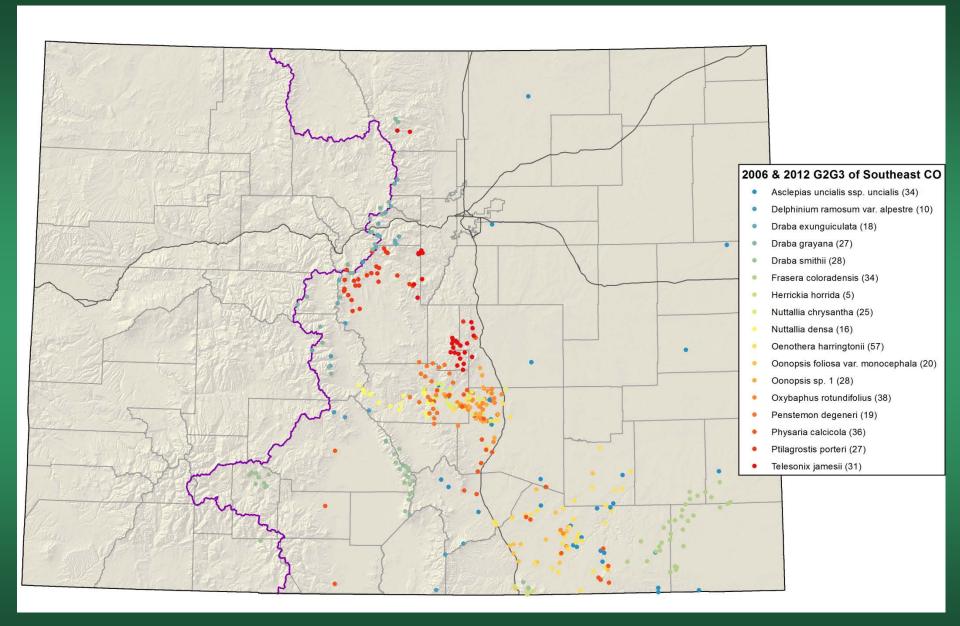
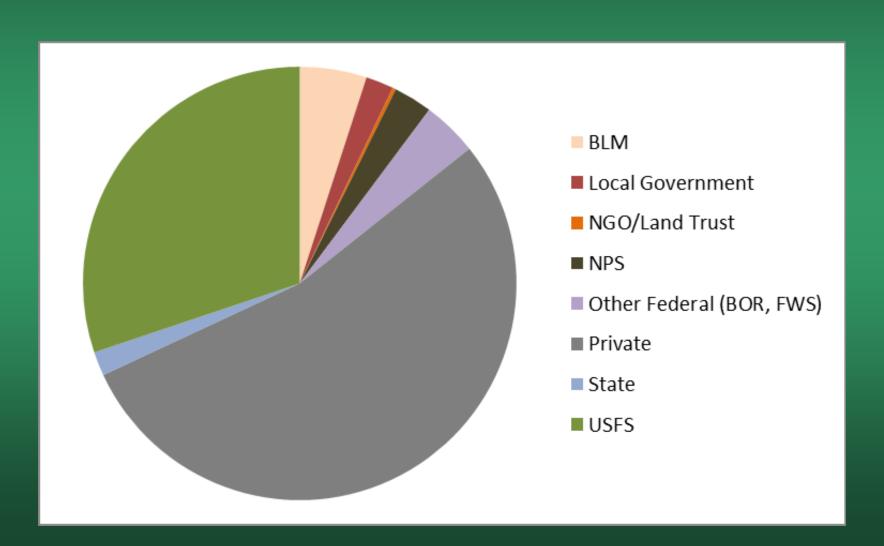
### Colorado Rare Plant Symposia 2006, 2012, 2017, and 2021 SE Colorado G2, G3, and G2G3 Species

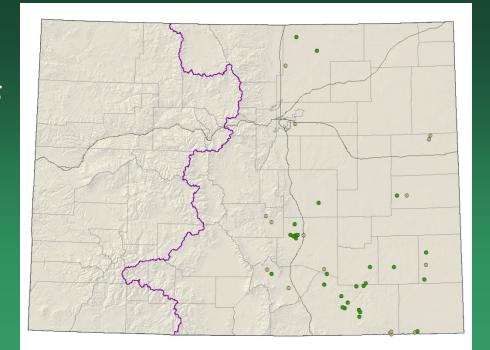


Location of SE Colorado G2G3 Plant Species

# Land Ownership of G2G3 Plant Species of SE Colorado



### Asclepias uncialis ssp. uncialis Dwarf milkweed

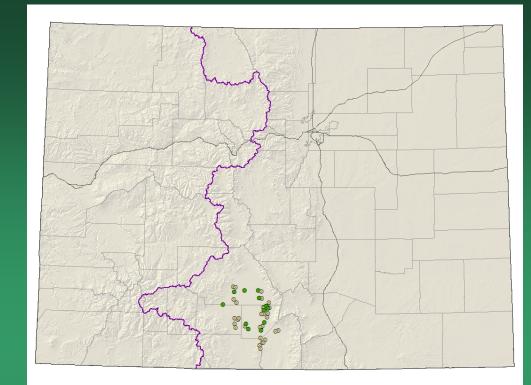


- <u>Federal status</u>: BLM/USFS sensitive
- Heritage ranks: G2/S2
- Global distribution: Arizona, Texas, New Mexico, Wyoming, Oklahoma, Utah, and Eastern Colorado (Las Animas, Baca, Weld, Kit Carson, Huerfano, Pueblo, Otero, Prowers, Fremont, and El Paso counties)
- <u>Elevation range</u>: 3,880-7,730 ft.
- <u>Last observed in Colorado</u>: 2017
- <u>Colorado occurrences</u>: 44 (16 are historical or extirpated)
- Colorado individuals: ~500
- <u>Primary threats</u>: Population limitation by unknown biological requirements, altered disturbance regime, habitat loss, spread of exotic species, global climate change
- <u>Land ownership/management</u>: BLM, local government, NGO/land trust, federal, state, private, USFS



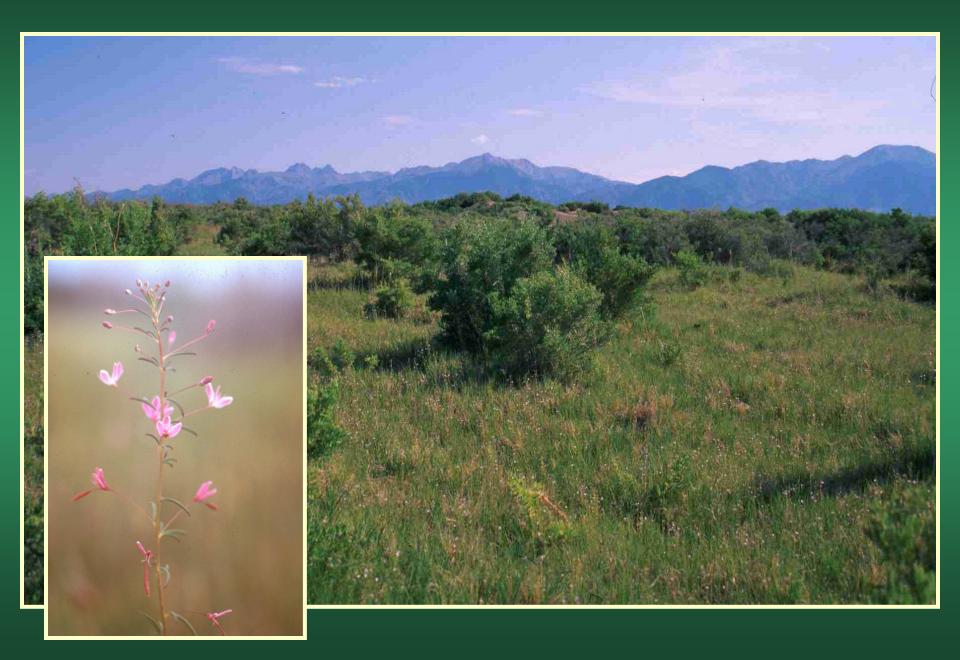
Asclepias uncialis ssp. uncialis

### Cleome multicaulis= Peritoma multicaulis Slender spider-flower

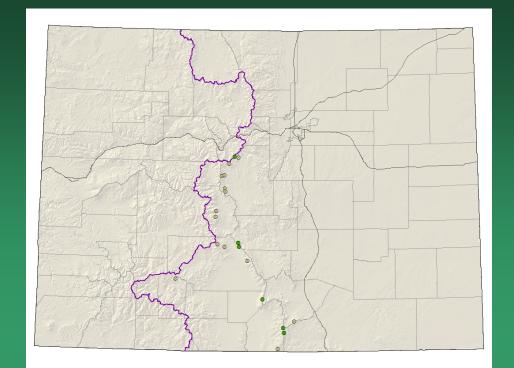


- <u>Federal status</u>: BLM sensitive
- Heritage ranks: G2G3/S2S3
- <u>Global distribution</u>: Mexico, Texas, Arizona, New Mexico, Wyoming and Colorado (Alamosa, Conejos, Costilla, Rio Grande, and Saguache counties)
- <u>Elevation range</u>: 7,480-8,190 ft.
- <u>Last observed in Colorado</u>: 2018
- <u>Colorado occurrences</u>: 41 (27 are historical)
- Colorado individuals: ~5,132,000
- <u>Primary threats</u>: draining of wetlands
- Land ownership/management: BLM, federal, NGO/land trust, NPS, state, private

#### Cleome multicaulis



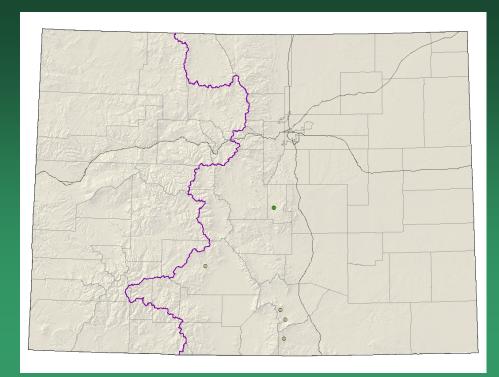
# Delphinium alpestre = Delphinium ramosum var. alpestre Colorado larkspur



- <u>Federal status</u>: none
- Heritage ranks: G3/S2
- Global distribution: New Mexico and Colorado (Costilla, Chaffee, Fremont, Huerfano, Las Animas, Mineral, Park, Saguache, and Summit counties)
- <u>Elevation range</u>: 10,850-14,255 ft.
- <u>Last observed in Colorado</u>: 2018
- <u>Colorado occurrences</u>: 20 (14 are historical)
- Colorado individuals: 100+
- <u>Primary threats</u>: Trampling from recreational activities
- <u>Land ownership/management</u>: private, USFS



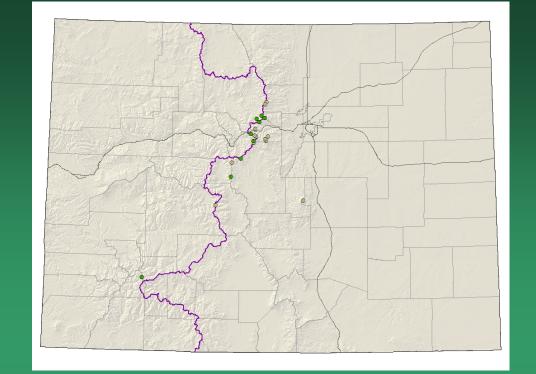
### *Delphinium robustum*Wahatoya Creek larkspur



- <u>Federal status</u>: none
- Heritage ranks: G2G3/S2?
- Global distribution: New Mexico and Colorado (Teller, Huerfano, El Paso, Las Animas, Montezuma and Saguache counties)
- <u>Elevation range</u>: 7,000-8,600 ft.
- Last observed in Colorado: 2019
- <u>Colorado occurrences</u>: 5 (4 are historical)
- Colorado individuals: 100
- <u>Primary threats</u>: Recreational uses, noxious weeds. Some species of *Delphinium* are poisonous to cattle, so the genus as a whole is sometimes targeted for poisonous weed control
- <u>Land ownership/management</u>: BLM, private, State



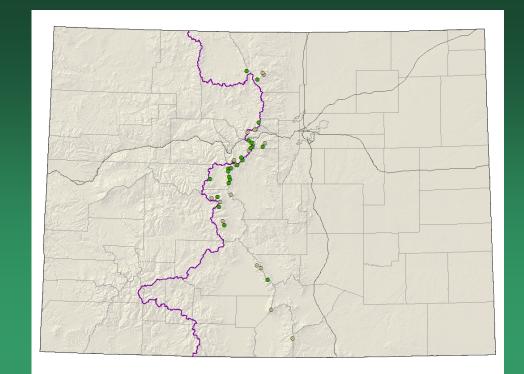
### Draba exunguiculata Clawless draba



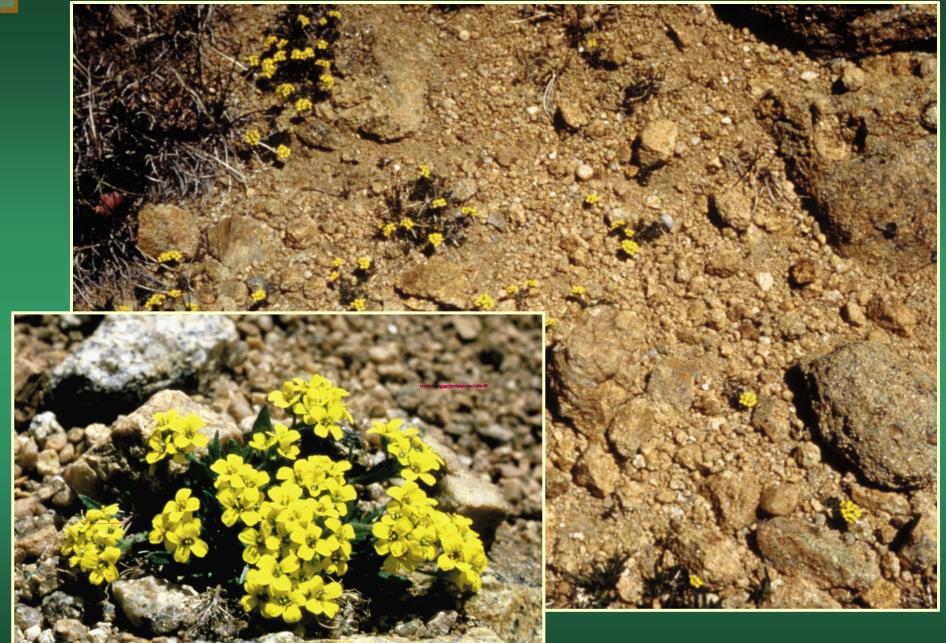
- <u>Federal status</u>: USFS sensitive
- Heritage ranks: G2/S2
- Global distribution: endemic to Colorado (Boulder, Chaffee, Clear Creek, El Paso, Gilpin, Grand, Lake, Park, San Juan, and Summit counties)
- <u>Elevation range</u>: 10,780-14,120 ft.
- <u>Last observed in Colorado</u>: 2016
- <u>Colorado occurrences</u>: 21 (12 are historical)
- <u>Colorado individuals</u>: ~250
- <u>Primary threats</u>: 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, BLM



### Draba grayana Gray's Peak whitlow-grass

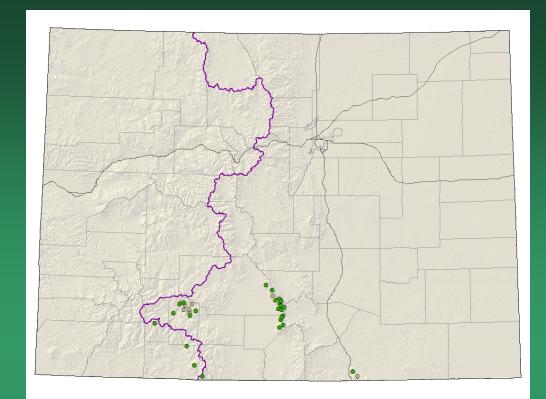


- Federal status: USFS sensitive
- Heritage ranks: G3/S3
- <u>Global distribution</u>: endemic to Colorado (Chaffee, Clear Creek, Costilla, Custer, Gilpin, Grand, Gunnison, Huerfano, Jackson, Lake, Larimer, Ouray, Park, Pitkin, Saguache, and Summit counties)
- <u>Elevation range</u>: 10,630-14,350 ft.
- Last observed in Colorado: 2021
- <u>Colorado occurrences</u>: 41 (18 are historical)
- <u>Colorado individuals</u>: 23,000
- <u>Primary threats</u>: Trampling from hikers and mountain goats, over-collection for gardens and global warming
- <u>Land ownership/management</u>: NPS, private, USFS, State Forest



Draba grayana

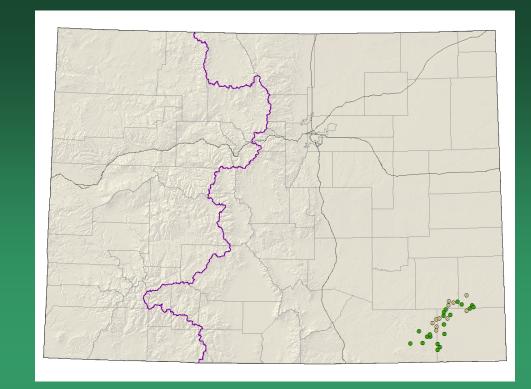
## *Draba smithii*Smith's whitlow-grass



- Federal status: USFS sensitive
- Heritage ranks: G2/S2
- <u>Global distribution</u>: Colorado (Alamosa, Archuleta, Custer, Hinsdale, Huerfano, Las Animas, Mineral, and Saguache counties), and New Mexico.
- <u>Elevation range</u>: 7,400-13,450 ft.
- <u>Last observed in Colorado</u>: 2020
- <u>Colorado occurrences</u>: 36 (9 are historical)
- Colorado individuals: ~3200
- <u>Primary threats</u>: Habitat modification from hiking and construction
- <u>Land ownership/management</u>: local government, NPS, private, USFS

Draba smithii

## Frasera coloradnesis Colorado gentian



- <u>Federal status</u>: none
- Heritage ranks: G2G3/S2S3
- <u>Global distribution</u>: Colorado endemic; (Baca, Bent, Prowers, and Las Animas counties)
- <u>Elevation range</u>: 4070-5800 ft.
- Last observed in Colorado: 2016
- Colorado occurrences: 32 (11 are historical)
- Colorado individuals: 275,000
- Primary threats: wind energy, agriculture, and road maintenance
- Land ownership/management: NGO/land trust, private, state, USFS

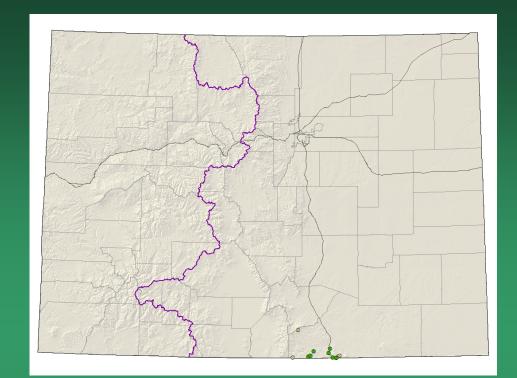


Herrickia horrida

= Eurybia horrida

Canadian River spiny aster or

Horrid herrickia



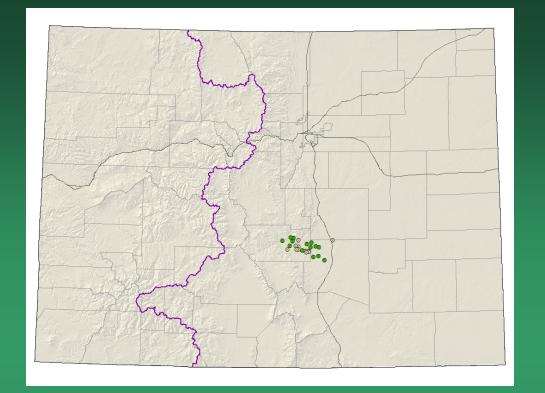
- <u>Federal status</u>: none
- Heritage ranks: G3/S1
- Global distribution: New Mexico and Colorado (Las Animas County)
- <u>Elevation range</u>: 5,500-9,320 ft.
- <u>Last observed in Colorado</u>: 2020
- <u>Colorado occurrences</u>: 11 (4 historical)
- <u>Colorado individuals</u>: 3,000
- <u>Primary threats</u>: incompatible grazing, recreation
- <u>Land ownership/management</u>: local government, private, State Park and State
   Wildlife Area



## Nuttallia chrysantha = Mentzelia chrysantha Golden blazing star

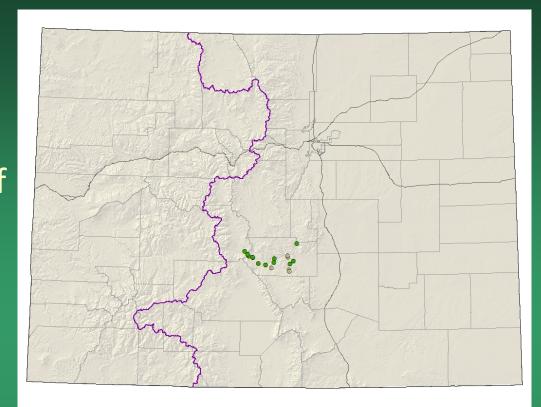
#### **Conservation Action Plan**

- <u>Federal status</u>: BLM sensitive
- Heritage ranks: G2/S2
- Global distribution: endemic to Colorado (Fremont, El Paso, and Pueblo counties)
- <u>Elevation range</u>: 4,750-6,850 ft.
- Last observed in Colorado: 2010
- <u>Colorado occurrences</u>: 26 (12 are historical)
- Colorado individuals: ~4100
- <u>Primary threats</u>: Grazing, quarry activities, and subdivision and road construction
- <u>Land ownership/management</u>: BLM, federal, state, private





### Nuttallia densa = Mentzelia densa Arkansas Canyon stickleaf

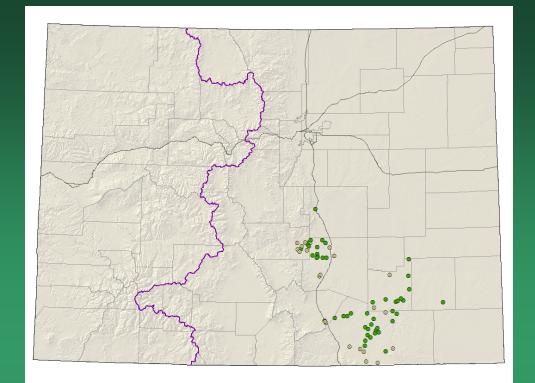


- Federal status: BLM sensitive
- Heritage ranks: G2/S2
- Global distribution: endemic to Colorado (Fremont, Chaffee, and Teller counties)
- <u>Elevation range</u>: 4,750-6,850 ft.
- Last observed in Colorado: 2016? Or 2009
- <u>Colorado occurrences</u>: 17 (6 are historical)
- Colorado individuals: ~13,500
- <u>Primary threats</u>: Recreational development and road construction
- <u>Land ownership/management</u>: BLM, state, private





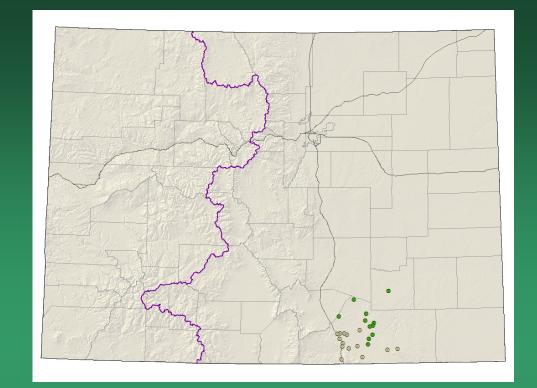
## Oenothera harringtonii Arkansas Valley evening primrose



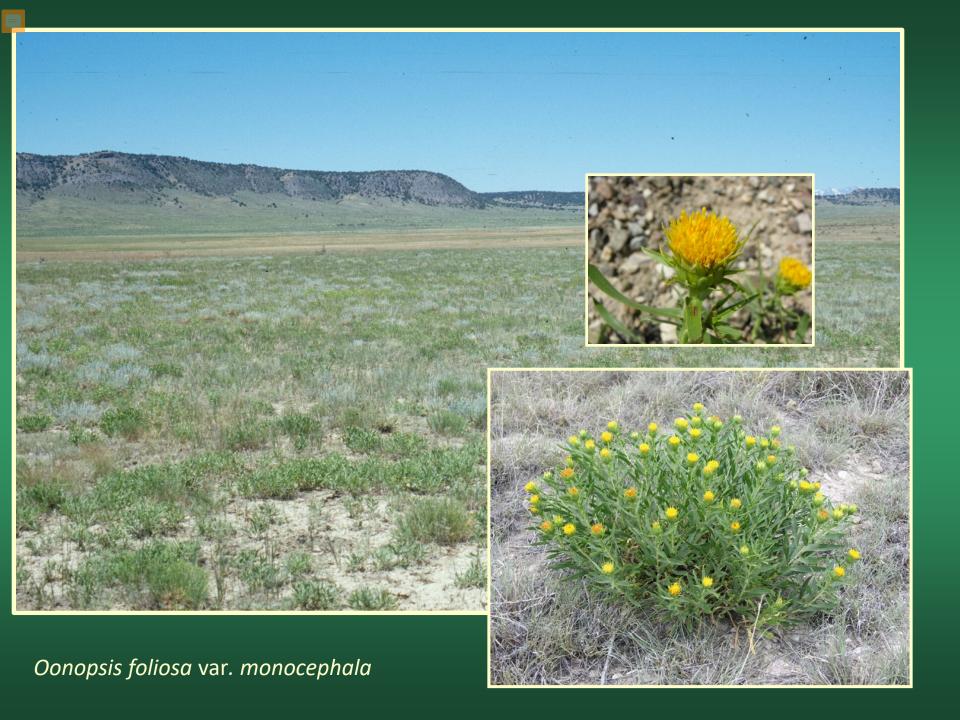
- <u>Federal status</u>: none
- Heritage ranks: G3/S3
- <u>Global distribution</u>: endemic to Colorado (Bent. El Paso, Fremont, Huerfano, Las Animas, Otero, and Pueblo counties)
- <u>Elevation range</u>: 4,130-6,450 ft.
- Last observed in Colorado: 2019
- <u>Colorado occurrences</u>: 69 (22 are historical)
- Colorado individuals: 12,000+
- <u>Primary threats</u>: Habitat loss due to urbanization, road development projects, and resource extraction activities, especially quarrying and surface mining. Motorized recreation, incompatible grazing, noxious weeds.
- Land ownership/management: BLM, local government, federal, state, private, USFS



#### Oonopsis foliosa var. monocephala Rayless goldenweed



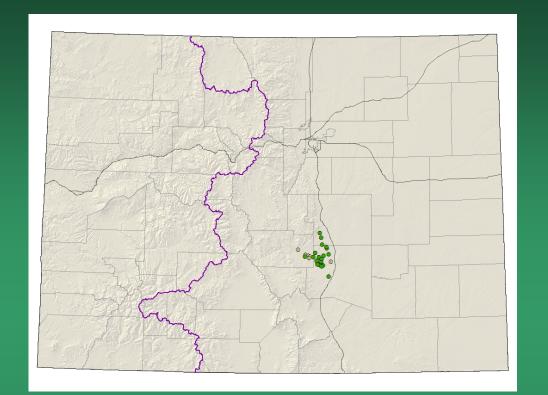
- <u>Federal status</u>: none
- Heritage ranks: G3G4T2/S2
- Global distribution: endemic to Colorado (Las Animas and Fremont counties)
- Elevation range: 4,330-7,880 ft.
- <u>Last observed in Colorado</u>: 2009
- Colorado occurrences: 20 (9 are historical)
- Colorado individuals: 400,000+
- Primary threats: Maintenance on current roads or further developments may disturb or destroy individuals
- Land ownership/management: federal, state, private, USFS



### Oonopsis "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)
- <u>Elevation range</u>: 4,850-6,120 ft.
- <u>Last observed in Colorado</u>: 2009
- Colorado occurrences: 28 (7 are historical)
- Colorado individuals: ~11,000 or more
- <u>Primary threats</u>: Shale extraction by cement plants
- <u>Land ownership/management</u>: state, private

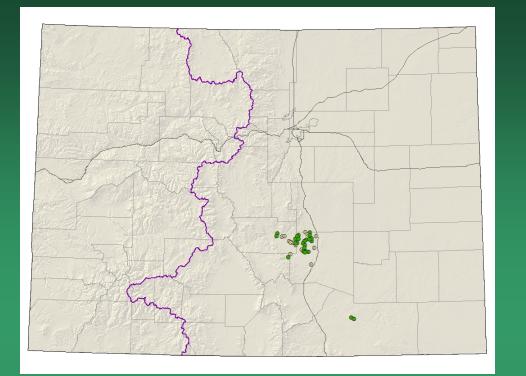




#### Oxybaphus rotundifolius = Mirabilis rotundifolia Round-leaf four-o'clock

#### **Conservation Action Plan**

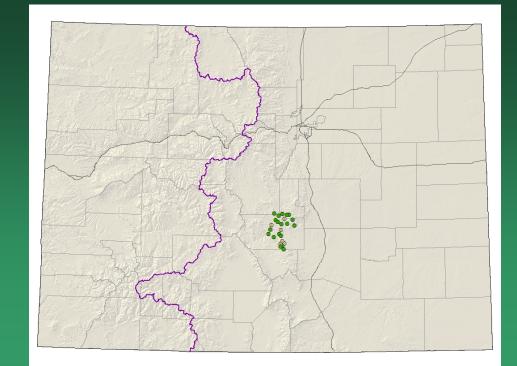
- <u>Federal status</u>: none
- Heritage ranks: G2/S2
- Global distribution: endemic to Colorado (Fremont, Las Animas, El Paso and Pueblo counties)
- <u>Elevation range</u>: 4,900-5,900 ft.
- <u>Last observed in Colorado</u>: 2014
- <u>Colorado occurrences</u>: 40 (14 are historical)
- Colorado individuals: ~6200
- <u>Primary threats</u>: 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 (Park, Custer, Teller and Fremont counties)
- <u>Elevation range</u>: 6,000-9,450 ft.
- Last observed in Colorado: 2020
- <u>Colorado occurrences</u>: 25 (6 historical)
- Colorado individuals: ~3500
- <u>Primary threats</u>: Motorized and non-motorized recreation, non-native plant invasion, grazing and trampling, extensive herbivory, succession, and global environmental changes
- <u>Land ownership/management</u>: BLM, private, state, USFS



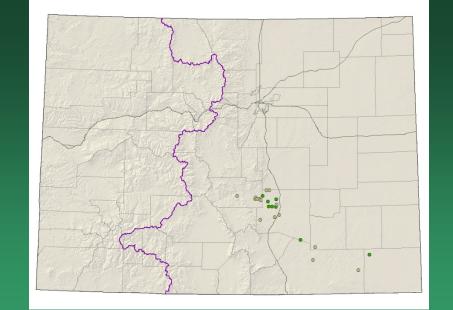




Penstemon degeneri

### 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
- <u>Elevation range</u>: 4750-6700
- <u>Last observed in Colorado</u>: 2019
- Colorado occurrences: 23 (15 historical)
- Colorado individuals: Uncommon, locally common, hundreds
- <u>Primary threats</u>: : Shale extraction by cement plants, residential and recreational developments.
- <u>Land ownership/management</u>: Fort Carson, Pinyon Canyon, Comanche National Grassland, Pueblo Reservoir State Park, private







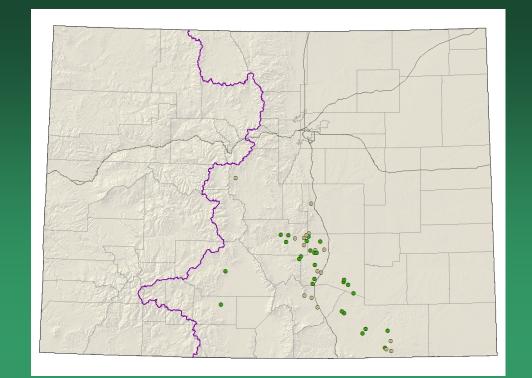
Penstemon versicolor







# Physaria calcicola = Lesquerella calcicola Rocky Mountain bladderpod

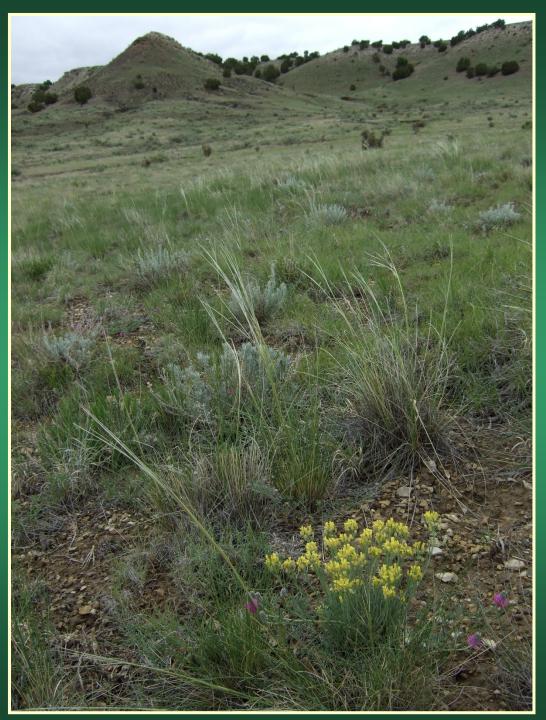


- <u>Federal status</u>: none
- Heritage ranks: G3/S3
- Global distribution: New Mexico (Santa Fe County) and Colorado (Rio Grande, Saguache, El Paso, Custer, Fremont, Huerfano, Las Animas, Park, and Pueblo counties)
- <u>Elevation range</u>: 4,780-10,800 ft.
- Last observed in Colorado: 2013
- <u>Colorado occurrences</u>: 43 (17 are historical)
- <u>Colorado individuals</u>: 24,000
- <u>Primary threats</u>: This species occurs in areas that are experiencing rapid development pressures
- <u>Land ownership/management</u>: BLM, local government, federal, state, private

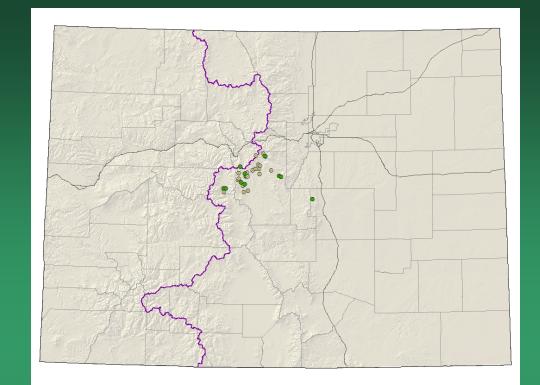




Physaria calcicola



#### Ptilagrostis porteri Porter feathergrass



- <u>Federal status</u>: USFS sensitive
- Heritage ranks: G2/S2
- <u>Global distribution</u>: New Mexico (Colfax County) and Colorado (El Paso, Lake, Park and Summit counties)
- <u>Elevation range</u>: 9,000-12,470 ft.
- <u>Last observed in Colorado</u>: 2017
- <u>Colorado occurrences</u>: 29 (18 are historical)
- Colorado individuals: ~408,000
- <u>Primary threats</u>: Alterations to the water table resulting from increased diversion and pumping for the metropolitan Front Range
- <u>Land ownership/management</u>: NGO/land trust, private, USFS

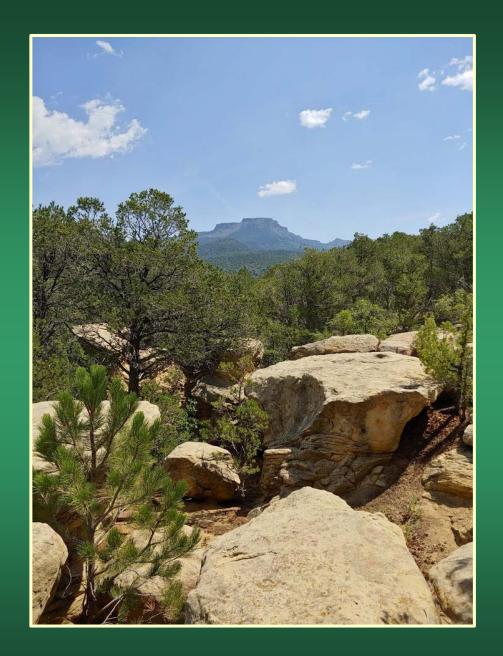




## Solidago capulinensis (Capulin goldenrod)

- <u>Federal status</u>: None
- Heritage ranks: G1G3/S1
- Global distribution: Known only from SE CO (Las Animas and Baca counties) and NE NM (Nesom and Lowrey 2011).
- <u>Elevation range</u>: 4700-6500
- Last observed in Colorado: 2020
- <u>Colorado occurrences</u>: 5 (4 historical)
- <u>Colorado individuals</u>: uncommon, 123 counted at one location.
- <u>Primary threats</u>: unknown, possible recreational use
- Land ownership/management: Fisher's Peak State Park

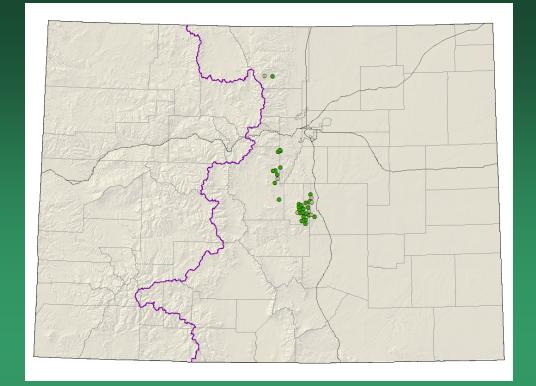






Solidago capulinensis

#### *Telesonix jamesii* James' teles<u>onix</u>



- <u>Federal status</u>: none
- Heritage ranks: G3G4/S3
- Global distribution: New Mexico and Colorado (El Paso, Jefferson, Larimer, Park, and Teller counties)
- <u>Elevation range</u>: 6,700-13,700 ft.
- <u>Last observed in Colorado</u>: 2019
- <u>Colorado occurrences</u>: 38 (8 are historical)
- Colorado individuals: ~20,000
- <u>Primary threats</u>: 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

