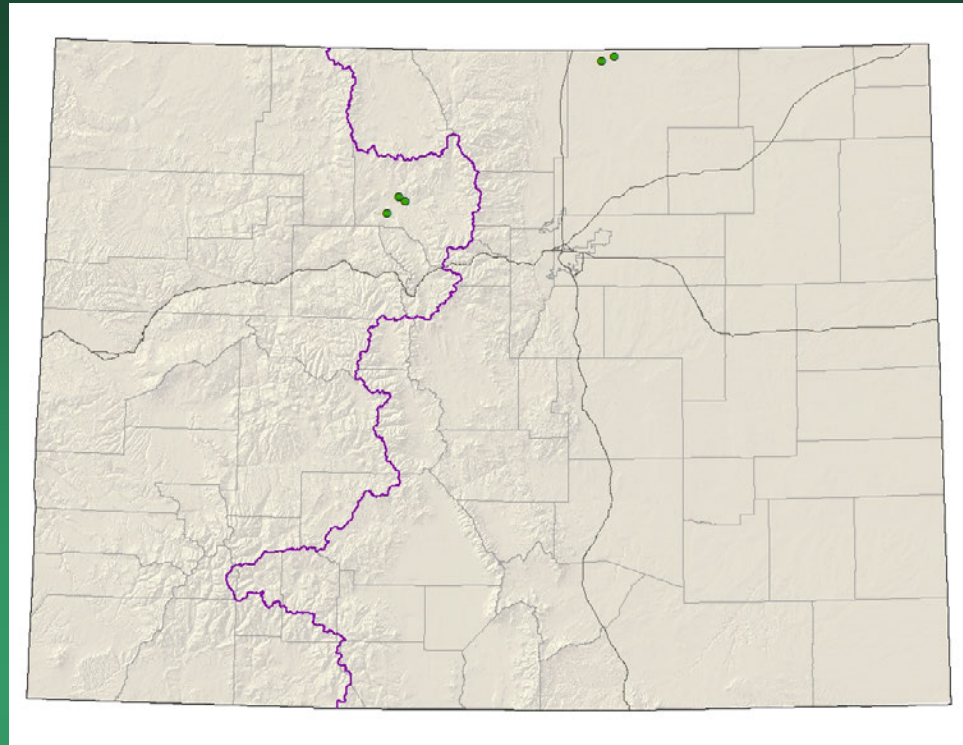
- Federal status: None
- Heritage ranks: G2G3/S2S3
- Global distribution: Colorado (Larimer and Boulder counties). Possibly extending into southern Wyoming.
- Elevation range: 6,150-8,830 ft.
- Last observed in Colorado: 2013
- Colorado occurrences: 27 (2 are historical)
- Colorado individuals: 15,000+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

Aletes humilis



Aletes nuttallii =
Lomatium nutallii

Nuttall's desert-parsley



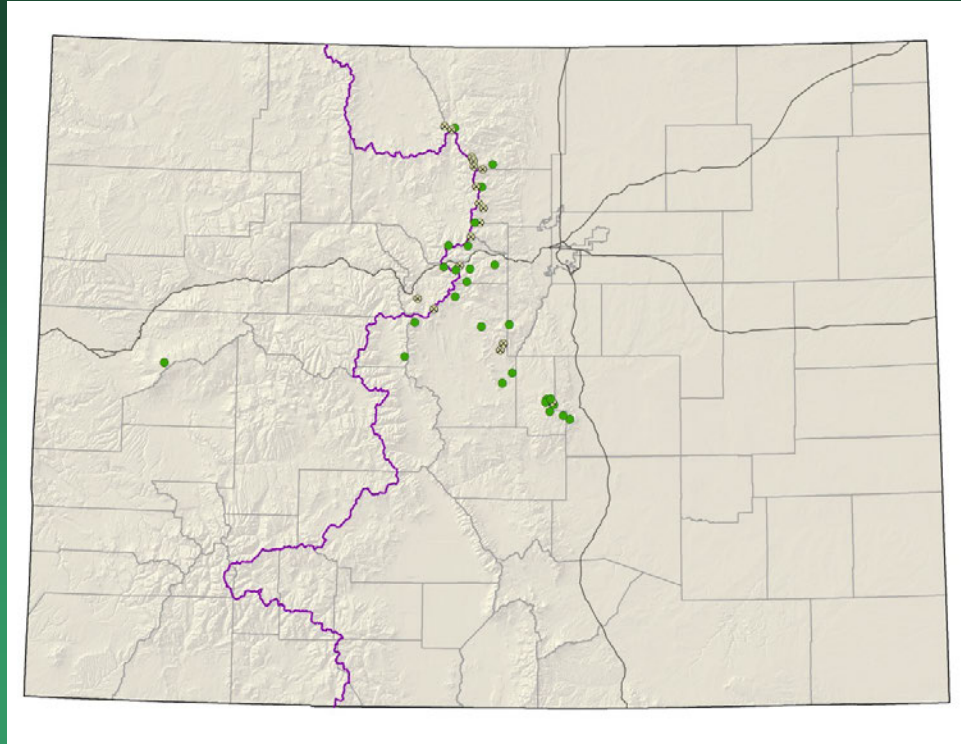
- Federal status: None
- Heritage ranks: G3/S1
- Global distribution: Montana, Wyoming, Nebraska, South Dakota (historical), Colorado (Grand and Weld counties).
- Elevation range: 5,590-7,800 ft.
- Last observed in Colorado: 2013
- Colorado occurrences: 5
- Colorado individuals: 6,500
- Primary threats: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

Aletes nuttallii



Aquilegia saximontana

Rocky Mountain columbine



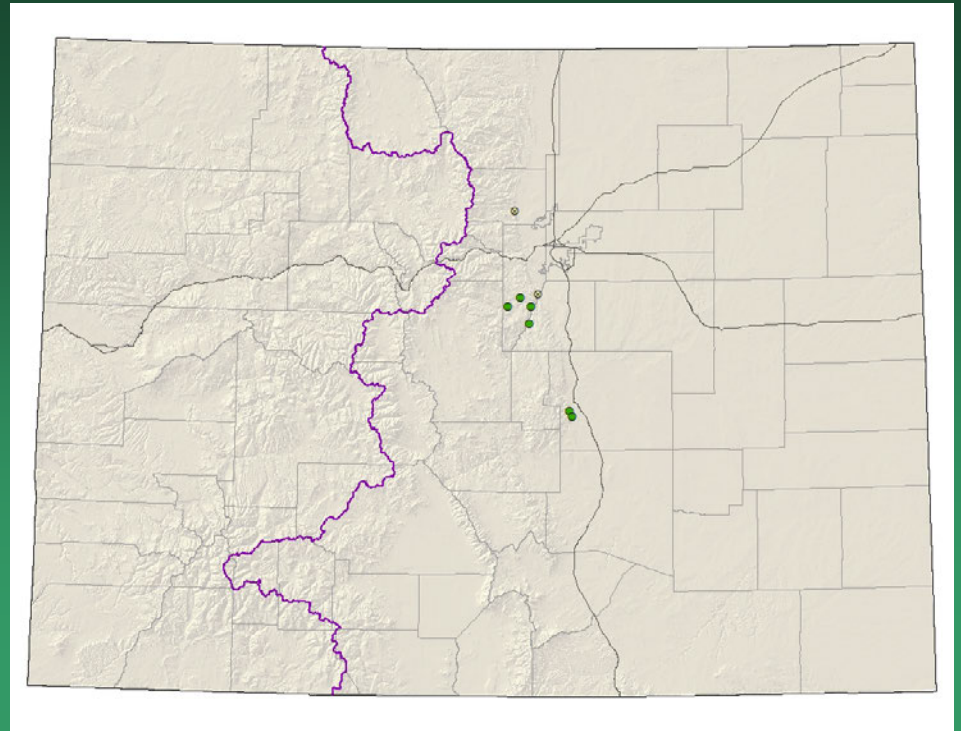
- Federal status: None
- Heritage ranks: G3/S3
- Global distribution: Colorado (Boulder, Clear Creek, El Paso, Gilpin, Jackson, Jefferson, Lake, Larimer, Mesa, Park, Pueblo, San Juan, Summit, and Teller counties).
- Elevation range: 7,620-14,260 ft.
- Last observed in Colorado: 2013
- Colorado occurrences: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

Aquilegia saximontana



Astragalus sparsiflorus

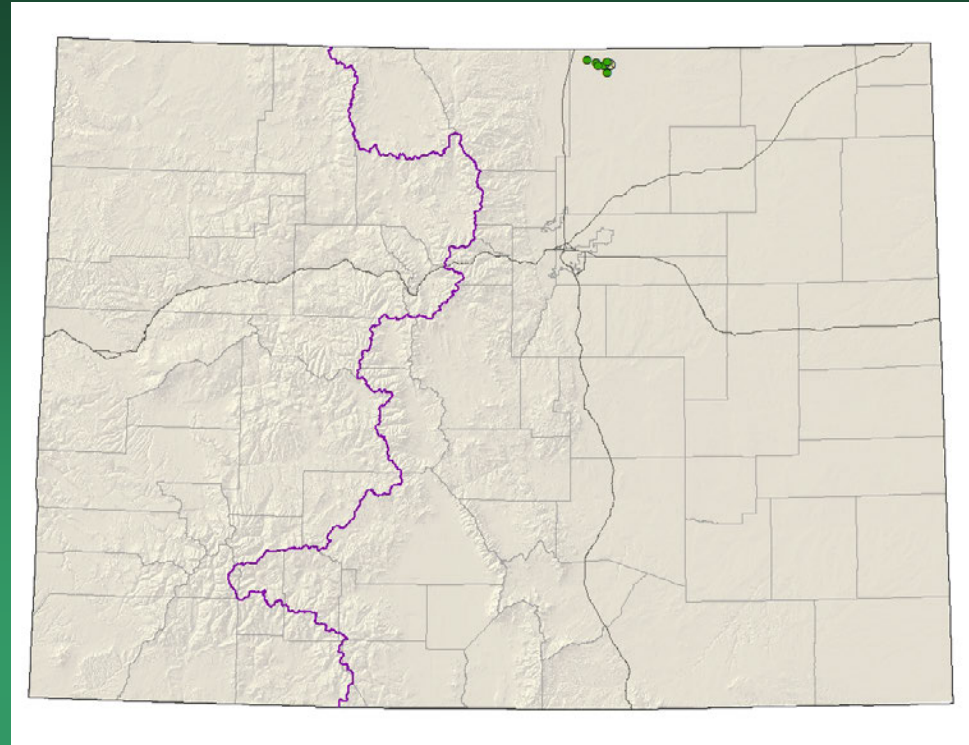
Front Range milk-vetch



- Federal status: None
- Heritage ranks: G2/S2
- Global distribution: Colorado endemic (Douglas, Denver, El Paso, Park, Fremont, Teller, Boulder, and Jefferson counties).
- Elevation range: 5,510-9,220 ft.
- Last observed in Colorado: 2010
- Colorado occurrences: 13 (2 are historical)
- Colorado individuals: 330+
- Primary threats: recreation
- Land ownership/management: local government, federal, NGO, state, private, USFS



Bolophyta alpina =
Parthenium alpinum
Alpine fever-few



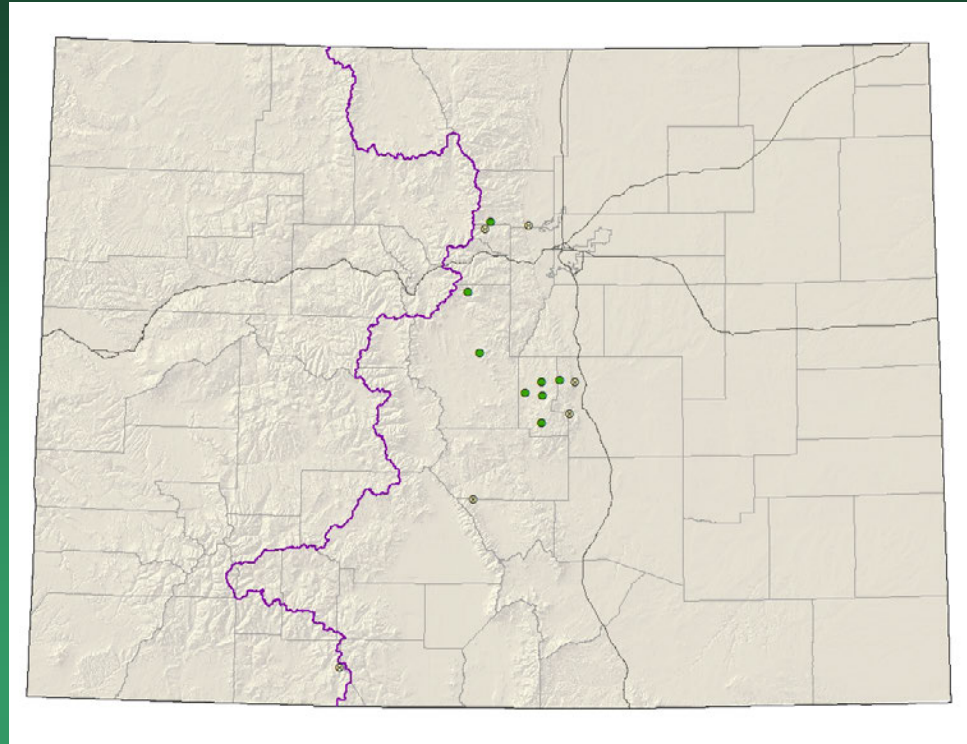
- Federal status: None
- Heritage ranks: G3/S3
- Global distribution: Wyoming, New Mexico, Colorado (Weld County)
- Elevation range: 5,500-5,820 ft.
- Last observed in Colorado: June 2007
- Colorado occurrences: 7 (1 historical)
- Colorado individuals: 100,000+
- Primary threats: Incidental grazing, hay dumping (State), pipelines
- Land ownership/management: private, USFS

Bolophyta alpina



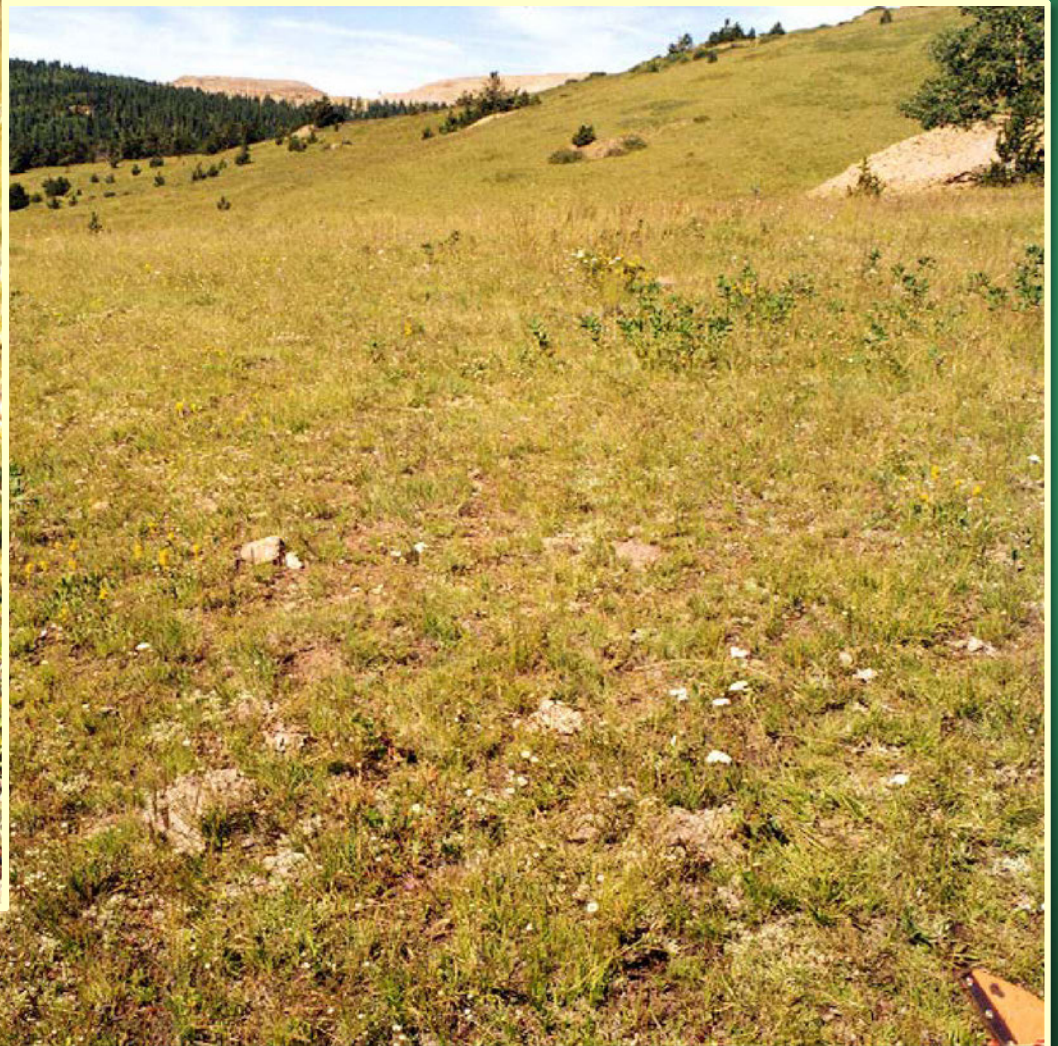
Carex oreocharis

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: 5,980-10,540 ft.
- Last observed in Colorado: 2010
- Colorado occurrences: 14 (5 are historical)
- Colorado individuals: several thousand
- Primary threats: weeds, road construction, grazing
- Land ownership/management: BLM, local government, federal, NPS, private, USFS

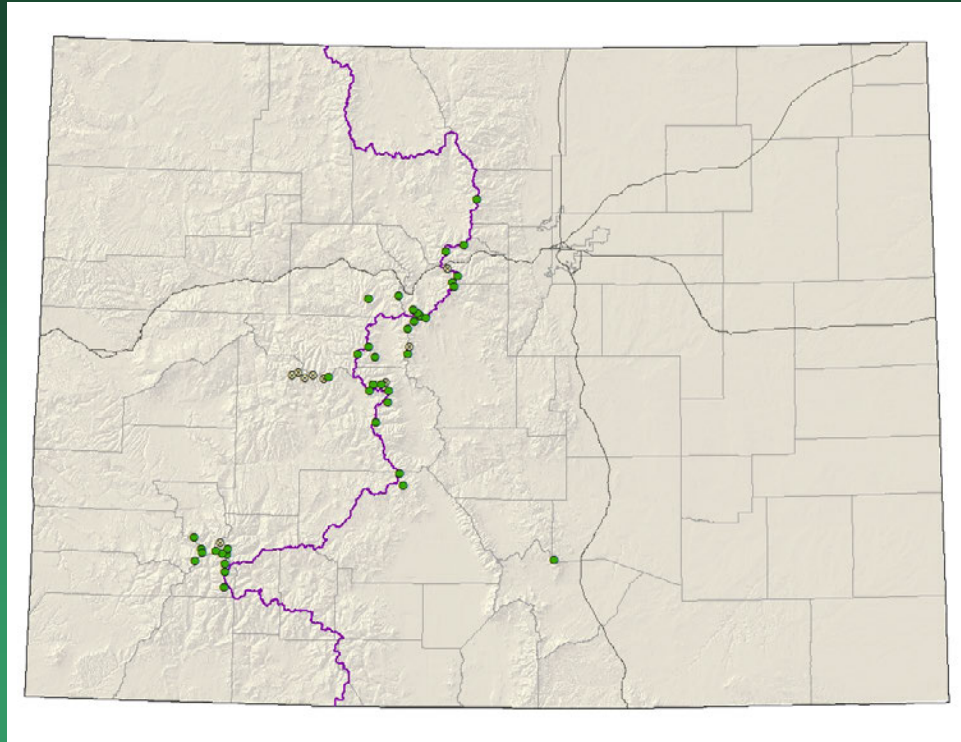
Carex oreocharis



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: 9,870-14,140 ft.
- Last observed in Colorado: 2013
- Colorado occurrences: 48 (9 are historical)
- Colorado individuals: 2,700 +
- Primary threats: recreational uses
- Land ownership/management: private, USFS

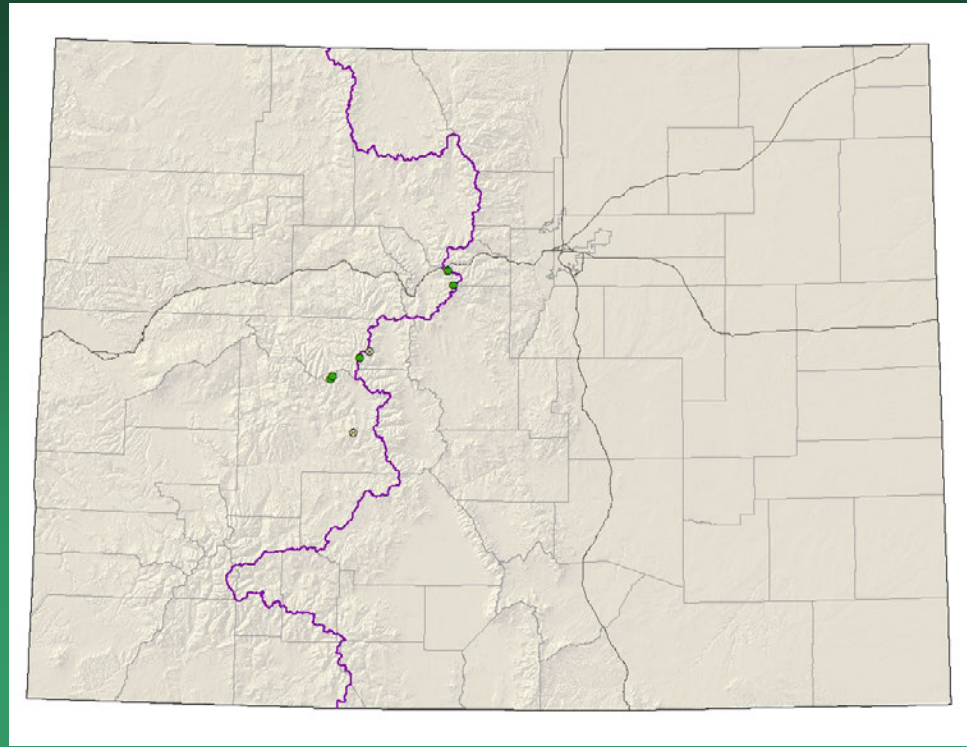




Draba crassa

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: 10,560-13,370 ft.
- Last observed in Colorado: 2013
- Colorado occurrences: 7 (2 are historical)
- Colorado individuals: 150
- Primary threats: recreational use, potential mining
- Land ownership/management: private, USFS

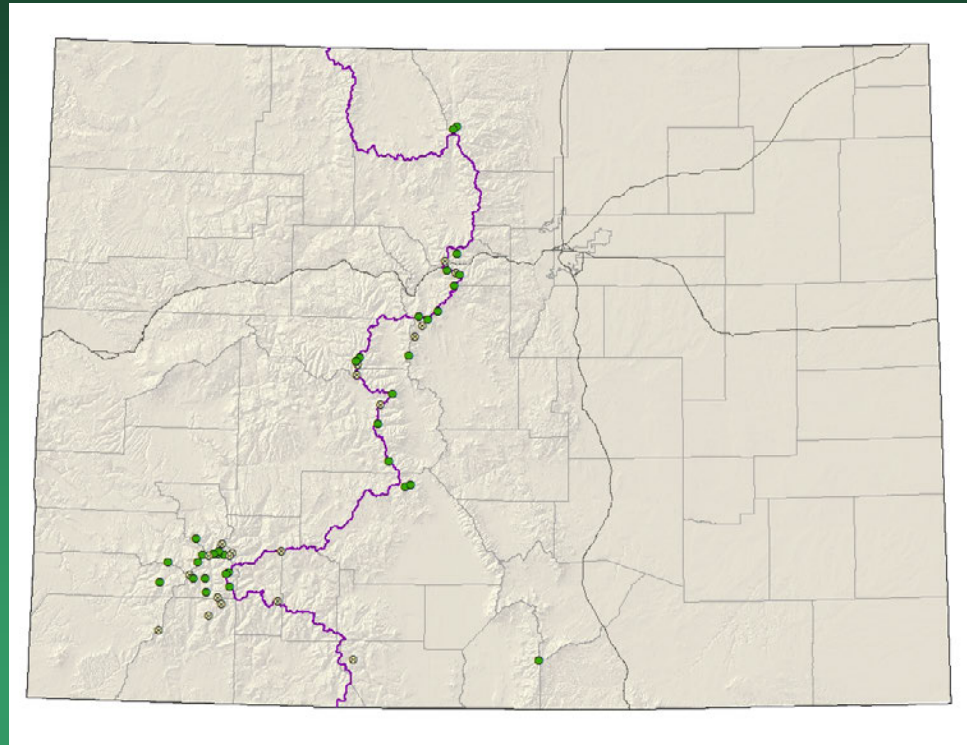
Draba globosa



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: 10,200-14,050 ft.
- Last observed in Colorado: 2013
- Colorado occurrences: 52 (19 are historical)
- Colorado individuals: unknown
- Primary threats: recreation
- Land ownership/management: BLM, state, private, USFS

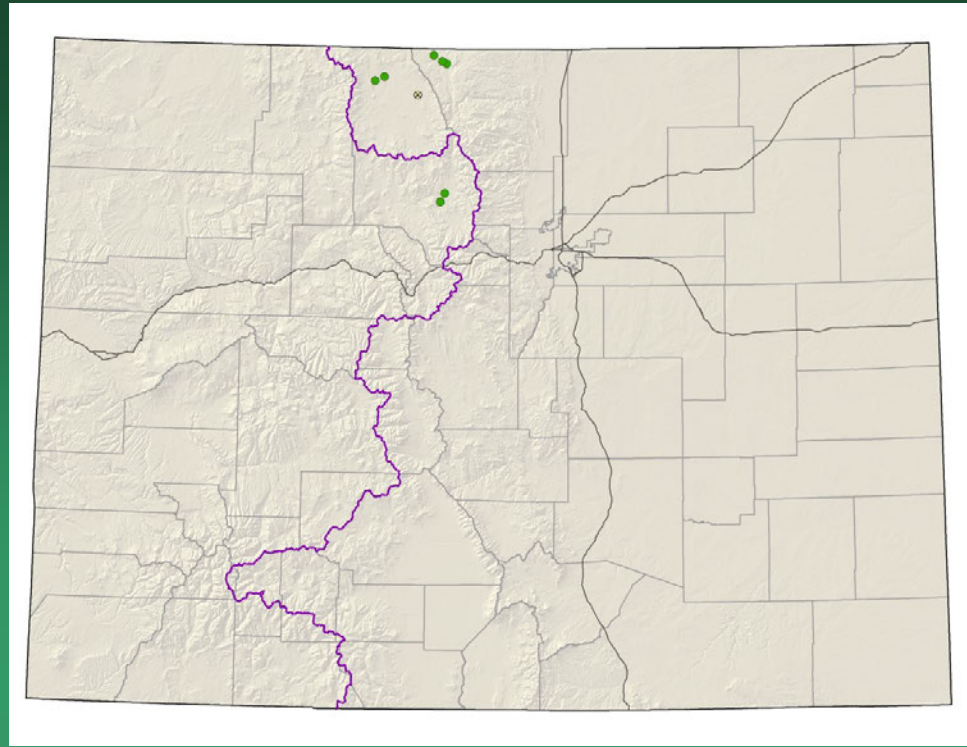




Draba streptobrachia

Eriogonum exilifolium

Dropleaf wild buckwheat



- Federal status: USFS sensitive
- Heritage ranks: G3/S2
- Global distribution: Wyoming, Colorado (Grand, Jackson, and Larimer counties).
- Elevation range: 7,820-8,770 ft.
- Last observed in Colorado: 2015
- Colorado occurrences: 10 (2 are historical)
- Colorado individuals: greater than 1,000,000
- Primary threats: weeds, incompatible grazing, roads
- Land ownership/management: BLM, state, private, USFS

Eriogonum exilifolium



Nuttallia (Mentzelia)
sinuata
Wavy-leaf stickleaf

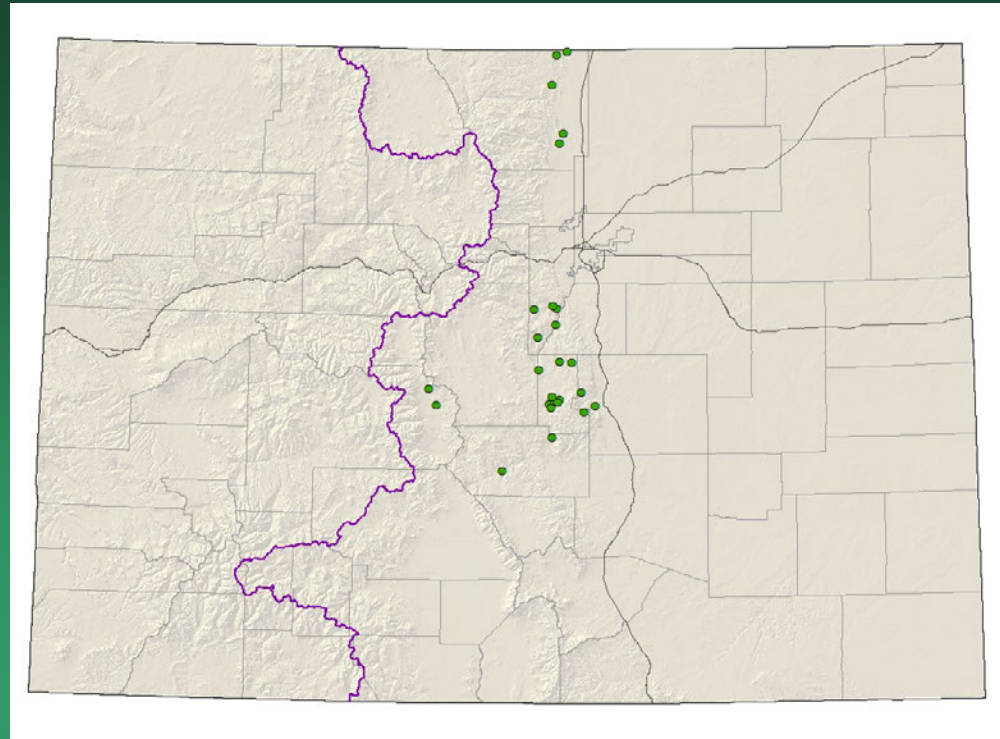


- Federal status: None
- Heritage ranks: G3/S3
- Global distribution: Wyoming and Colorado (Boulder, Clear Creek, El Paso, Larimer, Teller, and Weld counties).
- Elevation range: 5,320-8,600 ft.
- Last observed in Colorado: 2008
- Colorado occurrences: 12 (4 are historical)
- Colorado individuals: hundreds+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

Nuttallia sinuata



Nuttallia (Mentzelia) speciosa Jeweled blazingstar



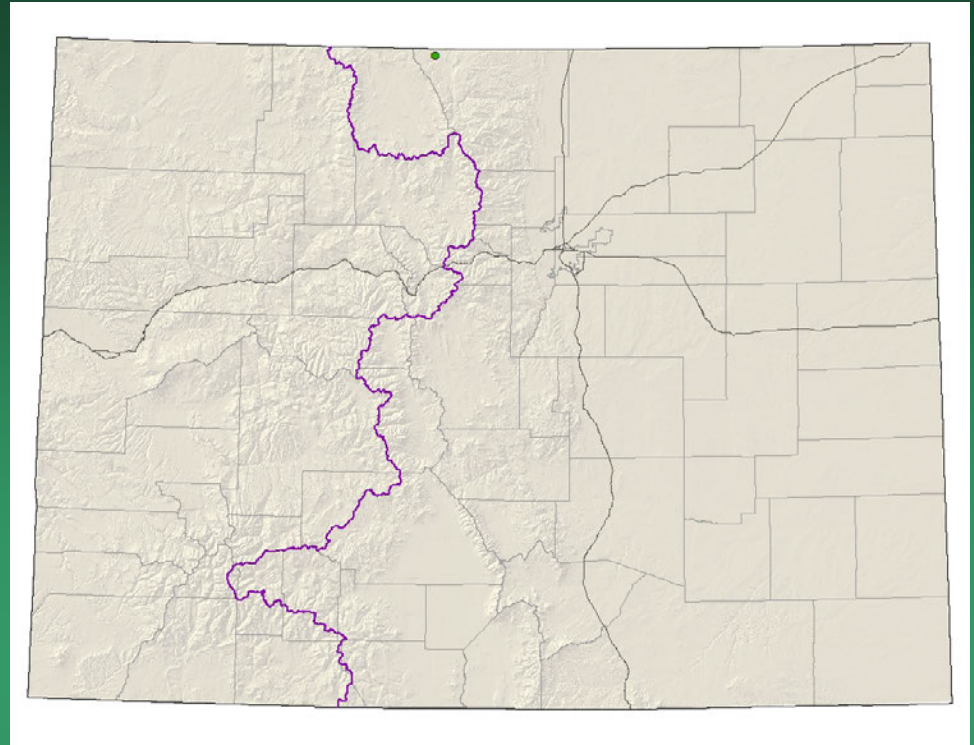
- Federal status: None
- Heritage ranks: G3/S3
- Global distribution: Wyoming and Colorado (Arapahoe, Boulder, Chaffee, Clear Creek, Denver, Douglas, El Paso, Fremont, Gilpin, Jefferson, Larimer, Mineral, Saguache, and Teller counties).
- Elevation range: 5,390-10,850 ft.
- Last observed in Colorado: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

Nuttallia speciosa



Oenopsis wardii

Ward's golden-weed



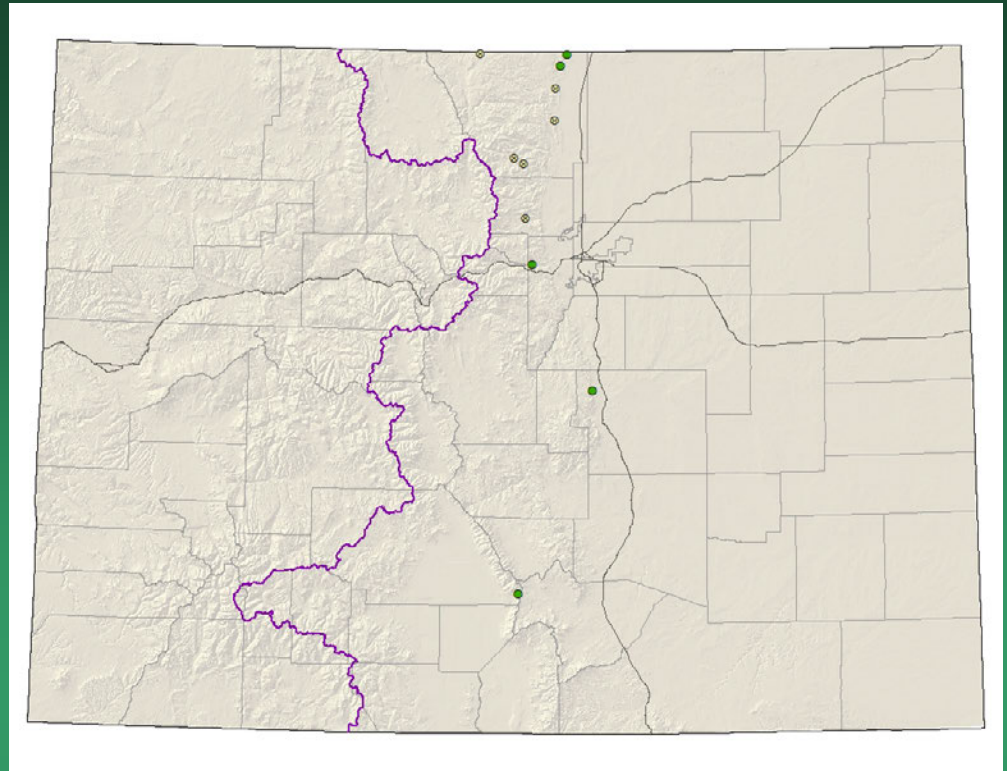
- Federal status: None
- Heritage ranks: G3/S1
- Global distribution: Wyoming and Colorado (Larimer County).
- Elevation range: 7,830-7,850 ft.
- Last observed in Colorado: August 2004
- Colorado occurrences: 1
- Colorado individuals: 300+
- Primary threats: incompatible grazing
- Land ownership/management: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

Oönoopsis wardii



Phacelia denticulata

Rocky Mountain phacelia



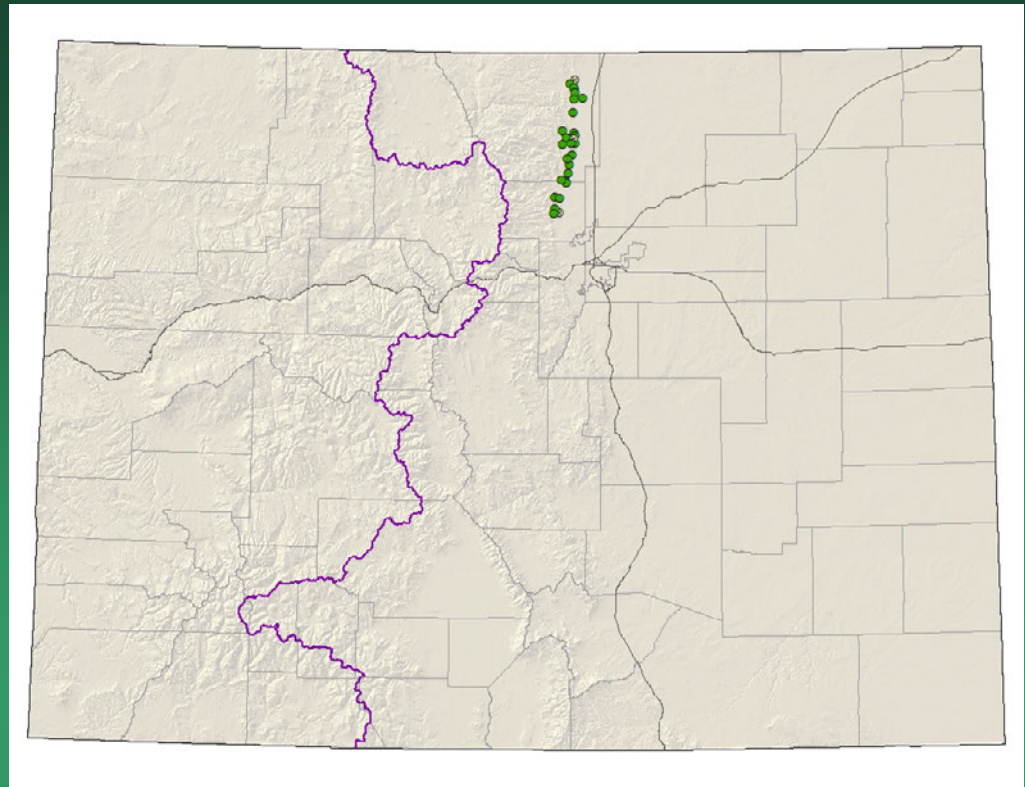
- Federal status: None
- Heritage ranks: G3/SU
- Global distribution: Wyoming, New Mexico, Colorado (Boulder, Clear Creek, Costilla, Douglas, El Paso, Jefferson, Larimer, Las Animas, Park, and Saguache counties).
- Elevation range: 7,470-8,720 ft.
- Last observed in Colorado: 2012
- Colorado occurrences: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



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: 5,090-6,550 ft.
- Last observed in Colorado: 2014
- Colorado occurrences: 28 (3 are historical)
- Colorado individuals: Approximately 1 million
- Primary threats: Residential development, limestone mining, road work, weeds
- Land ownership/management: local government, state, private

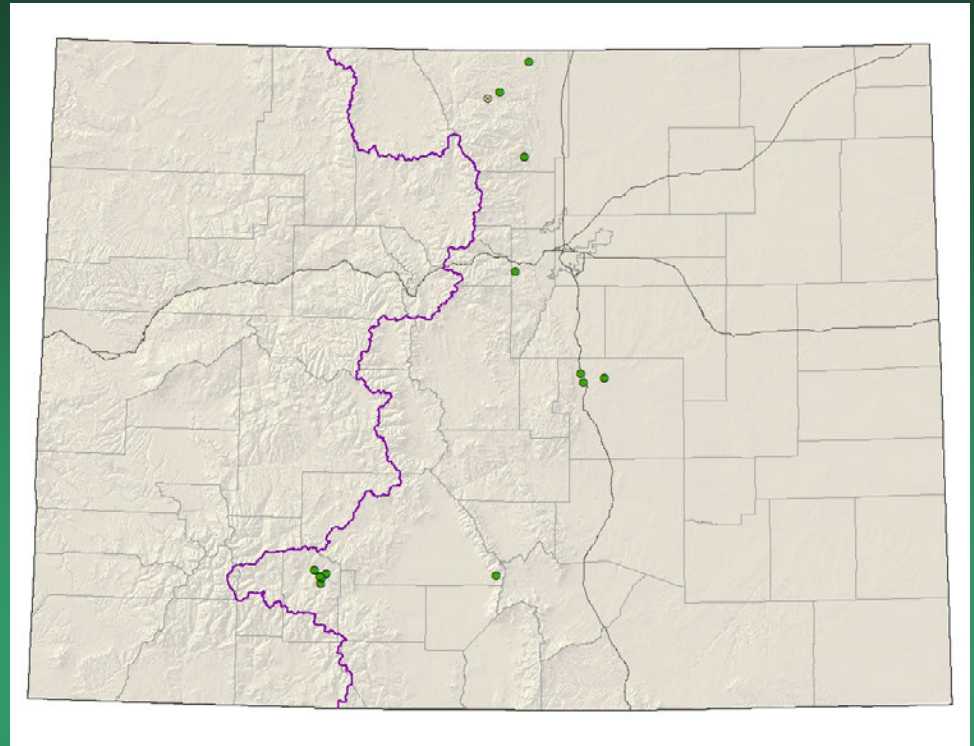


Physaria bellii



Potentilla ambigens

Southern Rocky Mountain cinquefoil



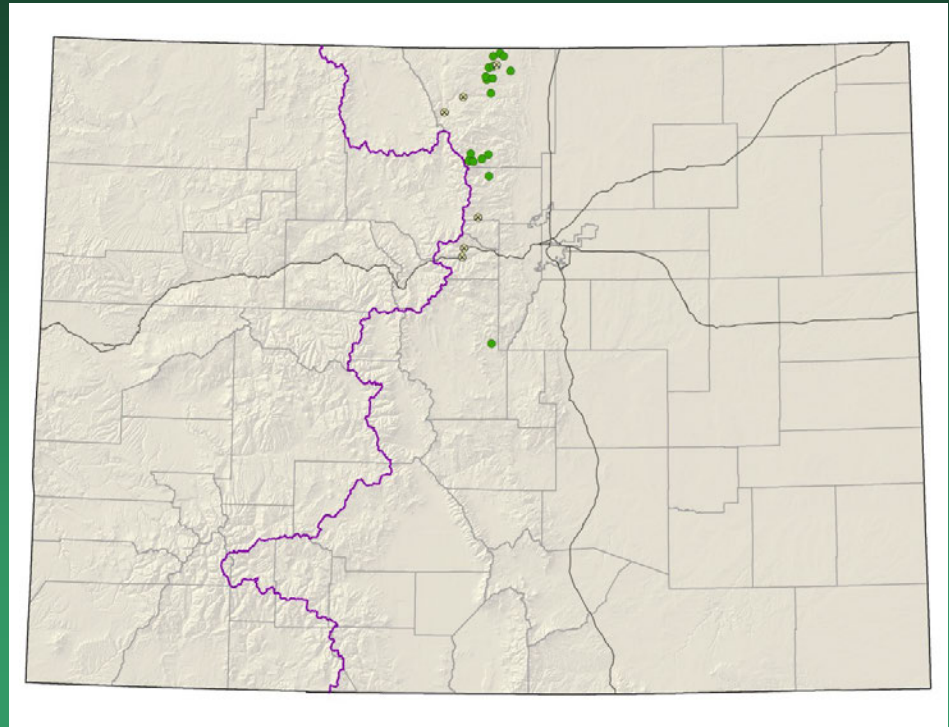
- Federal status: None
- Heritage ranks: G3/S2
- Global distribution: New Mexico, Wyoming (historical), and Colorado (El Paso, Jefferson, Larimer, Mineral, and Saguache counties).
- Elevation range: 6,610-9,060 ft.
- Last observed in Colorado: 2013
- Colorado occurrences: 15 (2 are historical)
- Colorado individuals: 5,000
- Primary threats: recreation, grazing, weeds
- Land ownership/management: local government, federal, NPS, state, private, USFS

Potentilla ambigens



Potentilla rupincola

Rocky Mountain cinquefoil



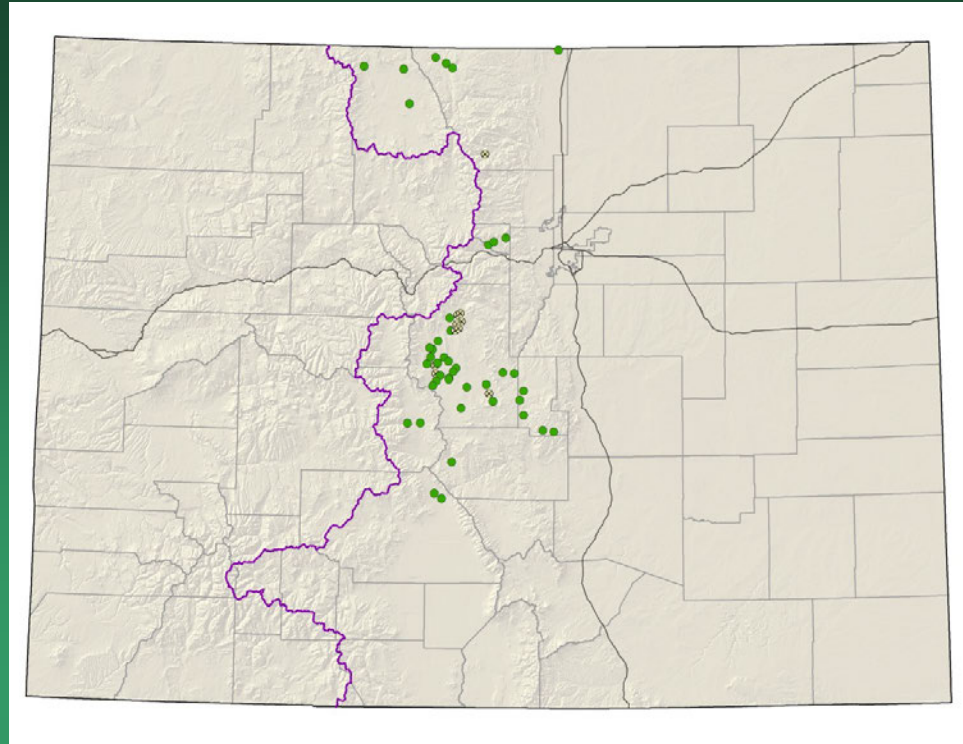
- Federal status: USFS Sensitive
- Heritage ranks: G2/S2
- Global distribution: Colorado endemic. Boulder, Clear Creek, Larimer, and Park counties. Historically from Gilpin county.
- Elevation range: 6,240-10,930 ft.
- Last observed in Colorado: 2013
- Colorado occurrences: 25 (8 are historical)
- Colorado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

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: 6,320-9,710 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: BLM, local government, NGO/land trust, NPS, state, private, USFS

Sisyrinchium pallidum

