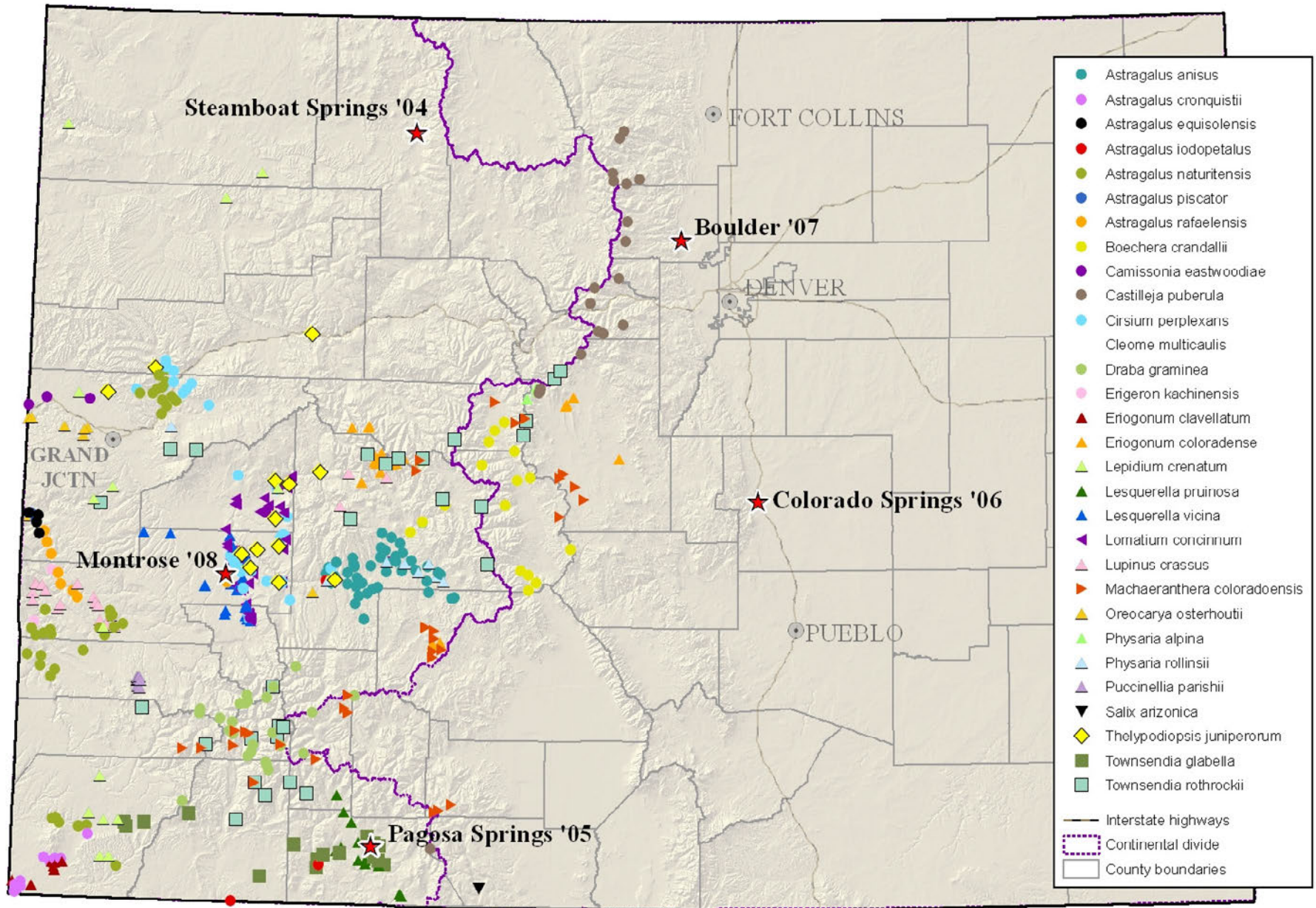


The Colorado Rare Plant Technical Committee presents:
5th Annual
Colorado Rare Plant Symposium
September 5, 2008
Montrose, Colorado

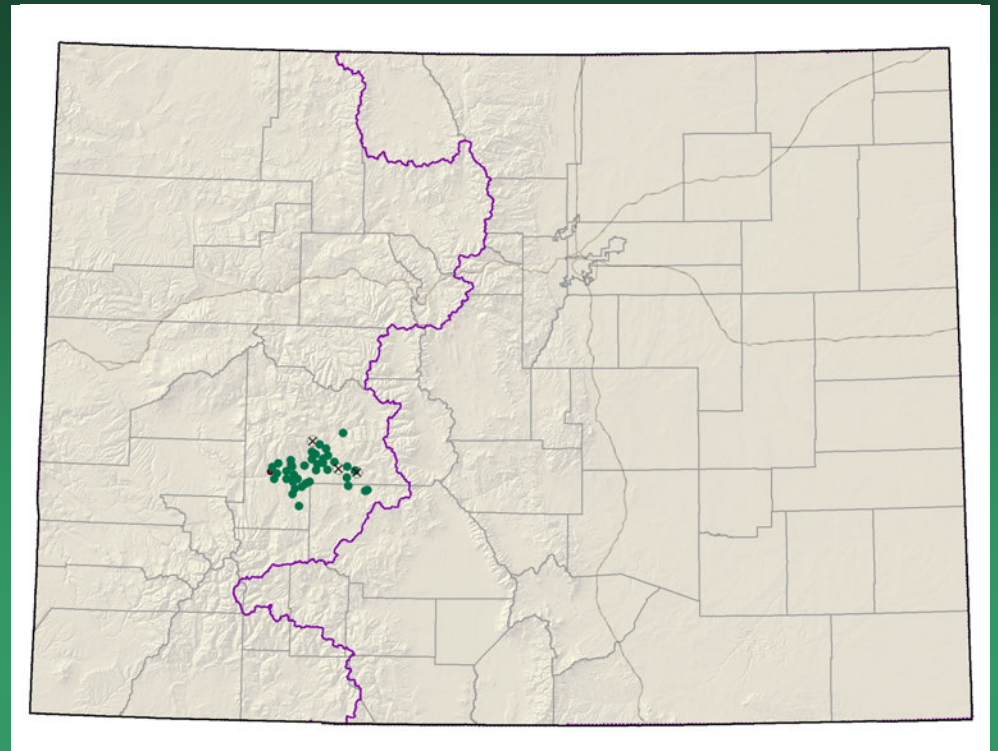
Sponsored by:

Colorado Rare Plant Technical Committee
Colorado Native Plant Society
University of Colorado Herbarium
US Fish and Wildlife Service
Colorado Natural Heritage Program
USDA Forest Service





Astragalus anisus Gunnison milkvetch



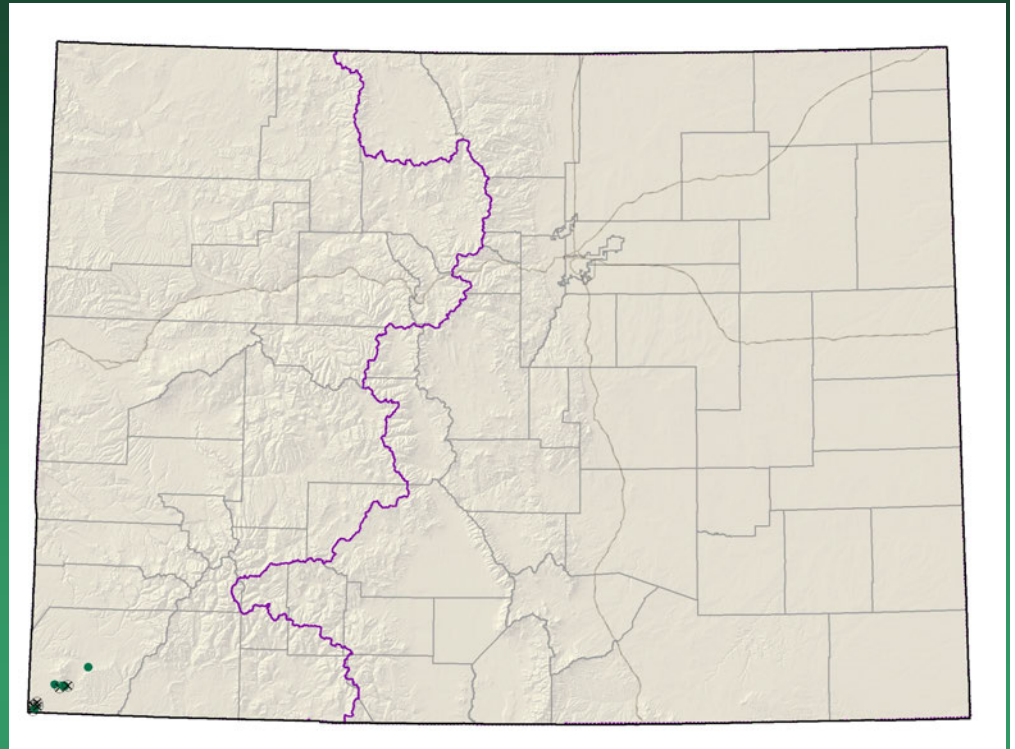
- Federal status: BLM sensitive
- Heritage ranks: G2G3/S2S3
- Global distribution: endemic to Colorado (Gunnison & Saguache counties)
- Last observed in Colorado: Lederer & Clark 2004
- Colorado occurrences: 40, 3 historical, 1 extirpated
- Colorado individuals: 5000-10,000?
- Primary threats: road building, off-road vehicle use, non-motorized recreation, non-native species invasion, grazing, residential development, fire suppression, resource extraction, and global climate change.
- Land ownership/management: BLM, USFS, NPS, state, private



Astragalus anisus

Astragalus cronquistii

Cronquist's milkvetch



- Federal status: BLM sensitive
- Heritage ranks: G2/S2
- Global distribution: Utah and Colorado (Montezuma county)
- Last observed in Colorado: 1993
- Colorado occurrences: 13, 8 historical
- Colorado individuals: ~1500
- Primary threats: roads, unknown
- Land ownership/management: Tribal



Astragalus cronquistii

Astragalus equisolensis=
A. desperatus var. *neeseae*
horseshoe milkvetch

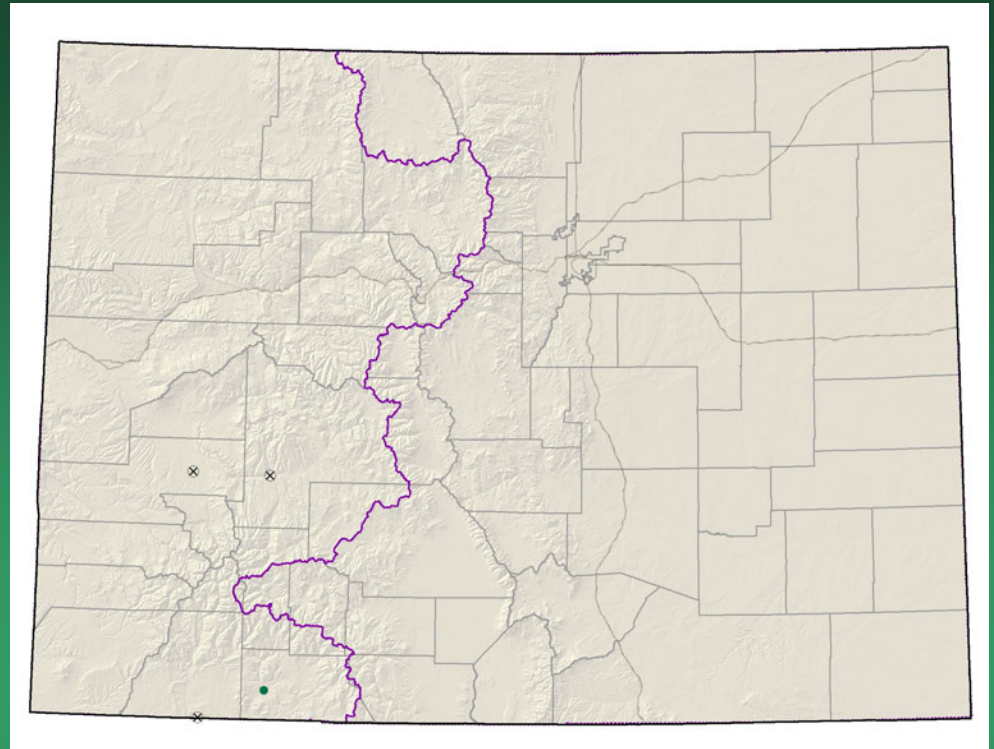


- Federal status: none
- Heritage ranks: G5T1/S1
- Global distribution: Utah and Colorado (Mesa County)
- Last observed in Colorado: 2008
- Colorado occurrences: 1 (plus 3 historic)
- Colorado individuals: ~50
- Primary threats: unknown
- Land ownership/management: BLM, private

Astragalus equisolensis

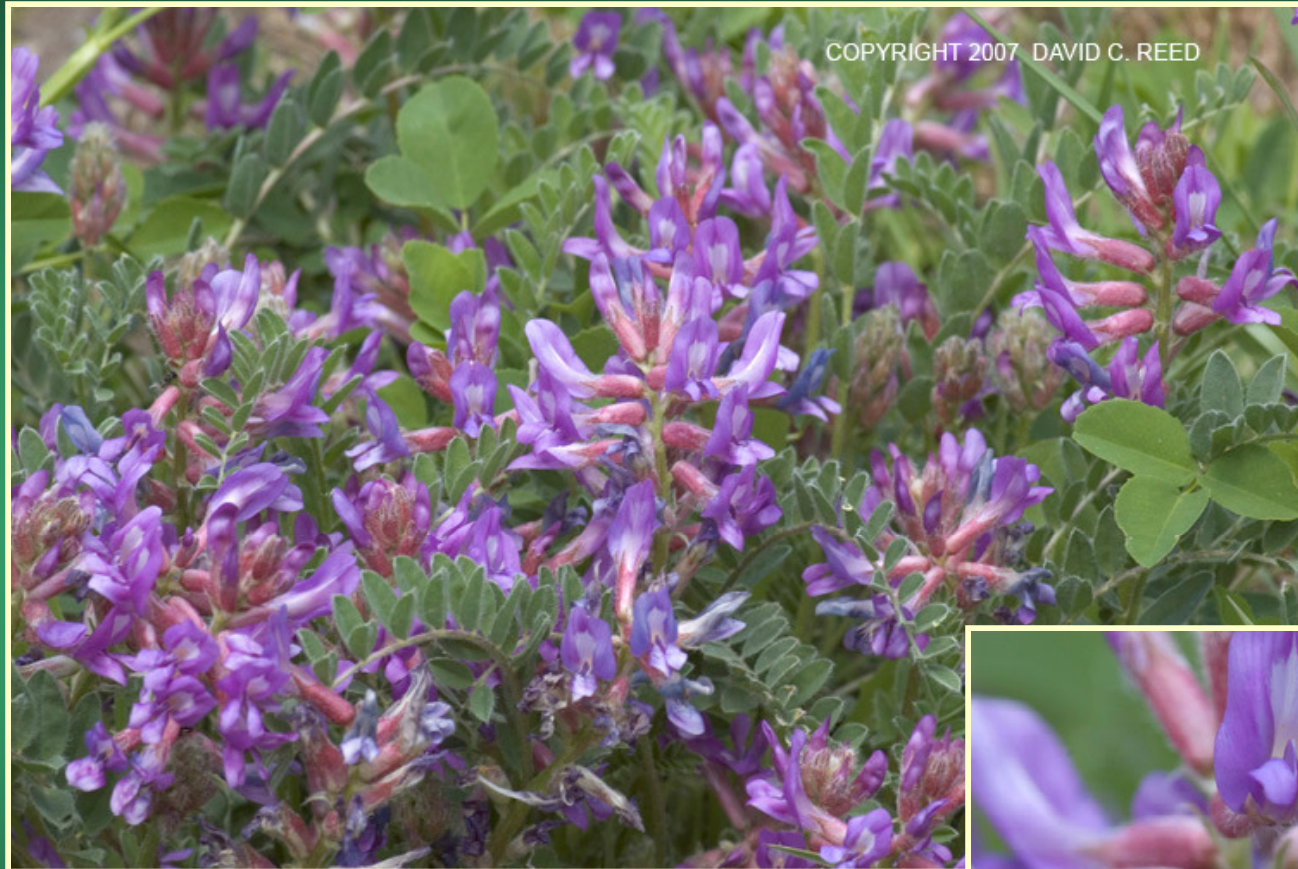


Astragalus iodopetalus violet milkvetch

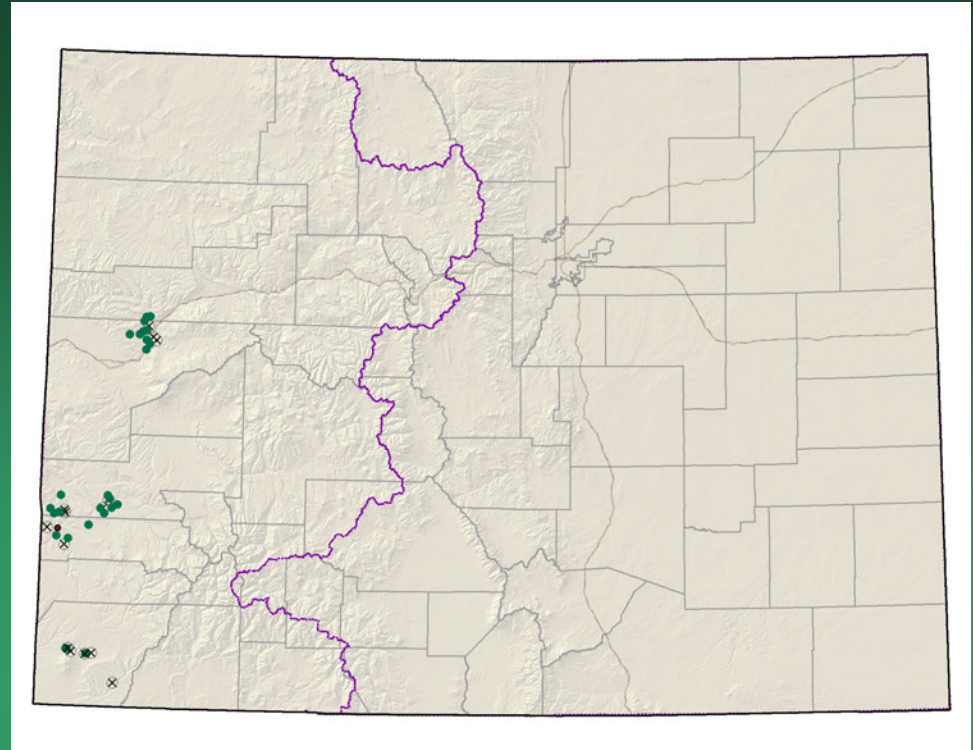


- Federal status: none
- Heritage ranks: G2/S1
- Global distribution: New Mexico (historic) and Colorado (Archuleta, Gunnison, La Plata and Montrose counties).
- Last observed in Colorado: Edwards 1993
- Colorado occurrences: 4, 3 historical
- Colorado individuals: unknown
- Primary threats: unknown
- Land ownership/management: USFS, Chimney Rock Archeological Area

Astragalus iodopetalus



Astragalus naturitensis Naturita milkvetch



- Federal status: BLM sensitive
- Heritage ranks: G2G3/S2S3
- Global distribution: New Mexico, Utah, the Navajo Nation and Colorado (Garfield, Mesa, Montezuma, Montrose and San Miguel counties)
- Last observed in Colorado: 2008
- Colorado occurrences: 40, 14 historical
- Colorado individuals:
- Primary threats: Uranium claims, housing, crop/farming
- Land ownership/management: BLM, private

Astragalus naturitensis



Astragalus piscator Fisher Towers milkvetch



- Federal status: BLM sensitive
- Heritage ranks: G2G3/S1
- Global distribution: Utah and Colorado (Mesa County)
- Last observed in Colorado: 2008
- Colorado occurrences: 3
- Colorado individuals: 3000-5000
- Primary threats: recreation, roads
- Land ownership/management: BLM

Astragalus piscator



Astragalus rafaensis

San Rafael milkvetch

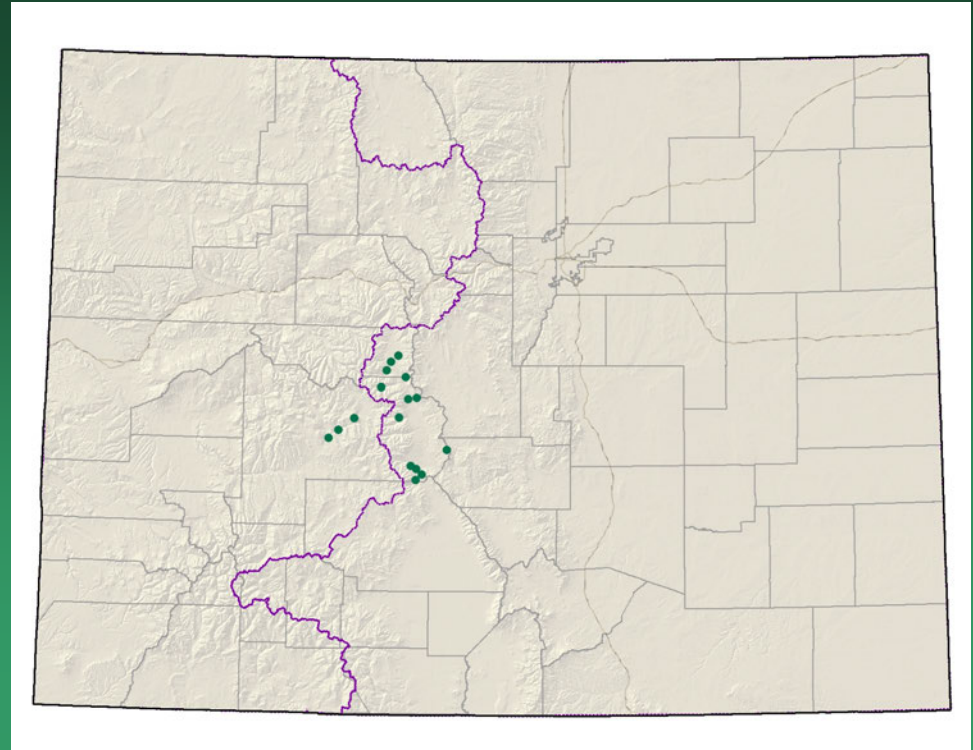


- Federal status: BLM sensitive
- Heritage ranks: G2G3/S1
- Global distribution: Navajo Basin endemic. Utah and Colorado (Montrose, Mesa and La Plata counties)
- Last observed in Colorado: 2008
- Colorado occurrences: 8 or more (2 are historical)
- Colorado individuals: >1000
- Primary threats: unknown
- Land ownership/management: BLM, private

Astragalus rafaensis



Boechea crandallii=
Arabis crandallii
Crandall's rock-cress



- Federal status: BLM sensitive
- Heritage ranks: G2/S2
- Global distribution: Wyoming and Colorado (Gunnison, Chaffee, and Lake counties)
- Last observed in Colorado: 2007
- Colorado occurrences: 16
- Colorado individuals:
- Primary threats: habitat loss/degradation, road construction
- Land ownership/management: USFS, BLM, private

Boechea crandallii



Camissonia eastwoodiae
Eastwood evening
primrose

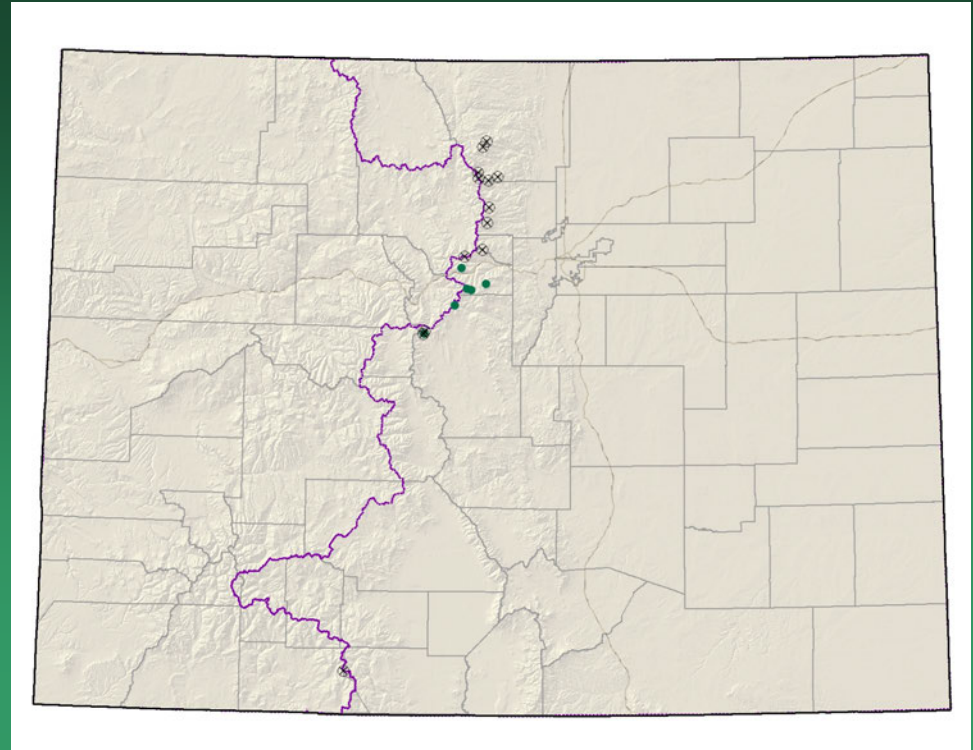


- Federal status: none
- Heritage ranks: G2/S1
- Global distribution: Utah and Colorado (Delta and Mesa counties)
- Last observed in Colorado: 2003
- Colorado occurrences: 4 (2 are historical)
- Colorado individuals: several thousand
- Primary threats: unknown
- Land ownership/management: BLM, private

Camissonia eastwoodiae



Castilleja puberula downy indian paintbrush

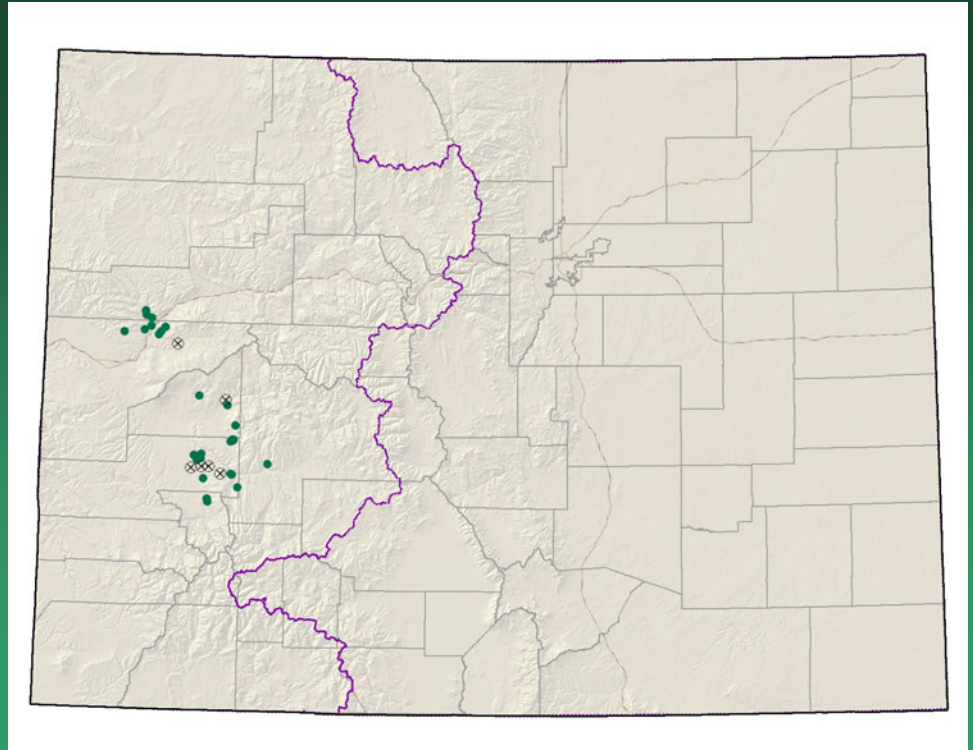


- Federal status: none
- Heritage ranks: G2G3/S2S3
- Global distribution: Colorado endemic (Park, Larimer, Clear Creek, Boulder, and Grand counties)
- Last observed in Colorado: 2002
- Colorado occurrences: 19 (13 are historical)
- Colorado individuals: >250
- Primary threats: May be threatened by off-road-vehicle use
- Land ownership/management: USFS, private

Castilleja puberula



Cirsium perplexans adobe thistle

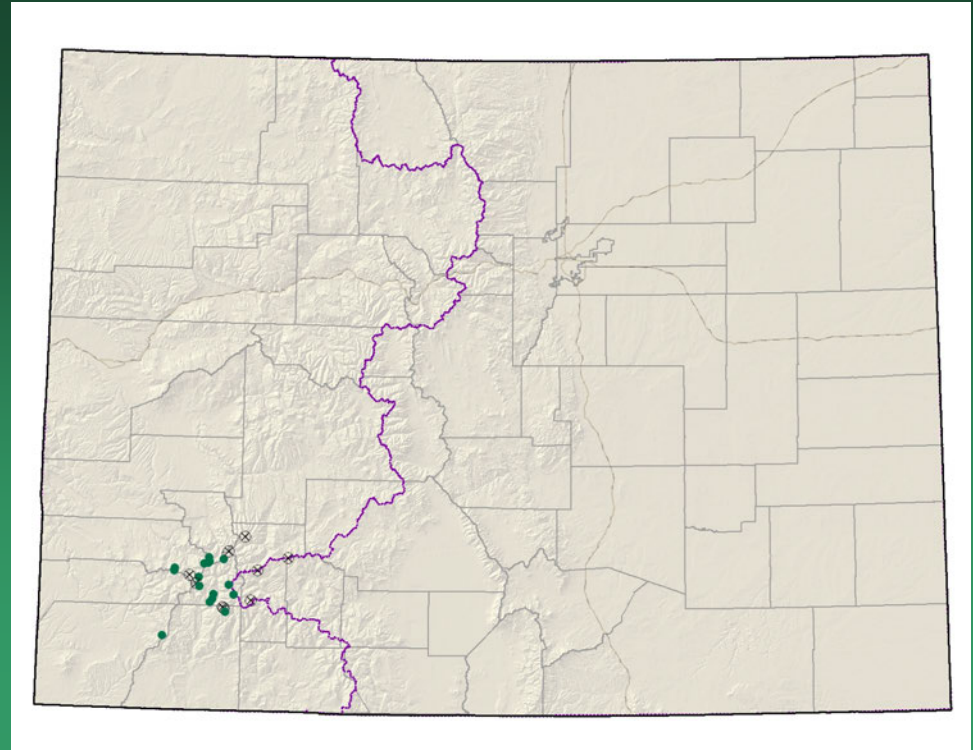


- Federal status: BLM & USFS sensitive
- Heritage ranks: G2G3/S2S3
- Global distribution: Colorado endemic (Delta, Mesa, Montrose, Gunnison, Garfield, and Ouray counties)
- Last observed in Colorado: 2006
- Colorado occurrences: 30 (6 are historical)
- Colorado individuals: ~4000
- Primary threats: Bio or other control for non-native thistles
- Land ownership/management: BLM, private, USFS, NPS, state

Cirsium perplexans



Draba graminea
San Juan whitlow-grass



- Federal status: none
- Heritage ranks: G2/S2
- Global distribution: Colorado endemic (Dolores, Hinsdale, La Plata, Montezuma, Ouray, San Juan, and San Miguel counties)
- Last observed in Colorado: 2008
- Colorado occurrences: 25 (9 are historical)
- Colorado individuals: >8000
- Primary threats: Non-motorized recreation
- Land ownership/management: USFS, private

Draba graminea



Erigeron kachinensis kachina daisy



- Federal status: BLM sensitive
- Heritage ranks: G2/S1
- Global distribution: Utah and Colorado (Montrose county)
- Last observed in Colorado: 2008
- Colorado occurrences: 2
- Colorado individuals: est. 7,600
- Primary threats: mining, energy development, or water projects could affect water supplies to habitat
- Land ownership/management: BLM



Erigeron kachinensis

Eriogonum clavellatum
Comb Wash buckwheat

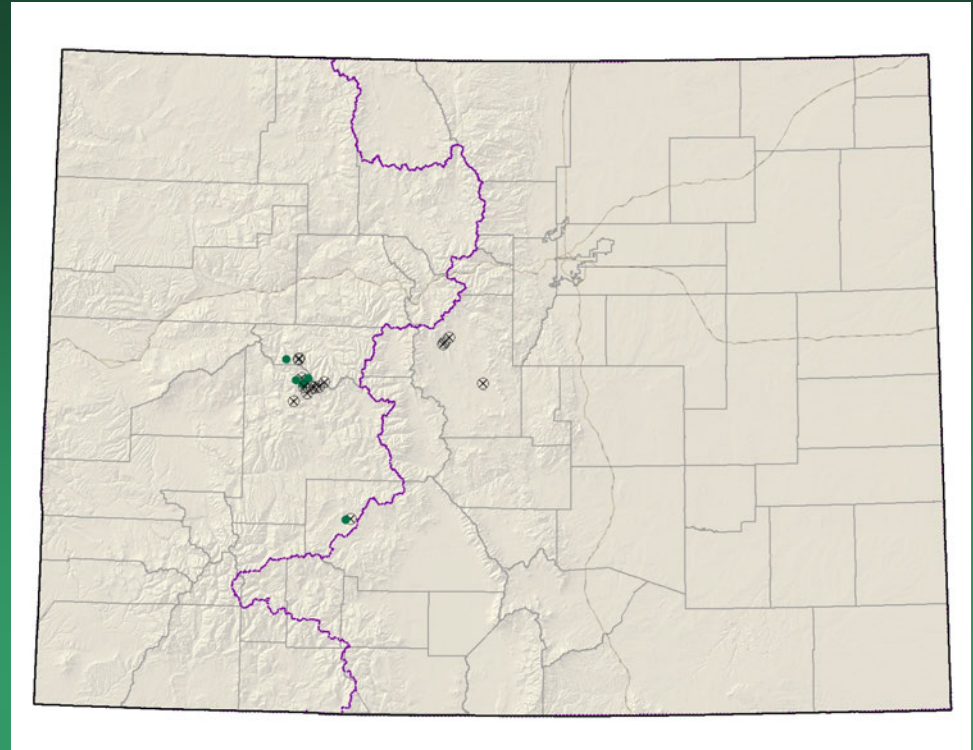


- Federal status: BLM sensitive
- Heritage ranks: G2/S1
- Global distribution: Utah and Colorado (Montezuma County)
- Last observed in Colorado: 1990
- Colorado occurrences: 8 (4 are historical)
- Colorado individuals: unknown
- Primary threats: road construction, exploration for oil and gas, and a proposed system of irrigation canals on the Reservation
- Land ownership/management: Ute Mountain Ute

Eriogonum clavellatum



Eriogonum coloradense Colorado wild buckwheat

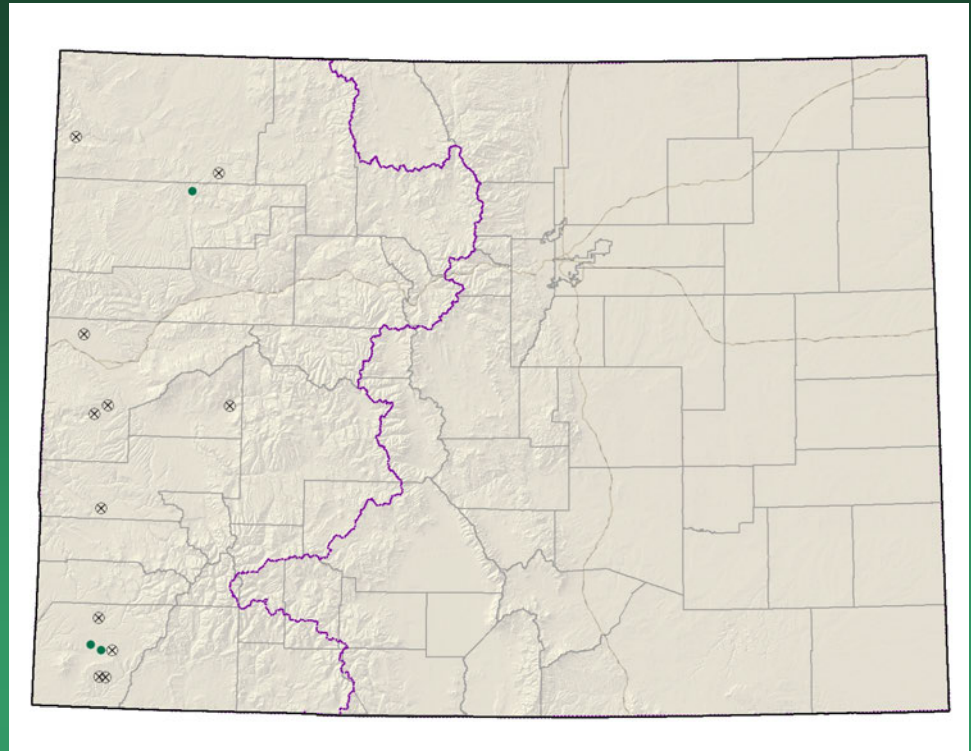


- Federal status: BLM sensitive
- Heritage ranks: G2/S2
- Global distribution: Colorado endemic (Gunnison, Park, Pitkin, and Saguache counties)
- Last observed in Colorado: 2004
- Colorado occurrences: 21 (15 are historical)
- Colorado individuals: ~5000
- Primary threats: recreation
- Land ownership/management: USFS, BLM, private

Eriogonum coloradense



Lepidium crenatum alkaline pepperwort

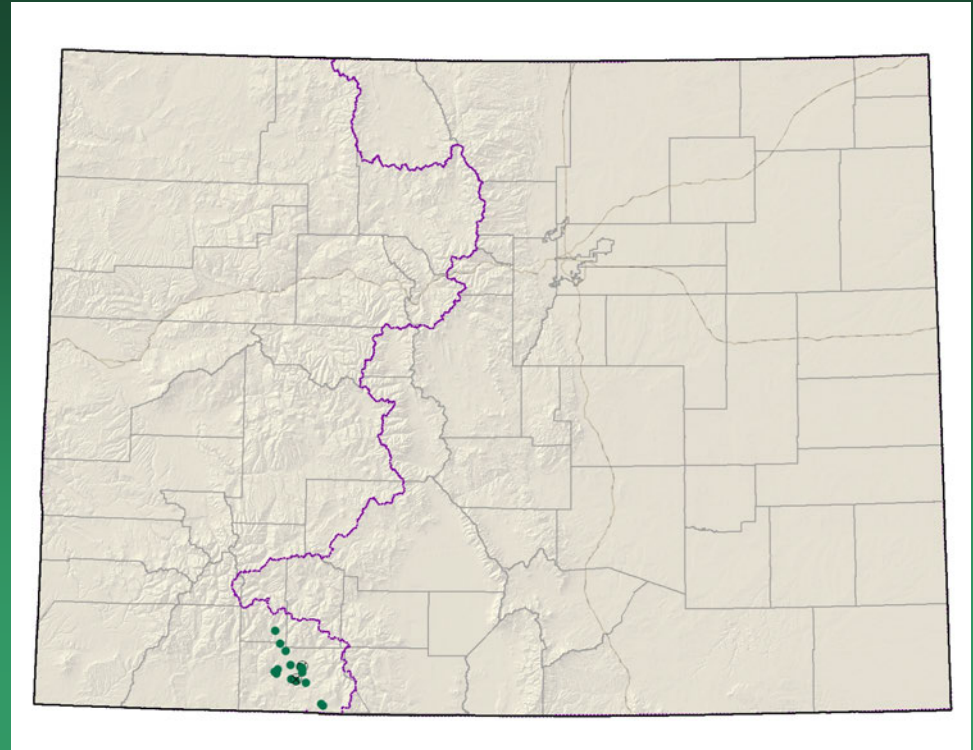


- Federal status: none
- Heritage ranks: G2/S2
- Global distribution: documented from Moffat, Rio Blanco, Mesa, Delta, Montrose and Montezuma counties in Colorado, may be present in Utah and New Mexico.
- Last observed in Colorado: 1998
- Colorado occurrences: 14 (11 are historical)
- Colorado individuals: unknown
- Primary threats: unknown
- Land ownership/management: BLM, private

Lepidium crenatum



Lesquerella pruinosa
Pagosa bladderpod

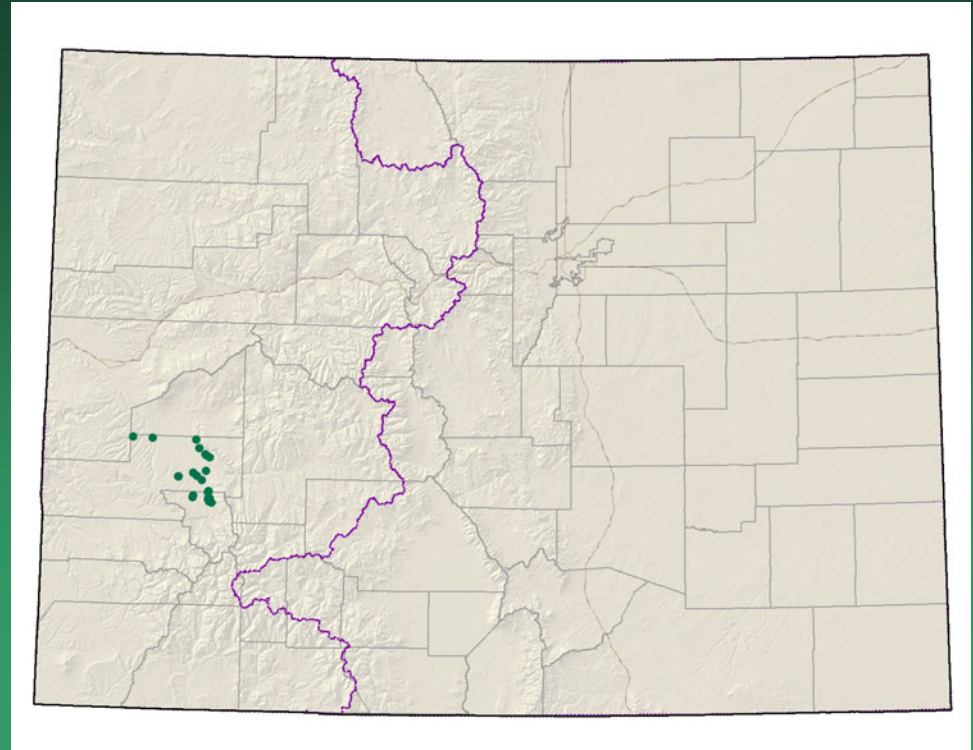


- Federal status: USFS and BLM sensitive
- Heritage ranks: G2/S2
- Global distribution: New Mexico and Colorado (Archuleta County, and the extreme southern portion of Hinsdale County)
- Last observed in Colorado: 2008
- Colorado occurrences: 17 (2 are historical)
- Colorado individuals: 5,000 to 20,000
- Primary threats: Residential and commercial development
- Land ownership/management: USFS, private, BLM

Lesquerella pruinosa



Lesquerella vicina
Montrose bladderpod



- Federal status: BLM sensitive
- Heritage ranks: G2/S2
- Global distribution: Colorado endemic (Montrose and Ouray counties)
- Last observed in Colorado: 2008
- Colorado occurrences: 19
- Colorado individuals: >9,000
- Primary threats: Roads and recreational uses
- Land ownership/management: BLM, state, private

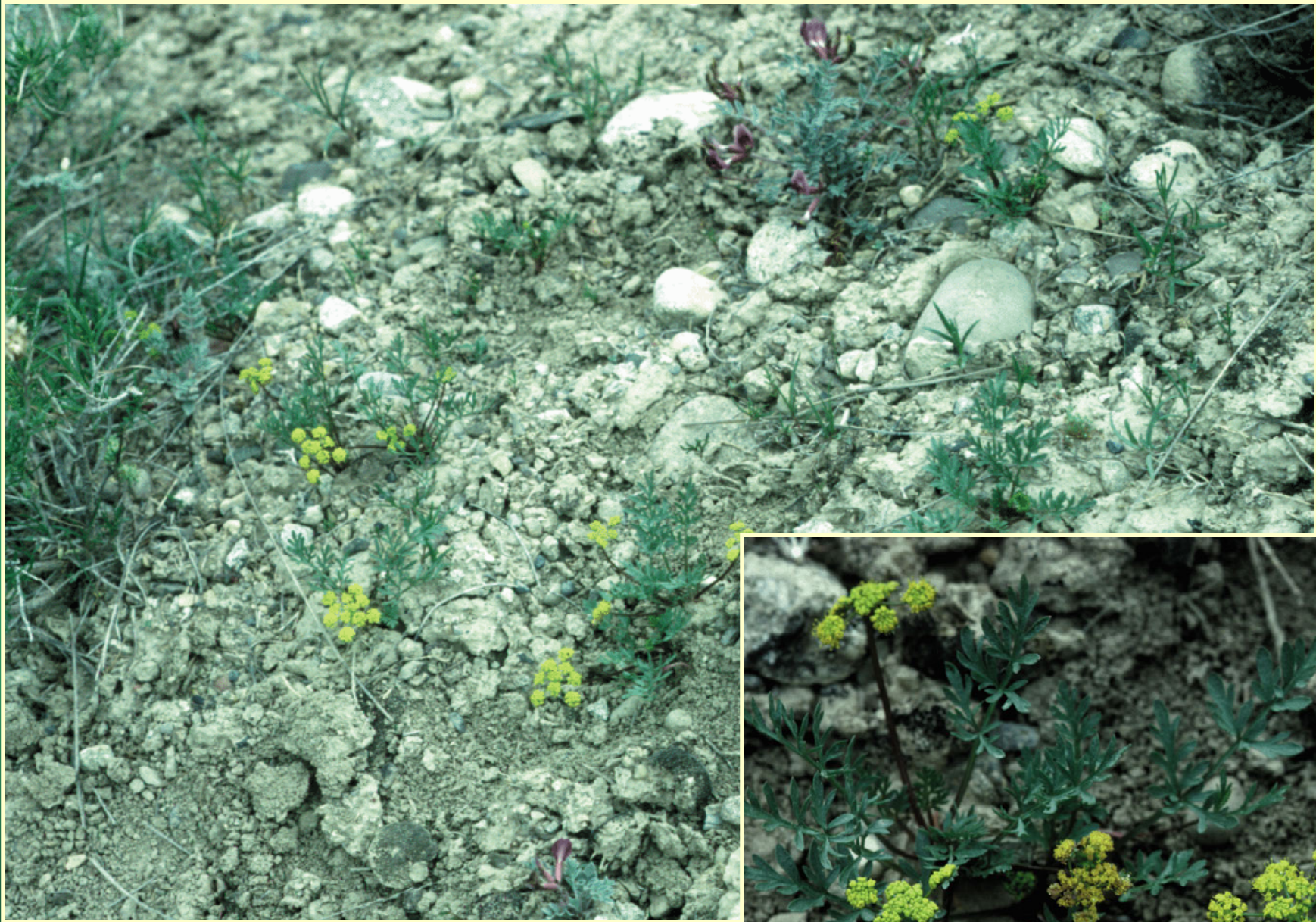


Lesquerella vicina

Lomatium concinnum
Colorado desert-parsley

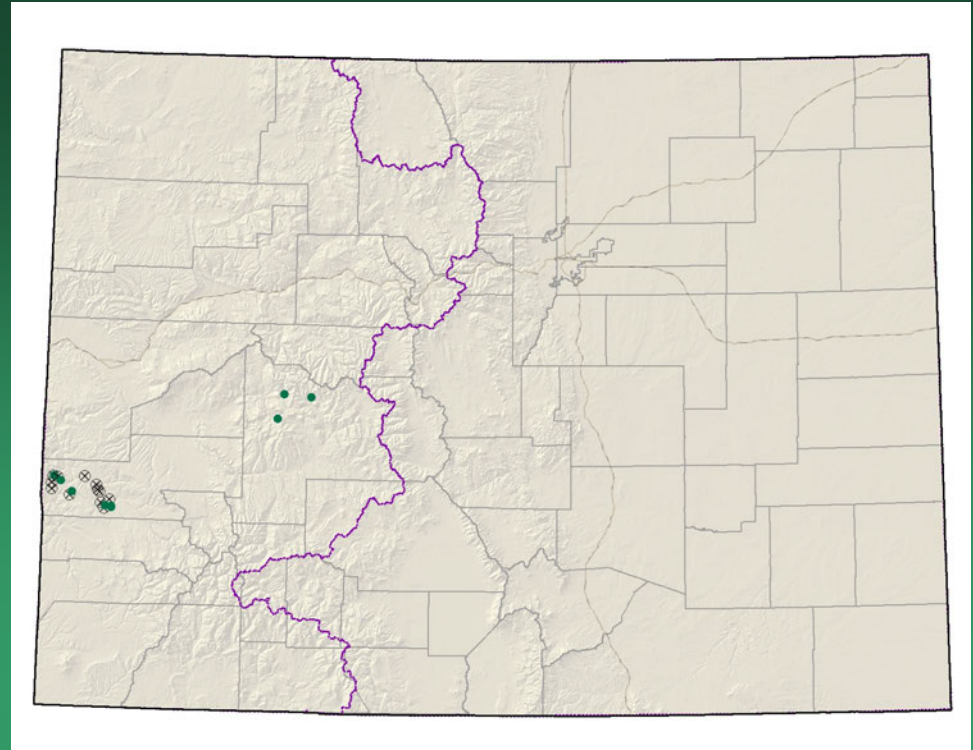


- Federal status: BLM sensitive
- Heritage ranks: G2G3/S2S3
- Global distribution: Colorado endemic (Delta, Montrose, and Ouray counties)
- Last observed in Colorado: 2008
- Colorado occurrences: 38 (4 are historical)
- Colorado individuals: >70,000
- Primary threats: Motorized recreation
- Land ownership/management: BLM, private, USFS



Lomatium concinnum

Lupinus crassus
Payson lupine

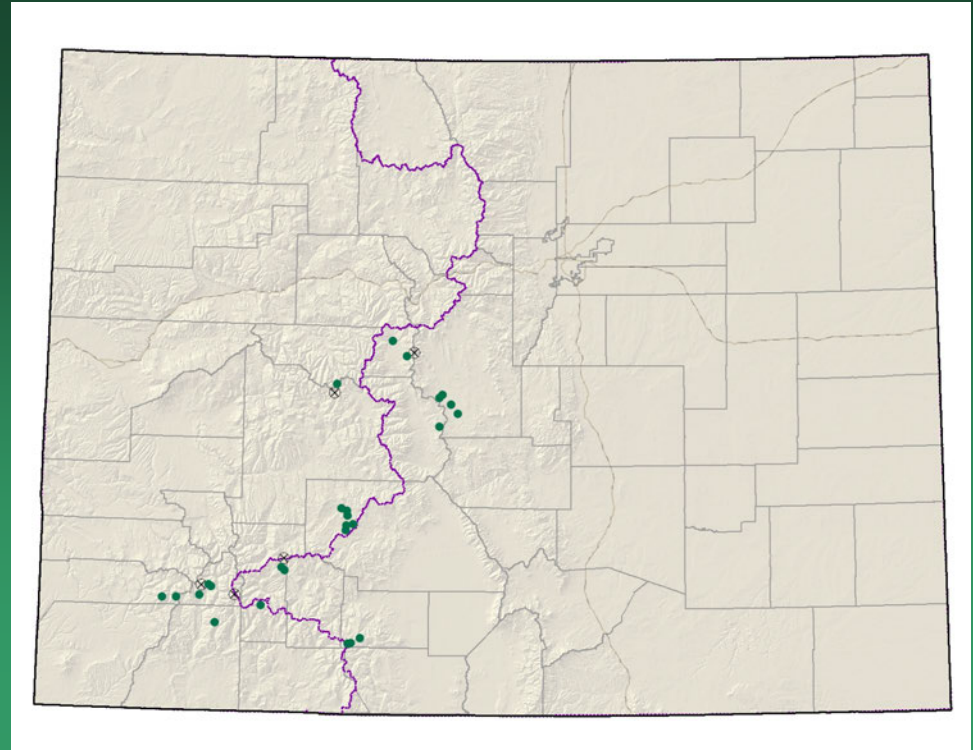


- Federal status: BLM sensitive
- Heritage ranks: G2/S2
- Global distribution: Colorado endemic (Montrose and Gunnison counties)
- Last observed in Colorado: 2000
- Colorado occurrences: 21 (12 are historical)
- Colorado individuals: >100,000
- Primary threats: Incompatible grazing
- Land ownership/management: USFS, BLM, private

Lupinus crassus



*Machaeranthera
coloradoensis*
Colorado tansy-aster



- Federal status: USFS sensitive
- Heritage ranks: G2/S2
- Global distribution: Wyoming and Colorado (Chaffee, Dolores, Gunnison, Hinsdale, La Plata, Lake, Park, Pitkin, Rio Grande, Saguache, San Juan counties)
- Last observed in Colorado: 2008
- Colorado occurrences: 32 (5 are historical)
- Colorado individuals: unknown
- Primary threats: unknown
- Land ownership/management: USFS, private

Machaeranthera coloradoensis



Oreocarya osterhoutii=
Cryptantha osterhoutii
Osterhout cat's-eye



- Federal status: BLM sensitive
- Heritage ranks: G2G3/S2
- Global distribution: Utah and Colorado (Mesa and Gunnison counties)
- Last observed in Colorado: 2008
- Colorado occurrences: 9 (7 are historical)
- Colorado individuals: ~1500?
- Primary threats: unknown
- Land ownership/management: BLM, private

Oreocarya osterhoutii



Physaria alpina
Avery Peak twinpod

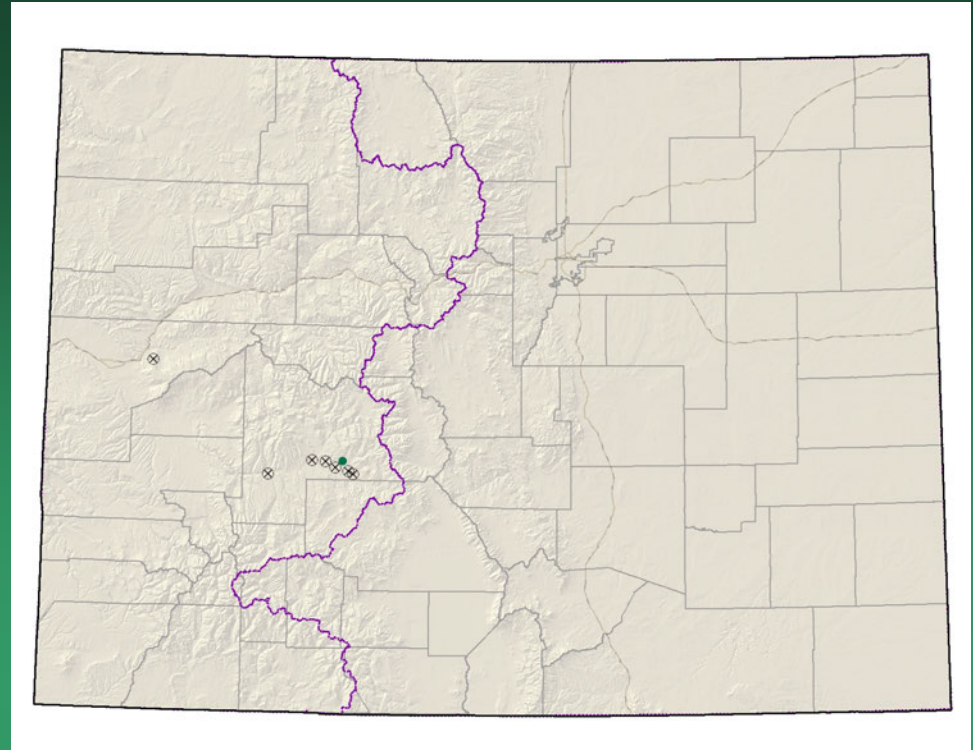


- Federal status: none
- Heritage ranks: G2/S2
- Global distribution: Colorado endemic (Lake, Gunnison, Pitkin and Park counties)
- Last observed in Colorado: 2007
- Colorado occurrences: 7 (3 are historical)
- Colorado individuals: >4000
- Primary threats: off-road vehicle use
- Land ownership/management: USFS, private

Physaria alpina



Physaria rollinsii
Rollins' twinpod

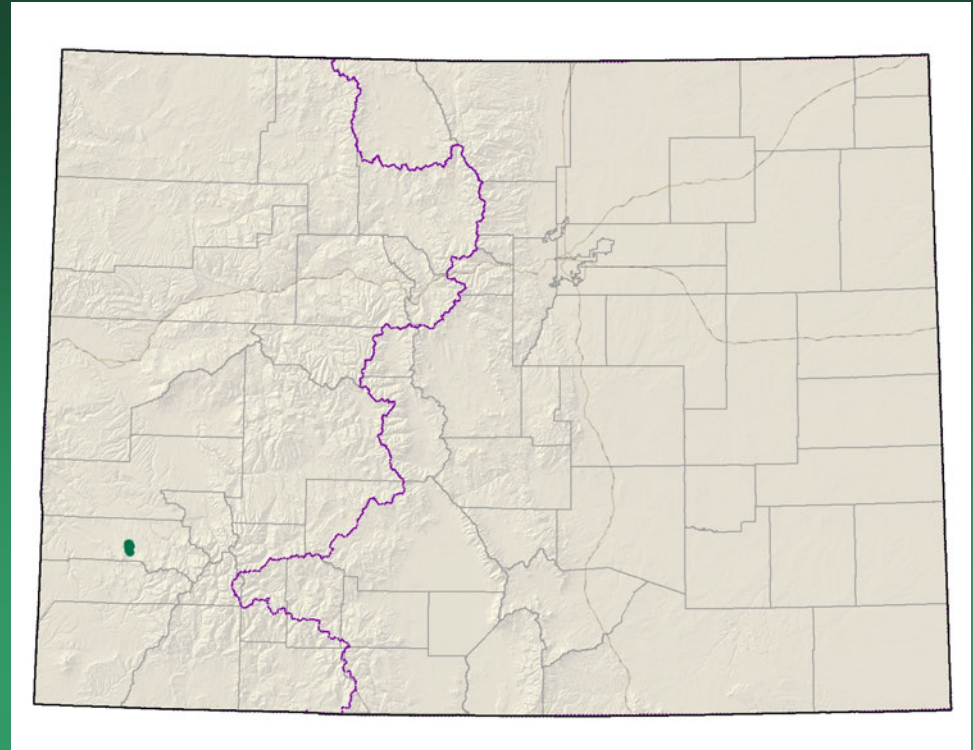


- Federal status: none
- Heritage ranks: G2/S2
- Global distribution: Colorado endemic (Mesa and Gunnison counties)
- Last observed in Colorado: 2003 (Hogan specimen at COLO)
- Colorado occurrences: 8 (7 are historical)
- Colorado individuals: unknown
- Primary threats: unknown
- Land ownership/management: Forest Service

Physaria rollinsii



Puccinellia parishii
Parish's alkali grass

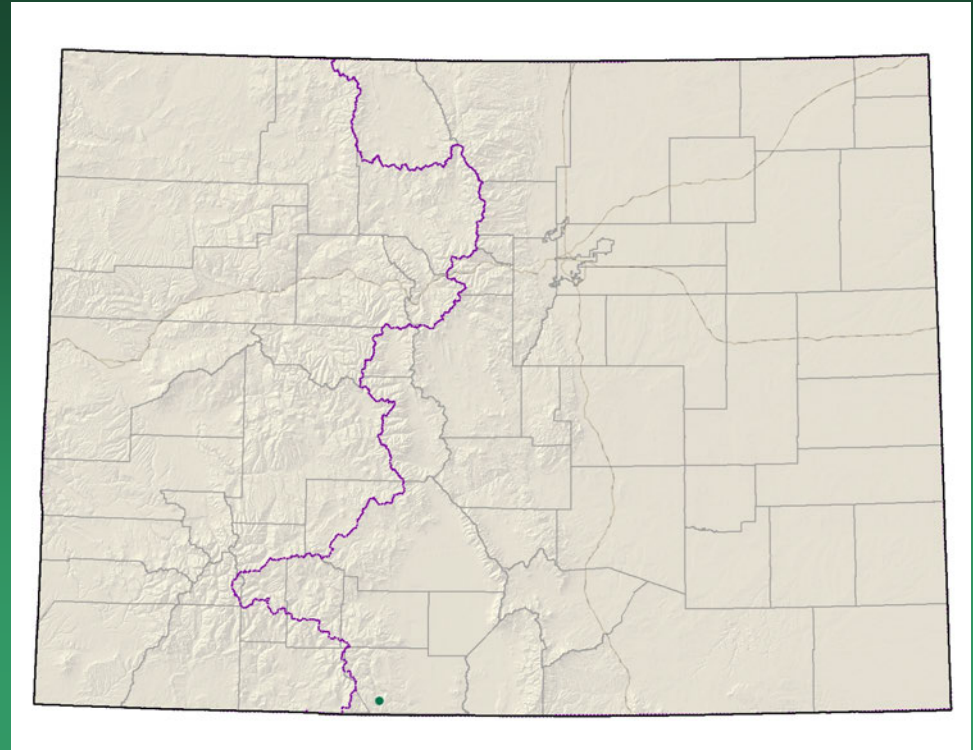
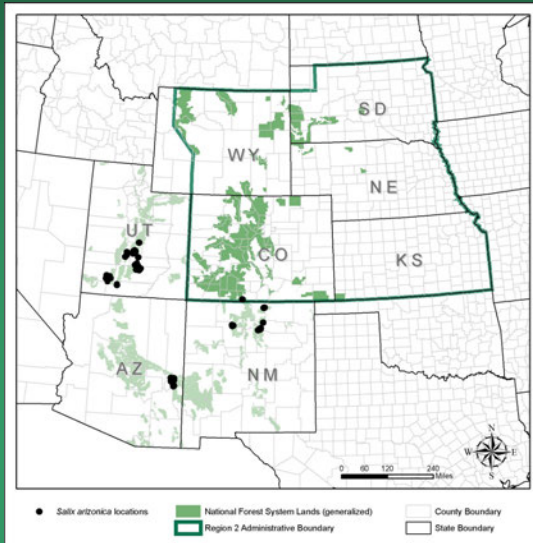


- Federal status: none
- Heritage ranks: G2/S1
- Global distribution: New Mexico, Arizona, California, and Colorado (San Miguel County)
- Last observed in Colorado: 1998
- Colorado occurrences: 1, with numerous sub-occurrences
- Colorado individuals: 20,000-35,000
- Primary threats: altered hydrology
- Land ownership/management: private, state

Puccinellia parishii



Salix arizonica Arizona willow

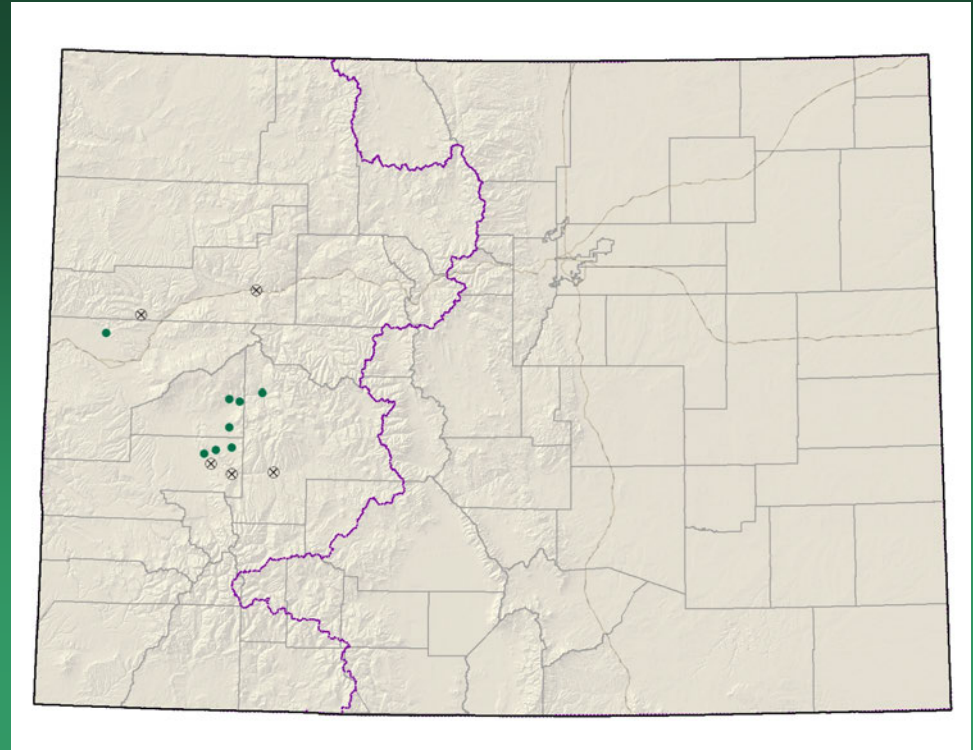


- Federal status: USFS sensitive
- Heritage ranks: G2G3/S1
- Global distribution: Arizona, New Mexico, Utah, and Colorado (Conejos Co.)
- Last observed in Colorado: 2004
- Colorado occurrences: 1
- Colorado individuals: unknown – 2 dense clumps
- Primary threats: incompatible grazing, hydrologic alteration
- Land ownership/management: USFS – Rio Grande NF

Salix arizonica



*Thelypodopsis
juniperorum*
juniper tumble mustard

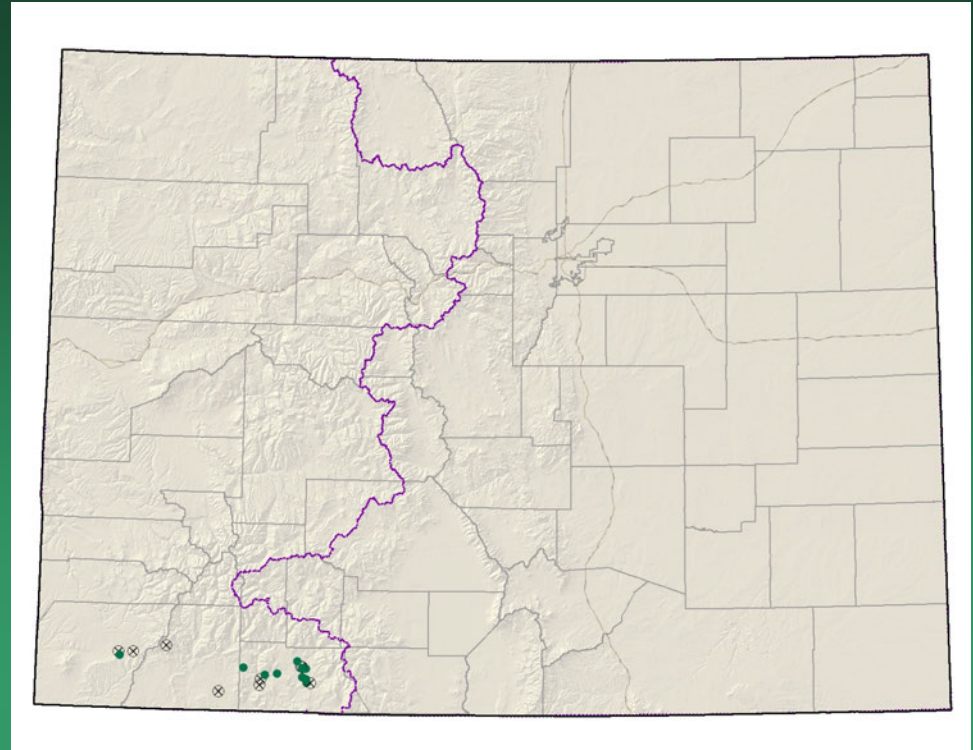


- Federal status: none
- Heritage ranks: G2/S2
- Global distribution: Colorado endemic (Montrose, Gunnison and Delta counties)
- Last observed in Colorado: 2004
- Colorado occurrences: 16 (5 are historical)
- Colorado individuals: 100's
- Primary threats: grazing, off-road vehicle use, non-native species invasion
- Land ownership/management: BLM, private

Thelypodopsis juniperorum



Townsendia glabella Gray's townsend-daisy

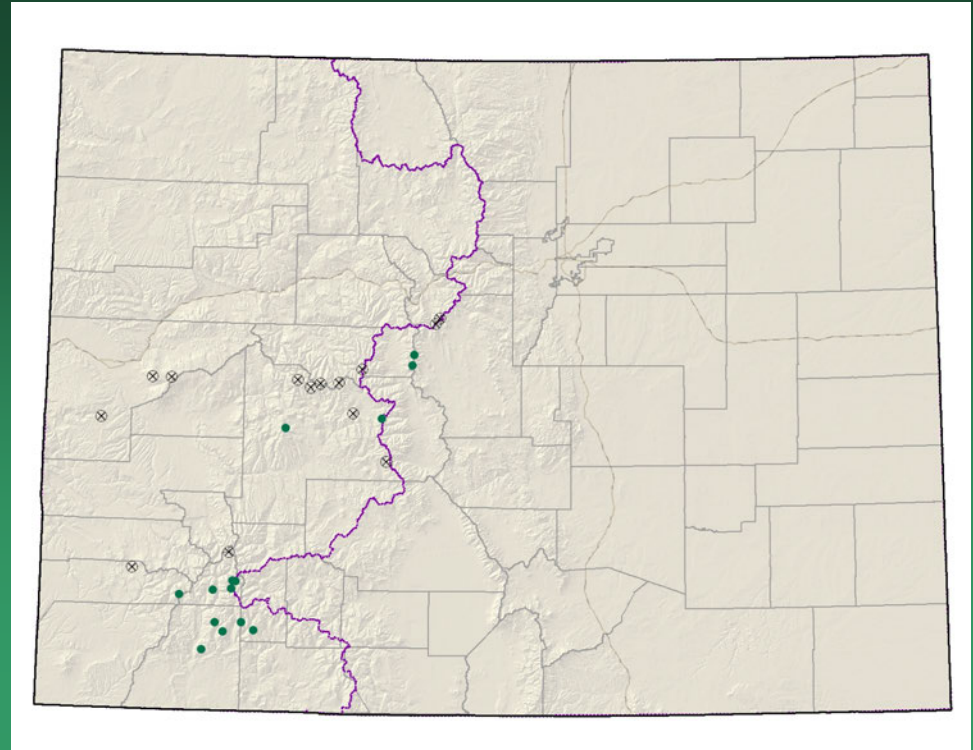


- Federal status: none
- Heritage ranks: G2/S2
- Global distribution: Colorado endemic (Archuleta, La Plata and Montezuma counties)
- Last observed in Colorado: 2008
- Colorado occurrences: 19 (9 are historical)
- Colorado individuals: >1,250
- Primary threats: Residential development
- Land ownership/management: USFS, private

Townsendia glabella



Townsendia rothrockii
Rothrock townsend-daisy



- Federal status: none
- Heritage ranks: G2G3/S2S3
- Global distribution: Colorado endemic (Dolores, Gunnison, Hinsdale, La Plata, Lake, Mesa, Ouray, Park, Pitkin, San Juan, and Summit counties)
- Last observed in Colorado: 2007
- Colorado occurrences: 28 (14 are historical)
- Colorado individuals: >4300
- Primary threats: motorized recreation
- Land ownership/management: USFS, private

Townsendia rothrockii



Some new species to be added to the CNHP database

Draba malphigiaceae (Hinsdale, La Plata and Montezuma counties)

Descurainia kenheillii (alpine tundra in San Juan Mtns.)

Physaria scrotiformis (upper subalpine–lower alpine zone San Juan Mtns.)

