

The Colorado Rare Plant Technical Committee presents:

17th Annual

Colorado Rare Plant Symposium

September 18, 2020

Virtual, from several locations, Colorado

Sponsored by:

Colorado Native Plant Society

US Fish and Wildlife Service

Colorado Natural Heritage Program

USDA Forest Service

University of Colorado Herbarium



2020 Symposium

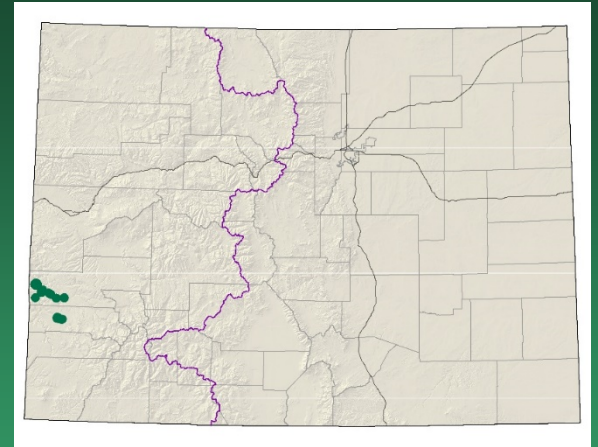
Front Range G1-G2

Select Plains plants of interest



Erigeron radicans (Taproot fleabane)

- Federal status: None
- Heritage ranks: G3G4/S1
- Global distribution: Found in the US in Colorado, Idaho (S3), Montana (S3), North Dakota (S1), Utah (S1), and Wyoming (SNR), and in Canada in Alberta (S3) and Saskatchewan (S3) provinces. Colorado in Weld County.
- Colorado elevation range: 5500-6000 ft.
- Last observed in Colorado: 2010
- Colorado occurrences: Two known occurrences in Weld county, one from 2000 and one from 2010.
- Colorado individuals: In one occurrence, the description cited “infrequent”.
- Primary threats: Primary land uses of concern include oil and gas, wind energy, and residential developments.



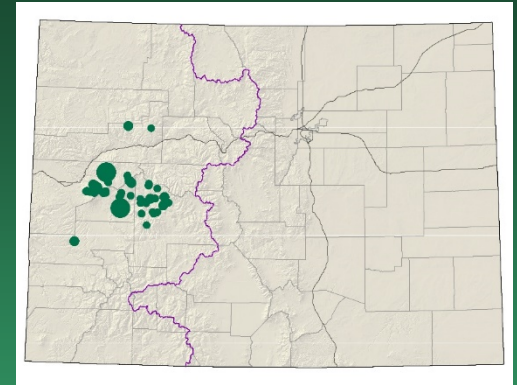




Lee

Dalea cylindriceps

(Andean prairie clover, Sandsage prairie clover)



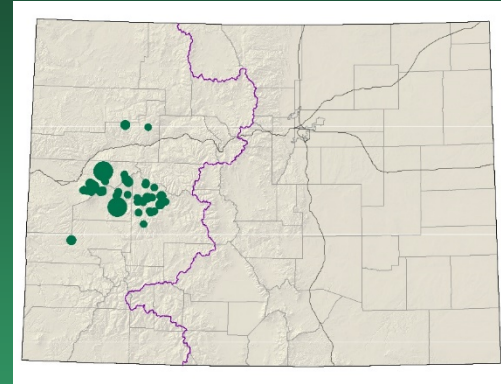
- Federal status: None
- Heritage ranks: G3G4/S2S3
- Global distribution: South Dakota and eastern Wyoming south to western Texas and northeast New Mexico. (NatureServe). In CO: Mostly the Eastern Plains: Adams, Arapahoe, Baca, Bent, Clear Creek, Cheyenne, Denver, El Paso, La Plata, Larimer, Lincoln, Morgan, Prowers, Sedgewick, Washington, Weld counties.
- Elevation range: 3600-5300 ft
- Last observed in Colorado: 2018, Janet Wingate specimen
- Colorado occurrences: CNHP has 20 recorded occurrences of this species, 7 of these are historical. The rest are unranked.
- Colorado individuals: Most mention rarity and scattered occurrences, with one noting locally abundant.
- Primary threats: energy, residential and agricultural developments
- Land ownership/management:

Dalea cylindriceps





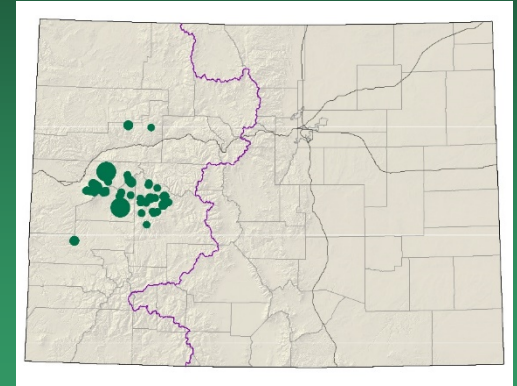
Grindelia hirsutula
var. acutifolia
(Raton gumweed)



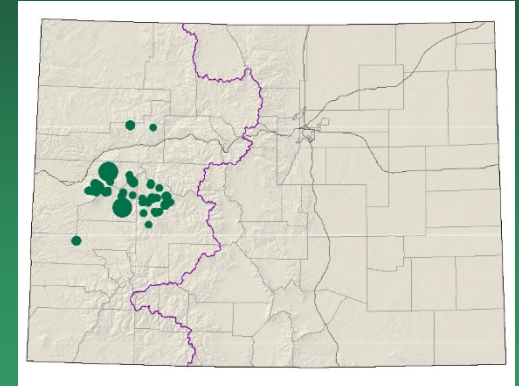
- Federal status: None
- Heritage ranks: G5T2/S2
- Global distribution: Colorado endemic, Las Animas County, near Trinidad in the Raton Mesa region .
Elevation range: 5400-6500 ft
- Last observed in Colorado: unknown
- Colorado occurrences: unknown
- Colorado individuals: uncommon
- Primary threats: Land ownership/management: unknown

Grindelia hirsutula
var. revoluta (Rolled
gumweed)

- Federal status: None
- Heritage ranks: G5T1/S1
- Global distribution: Colorado endemic, El Paso, Huerfano, and Pueblo counties
- Elevation range: 6500-9000 ft
- Last observed in Colorado: unknown
- Colorado occurrences: unknown
- Colorado individuals: uncommon
- Primary threats: Land ownership/management: unknown



Solidago capulensis (Capulin goldenrod)



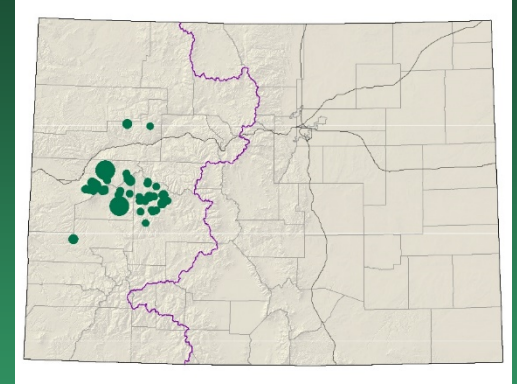
- Federal status: None
- Heritage ranks: G1G3/S1
- Global distribution: Known only from SE CO and NE NM (Nesom and Lowrey 2011).
- Elevation range: kk ft
- Last observed in Colorado: 2020
- Colorado occurrences: unknown
- Colorado individuals: uncommon
- Primary threats:
- Land ownership/management: Fisher's Peak State Park



Solidago capulensis

Penstemon versicolor

(Variable-color Beardstongue)



- Federal status: None
- Heritage ranks: G3/S3
- Global distribution: Colorado endemic, Bent, El Paso, Fremont, Las Animas, Otero, and Pueblo counties. Mostly in Fremont and Pueblo in the Arkansas watershed
- Elevation range: kk ft
- Last observed in Colorado: unknown
- Colorado occurrences: 23, 16 historical, and 7 unranked.
- Colorado individuals: Uncommon
- Primary threats: : Shale extraction by cement plants, residential and recreational developments.
- Land ownership/management: Fort Carson, Pinyon Canyon, Pueblo Reservoir State Park, private



FLORA OF NORTH AMERICA
Penstemon versicolor Pennell
 TRUSCO 2192
Penstemon versicolor Pennell
 Black sedge rh.

THE COLORADO COLLEGE
 HERBARIUM
 No. 4117
 Colorado Springs, Colorado, 1971
 From Fremont - Colo.
 Family Scrophulariaceae
Penstemon acuminiflorus Benth.
 Low, alkali marsh basin at the
 intersection of Highways 115 and 50.
 Elevation 5272
 Date May 18, 1971
 = 68W + 19S
 Collector Cheryl
 Sylvester

Penstemon versicolor



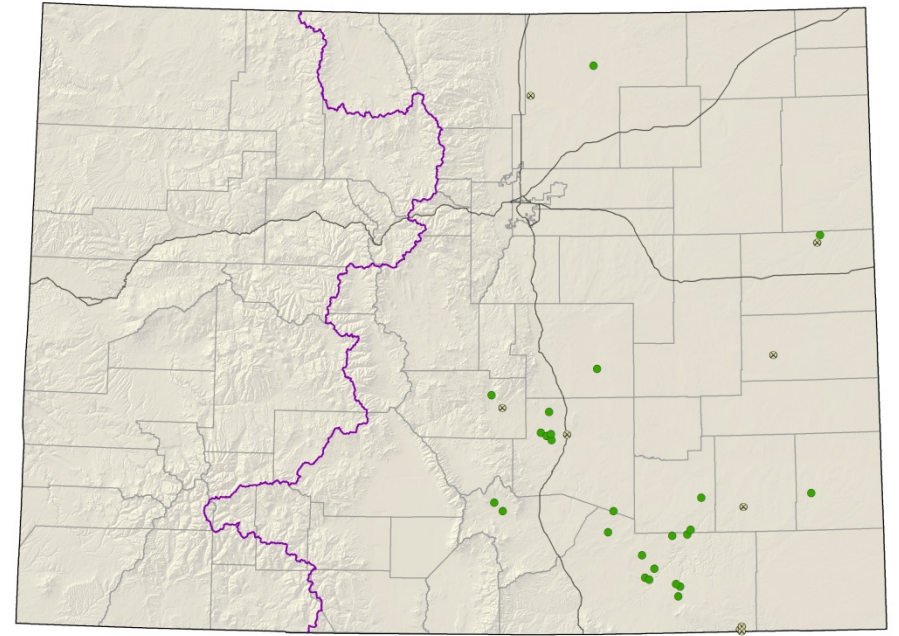
FLORA OF NORTH AMERICA
Penstemon versicolor Pennell
 TRUSCO 2192

No. 4117
 PLANTS OF COLORADO
 Colorado College Herbarium
Penstemon acuminiflorus Benth.
 Roadside cut, north of
 Arkansas River, just
 opposite Florence
 C. William T. Penland,
 w/ John B. Hartwell
 Date 5 June 1951
 Elevation 5200 feet
 Loc. FRIEHOOT

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

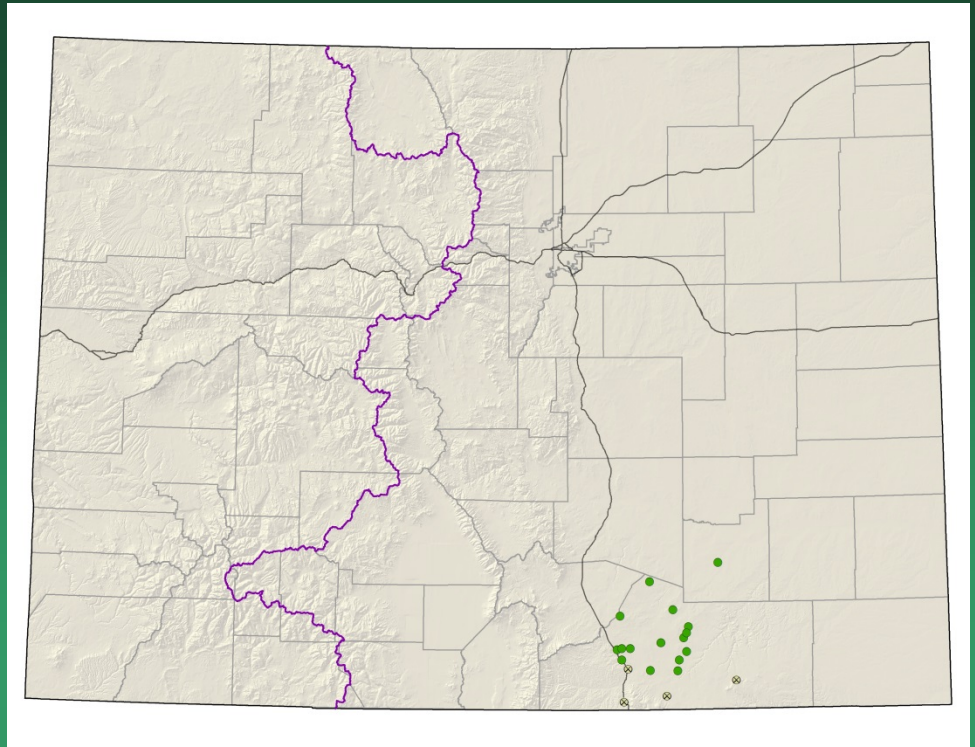


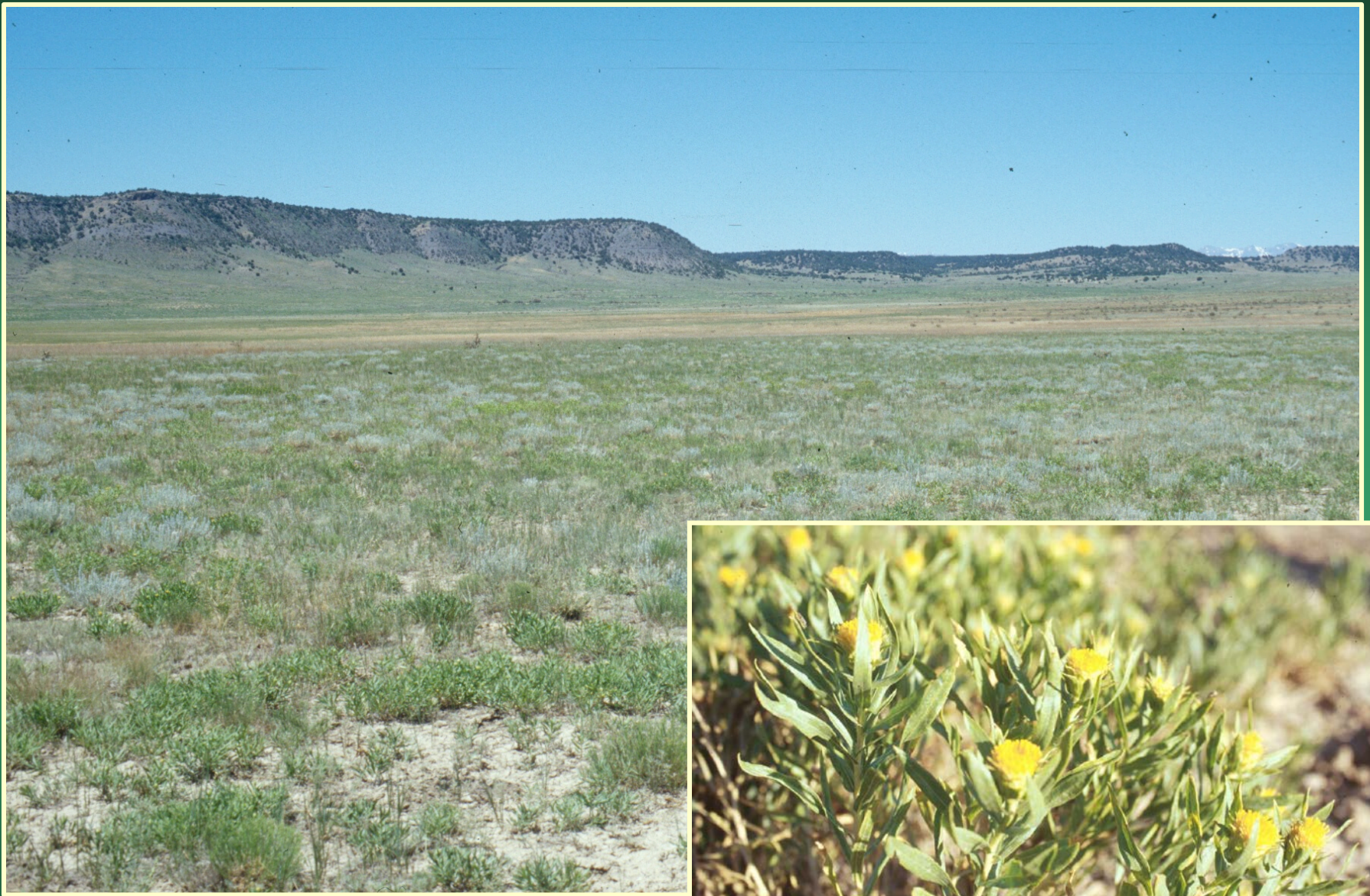


Asclepias uncialis ssp. *uncialis*

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



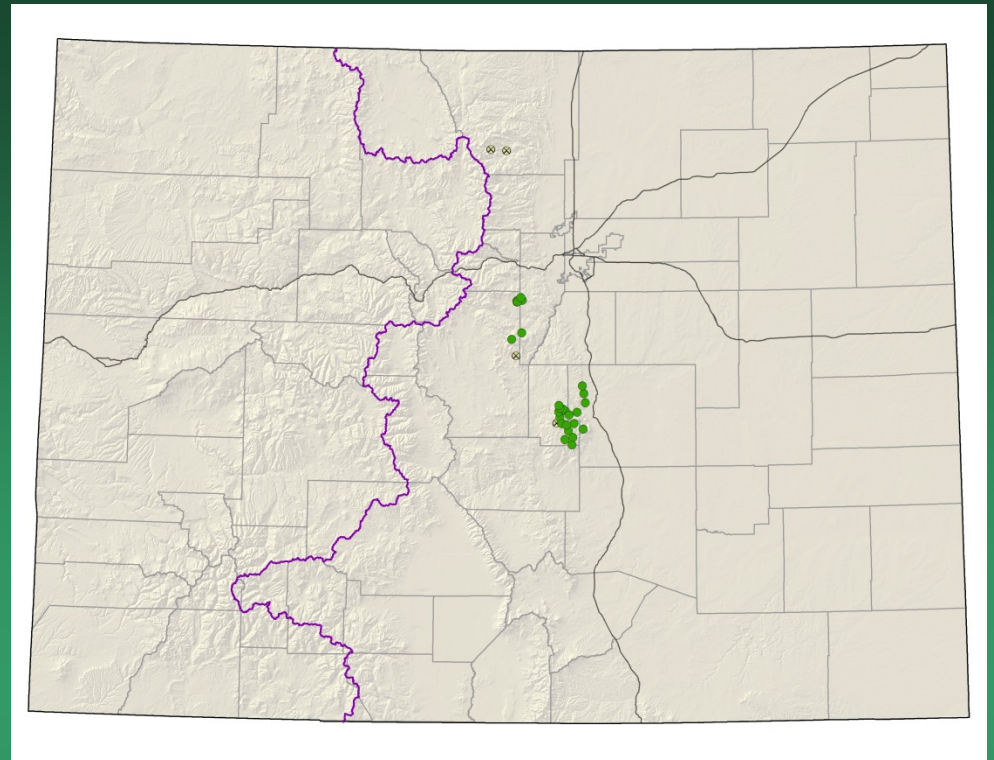


Oonopsis foliosa var. *monocephala*

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: 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



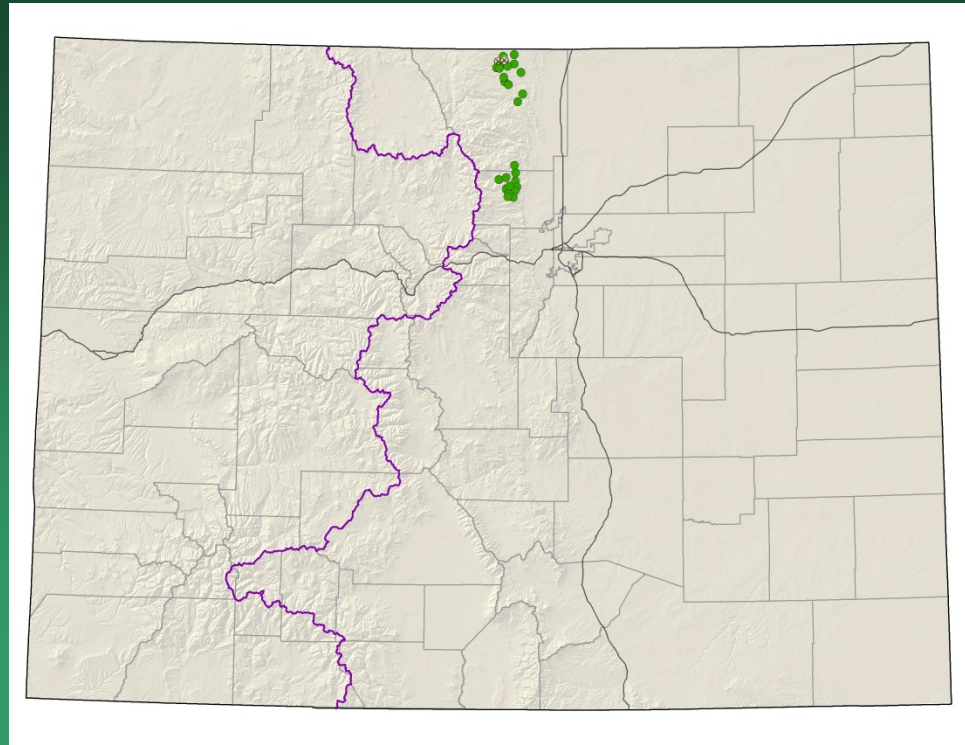


Telesonix jamesii

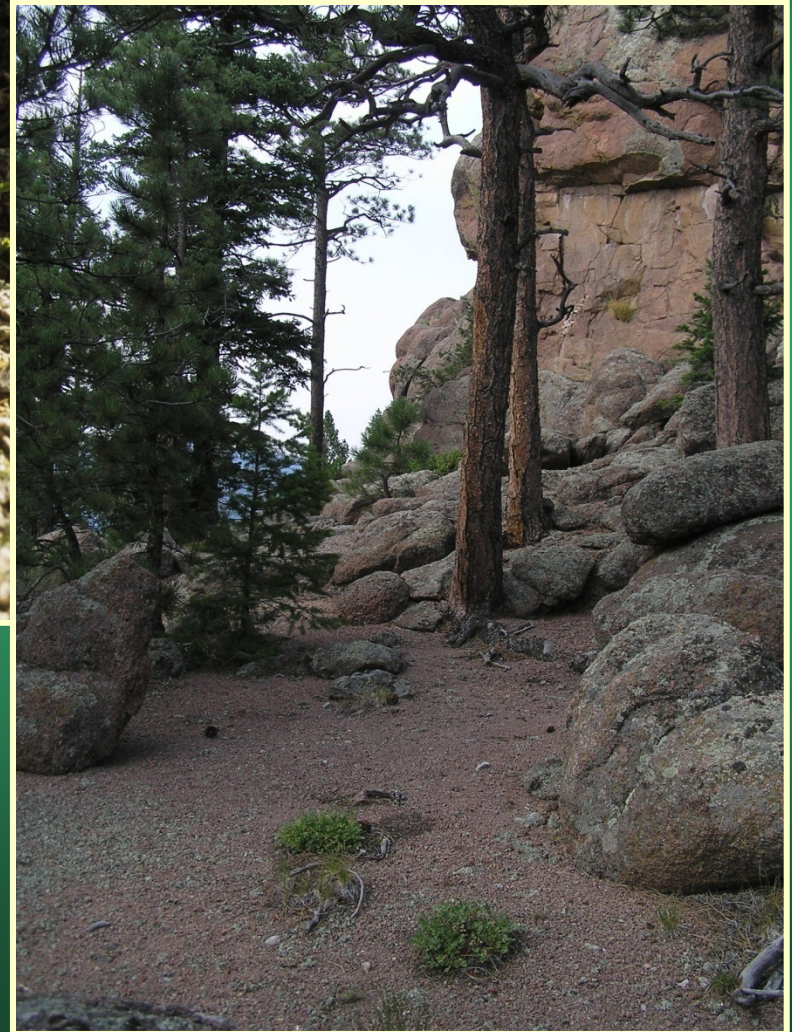
Aletes humilis

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

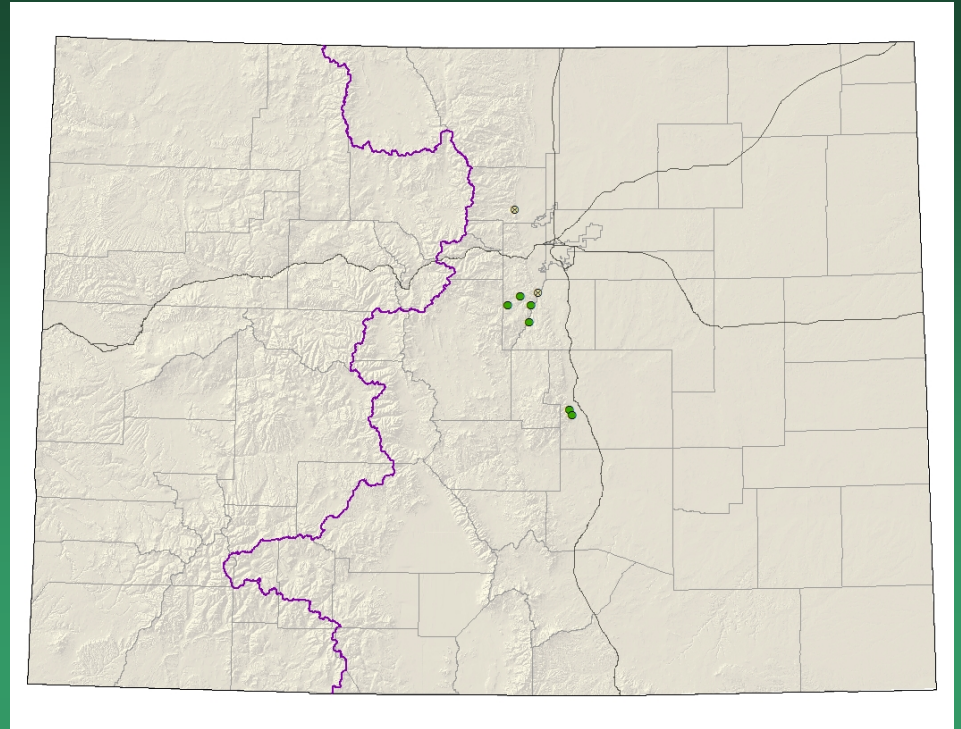


Aletes humilis



Astragalus sparsiflorus

Front Range milk-vetch

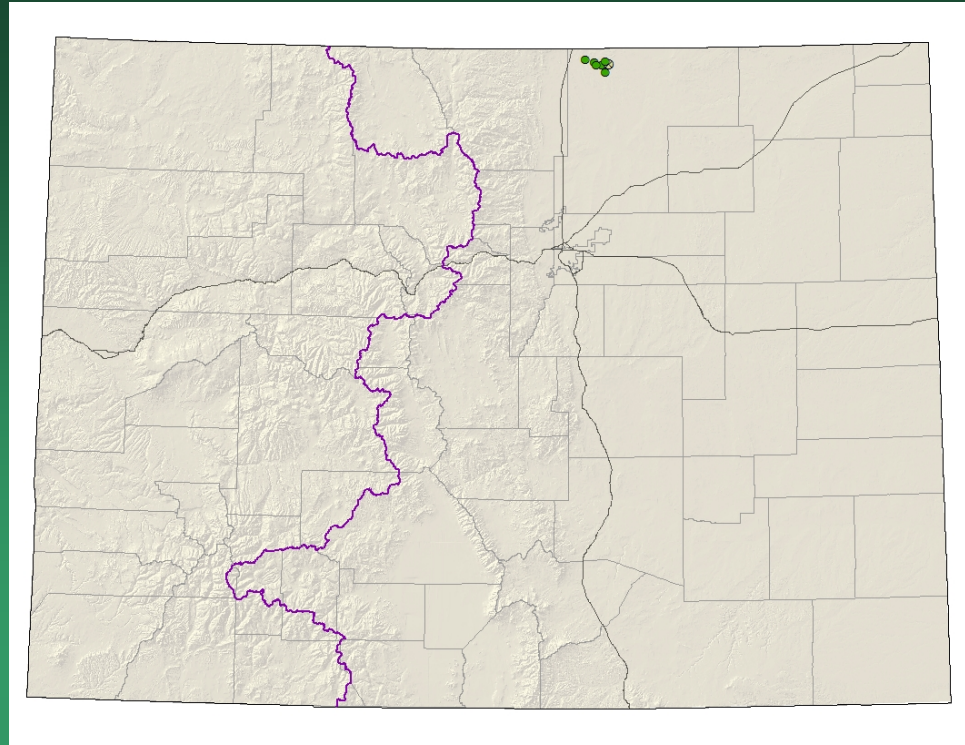


- Federal status: None
- Heritage ranks: G2/S2
- Global distribution: Colorado endemic (Douglas, Denver, El Paso, Park, Fremont, Teller, Boulder, and Jefferson counties).
- Elevation range: 5,510-9,220 ft.
- Last observed in Colorado: 2010
- Colorado occurrences: 13 (2 are historical)
- Colorado individuals: 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



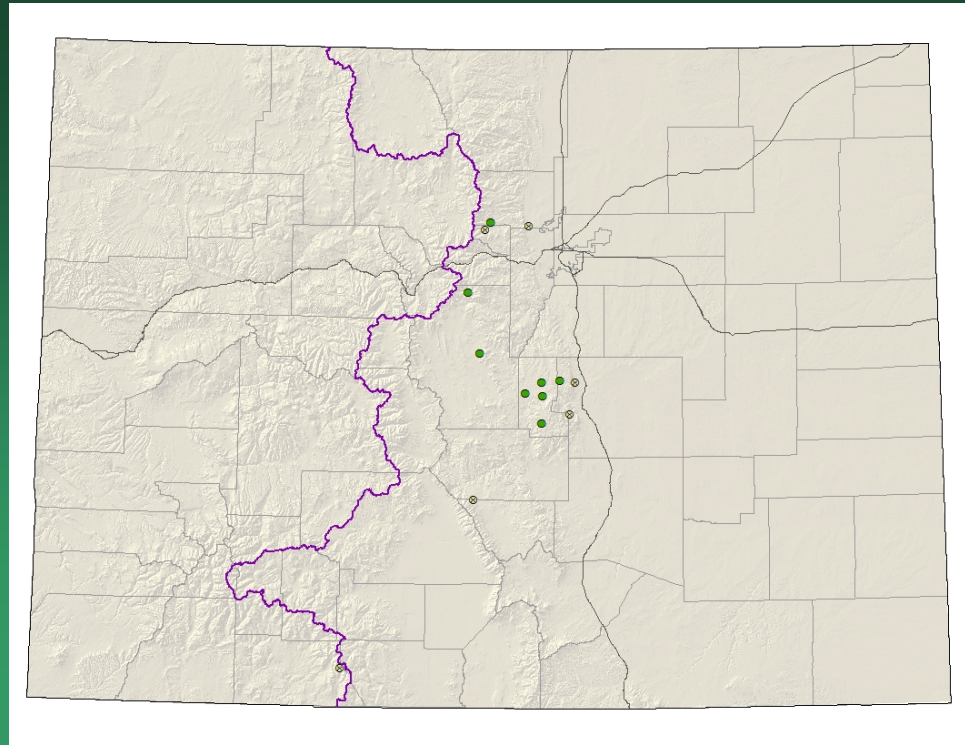
Bolophyta alpina



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



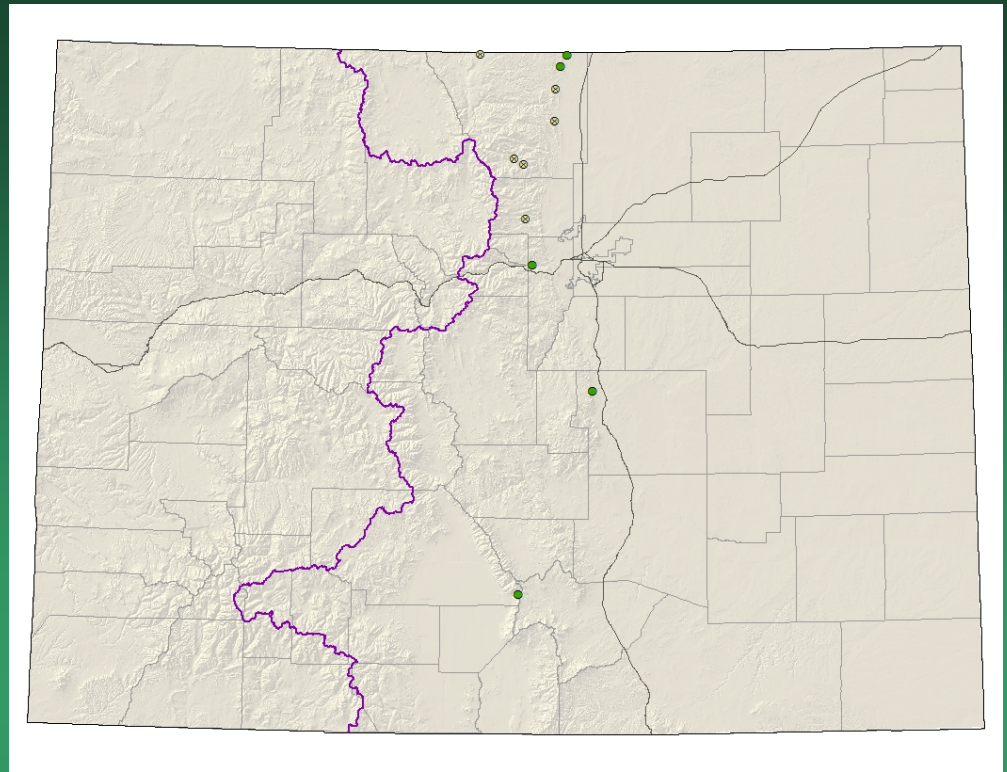
Carex oreocharis



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

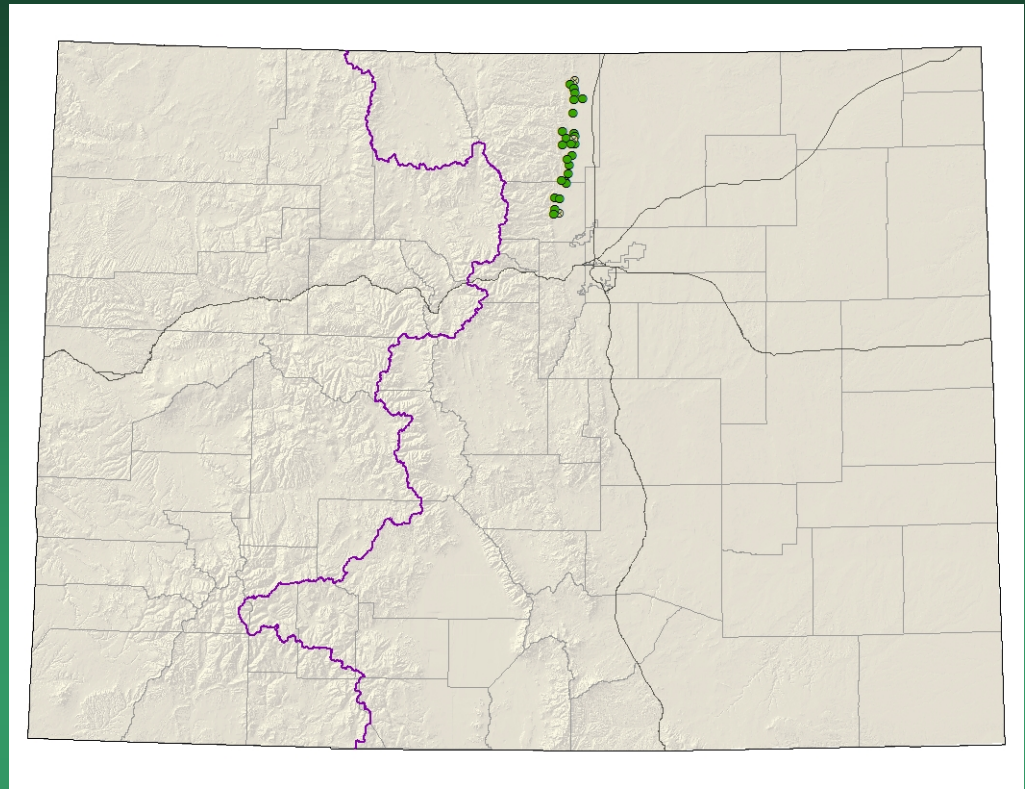




Physaria bellii

Bell's twinpod

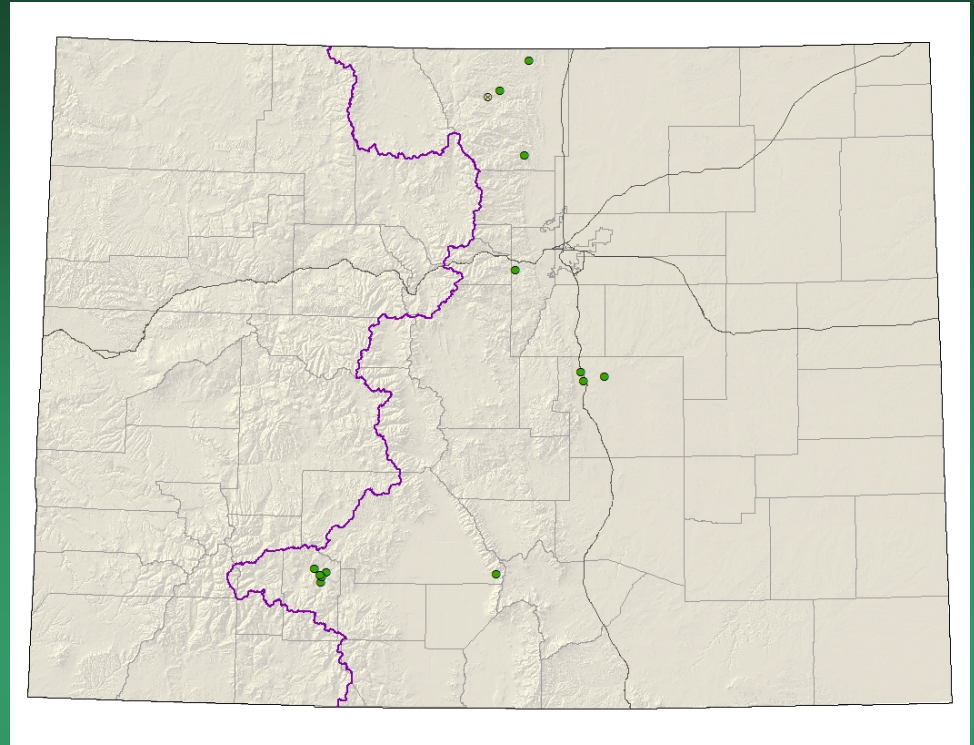
- Federal status: None
- Heritage ranks: G2G3/S2S3
- Global distribution: Colorado endemic (Boulder and Larimer counties). Jefferson and El Paso County records annotated to a different species.
- Elevation range: 5,090-6,550 ft.
- Last observed in Colorado: 2014
- Colorado occurrences: 28 (3 are historical)
- 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, flooding
- Land ownership/management: local government, federal, NPS, state, private, USFS

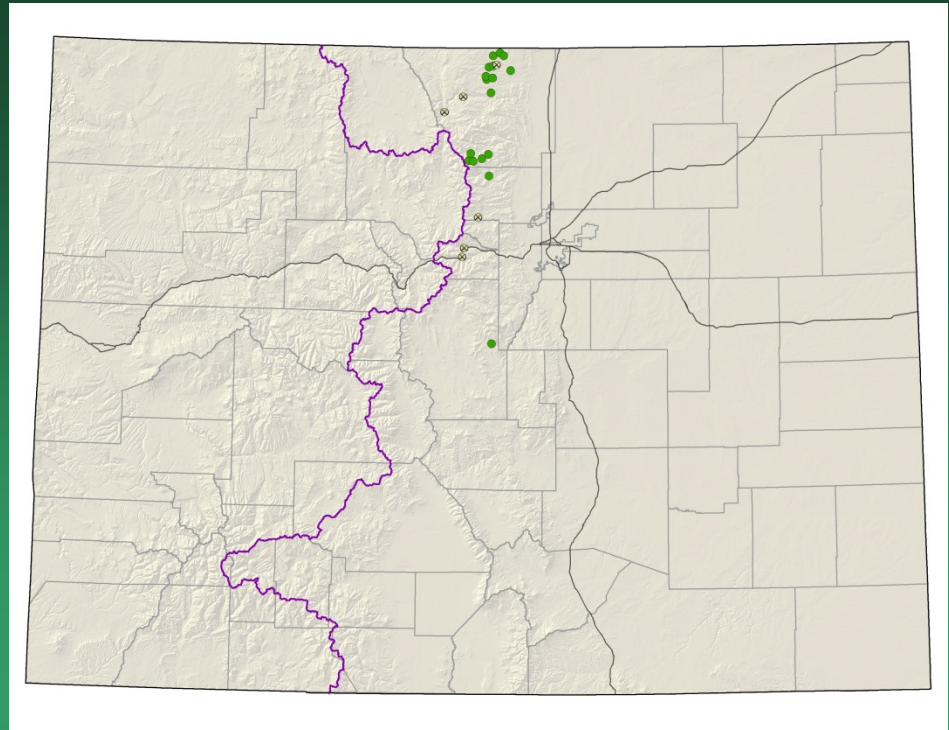
Potentilla ambigens



Potentilla rupincola

Rocky Mountain cinquefoil

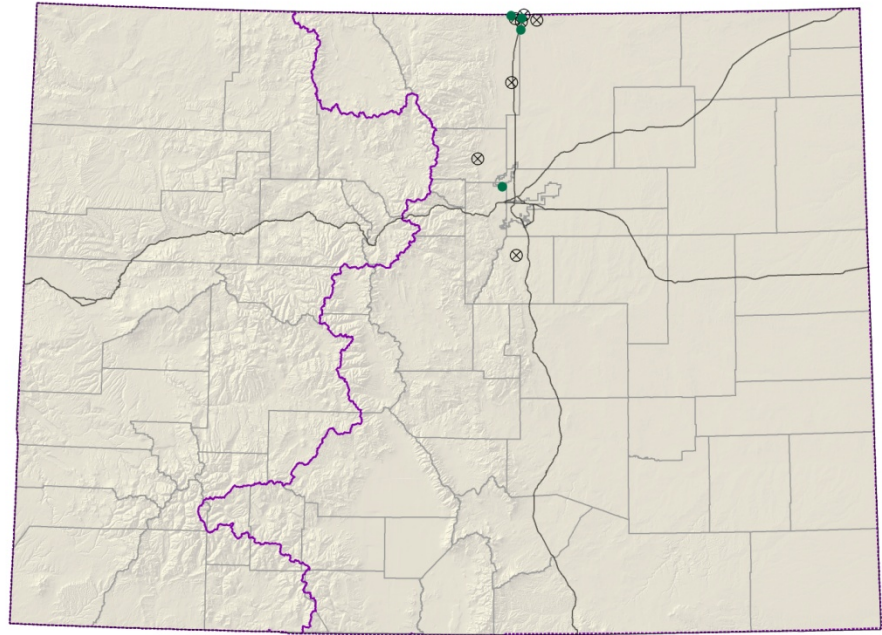
- Federal status: USFS Sensitive
- Heritage ranks: G2/S2
- Global distribution: Colorado endemic. Boulder, Clear Creek, Larimer, and Park counties. Historically from Gilpin county.
- Elevation range: 6,240-10,930 ft.
- Last observed in Colorado: 2013
- Colorado occurrences: 25 (8 are historical)
- Colorado 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



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

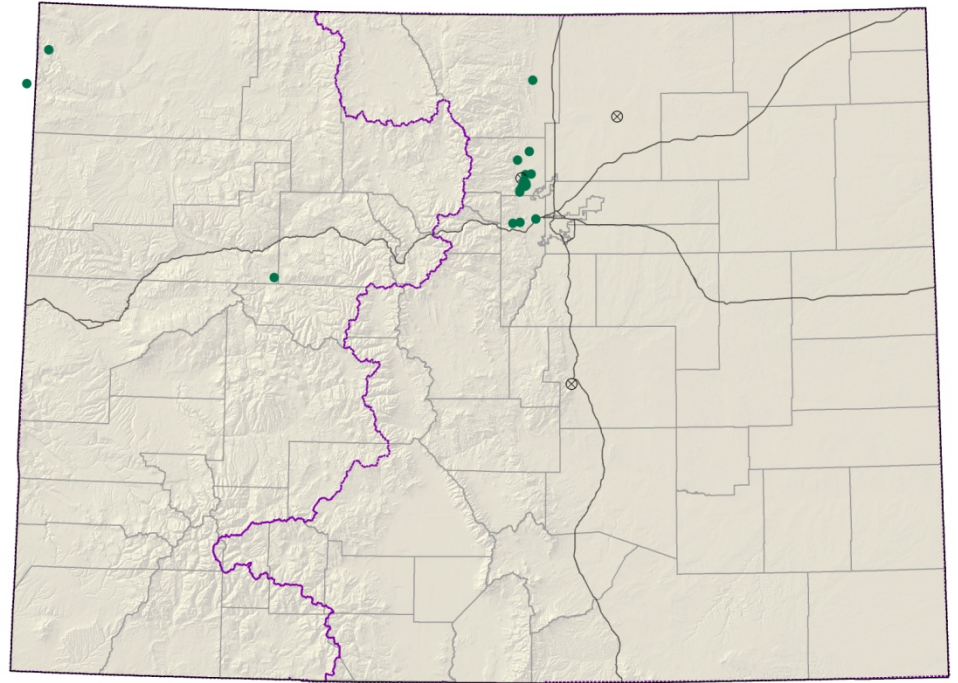


Gaura neomexicana ssp. *coloradensis*

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



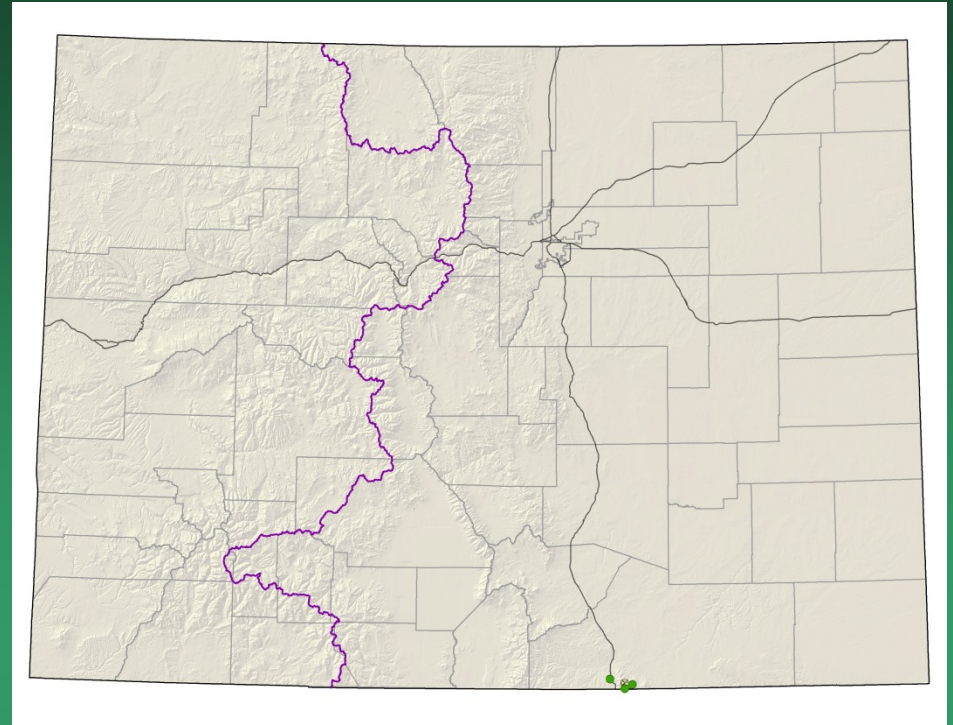
Spiranthes diluvialis



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

References

Colorado Natural Heritage Program (CNHP). 2020. Biodiversity Tracking and Conservation System (BIOTICS). Colorado Natural Heritage Program, Colorado State University, Fort Collins, CO.

NatureServe. 2020. An online encyclopedia of life (web application). Version 4.4
Arlington, Virginia. [website] Accessed 2020. <http://www.natureserve.org/explorer>

Locklear, J.H. 2013. Taxonomic identity and historical accounts of *Dalea cylindriceps* (Fabaceae), a species of conservation concern in the Great Plains (U.S.A.). J. Bot. Res. Inst. Texas 7(2):879-890.

SEINet

Personal communications

Montana Natural Heritage Program website