Review of previous meetings 2004-2006











Species from previous years

2004 - T & E Species - Statewide

2005 - G1 Species - Statewide

Astragalus humillimus Astragalus osterhoutii Astragalus tortipes Botrychium lineare Eriogonum pelinophilum *Eutrema edwardsii* ssp *penlandii Gaura neomexicana* ssp coloradensis Ipomopsis polyantha Lesquerella congesta Pediocactus knowltonii Penstemon debilis Penstemon grahamii Penstemon penlandii Penstemon scariosus var albifluvis Phacelia formosula Phacelia submutica Physaria obcordata Sclerocactus glaucus Sclerocactus mesae-verdae Spiranthes diluvialis

Aletes latilobus Aliciella sedifolia Astragalus lonchocarpus var. hamiltonii Astragalus microcymbus Astragalus schmolliae *Cirsium scapanolepis Corispermum navicula* Cryptantha gypsophila Draba weberi Erigeron wilkenii Eriogonum brandegeei *Hackelia* gracilenta Lygodesmia doloresensis Mimulus gemmiparus Oreoxis humilis Penstemon gibbensii Physaria pulvinata

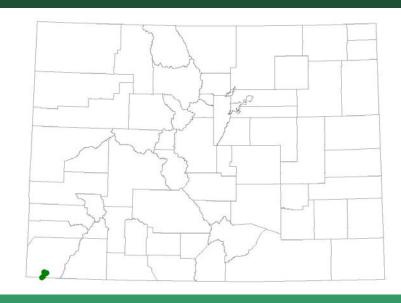
2006 - G2 Species - SE Colo

Asclepias uncialis ssp. uncialis *Cleome multicaulis* Delphinium ramosum var. alpestre Delphinium robustum Draba exunguiculata Draba grayana Draba smithii Grindelia inornata Herrickia horrida Lesquerella calcicola Nuttallia chrysantha Nuttallia densa *Oenothera harringtonii* Oonopsis foliosa var. monocephala *Oonopsis puebloensis* Oxybaphus rotundifolius Penstemon degeneri Ptilagrostis porteri Telesonix jamesii

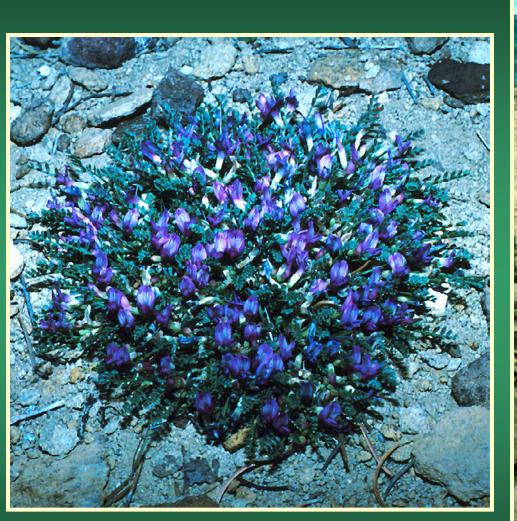
2004 Steamboat Springs

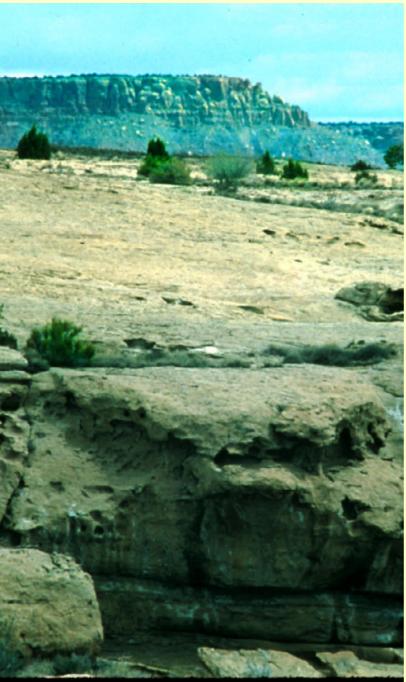
T & E Species

Astragalus humillimus Mancos milkvetch



- <u>Federal status</u>: Endangered
- Heritage ranks: G1/S1
- <u>Global distribution</u>: New Mexico and Colorado
- Last observed in Colorado: CNAP 1998
- <u>Colorado occurrences</u>: 4
- <u>Colorado individuals</u>: 25,000
- Primary threats: mineral, oil, and gas development, seismic exploration
- Land ownership/management: Ute Mountain Ute





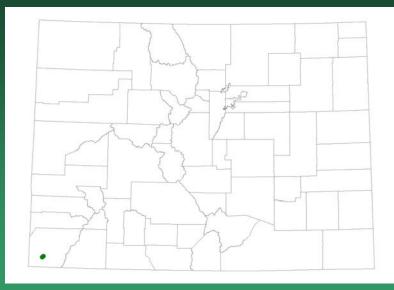
Astragalus osterhoutii Osterhout milkvetch



- Federal status: Endangered
- Heritage ranks: G1/S1
- <u>Global distribution</u>: Colorado endemic
- Last observed: 2005
- Occurrences: 6, 1 historical
- Individuals: 25,000-50,000
- <u>Primary threats</u>: recreation, mining, oil and gas development
- Land ownership/management: BLM, private, state



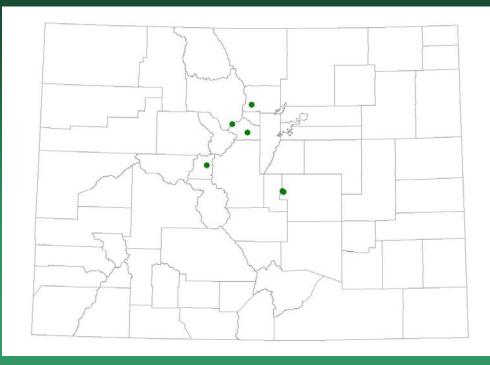
Astragalus tortipes Sleeping Ute milkvetch



- Federal status: Candidate
- Heritage ranks: G1/S1
- <u>Global distribution</u>: Colorado endemic
- Last observed: 2000
- <u>Occurrences</u>: 2
- <u>Individuals</u>: 2,000-3,000
- <u>Primary threats</u>: McPhee Reservoir canals, agricultural development
- Land ownership/management: Ute Mountain Ute



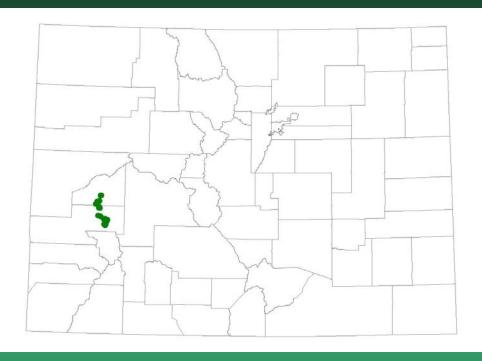
Botrychium lineare Narrowleaf grapefern



- <u>Federal status</u>: Candidate
- <u>Heritage ranks</u>: G1/S1
- <u>Global distribution</u>: New Brunswick, Quebec, Idaho, Montana, Oregon, California, Wyoming, and Colorado
- Last observed in Colorado: 2004
- <u>Colorado occurrences</u>: 4 (or more)
- <u>Colorado individuals</u>: 60
- <u>Primary threats</u>: road maintenance, weeds
- Land ownership/management: USFS, private, city of Denver



Eriogonum pelinophilum Clay-loving wild buckwheat



- Federal status: Endangered
- <u>Heritage ranks</u>: G2/S2
- <u>Global distribution</u>: Colorado endemic
- Last observed: 2007
- <u>occurrences</u>: 19, 4 historical
- <u>Individuals</u>: 30,000
- <u>Primary threats</u>: residential and agricultural developments, ORV use, overgrazing, oil and gas exploration
- Land ownership/management: private, BLM Waker property purchased



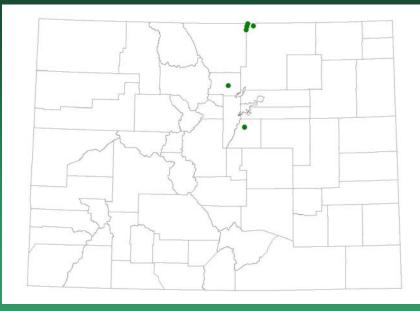
Eutrema penlandii Penland alpine fen mustard



- <u>Federal status</u>: Endangered
- <u>Heritage ranks</u>: G1G2/S1S2
- <u>Global distribution</u>: Colorado endemic
- Last observed: 2006
- Occurrences: 11, 1 historical
- <u>Individuals</u>: 10,000-12,000
- <u>Primary threats</u>: mining, recreation
- Land ownership/management: private, USFS, BLM



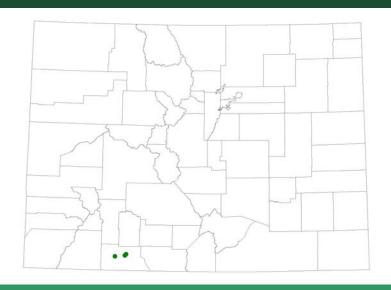
Gaura neomexicana ssp. coloradensis Colorado butterfly plant



- <u>Federal status</u>: Threatened
- <u>Heritage ranks</u>: G3T2/S1
- Global distribution: Wyoming, Nebraska, and Colorado
- Last observed in Colorado: 2006 or later
- <u>Colorado occurrences</u>: 3 (plus 7 historical)
- <u>Colorado individuals</u>: 11,000
- <u>Primary threats</u>: grazing, hydrological alterations, weeds, Interstate 25
- Land ownership: City of Fort Collins, private, state



Ipomopsis polyantha Pagosa gilia



- Federal status: Candidate
- <u>Heritage ranks</u>: G1/S1
- <u>Global distribution</u>: Colorado endemic
- Last observed: 2007
- Individuals: 10,000
- <u>Occurrences</u>: 3
- <u>Primary threats</u>: residential development, road construction and maintenance, overgrazing
- Land ownership/management: private, highway right of way



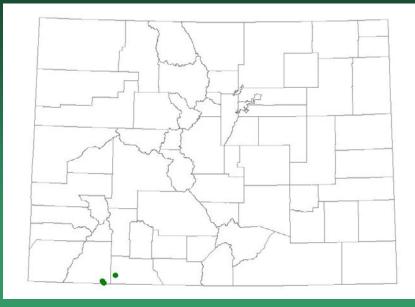
Lesquerella congesta Dudley Bluffs bladderpod



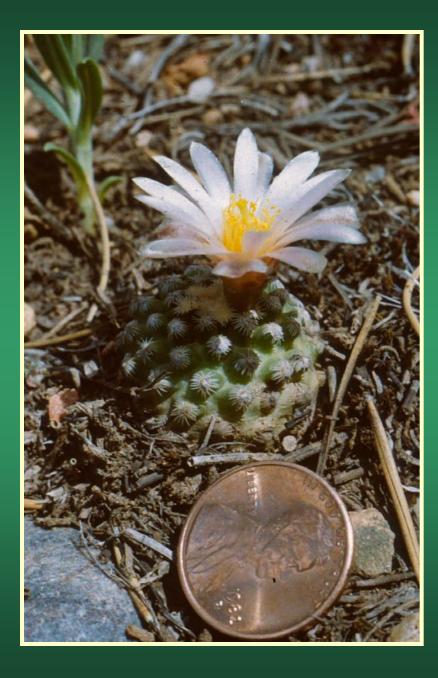
- Federal status: Threatened
- Heritage ranks: G1/S1
- <u>Global distribution</u>: Colorado endemic
- Last observed: 2007
- <u>Occurrences</u>: 7
- <u>Individuals</u>: 100,000-500,000
- <u>Primary threats</u>: oil and gas development, oil shale and nahcolite mining, ORV use, overgrazing, trampling by wild horses
- Land ownership/management: BLM, state, private

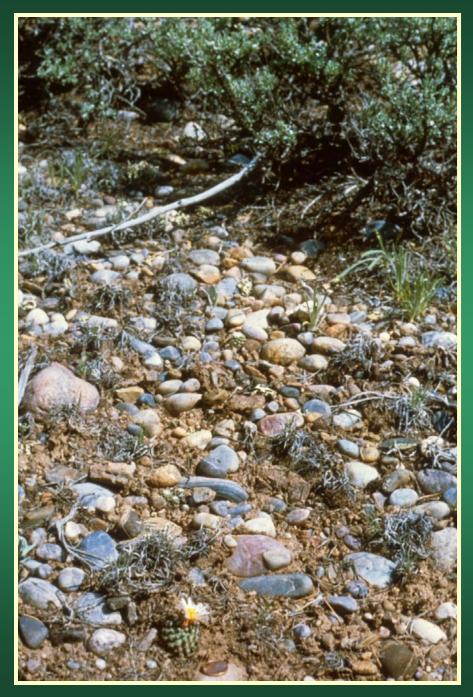


Pediocactus knowltonii Knowlton's cactus



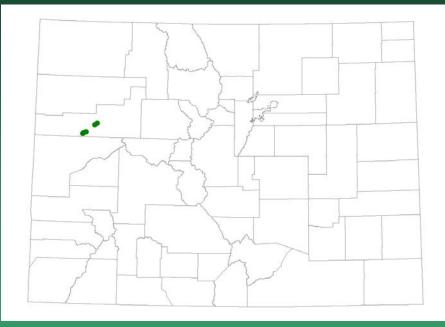
- Federal status: Endangered
- Heritage ranks: G1/SNA
- Global distribution: New Mexico and Colorado
- Last observed in Colorado: 1995
- <u>Colorado occurrences</u>: 0
- Individuals: 9,000 in NM
- <u>Primary threats</u>: cactus collection
- Land ownership: private, Ute





Penstemon debilis

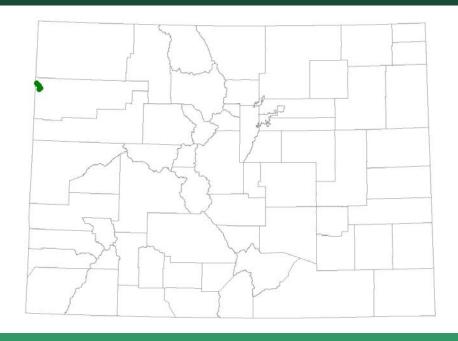
Parachute penstemon



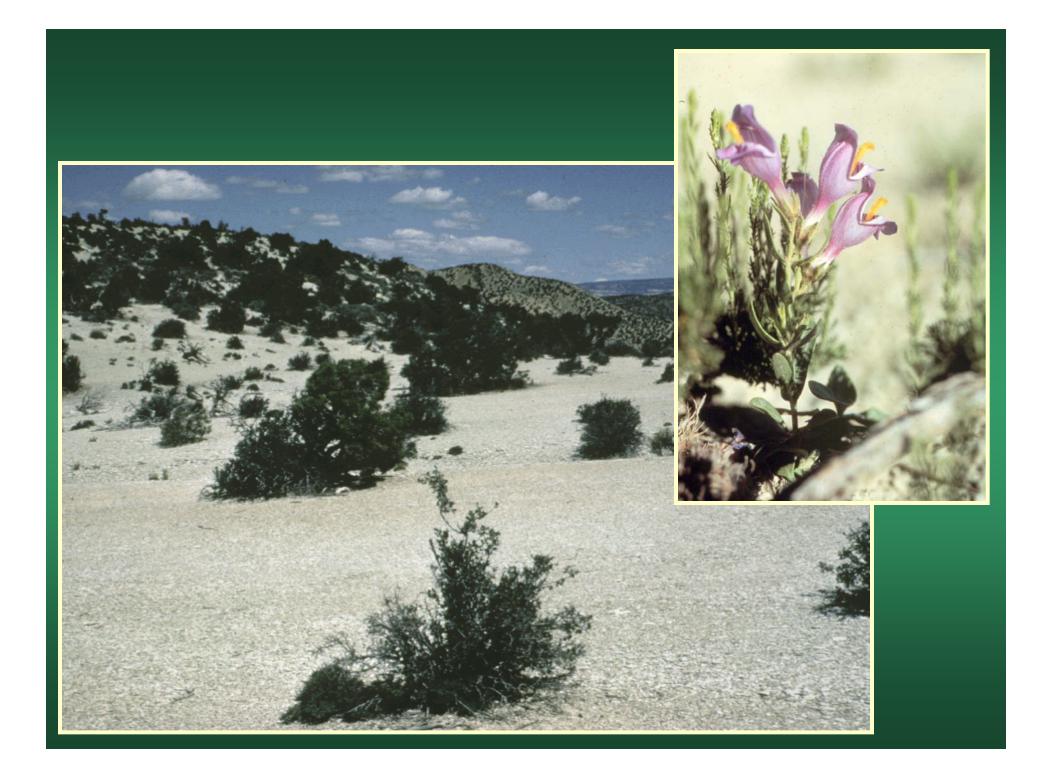
- Federal status: Candidate
- Heritage ranks: G1/S1
- <u>Global distribution</u>: Colorado endemic
- Last observed: 2005
- Occurrences: 5
- <u>Individuals</u>: 6,750
- <u>Primary threats</u>: oil and gas development, oil shale development, recreation
- Land ownership/management: private, BLM, DOE



Penstemon grahamii Graham beardtongue



- Federal status: Candidate
- <u>Heritage ranks</u>: G2/S1
- <u>Global distribution</u>: Utah and Colorado
- Last observed in Colorado: 2003
- Colorado occurrences: 5, 3 historical
- Colorado individuals: 5,000
- <u>Primary threats</u>: oil and gas development, overgrazing
- Land ownership/management: BLM



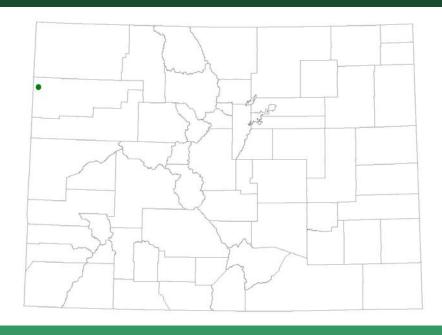
Penstemon penlandii Penland beardtongue



- <u>Federal status</u>: Endangered
- Heritage ranks: G1/S1
- <u>Global distribution</u>: Colorado endemic
- Last observed: 2005
- <u>Occurrences</u>: 2
- <u>Individuals</u>: 5,000-8,000
- <u>Primary threats</u>: road maintenance (grading, spraying, snow plowing), ORV use
- Land ownership/management: BLM, private



Penstemon scariosus var. albifluvis White River penstemon



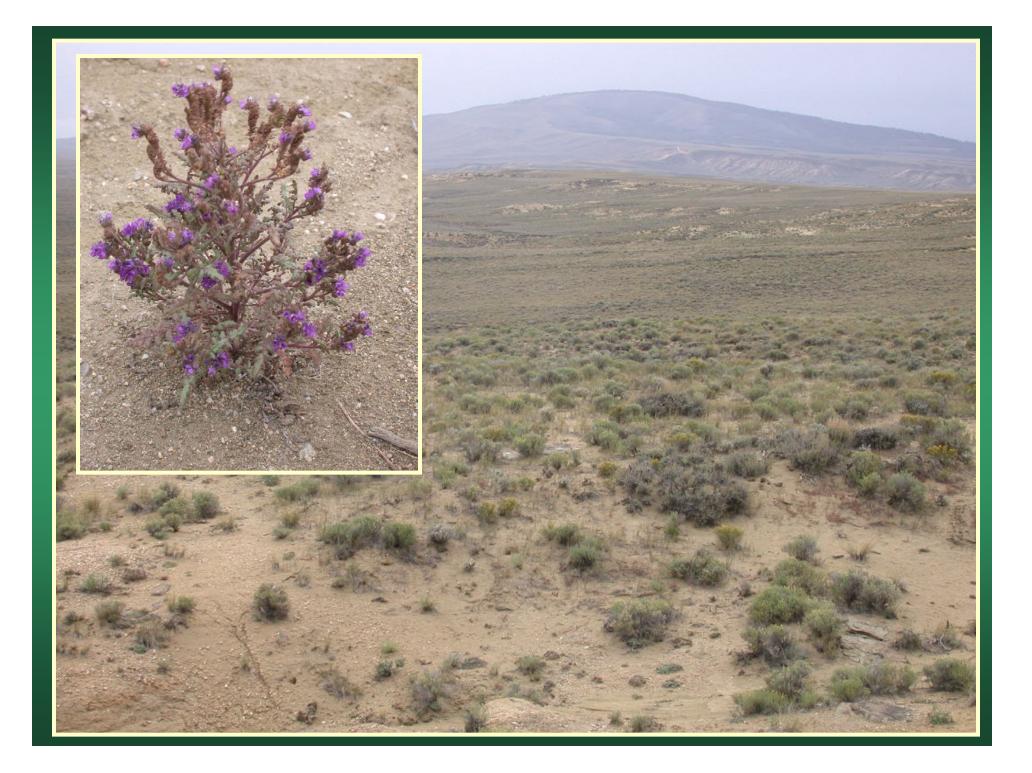
- <u>Federal status</u>: Candidate
- Heritage ranks: G4T1/S1
- <u>Global distribution</u>: Utah and Colorado
- Last observed in Colorado: 1999
- <u>Colorado occurrences</u>: 2
- <u>Colorado individuals</u>: 50-100
- <u>Primary threats</u>: overgrazing, oil and gas development, ORV use
- Land ownership/management: BLM, private



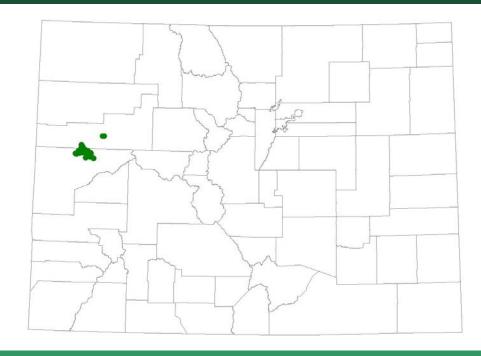
Phacelia formosula North Park phacelia



- <u>Federal status</u>: Endangered
- Heritage ranks: G1/S1
- <u>Global distribution</u>: Colorado endemic
- Last observed: 2005
- Occurrences: 9 (and 2 historical)
- <u>Individuals</u>: 8,000
- <u>Primary threats</u>: ORV use, coal extraction, overgrazing, oil and gas development
- Land ownership/management: BLM, private, USFWS



Phacelia submutica DeBeque phacelia



- <u>Federal status</u>: Candidate
- <u>Heritage ranks</u>: G4T2/S2
- <u>Global distribution</u>: Colorado endemic
- Last observed: 2004
- <u>Occurrences</u>: 35,14 historical
- <u>Individuals</u>: 25,000
- <u>Primary threats</u>: oil and gas development, ORV use, overgrazing, oil shale mining
- Land ownership/management: BLM, private, USFS, DOD



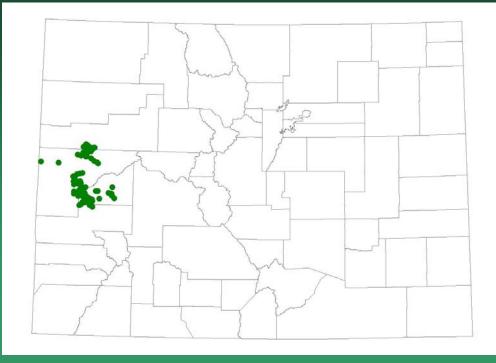
Physaria obcordata Piceance twinpod



- <u>Federal status</u>: Threatened
- <u>Heritage ranks</u>: G1G2/S1S2
- <u>Global distribution</u>: Colorado endemic
- Last observed: 2007
- <u>occurrences</u>: 9, 1 historical
- <u>Individuals</u>: 23,000
- <u>Primary threats</u>: oil and gas development, oil shale and nahcolite mining, ORV use, trampling by wild horses
- Land ownership/management: BLM, state, private



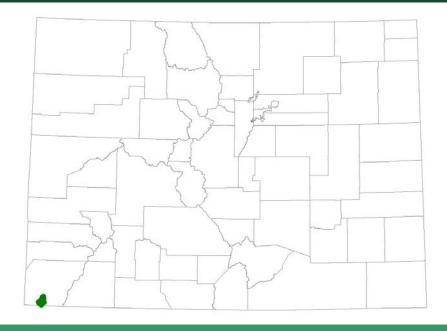
Sclerocactus glaucus Uinta Basin hookless cactus



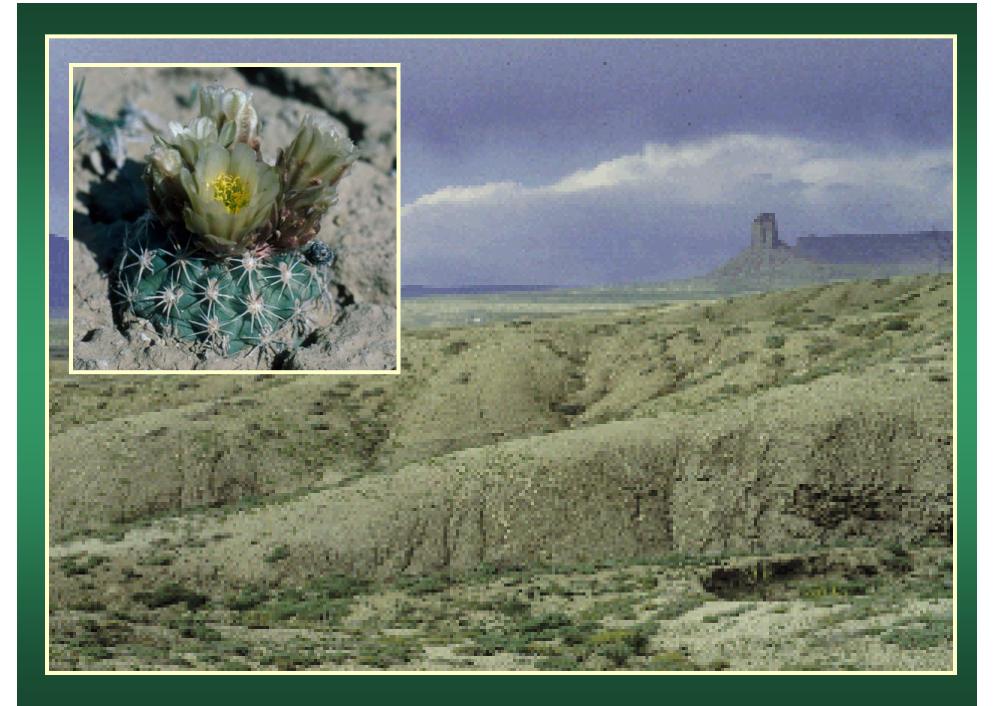
- <u>Federal status</u>: Threatened
- <u>Heritage ranks</u>: G3/S3
- Global distribution: Colorado
- Last observed in Colorado: 2001
- <u>Colorado occurrences</u>: 95
- Colorado individuals: 7600
- <u>Primary threats</u>: oil and gas development, residential development, cactus collecting
- Land ownership/management: BLM, state, private



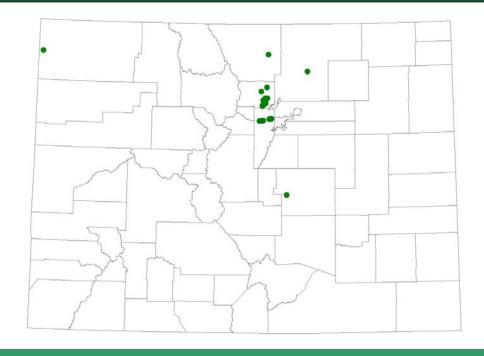
Sclerocactus mesae-verdae Mesa Verde cactus



- <u>Federal status</u>: Threatened
- <u>Heritage ranks</u>: G2/S2
- <u>Global distribution</u>: New Mexico and Colorado
- Last observed in Colorado: 2005
- <u>Colorado occurrences</u>: 23 probably a single large occurrence
- <u>Colorado individuals</u>: 2,000-10,000
- Primary threats: cactus collecting, oil and gas development, ORV use
- Land ownership/management: Ute Mountain Ute



Spiranthes diluvialis Ute ladies' tresses



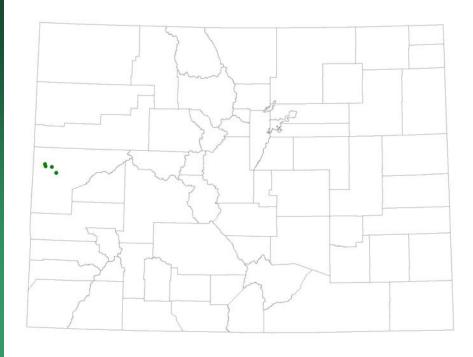
- <u>Federal status</u>: Threatened
- <u>Heritage ranks</u>: G2/S2
- <u>Global distribution</u>: Washington, Idaho, Montana, Wyoming, Nevada, Utah, Nebraska, and Colorado
- Last observed in Colorado: 2007
- <u>Colorado occurrences</u>: 17 (3 historical)
- <u>Colorado individuals</u>: 5,000-10,000
- <u>Primary threats</u>: 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



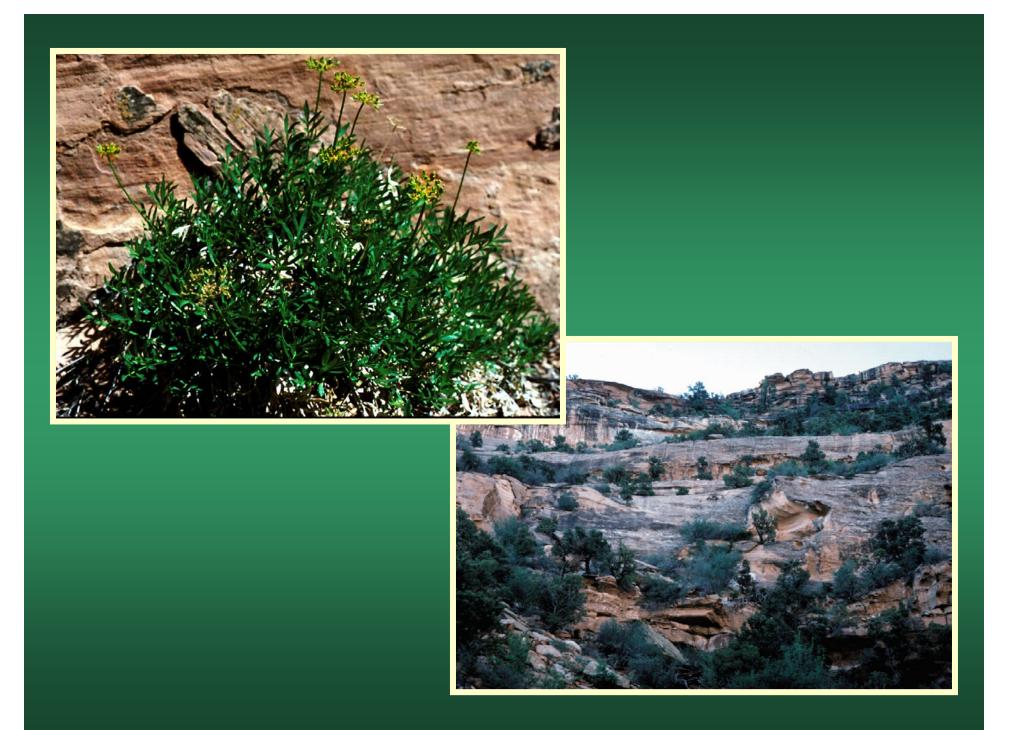
2005 Pagosa Springs

G1 species

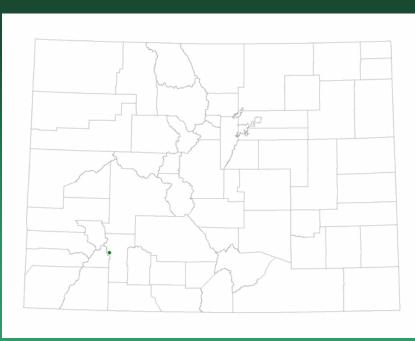
Aletes latilobus= Lomatium latilobum Canyonlands biscuitroot



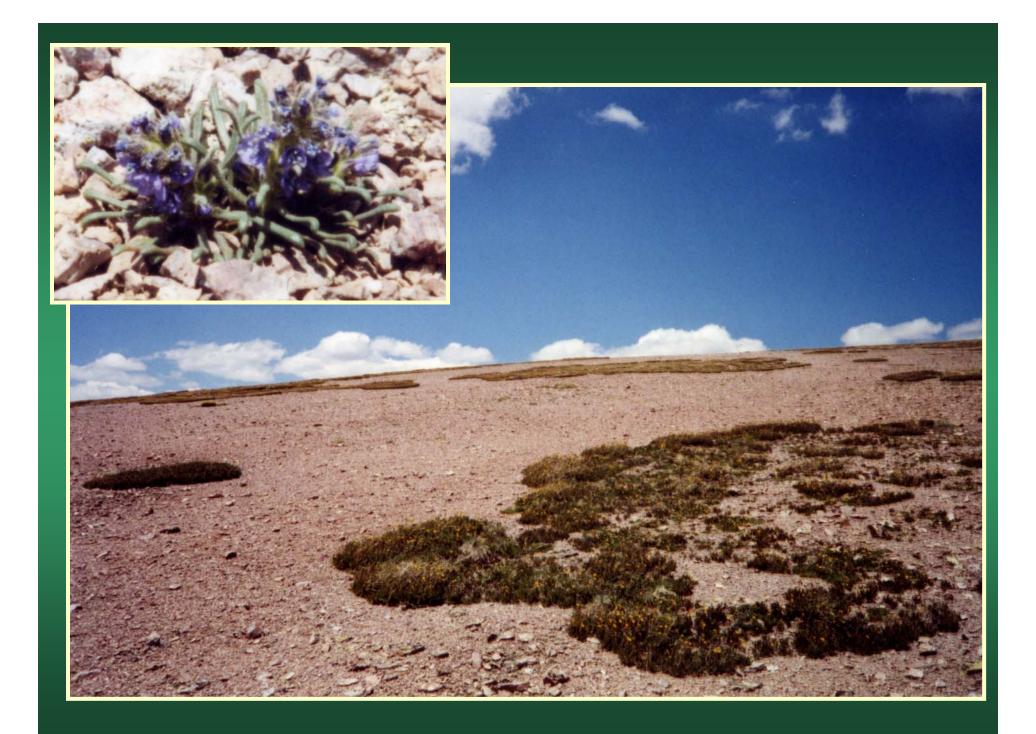
- <u>Federal status</u>: BLM sensitive
- Heritage ranks: G1/S1
- <u>Global distribution</u>: Utah (Grand and San Juan counties) and Colorado (Mesa County-- Colorado National Monument and Rattlesnake Canyon)
- Last observed in Colorado: 1997
- <u>Colorado occurrences</u>: Five (3 known extant, 2 from herbarium records)
- <u>Colorado individuals</u>: >5,000
- <u>Primary threats</u>: Habitat disturbance, Park developments, trampling by hikers
- <u>Land ownership/management</u>: Colorado National Monument, BLM, possibly on adjacent private



Aliciella sedifolia=Gilia sedifolia Stonecrop gilia

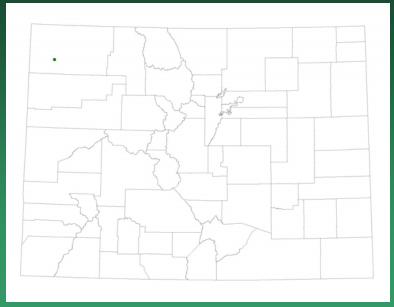


- <u>Federal status</u>: USFS sensitive
- Heritage ranks: G1/S1
- <u>Global distribution</u>: Colorado endemic, San Juan Mountains, Hinsdale County
- Last observed: 2007
- <u>Occurrences</u>: 2 (one of these has not been seen since 1892)
- <u>Individuals</u>: 1,100
- <u>Primary threats</u>: off-road vehicle use, recreation, sheep grazing, mining, noxious weed invasion, effects of small population size, global climate change, and pollution
- <u>Land ownership/management</u>: Gunnison and possibly San Juan National Forest



Astragalus lonchocarpus var. hamiltonii =A. hamiltonii

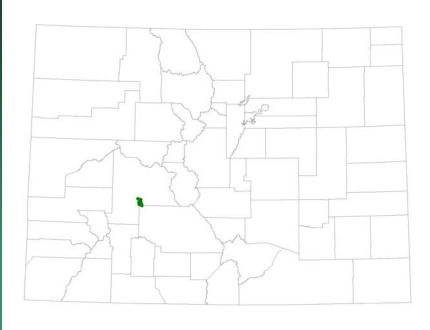
Hamilton's milkvetch



- <u>Federal status</u>: BLM sensitive in CO
- Heritage ranks: G1/S1
- <u>Global distribution</u>: Uintah County, Utah and Moffat County, Colorado
- Last observed in Colorado: 1991
- <u>Colorado occurrences</u>: 1
- <u>Colorado individuals</u>: 12
- <u>Primary threats</u>: unknown, area heavily grazed in past, OHV and oil & gas development for UT occurrences.
- <u>Land ownership/management</u>: Dinosaur NM in CO and UT; National Wildlife Refuge, Ute, BLM, State, and private in UT



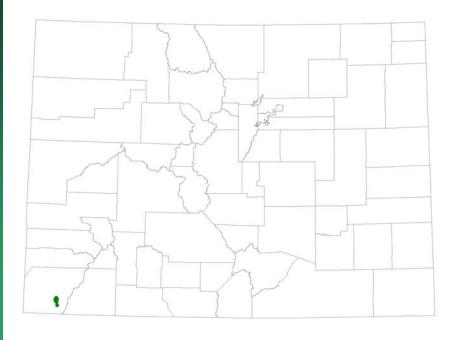
Astragalus microcymbus Skiff milkvetch



- <u>Federal status</u>: BLM sensitive
- Heritage ranks: G1/S1
- <u>Global distribution</u>: Colorado endemic, South Beaver Creek, Gunnison and Saguache counties
- Last observed: 1993 (monitored by DBG)
- <u>Occurrences</u>: 4 principal occurrences, 1 historical
- <u>Individuals</u>: 10,332
- <u>Primary threats</u>: recreation, grazing by cattle and rabbits, mining, residential development
- Land ownership/management: BLM (most occurrences within a BLM ACEC and South Beaver Creek Natural Area), private



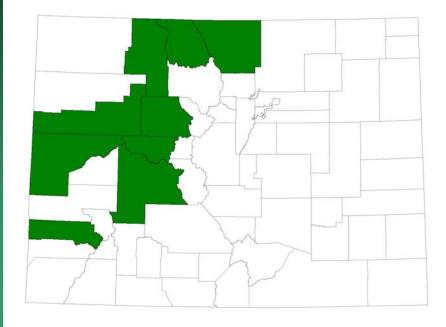
Astragalus schmolliae Schmoll's milkvetch



- <u>Federal status</u>: none
- Heritage ranks: G1/S1
- <u>Global distribution</u>: Colorado endemic, Chapin Mesa, Montezuma County
- Last observed: 2005
- <u>Occurrences</u>: 6 principal occurrences (2 not obs. In >20 years)
- Individuals: 294,499 in Mesa Verde, Tribal lands unsurveyed
- <u>Primary threats</u>: Noxious weed invasions, Park developments, grazing and road construction outside NP
- Land ownership/management: Mesa Verde National Park, Ute Mountain Ute Tribal lands



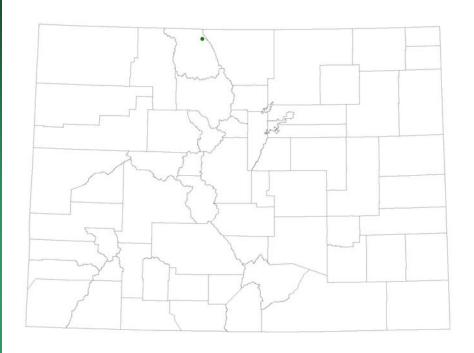
Cirsium scapanolepis Mountain slope thistle



- <u>Federal status</u>: none
- Heritage ranks: G1G2Q/S1
- <u>Global distribution</u>: Colorado endemic
- Last observed in Colorado: 1900-1983?
- <u>Colorado occurrences</u>: unknown, obscure
- <u>Colorado individuals</u>: unknown
- Primary threats: weevils, unknown
- Land ownership/management: unknown



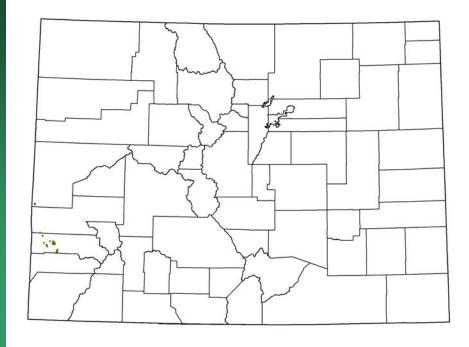
Corispermum navicula Crescent bugseed



- Federal status: none
- Heritage ranks: G1?/S1
- <u>Global distribution</u>: Colorado endemic, possibly Oklahoma
- Last observed: 2006
- <u>Occurrences</u>: 2 principal occurrences
- Individuals: common locally
- Primary threats: off-road vehicle use
- Land ownership/management: BLM, Kremmling Field Office



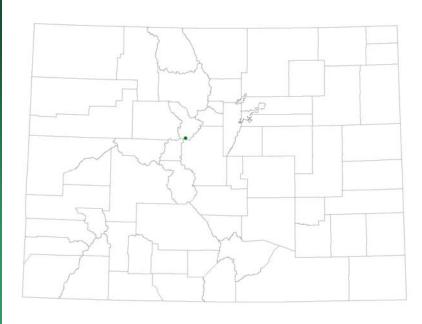
Cryptantha gypsophila Gypsum Valley Cat-eye



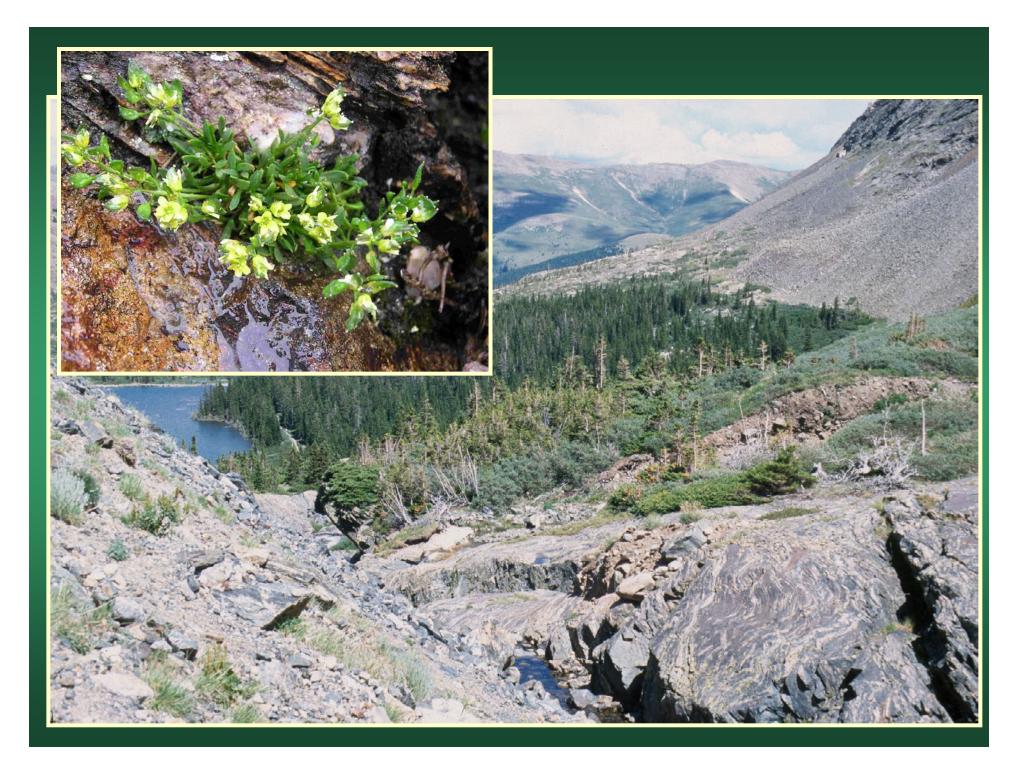
- <u>Federal status</u>: none
- <u>Heritage ranks</u>: G1G2/S1S2
- <u>S2Global distribution</u>: Colorado endemic, Mesa, Montrose & San Miguel Counties
- Last observed: 2005
- Occurrences: 8 principal occurrences.
- <u>Individuals</u>: 25,100+
- <u>Primary threats</u>: oil and gas development, grazing, ATVs, recreation, roads
- Land ownership/management: BLM, Private



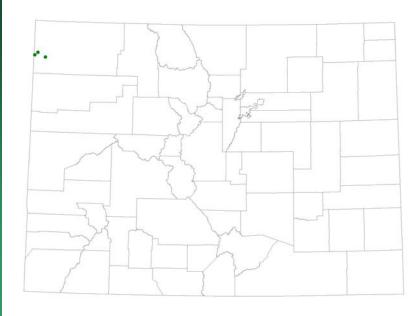
Draba weberi Weber's draba



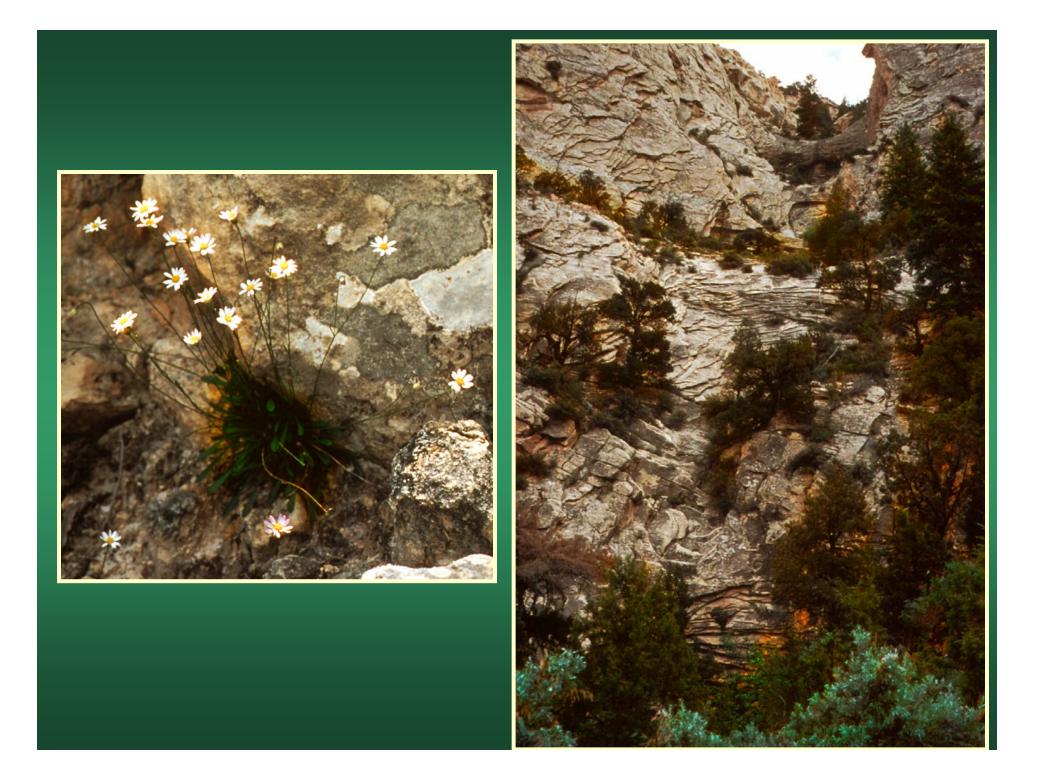
- <u>Federal status</u>: none
- Heritage ranks: G1/S1
- <u>Global distribution</u>: Colorado endemic, Monte Cristo Creek drainage in Summit County
- Last observed: 2006
- <u>Occurrences</u>: 1
- <u>Individuals</u>: 20-100
- <u>Primary threats</u>: road and dam construction and maintenance, environmental stochasticity, recreation, mining, noxious weeds, climate change
- Land ownership/management: private (Colo. Spgs. Utilities)



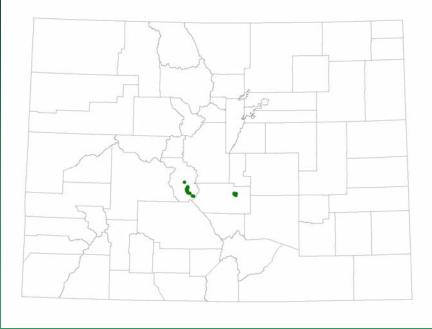
Erigeron wilkenii Dieter's fleabane



- <u>Federal status</u>: none
- Heritage ranks: G1/S1
- <u>Global distribution</u>: endemic to Colorado (Dinosaur National Monument, Moffat County)
- Last observed: 1995
- <u>Occurrences</u>: 4 (one is imprecisely described and may overlap with one of the other 3)
- <u>Individuals</u>: 1,000-3,000
- Primary threats: no specific threats known
- Land ownership: Dinosaur NM



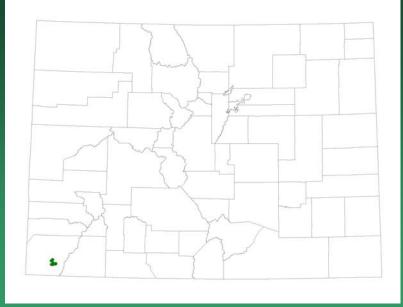
Eriogonum brandegeei Brandegee's buckwheat



- <u>Federal status</u>: USFS and BLM sensitive
- <u>Heritage ranks</u>: G1G2/S1S2
- <u>Global distribution</u>: Colorado endemic, Chaffee and Fremont counties
- Last observed: 2006
- Individuals: 35,000-several million
- Occurrences: 9
- <u>Primary threats</u>: off-road vehicle use and other recreation, residential and commercial development, timbering, mining, highway maintenance, weeds, grazing
- Land ownership/management: BLM (some within ACECs), state, private, highway right of way



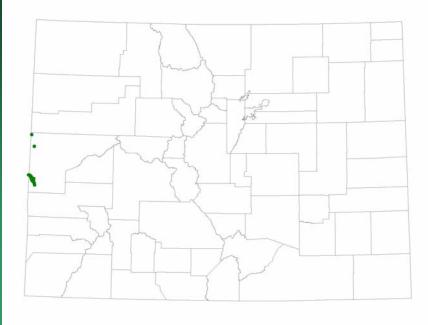
Hackelia gracilenta Mesa Verde stickseed



- <u>Federal status</u>: none
- Heritage ranks: G1/S1
- <u>Global distribution</u>: Colorado endemic, Mesa Verde National Park, Montezuma County
- Last observed: 1997 (some not since 1980)
- <u>Occurrences</u>: 10 (most have not been updated in CNHP databases in 25 or more years)
- <u>Individuals</u>: unknown, may be <1000
- <u>Primary threats</u>: Unknown, possibly recreation, and/or developments in the Park, such as trails or roads. Fires may have had an impact on this species.
- Land ownership/management: Mesa Verde NP



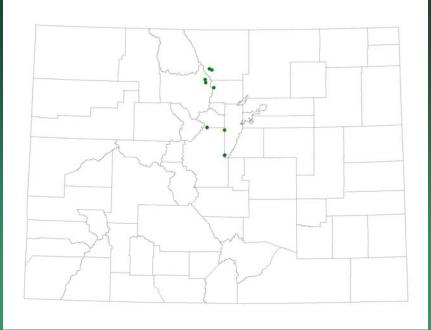
Lygodesmia doloresensis Dolores River skeletonplant



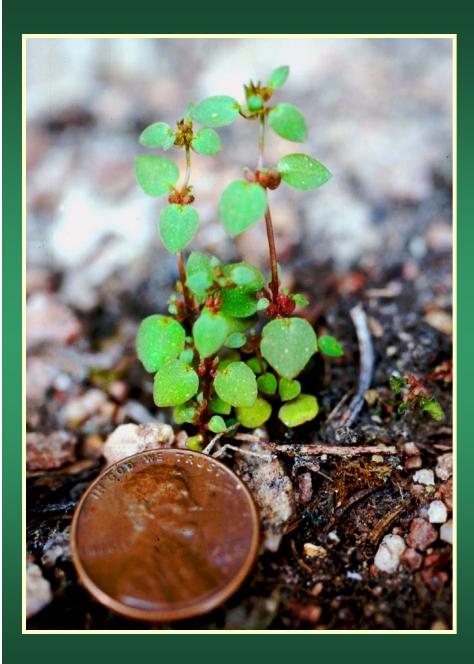
- Federal status: BLM sensitive in CO
- Heritage ranks: G1G2/S1
- Global distribution: Utah and Colorado (Mesa County)
- Last observed in Colorado: 2007
- <u>Colorado occurrences</u>: 11 or 12
- <u>Colorado individuals</u>: 2470
- <u>Primary threats</u>: deer, rabbit, and cattle grazing, private land development, road maintenance, weeds
- Land ownership/management: private, BLM

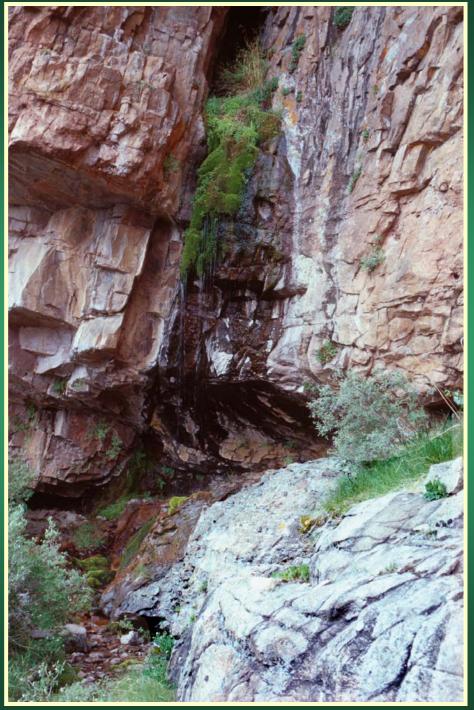


Mimulus gemmiparus Budding monkeyflower

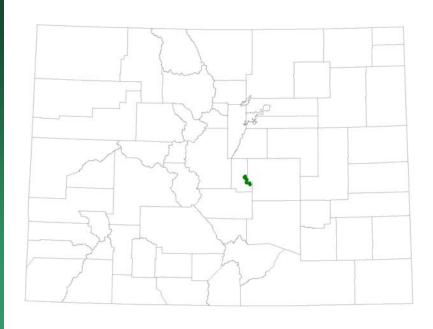


- <u>Federal status</u>: USFS sensitive
- Heritage ranks: G1/S1
- <u>Global distribution</u>: Colorado endemic, Boulder, Clear Creek, Jefferson, Grand, and Larimer counties
- Last observed: 2006
- <u>Occurrences</u>: 8
- <u>Individuals</u>: >125,000
- <u>Primary threats</u>: recreational activities, trampling, competition from other plants, interference with hydrology
- <u>Land ownership/management</u>: Rocky Mountain NP, Pike and Arapaho Roosevelt National Forests



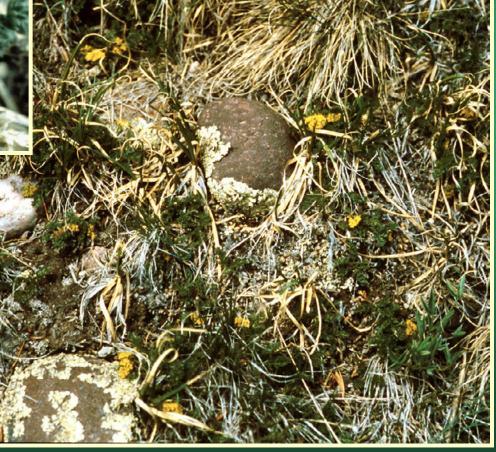


Oreoxis humilis Pike's Peak alpine parsley

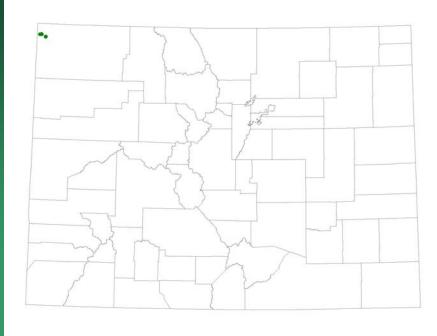


- Federal status: none
- Heritage ranks: G1/S1
- <u>Global distribution</u>: Colorado endemic (El Paso and Teller counties)
- Last observed: 2005
- <u>Occurrences</u>: 3 principal occurrences
- Individuals: 4,340 (tens of thousands estimated)
- <u>Primary threats</u>: road erosion and construction, structure maintenance, motorized and non-motorized recreation, herbivory, weeds
- <u>Land ownership/management</u>: Pike National Forest, private (Colorado Springs Utilities)





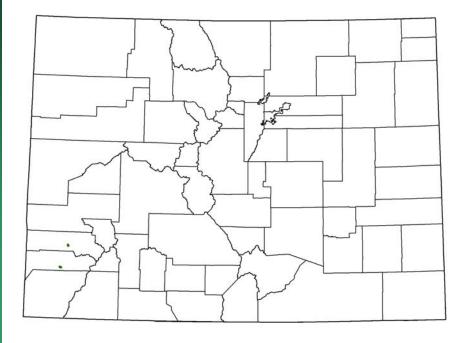
Penstemon gibbensii Gibbens' beardtongue



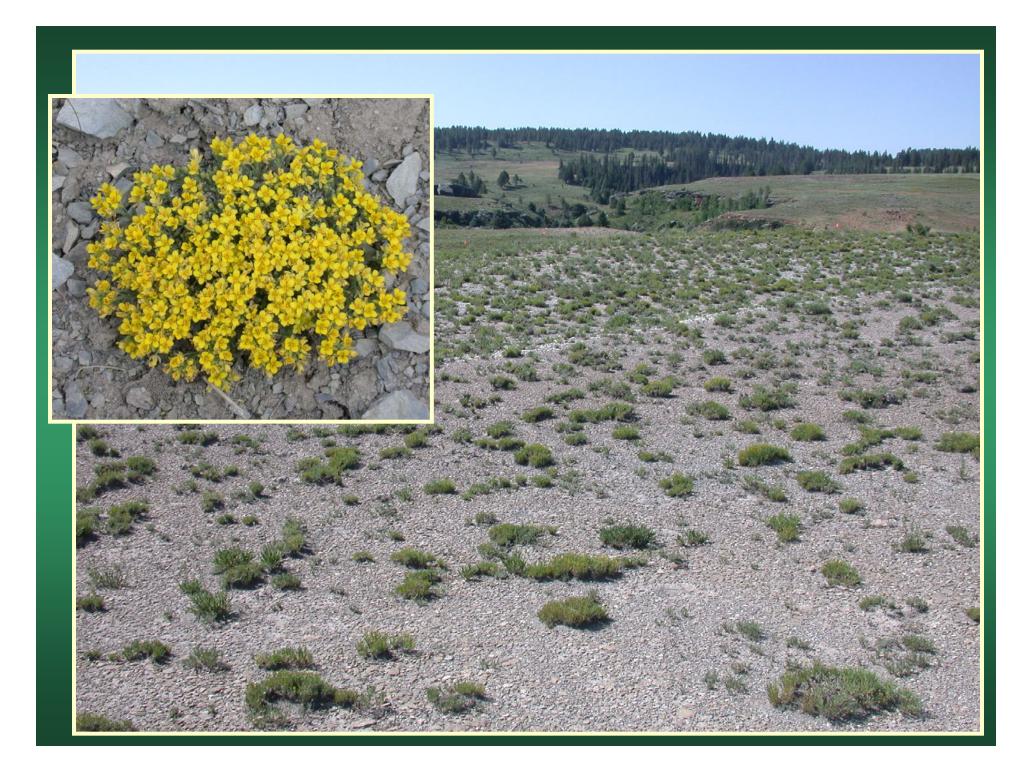
- <u>Federal status</u>: BLM sensitive
- Heritage ranks: G1/S1
- <u>Global distribution</u>: SC Wyoming, NE Utah, and NW Colorado
- Last observed in Colorado: 1999
- <u>Occurrences</u>: 7 total, 2 in CO
- Individuals: 17,000 individuals total, 6,300 in Colorado
- <u>Primary threats in CO</u>: noxious weeds, grazing, recreational activities, and uranium mining
- Land ownership in CO: BLM, National Wildlife Refuge



Physaria pulvinata Cushion bladderpod



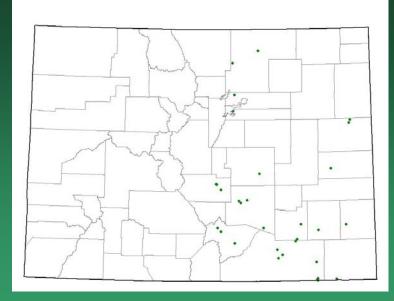
- <u>Federal status</u>: USFS sensitive
- Heritage ranks: G1/S1
- <u>Global distribution</u>: Colorado endemic, San Miguel and Dolores counties
- Last observed: 2007
- <u>Occurrences</u>: 2 locations
- <u>Individuals</u>: 7150+
- <u>Primary threats</u>: recreation, livestock trampling, weed control, habitat modification for sage grouse management, roads
- Land ownership/management: Colorado: Miramonte SWA and Lone Mesa State Park, San Juan NF; BLM, private



2006 Colorado Springs

G2 species

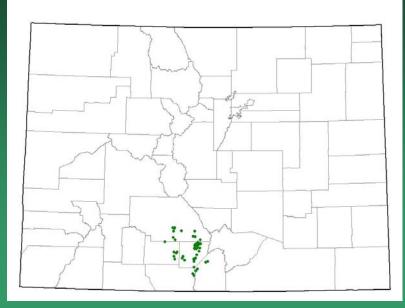
Asclepias uncialis ssp. uncialis Dwarf milkweed



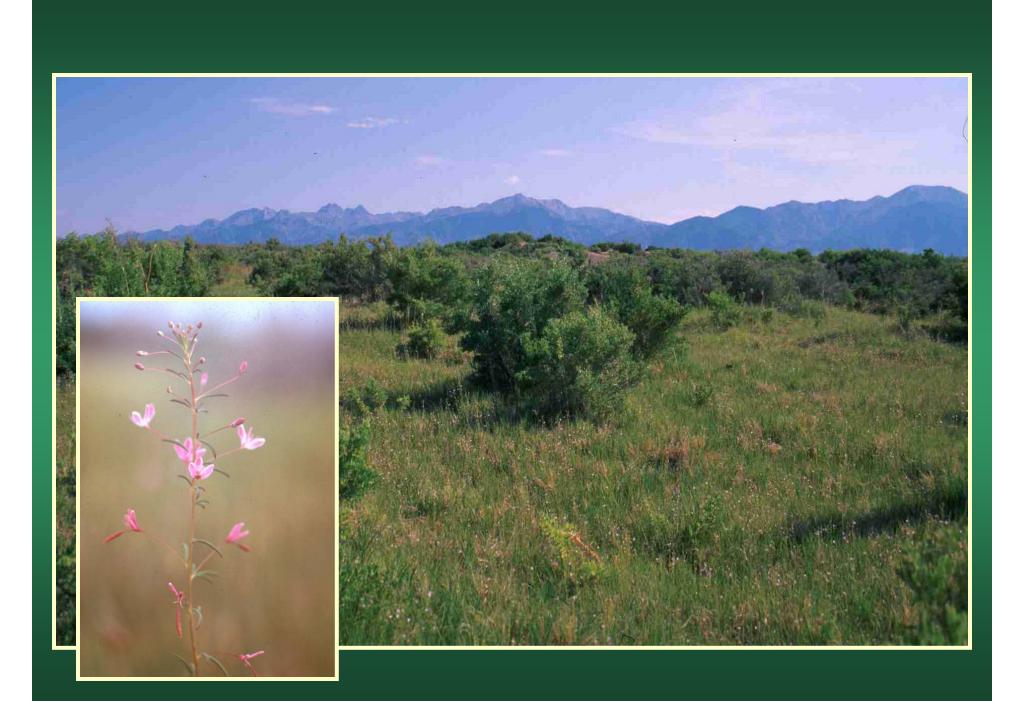
- <u>Federal status</u>: BLM/USFS sensitive
- <u>Heritage ranks</u>: G3G4T2T3/S2
- <u>Global distribution</u>: Arizona, Texas, New Mexico, Wyoming, Oklahoma and Eastern Colorado (Las Animas, Weld, Kit Carson, Huerfano, Pueblo, Otero, Prowers, Fremont, and El Paso counties)
- Last observed in Colorado: 2007
- <u>Colorado occurrences</u>: 20 extant, 13 historical
- 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, Military, Forest Service, Private, and State lands



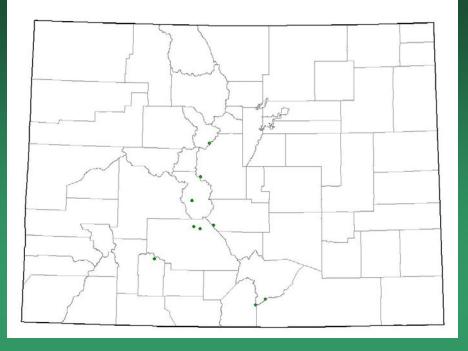
Cleome multicaulis Slender spiderflower



- <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)
- Last observed in Colorado: 2005
- <u>Colorado occurrences</u>: 35
- <u>Colorado individuals</u>: ~5,132,000
- <u>Primary threats</u>: draining of wetlands
- <u>Land ownership/management</u>: BLM, National Wildlife Refuge, Private, State, and Wilderness



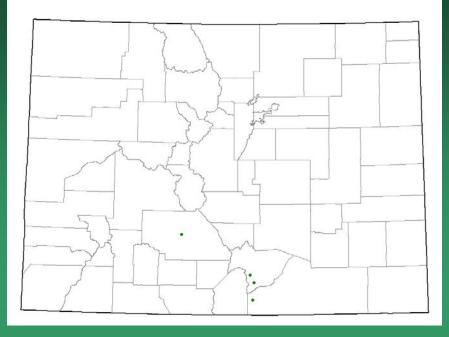
Delphinium ramosum var. alpestre = Delphinium alpestre Colorado larkspur



- <u>Federal status</u>: none
- <u>Heritage ranks</u>: G2/S2
- <u>Global distribution</u>: New Mexico and Colorado (Costilla, Chaffee, Fremont, Huerfano, Las Animas, Mineral, Park, Saguache, and Summit counties)
- Last observed in Colorado: 2005
- <u>Colorado occurrences</u>: 9, 4 historical
- <u>Colorado individuals</u>: ~75
- <u>Primary threats</u>: Trampling from recreational activities
- <u>Land ownership/management</u>: Forest Service, Private and Wilderness Areas



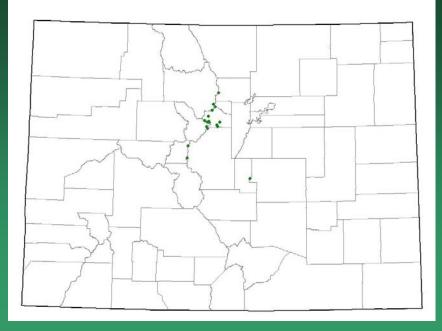
Delphinium robustum Wahatoya Creek larkspur



- <u>Federal status</u>: none
- <u>Heritage ranks</u>: G2?/S2?
- <u>Global distribution</u>: New Mexico and Colorado (Huerfano, El Paso, Las Animas, and Saguache counties)
- Last observed in Colorado: 1969
- <u>Colorado occurrences</u>: 4-9
- <u>Colorado individuals</u>: unknown
- <u>Primary threats</u>: 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, Forest Service, Private and State



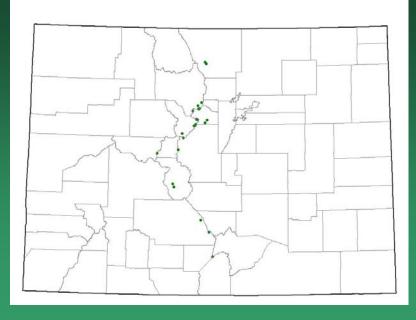
Draba exunguiculata Clawless draba



- <u>Federal status</u>: USFS sensitive
- <u>Heritage ranks</u>: G2/S2
- <u>Global distribution</u>: endemic to Colorado (Boulder, Clear Creek, El Paso, Gilpin, Grand, Lake, Park and Summit counties)
- Last observed in Colorado: 2006
- <u>Colorado occurrences</u>: 19
- <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
- <u>Land ownership/management</u>: BLM, Forest Service, Private, State and Wilderness Areas



Draba grayana Gray's Peak whitlow-grass



- <u>Federal status</u>: USFS sensitive
- <u>Heritage ranks</u>: G2/S2
- <u>Global distribution</u>: endemic to Colorado (Chaffee, Clear Creek, Grand, Huerfano, Larimer, Park, Pitkin, Saguache, and Summit counties)
- Last observed in Colorado: 2006
- <u>Colorado occurrences</u>: 34
- <u>Colorado individuals</u>: ~200
- <u>Primary threats</u>: Trampling from hikers and mountain goats, over-collection for gardens and global warming
- Land ownership/management: Forest Service, National Parks and Monuments, Private and Wilderness Areas



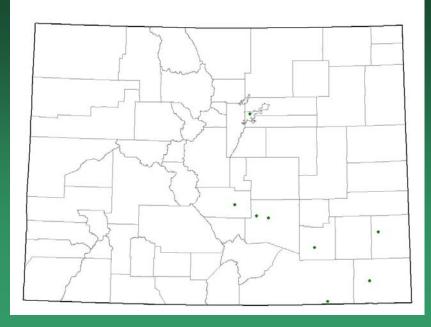
Draba smithii Smith's whitlow-grass



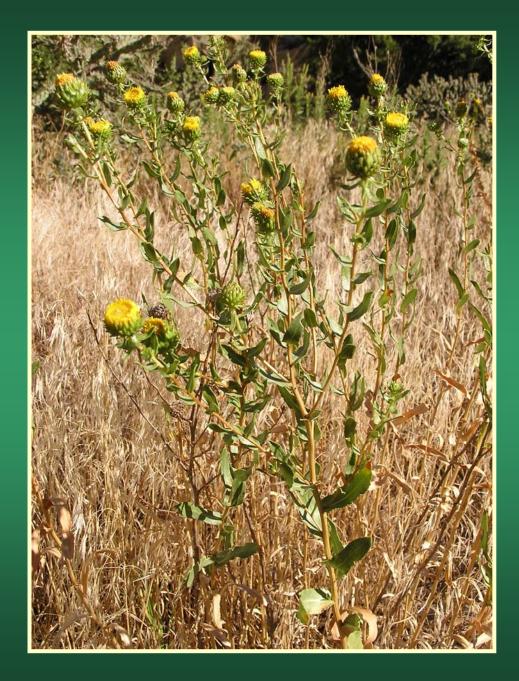
- <u>Federal status</u>: USFS sensitive
- <u>Heritage ranks</u>: G2/S2
- <u>Global distribution</u>: endemic to Colorado (Alamosa, Archuleta, Custer, Las Animas, Mineral, and Saguache counties)
- Last observed in Colorado: 2005
- <u>Colorado occurrences</u>: 21-22, 5 historical
- Colorado individuals: ~3200
- <u>Primary threats</u>: Habitat modification from hiking and construction
- Land ownership/management: Forest Service, Private and State



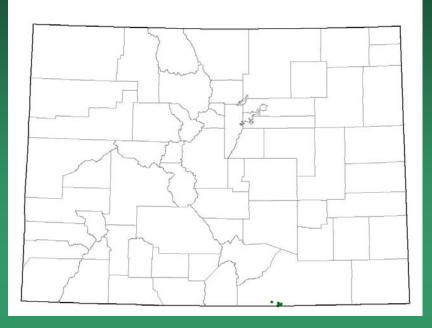
Grindelia inornata Colorado gumweed



- <u>Federal status</u>: none
- <u>Heritage ranks</u>: G4/S4
- <u>Global distribution</u>: endemic to Colorado (Baca, Denver, Fremont, Las Animas, Otero, Prowers, and Pueblo counties)
- Last observed in Colorado: 6/15/2003
- <u>Colorado occurrences</u>: 8 in CNHP db, but thought to be much more common
- <u>Colorado individuals</u>: unknown
- <u>Primary threats</u>: Residential and commercial development, and road maintenance activities
- <u>Land ownership/management</u>: BLM, Military, Forest Service, Private and State



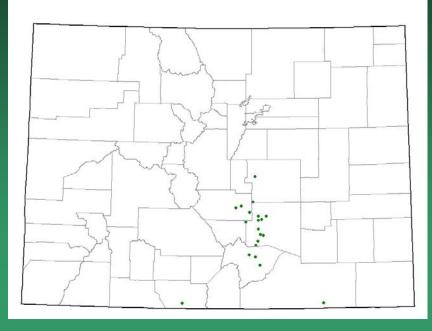
Herrickia horrida = Eurybia horrida Canadian River spiny aster or Horrid herrickia



- <u>Federal status</u>: none
- Heritage ranks: G2?/S1
- Global distribution: New Mexico and Colorado (Las Animas County)
- Last observed in Colorado: 1999
- <u>Colorado occurrences</u>: 5, 2 historical
- <u>Colorado individuals</u>: unknown
- <u>Primary threats</u>: unknown
- Land ownership/management: Private



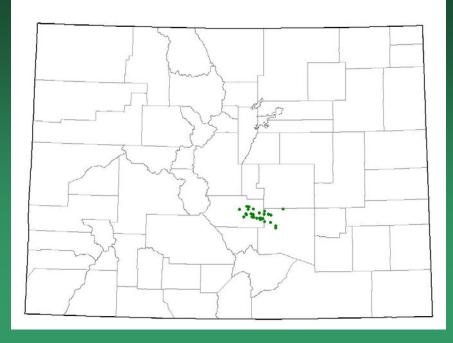
Lesquerella calcicola Rocky Mountain bladderpod



- <u>Federal status</u>: none
- <u>Heritage ranks</u>: G2/S2
- <u>Global distribution</u>: New Mexico and Colorado (Conejos, El Paso, Fremont, Huerfano, Las Animas, and Pueblo counties)
- Last observed in Colorado: 2006
- <u>Colorado occurrences</u>: 25, 3 historical
- <u>Colorado individuals</u>: ~2000
- <u>Primary threats</u>: This species occurs in areas that are experiencing rapid development pressures
- Land ownership/management: BLM, Military, Private, and State



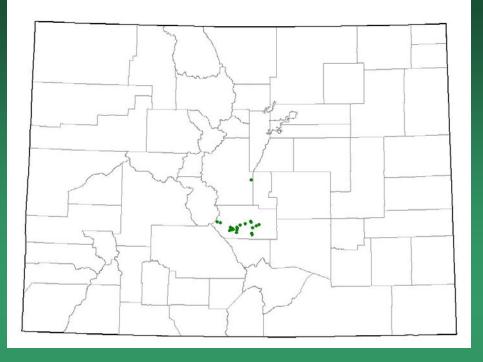
Nuttallia chrysantha = Mentzelia chrysantha Golden blazing star



- <u>Federal status</u>: BLM sensitive
- <u>Heritage ranks</u>: G2/S2
- <u>Global distribution</u>: endemic to Colorado (Fremont, El Paso, and Pueblo counties)
- Last observed in Colorado: 2007
- Colorado occurrences: 27, 3 historical
- <u>Colorado individuals</u>: ~4100
- <u>Primary threats</u>: Grazing, quarry activities, and subdivision and road construction
- Land ownership/management: BLM, Military, Private and State



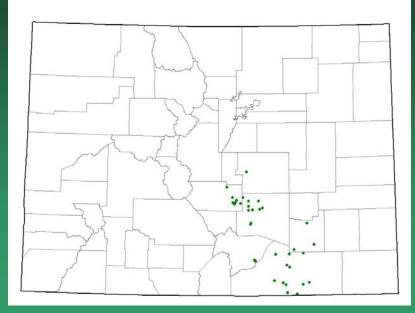
Nuttallia densa = Mentzelia densa Arkansas Canyon stickleaf



- <u>Federal status</u>: BLM sensitive
- <u>Heritage ranks</u>: G2/S2
- <u>Global distribution</u>: endemic to Colorado (Fremont County)
- Last observed in Colorado: 2006
- <u>Colorado occurrences</u>: 15, 4 historical
- <u>Colorado individuals</u>: ~13,500
- <u>Primary threats</u>: Recreational development and road construction
- Land ownership/management: BLM, Forest Service, Private and State



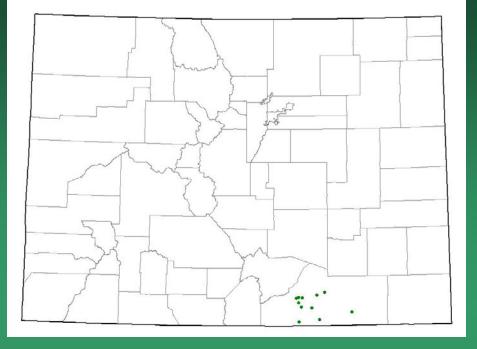
Oenothera harringtonii Arkansas Valley evening primrose



- <u>Federal status</u>: USFS sensitive
- <u>Heritage ranks</u>: G2/S2
- <u>Global distribution</u>: endemic to Colorado (El Paso, Fremont, Huerfano, Las Animas, Otero, and Pueblo counties)
- Last observed in Colorado: 2007
- <u>Colorado occurrences</u>: 40, 9 historical
- <u>Colorado individuals</u>: ~1500
- <u>Primary threats</u>: Habitat loss due to urbanization, road development projects, and resource extraction activities, especially quarrying and surface mining
- <u>Land ownership/management</u>: BLM, Military, Forest Service, Private and State



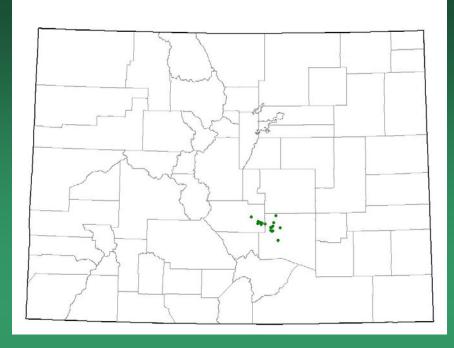
Oonopsis foliosa var. monocephala Rayless goldenweed



- <u>Federal status</u>: none
- <u>Heritage ranks</u>: G2G3T2/S2
- <u>Global distribution</u>: endemic to Colorado (Las Animas, Pueblo, and Fremont counties)
- Last observed in Colorado: 2007
- <u>Colorado occurrences</u>: 12+
- <u>Colorado individuals</u>: 400,000+
- <u>Primary threats</u>: Maintenance on current roads or further developments may disturb or destroy individuals
- Land ownership/management: BLM, Military, Private and State



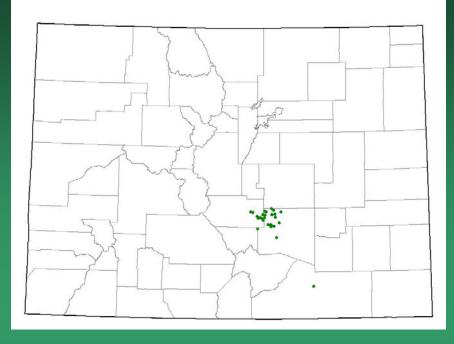
Oonopsis sp. 1 = Oonopsis puebloensis Pueblo goldenweed



- Federal status: none
- <u>Heritage ranks</u>: G2/S2
- <u>Global distribution</u>: endemic to Colorado (Fremont and Pueblo counties)
- Last observed in Colorado: 2007
- <u>Colorado occurrences</u>: 18
- Colorado individuals: ~11,000 or more
- <u>Primary threats</u>: Shale extraction by cement plants
- Land ownership/management: Private and Military



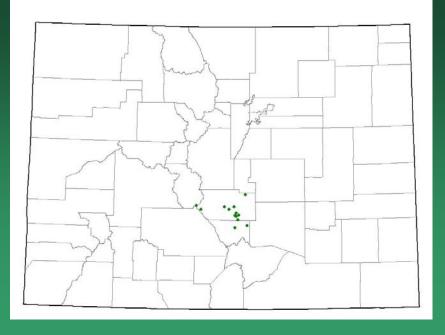
Oxybaphus rotundifolius = Mirabilis rotundifolia Round-leaf four-o'clock



- <u>Federal status</u>: none
- <u>Heritage ranks</u>: G2/S2
- <u>Global distribution</u>: endemic to Colorado (Fremont, Las Animas, El Paso and Pueblo counties)
- Last observed in Colorado: 2007
- Colorado occurrences: 29, 1 historical
- <u>Colorado individuals</u>: ~6200
- <u>Primary threats</u>: Highly threatened by residential and recreational development
- Land ownership/management: BLM, Military, Private and State



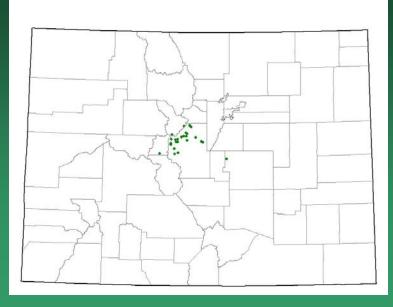
Penstemon degeneri Degener beardtongue



- <u>Federal status</u>: USFS and BLM sensitive
- <u>Heritage ranks</u>: G2/S2
- <u>Global distribution</u>: endemic to Colorado (Chaffee, Custer and Fremont counties)
- Last observed in Colorado: 2007
- <u>Colorado occurrences</u>: 13, 1 historical
- <u>Colorado individuals</u>: ~1500
- <u>Primary threats</u>: Motorized and non-motorized recreation, non-native plant invasion, grazing and trampling, extensive herbivory, succession, and global environmental changes
- Land ownership/management: BLM, Forest Service, Private and State



Ptilagrostis porteri Porter feathergrass



- <u>Federal status</u>: USFS and BLM sensitive
- <u>Heritage ranks</u>: G2/S2
- <u>Global distribution</u>: endemic to Colorado (El Paso, Lake, Park and Summit counties)
- Last observed in Colorado: 2006
- <u>Colorado occurrences</u>: 25, 2 historical.
- <u>Colorado individuals</u>: ~408,000
- <u>Primary threats</u>: Alterations to the water table resulting from increased diversion and pumping for the metropolitan front range
- Land ownership/management: BLM, Forest Service, and Private



Telesonix jamesii James' telesonix



- Federal status: none
- <u>Heritage ranks</u>: G2/S2
- <u>Global distribution</u>: New Mexico and Colorado (El Paso, Jefferson, Larimer, Park, and Teller counties)
- Last observed in Colorado: 2000
- <u>Colorado occurrences</u>: 15
- <u>Colorado individuals</u>: ~15,200
- <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, Military, Forest Service, Private and State

