

The Colorado Rare Plant Technical Committee presents:
14th Annual
Colorado Rare Plant Symposium

Sept. 8, 2017
Colo. Springs, Colorado

Sponsored by:
Colorado Native Plant Society
Colorado Natural Heritage Program
Denver Botanic Gardens
University of Colorado Herbarium



Thanks to all who have contributed pictures to the presentations

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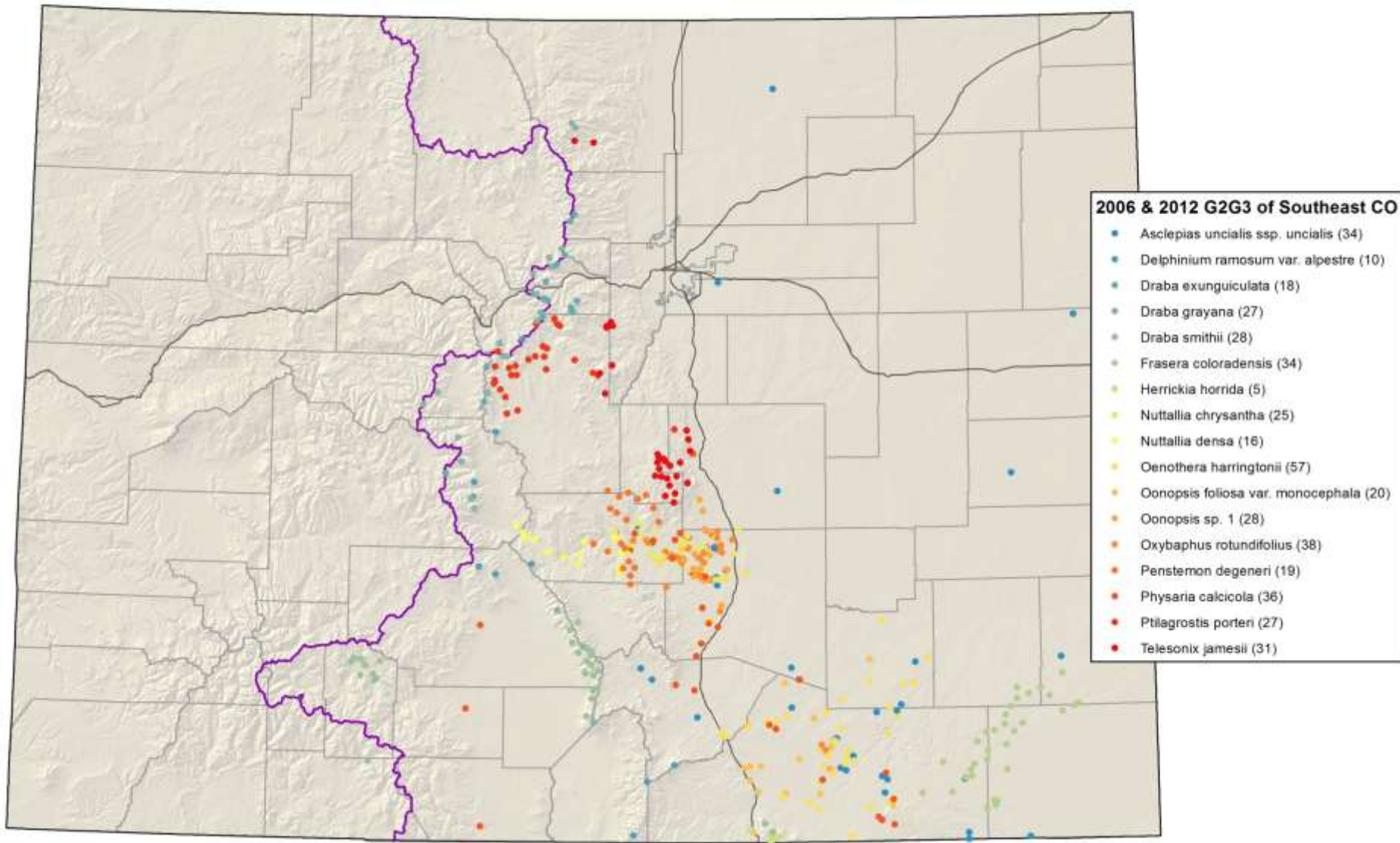
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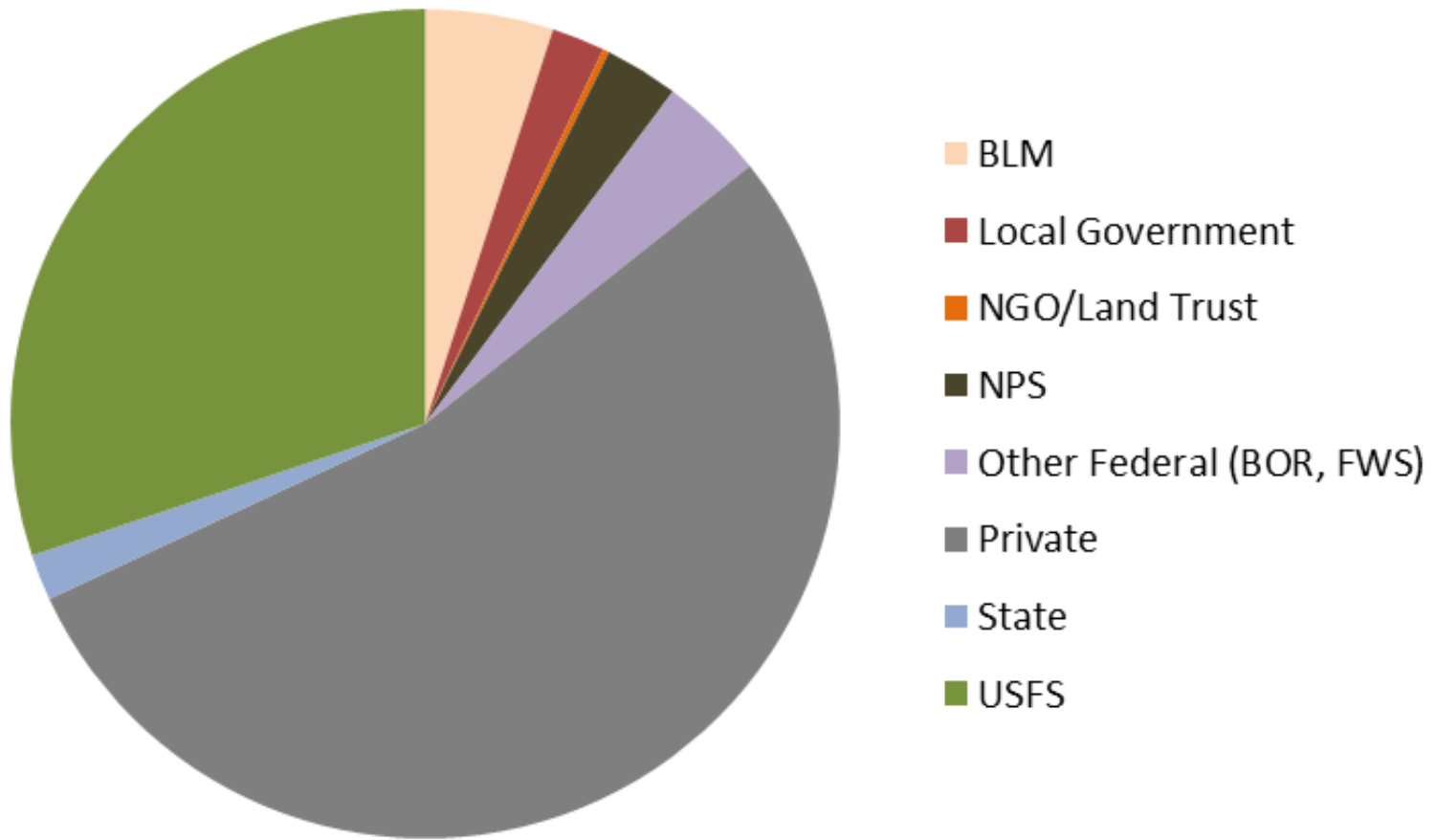
Lorraine Yeatts

Colorado Rare Plant Symposia
2006/2012/2017
SE Colorado
G2G3 Species



Location of SE Colorado G2G3 Plant Species

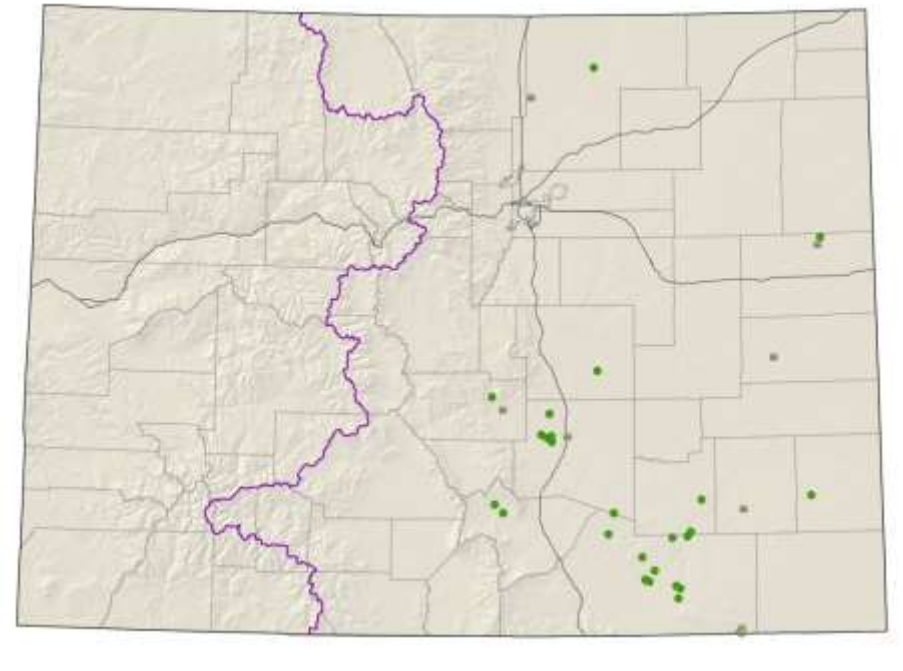
Land Ownership of G2G3 Plant Species of SE Colorado



Asclepias uncialis ssp. *uncialis*

Dwarf milkweed

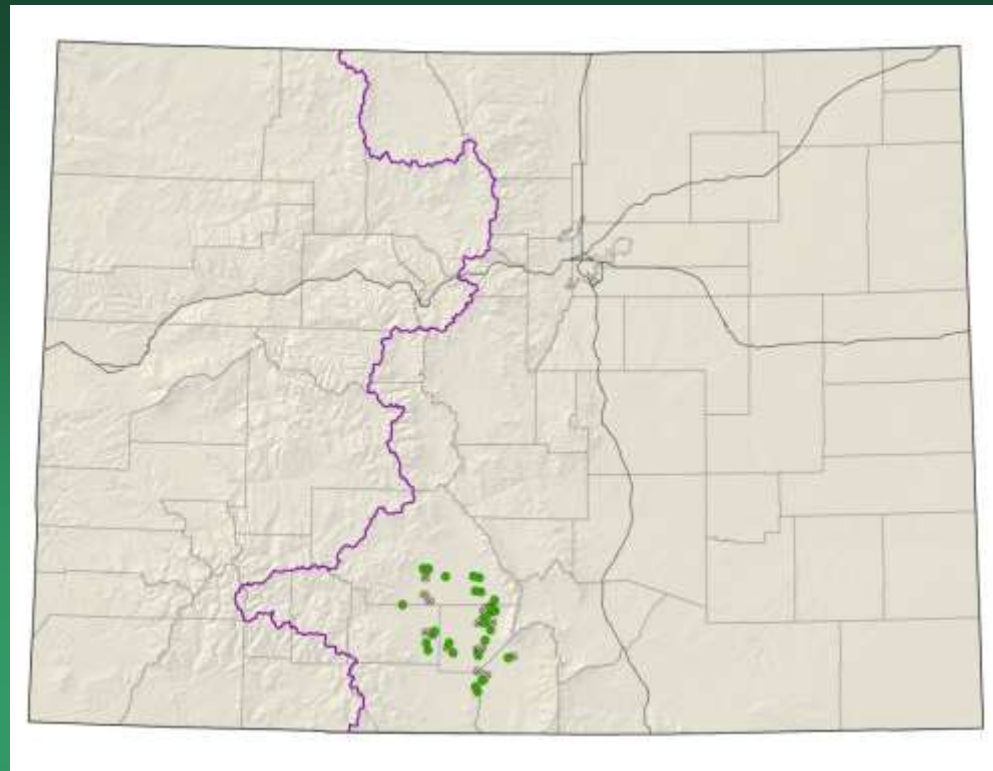
- Federal status: BLM/USFS sensitive
- Heritage ranks: G3G4T2T3/S2
- Global distribution: Arizona, Texas, New Mexico, Wyoming, Oklahoma, Utah, and Eastern Colorado (Las Animas, Weld, Kit Carson, Huerfano, Pueblo, Otero, Prowers, Fremont, and El Paso counties)
- Elevation range: 3,880-7,730 ft.
- Last 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

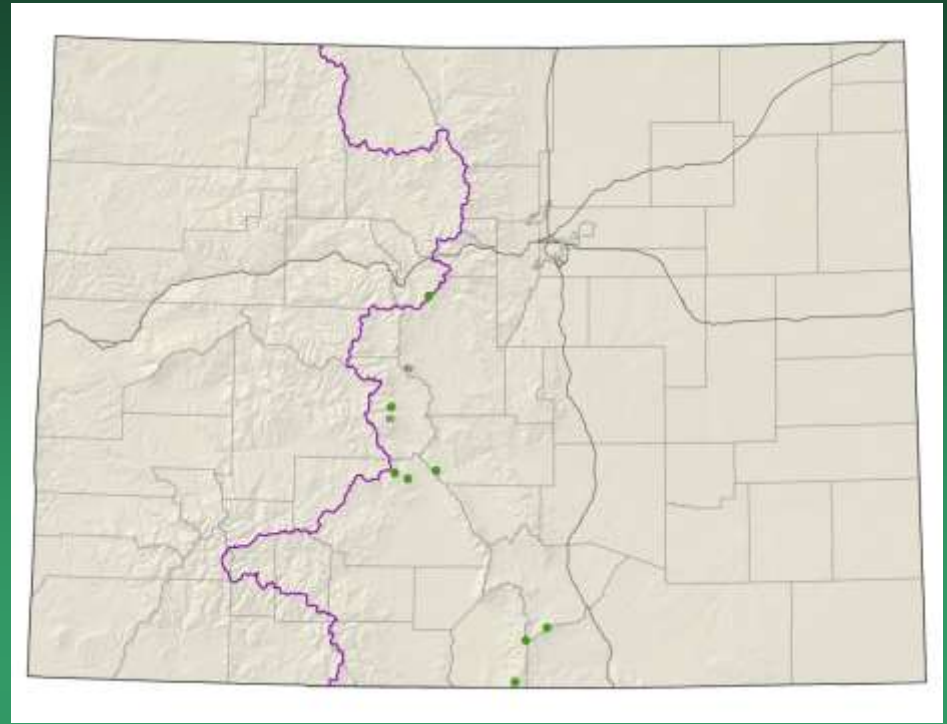


- Federal status: BLM sensitive
- Heritage ranks: G2G3/S2S3
- Global distribution: Mexico, Texas, Arizona, New Mexico, Wyoming and Colorado (Alamosa, Conejos, Costilla, Rio Grande, and Saguache counties)
- Elevation range: 7,480-8,190 ft.
- Last observed in Colorado: 2017
- Colorado occurrences: 40 (12 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



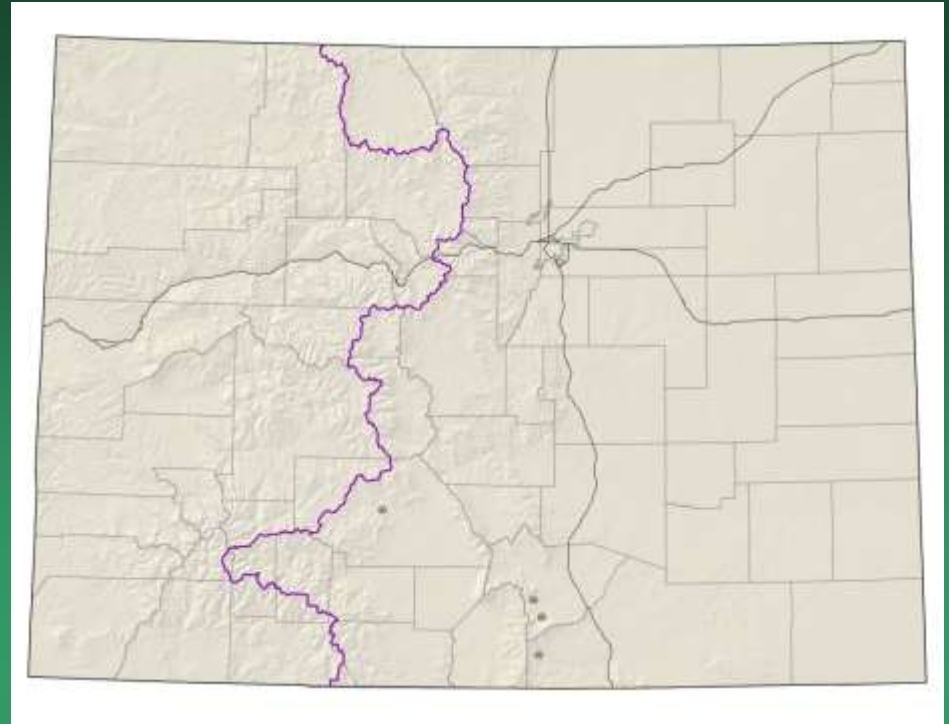
- Federal status: none
- Heritage ranks: G2/S2
- Global distribution: New Mexico and Colorado (Costilla, Chaffee, Fremont, Huerfano, Las Animas, Mineral, Park, Saguache, and Summit counties)
- Elevation range: 10,850-14,255 ft.
- Last observed in Colorado: 2015
- Colorado occurrences: 11 (3 are historical)
- Colorado individuals: 100+
- Primary threats: Trampling from recreational activities
- Land ownership/management: private, USFS

Delphinium ramosum var. *alpestre*



Delphinium robustum

Wahatoya Creek larkspur



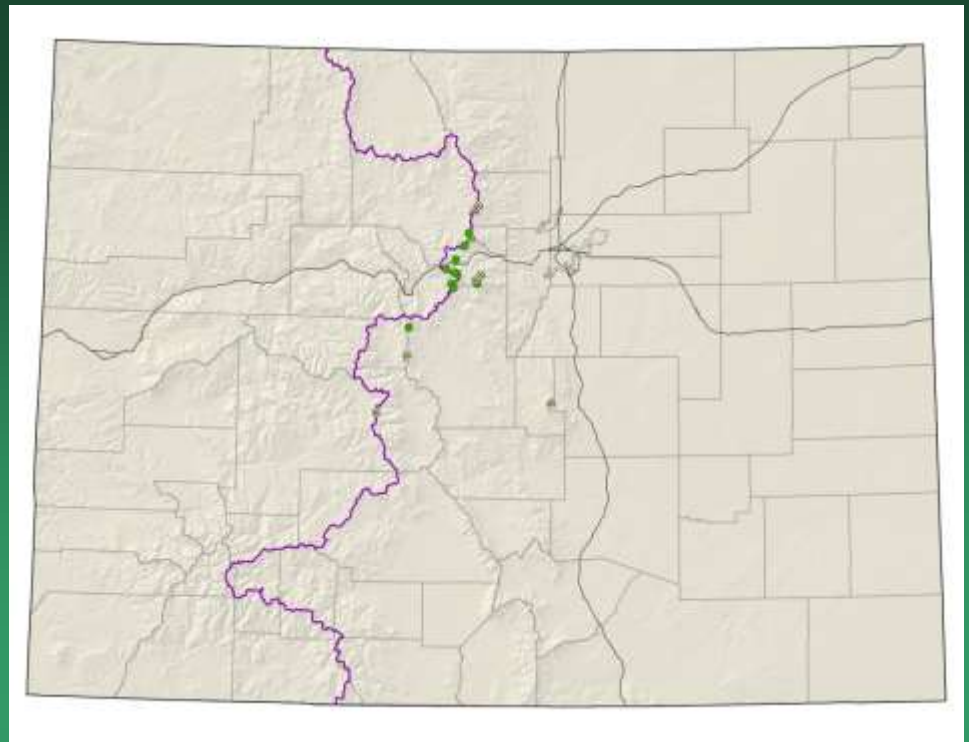
- Federal status: none
- Heritage ranks: G2G3/S2?
- Global distribution: New Mexico and Colorado (Huerfano, Las Animas, Saguache and **Teller** counties)
- Elevation range: 7,000-8,600 ft.
- Last observed in Colorado: 2016
- Colorado occurrences: 5 – (4 are historical)
- Colorado individuals: 100
- Primary 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



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www.swcoloradowildflowers.com

Draba exunguiculata
Clawless draba



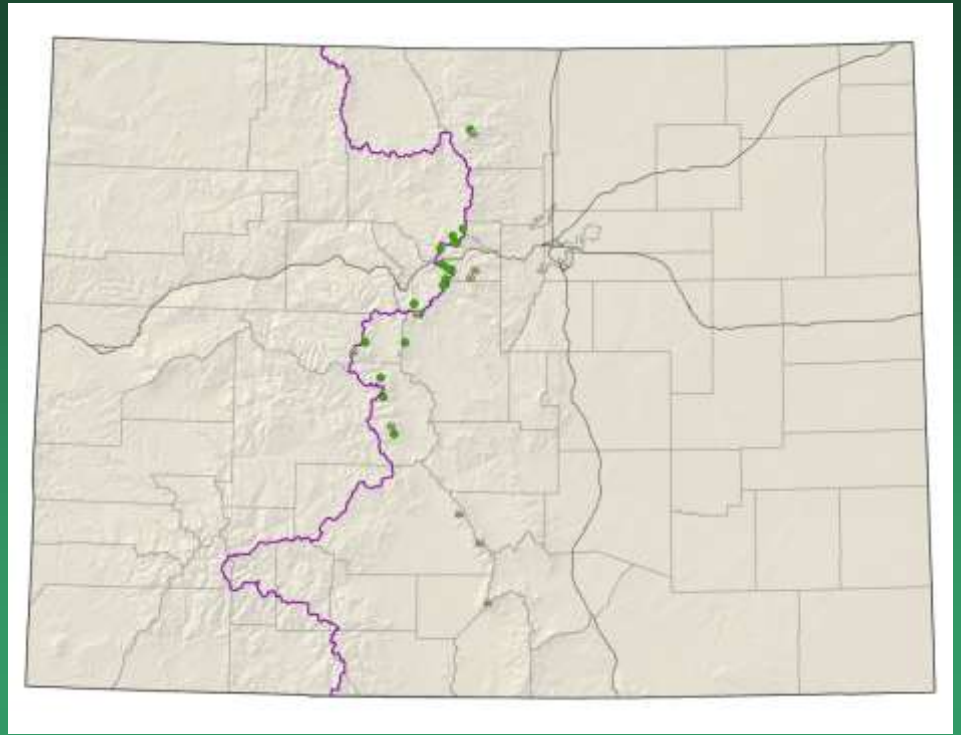
- Federal status: USFS sensitive
- Heritage ranks: G2/S2
- Global distribution: endemic to Colorado (Boulder, Chaffee, Clear Creek, El Paso, Gilpin, Grand, Lake, Park and Summit counties)
- Elevation range: 10,780-14,120 ft.
- Last observed in Colorado: 2016
- Colorado occurrences: 18 (8 are historical)
- 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



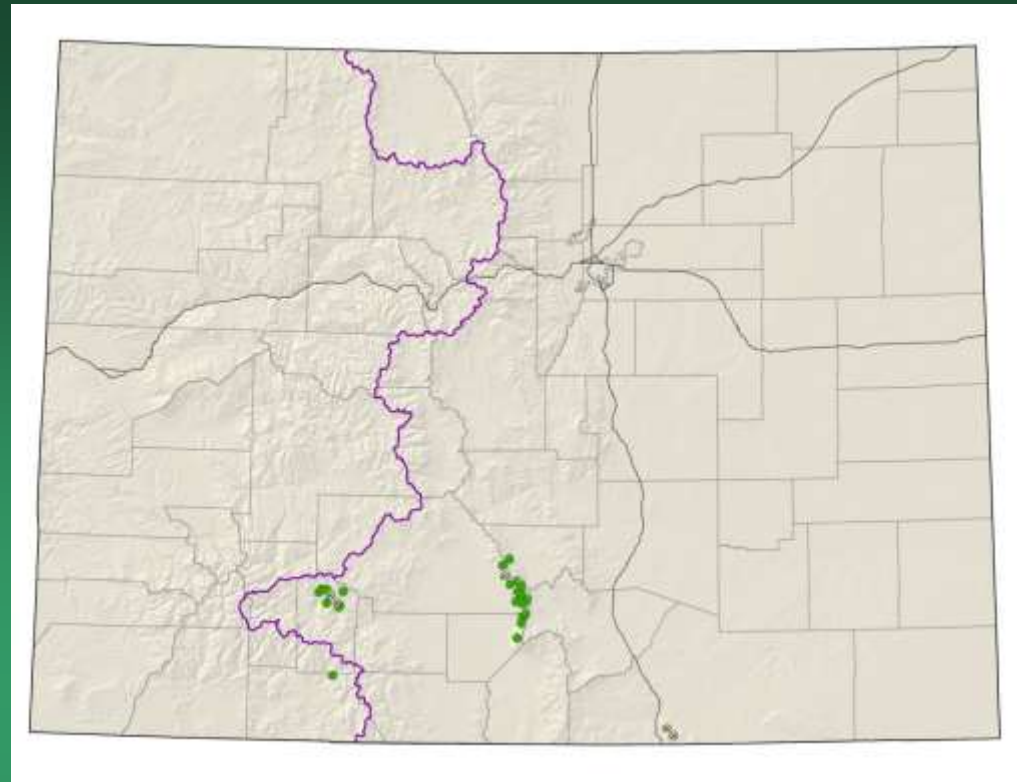
- Federal status: USFS sensitive
- Heritage ranks: G2/S2
- Global distribution: endemic to Colorado (Chaffee, Clear Creek, Grand, Huerfano, Larimer, Park, Pitkin, Saguache, and Summit counties)
- Elevation range: 10,630-14,350 ft.
- Last observed in Colorado: 2016
- Colorado occurrences: 27 (10 are historical)
- 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

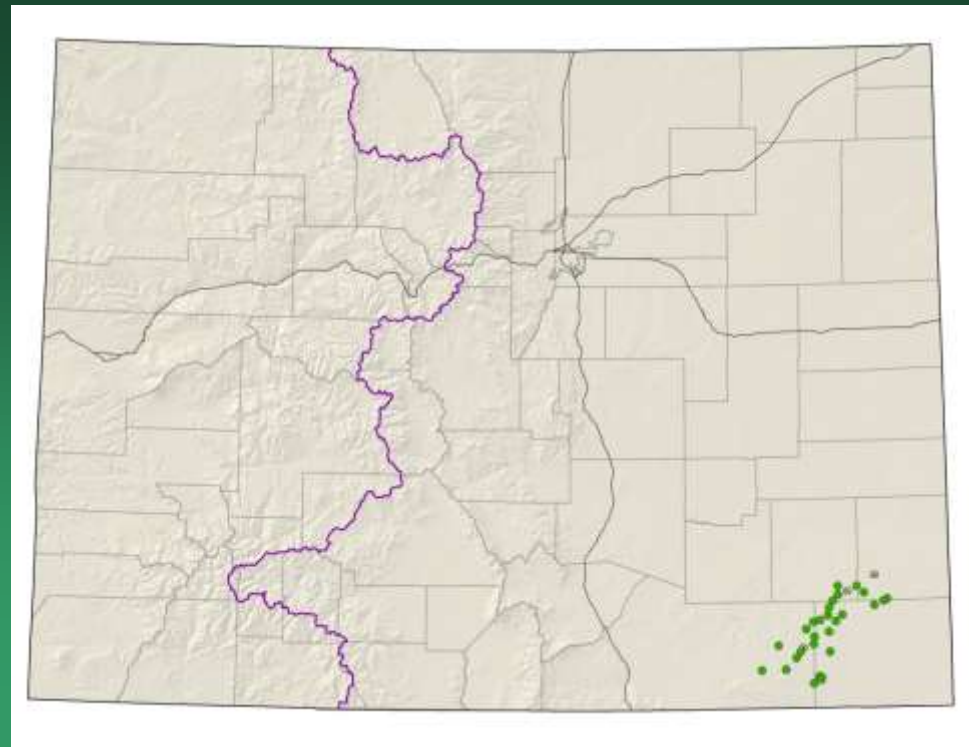


- Federal status: USFS sensitive
- Heritage ranks: G2/S2
- Global distribution: Colorado (Alamosa, Archuleta, Custer, Las Animas, Mineral, and Saguache counties), and NM
- Elevation range: 7,400-13,450 ft.
- Last observed in Colorado: 2017
- Colorado occurrences: 28 (6 are historical)
- Colorado individuals: ~3200
- Primary threats: Habitat modification from hiking and construction
- Land ownership/management: local government, NPS, private, USFS

Draba smithii



Frasera coloradnesis Colorado gentian



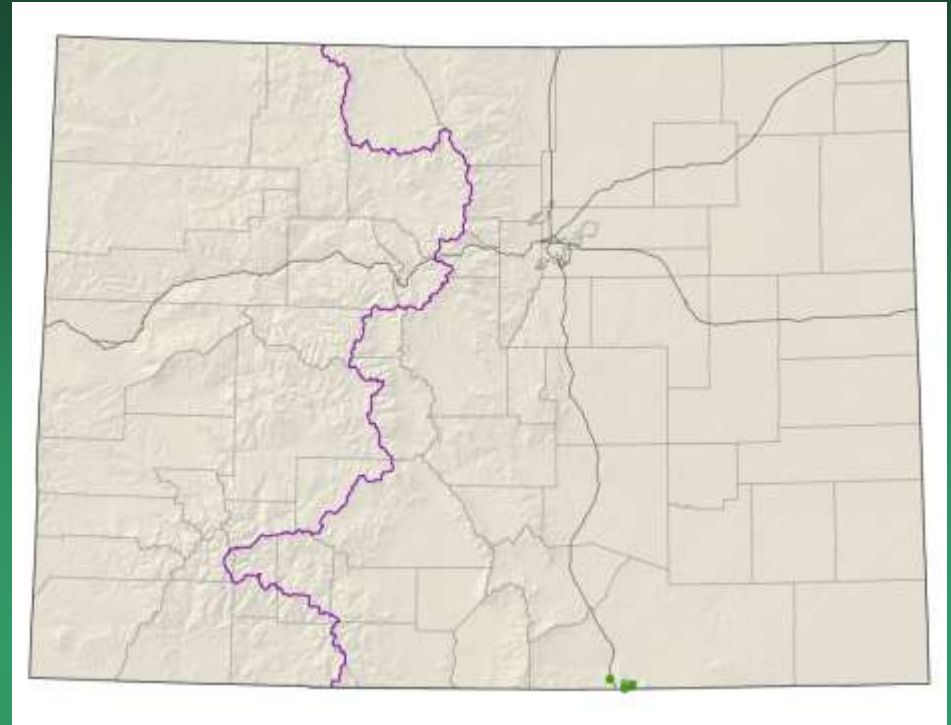
- Federal status: none
- Heritage ranks: G2G3/S2S3
- Global distribution: Colorado endemic; (Baca, Bent, Prowers, and Las Animas counties)
- Elevation range: 4070-5800 ft.
- Last observed in Colorado: 2016
- Colorado occurrences: 30 (3 are historical)
- Colorado individuals: 275,000
- Primary threats: 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

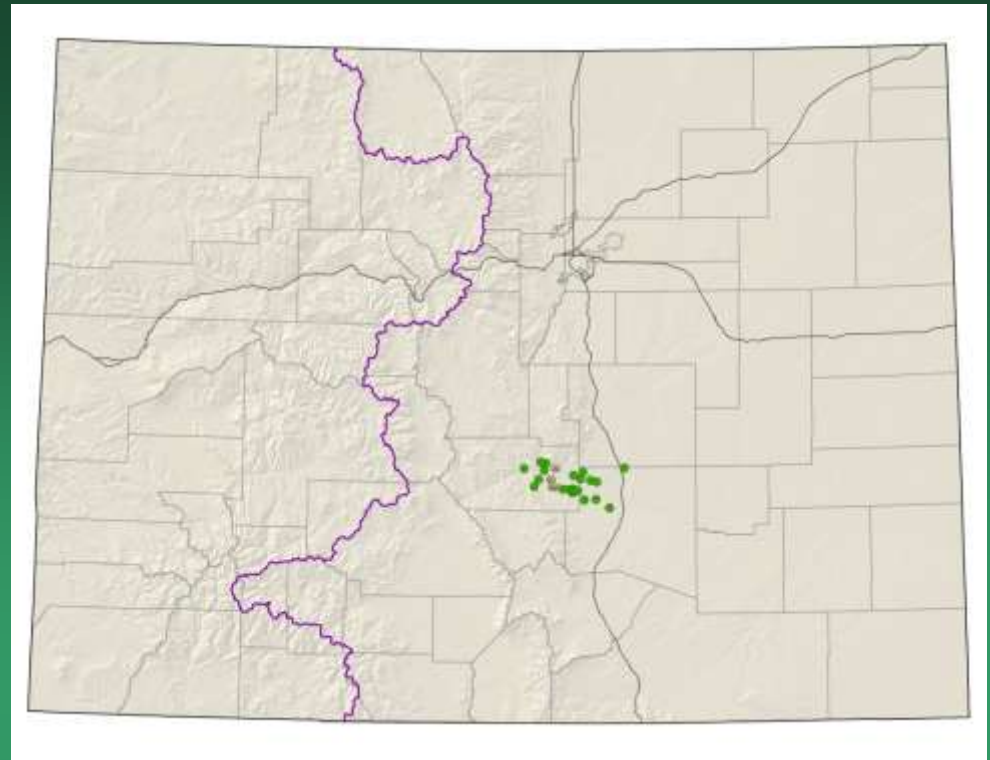


Herrickia horrida

Nuttallia chrysantha
= *Mentzelia chrysantha*
Golden blazing star

Conservation Action Plan

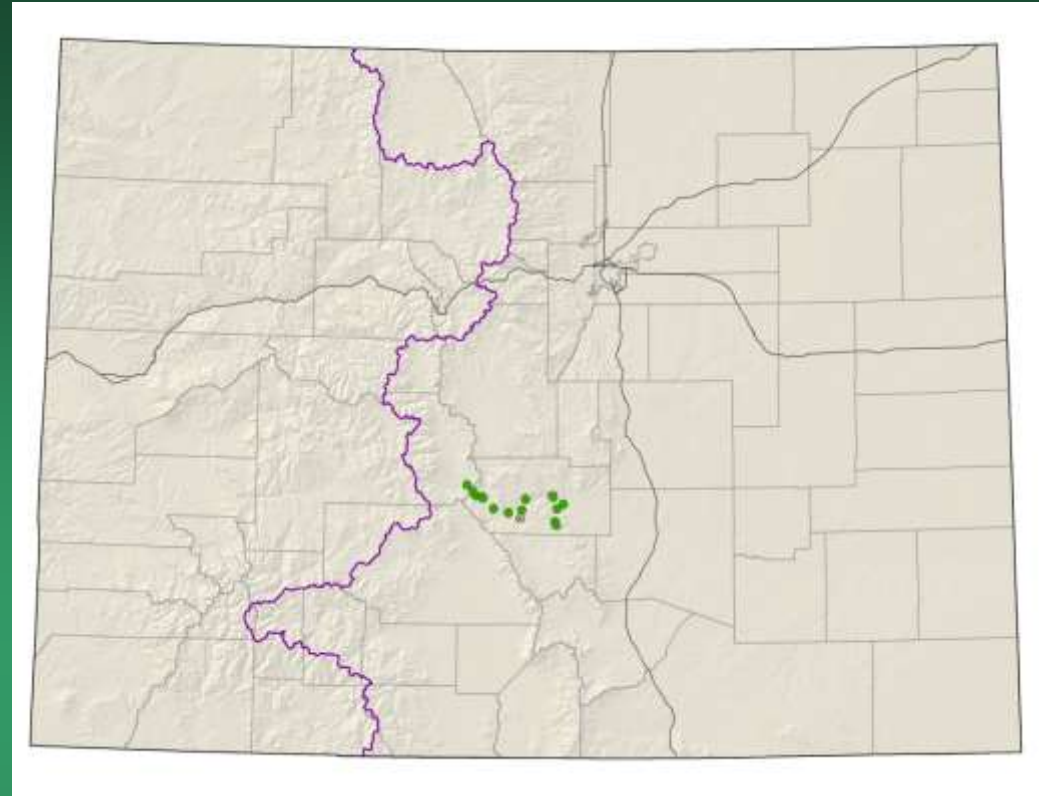
- Federal status: BLM sensitive
- Heritage ranks: G2/S2
- Global distribution: endemic to Colorado (Fremont, El Paso, and Pueblo counties)
- Elevation range: 4,750-6,850 ft.
- Last observed in Colorado: 2010
- Colorado occurrences: 26 (5 are historical)
- Colorado individuals: ~4100
- Primary threats: 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: 2016
- Colorado occurrences: 16 (2 are historical)
- Colorado individuals: ~13,500
- Primary threats: Recreational development and road construction
- Land ownership/management: BLM, state, private

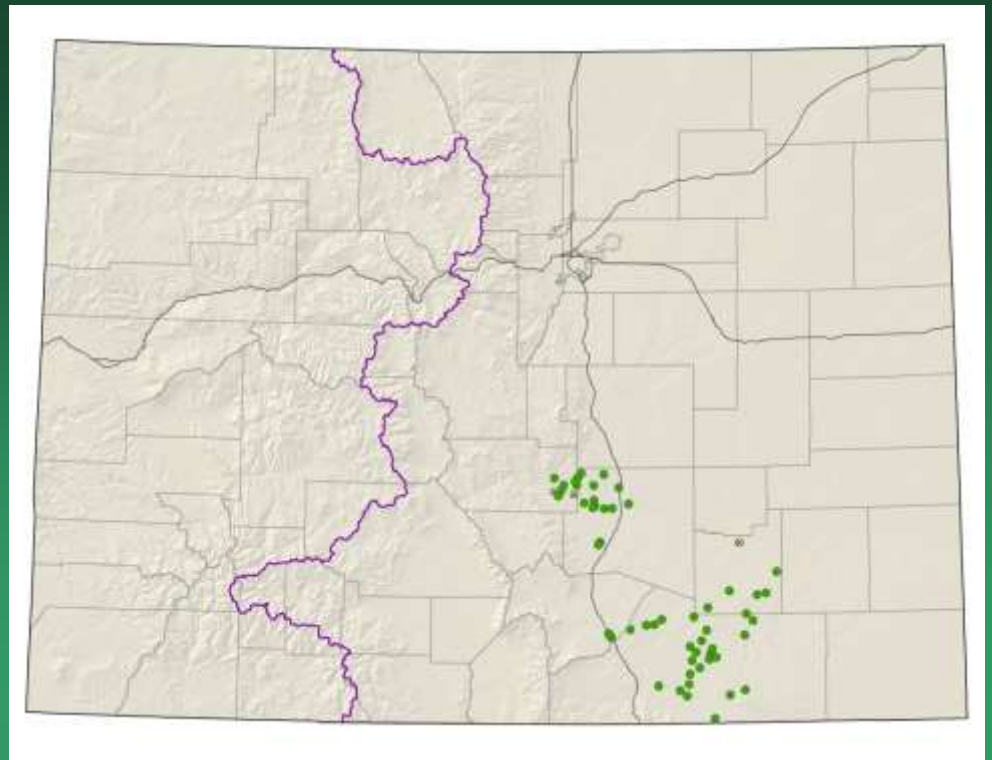


Nuttallia densa

Oenothera harringtonii

Arkansas Valley evening primrose

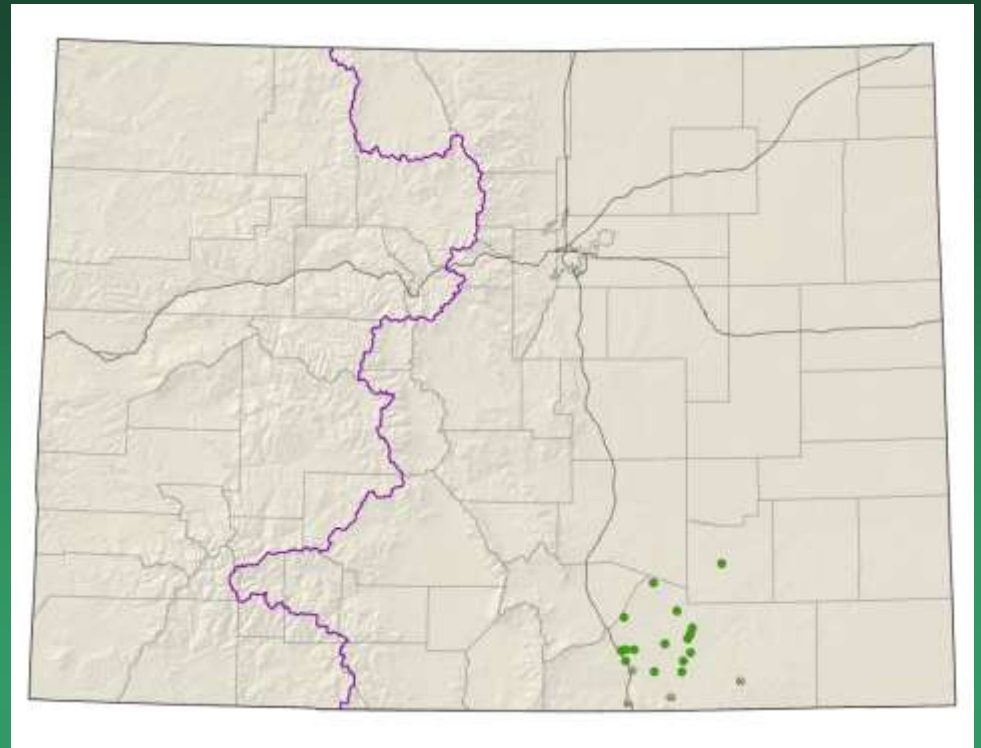
- Federal status: none
- Heritage ranks: G3/S3
- Global distribution: endemic to Colorado (El Paso, Fremont, Huerfano, Las Animas, Otero, and Pueblo counties)
- Elevation range: 4,130-6,450 ft.
- Last observed in Colorado: 2010
- Colorado occurrences: 62 (8 are historical)
- Colorado individuals: 12,000+
- 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



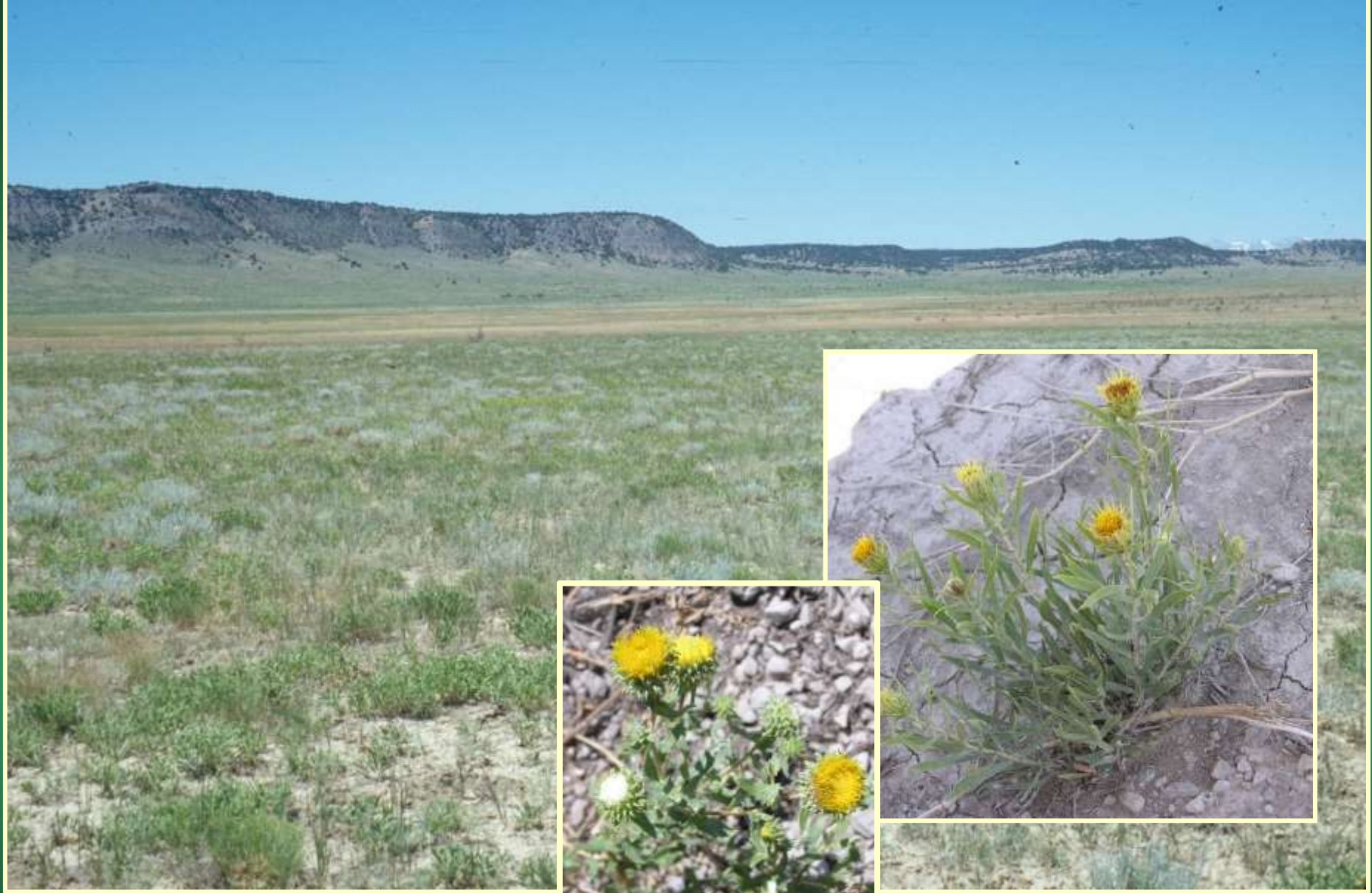


Oenothera harringtonii

Oonopsis 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

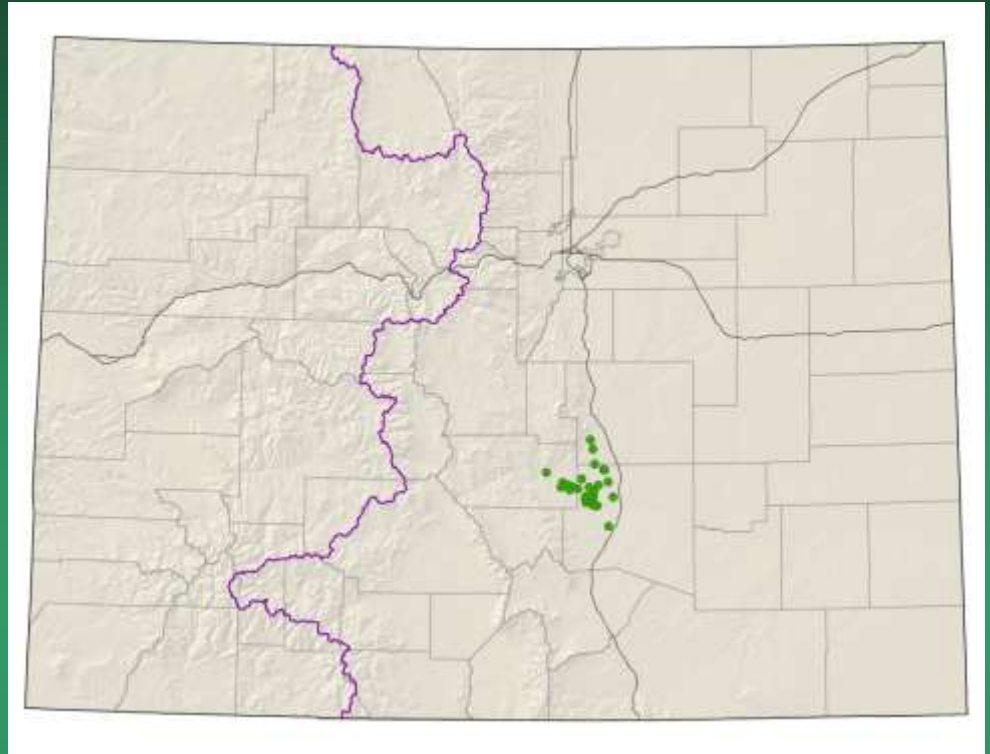


Oenopsis foliosa var. *monocephala*

Oenopsis “*puebloensis*”
= *Oenopsis* 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



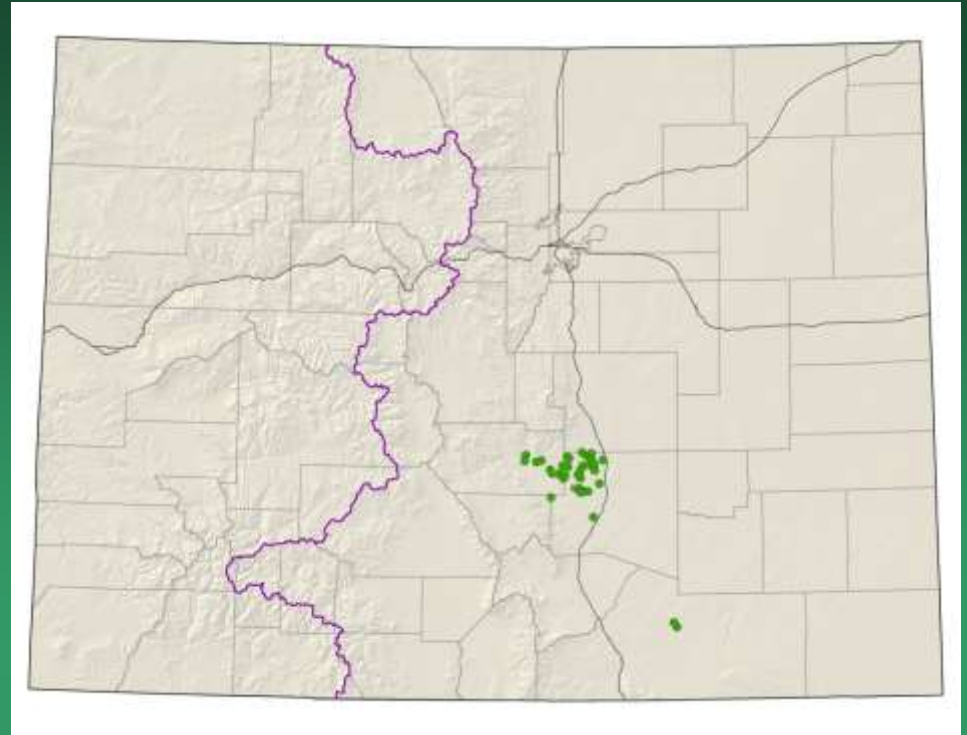


Oenopsis "puebloensis"

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: 2014
- 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



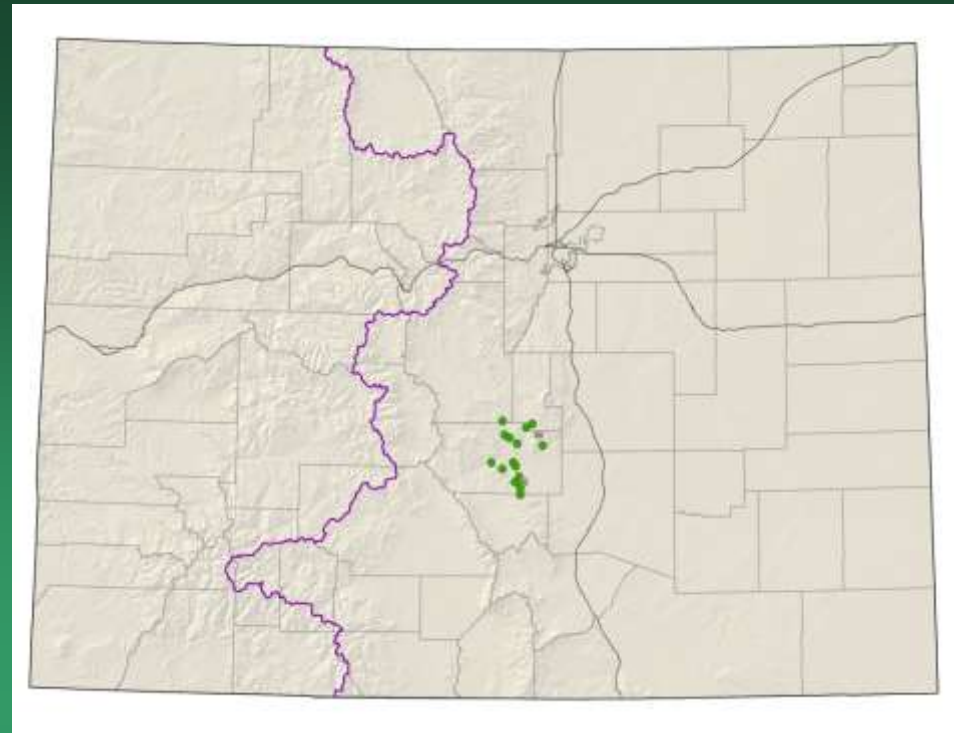


Oxybaphus rotundifolius

Penstemon degeneri

Degener beardtongue

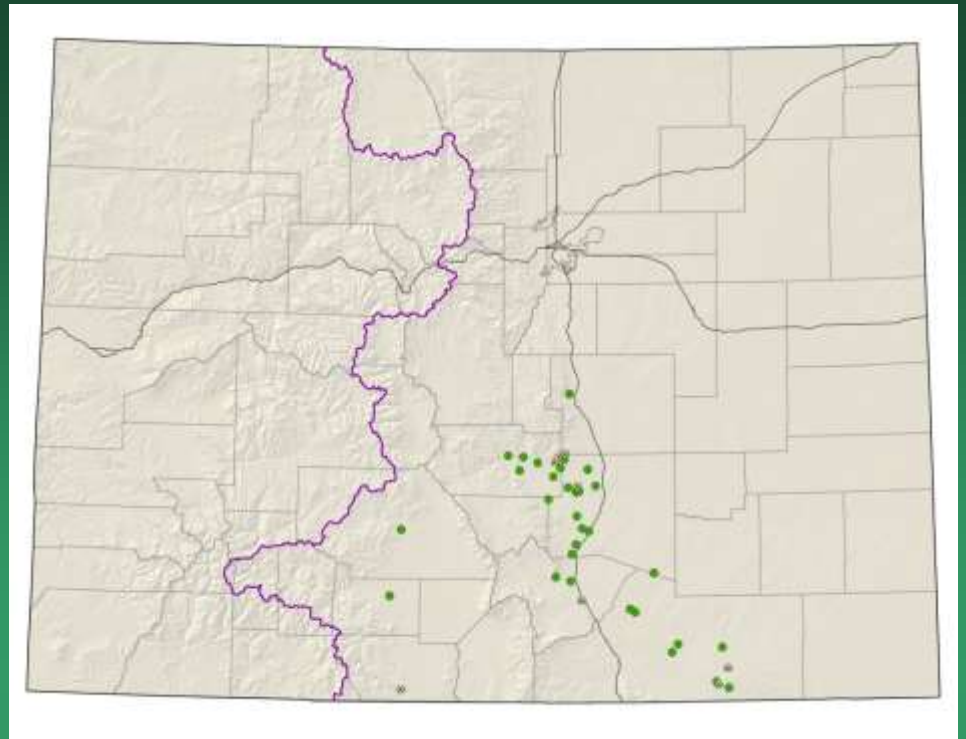
- Federal status: USFS & BLM sensitive
- Heritage ranks: G2/S2
- Global distribution: endemic to Colorado (Custer, Fremont, Park and Teller counties)
- Elevation range: 6,000-9,450 ft.
- Last observed in Colorado: 2016
- Colorado occurrences: 19 (2 historical)
- Colorado individuals: ~1500
- Primary 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

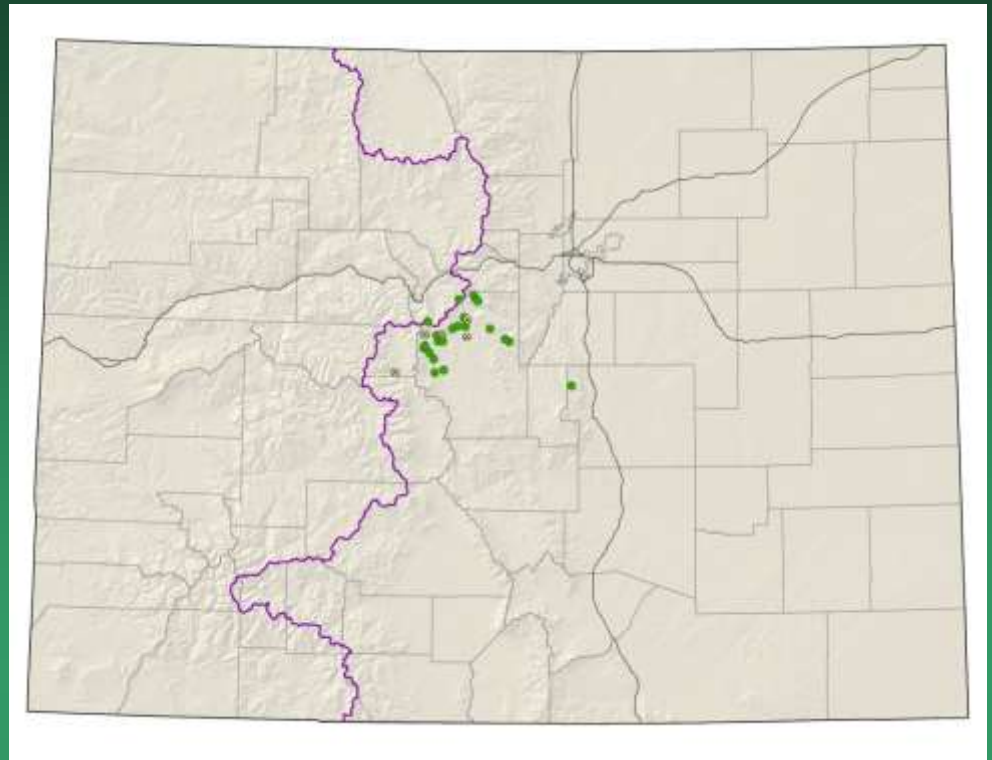


Physaria calcicola

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: 2017
- 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

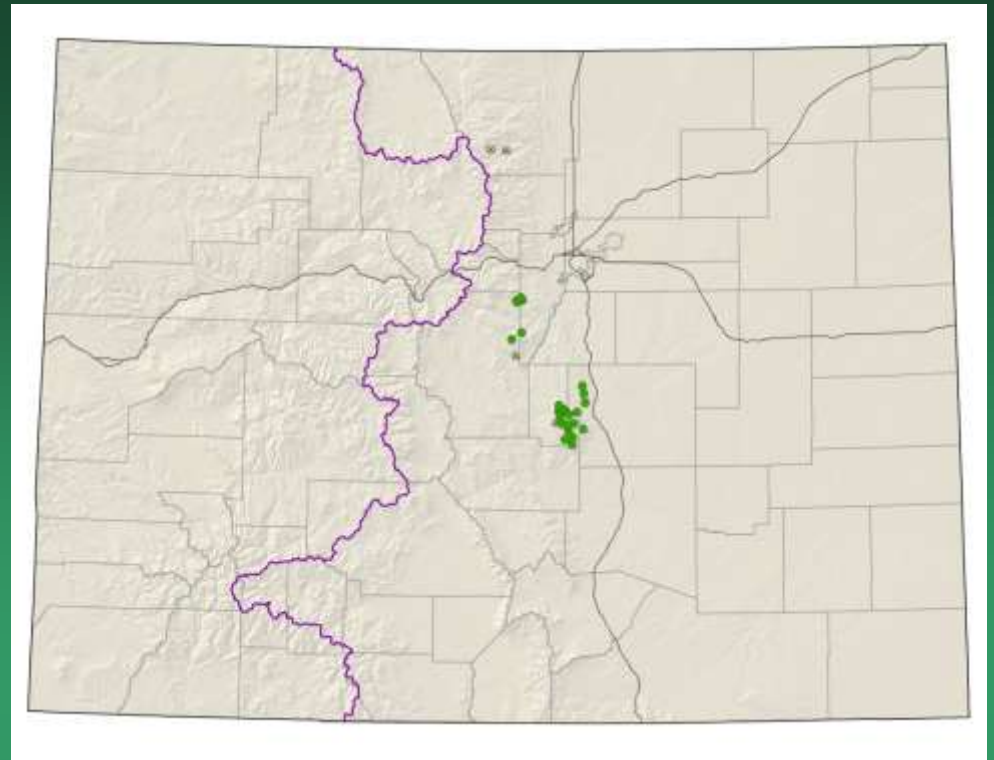




Ptilagrostis porteri

Telesonix jamesii

James' telesonix



- Federal status: none
- Heritage ranks: G2G3/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: 2016
- 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

**To contribute data or photos
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