The Colorado Rare Plant Technical Committee presents: 6th Annual

Colorado Rare Plant Symposium

September 11, 2009 Loveland, Colorado



Sponsored by:

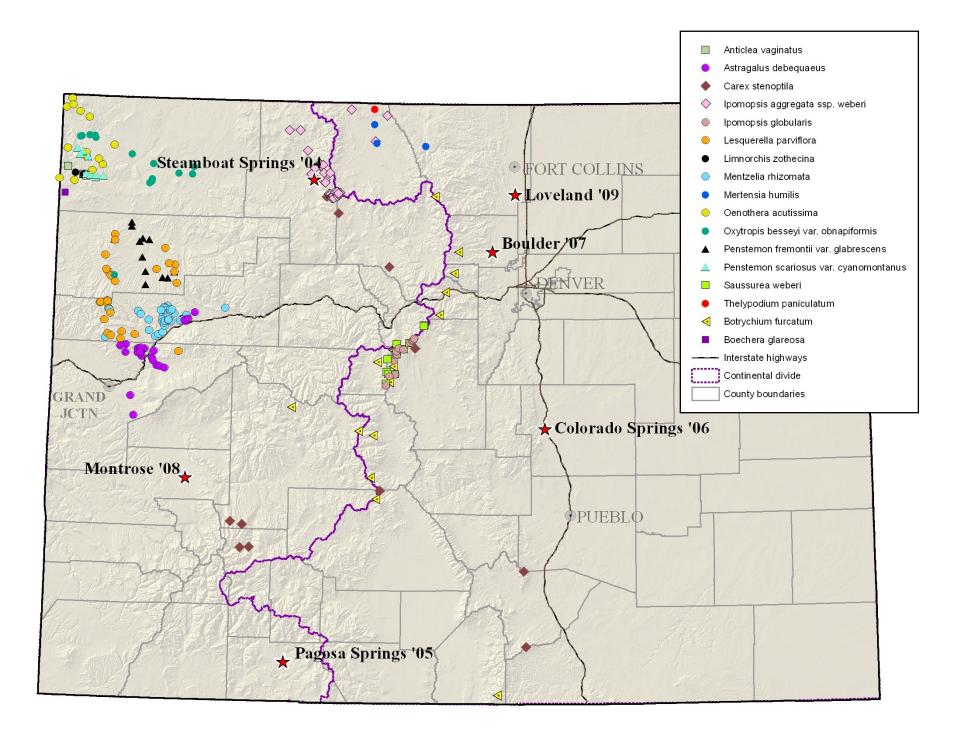
Colorado Native Plant Society
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USDA Forest Service



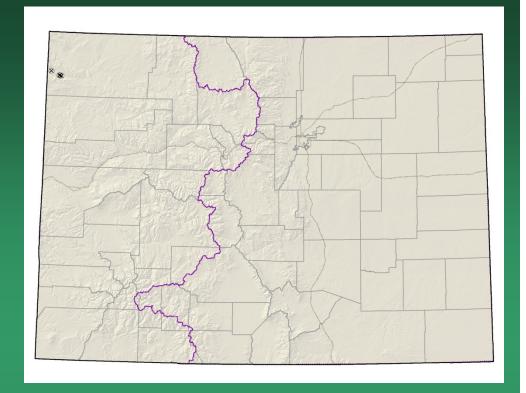








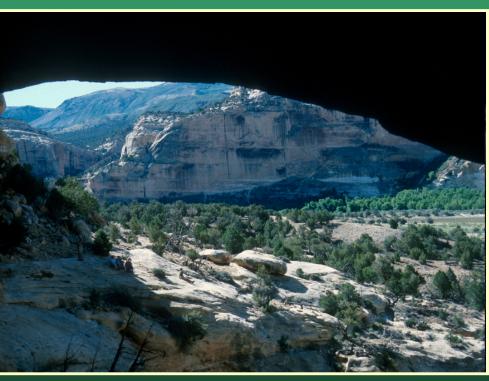
Anticlea vaginatus =Zigadenus vaginatus sheathed deathcamas



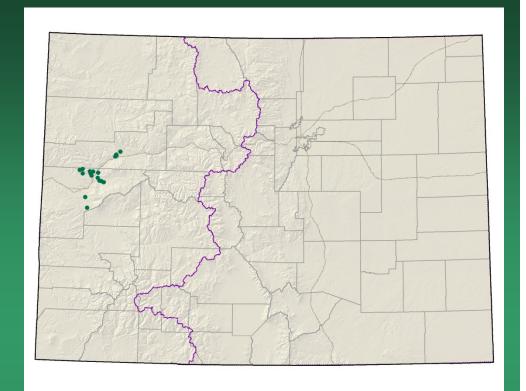
- <u>Federal status</u>: none
- Heritage ranks: G2/S1 or SH
- Global distribution: Utah and Colorado (Moffat county)
- <u>Last observed in Colorado</u>: 1988
- Colorado occurrences: 4 (all are historical)
- Colorado individuals: unknown
- Primary threats: hydrologic alteration
- Land ownership/management: NPS





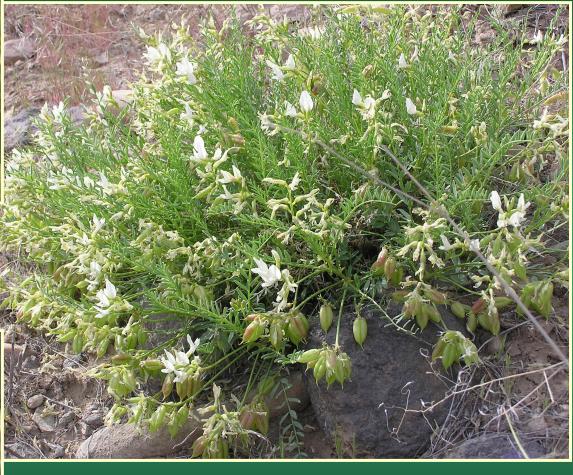


Astragalus debequaeus Debeque milkvetch



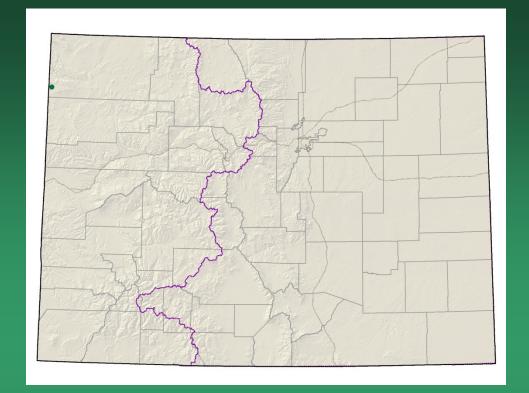
- Federal status: BLM sensitive
- Heritage ranks: G2/S2
- Global distribution: Colorado endemic (Garfield and Mesa counties)
- Last observed in Colorado: 2008
- Colorado occurrences: 18
- Colorado individuals: >61,000
- Primary threats: Disturbance by oil and gas development
- Land ownership/management: BLM, private





Astragalus debequaeus

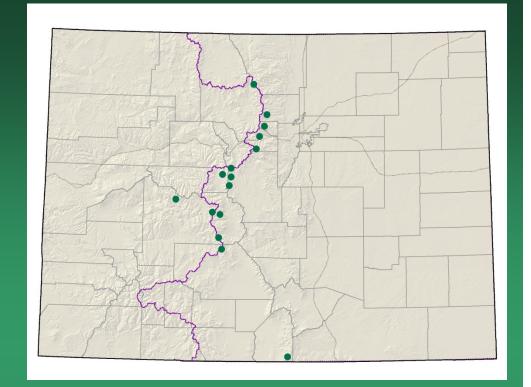
Boechera glareosa snowbasin rockcress



- <u>Federal status</u>: none
- Heritage ranks: G1G2/S1
- Global distribution: Utah and Colorado (Moffat county)
- Last observed in Colorado: 2002 Dorn collection
- Colorado occurrences: 1 location known, not yet processed as occurrence
- Colorado individuals: unknown
- Primary threats: unknown
- Land ownership/management: BLM?

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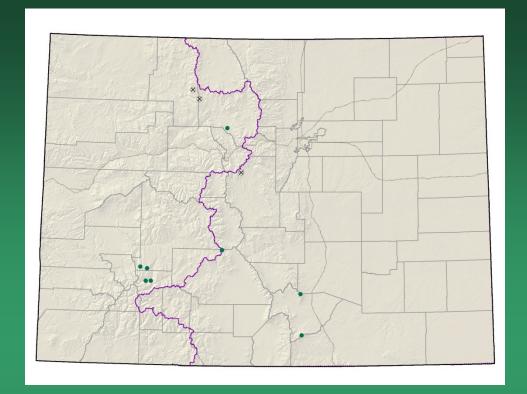
Botrychium tax. nov. "furcatum"? forkleaved moonwort



- <u>Federal status</u>: USFS sensitive
- Heritage ranks: G1G2/S1S2
- Global distribution: Colorado (Boulder, Chaffee, Clear Creek, Costilla, Grand, Gunnison, Lake, Park, and Saguache counties), New Mexico (Wheeler Peak, Taos County, pending genetic verification)
- Last observed in Colorado: 2009
- Colorado occurrences: 18 sites totaling 47 populations or subpopulations
- Colorado individuals: ~1200
- Primary threats: maintenance and improvements of roads and earthen dams
- Land ownership/management: USFS, NPS, Private

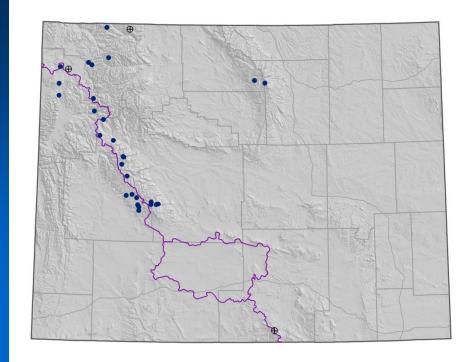


Carex stenoptila small-winged sedge

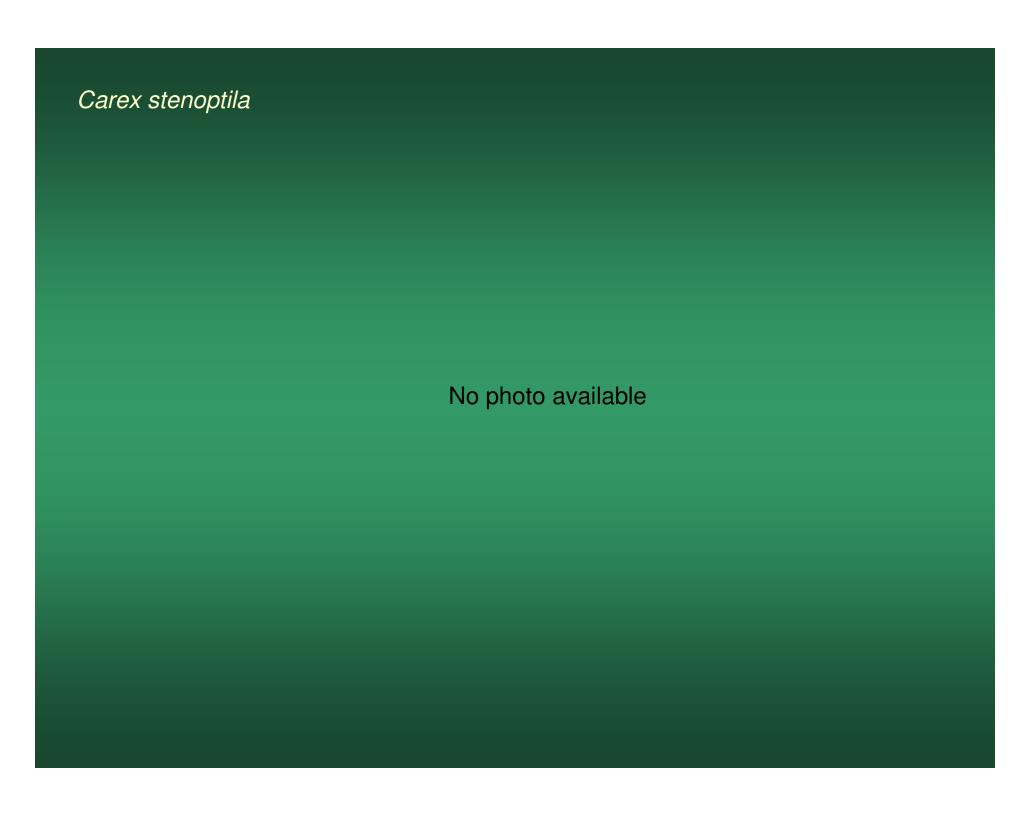


- Federal status: none
- Heritage ranks: G2/S2
- <u>Global distribution</u>: Montana, Wyoming, and Colorado (Park, Routt, Grand, Gunnison, Hinsdale, Saguache, and Huerfano counties)
- Last observed in Colorado: 1999
- Colorado occurrences: 11 (3 are historical)
- Colorado individuals: unknown
- Primary threats: none known
- Land ownership/management: USFS, BLM, private

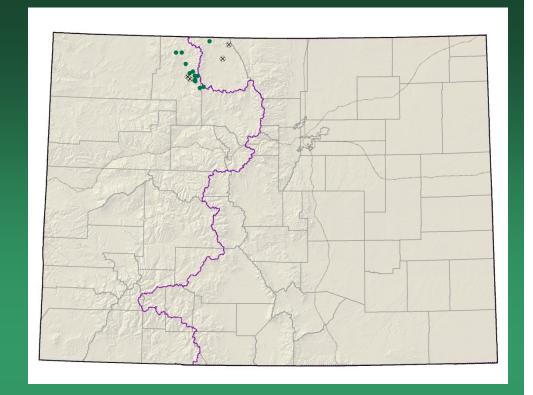
Carex stenoptila Small-winged sedge



- Federal status: None
- Heritage ranks: G2/S2
- Last observed in Wyoming: 2006
- Wyoming occurrences: 27 extant; 3 historic (RM data)
- Primary threats: unknown
- <u>Land ownership/management</u>: Bighorn NF, Bridger-Teton NF, Medicine Bow-Routt NF, Shoshone NF, Yellowstone NP



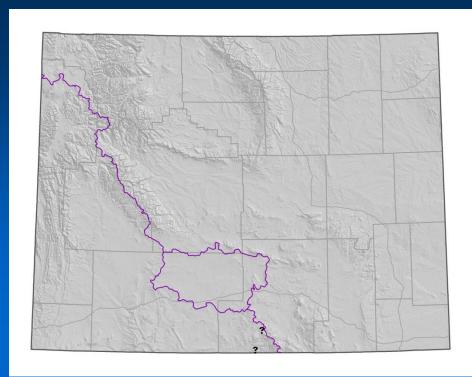
Ipomopsis aggregata ssp. weberi Weber's scarlet gilia



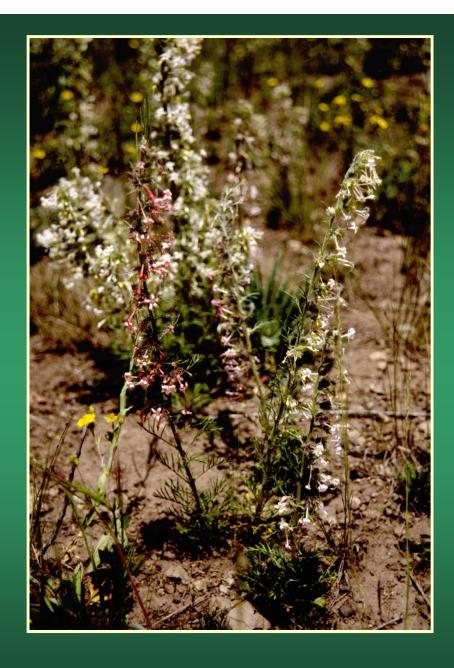
- Federal status: USFS sensitive
- Heritage ranks: G5T2/S2
- <u>Global distribution</u>: Regional endemic of northern Idaho, south-central Wyoming, and north-central Colorado (Grand, Routt and Jackson counties)
- Last observed in Colorado: 2009
- Colorado occurrences: 17 (4 are historical)
- Colorado individuals: >5300
- Primary threats: recreational use of habitat
- Land ownership/management: USFS, state, private

Ipomopsis aggregata var. weberi Weber's scarlet gilia

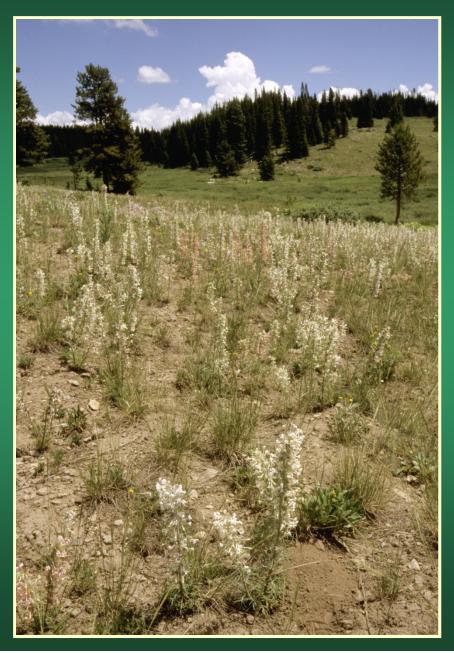
- <u>Federal status</u>: BLM Sensitive, USFS R2 Sensitive
- Heritage ranks: G2?/S1
- Last observed in Wyoming: 2009
- O Wyoming occurrences: 1-5?
- Primary threats: grazing, shrub encroachment
- Land ownership/management: BLM Rawlins FO?, Medicine Bow-Routt NF? State?



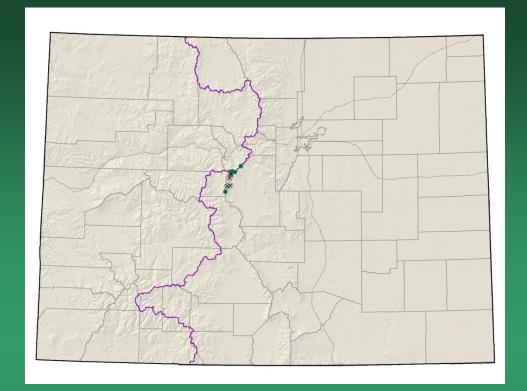




Ipomopsis aggregata ssp. weberi



Ipomopsis globularis globe gilia

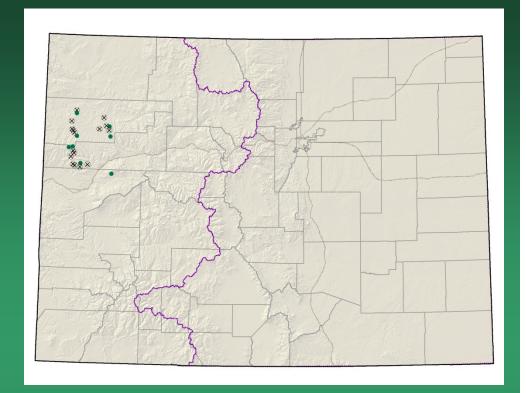


- Federal status: USFS sensitive
- Heritage ranks: G2/S2
- Global distribution: Colorado endemic (Lake, Park, and Summit counties)
- <u>Last observed in Colorado</u>: 2008
- Colorado occurrences: 9 (5 are historical)
- Colorado individuals: estimated 6,000 11,000
- Primary threats: motorized recreation, mining development
- <u>Land ownership/management</u>: USFS

Ipomopsis globularis



Lesquerella parviflora Piceance bladderpod



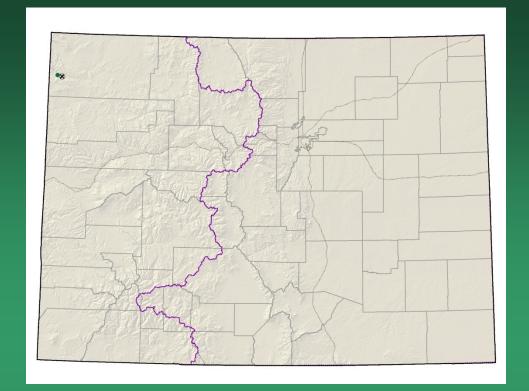
- <u>Federal status</u>: BLM sensitive
- Heritage ranks: G2/S2
- Global distribution: Colorado endemic (Rio Blanco, Garfield, and Mesa counties)
- Last observed in Colorado: 2007
- Colorado occurrences: 24 (16 are historical)
- Colorado individuals: >230,000
- Primary threats: Oil shale mining and oil and gas development
- Land ownership/management: BLM, private, state, USFS



Lesquerella parviflora



Limnorchis zothecina (=Platanthera zothecina) alcove bog orchid



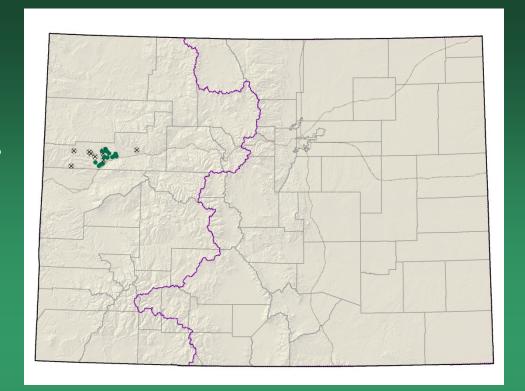
- <u>Federal status</u>: none
- Heritage ranks: G2/S1
- Global distribution: Utah, Arizona, and Colorado (Moffat County)
- <u>Last observed in Colorado</u>: 1989
- Colorado occurrences: 3 (2 are historical)
- Colorado individuals: ~100
- Primary threats: none known
- Land ownership/management: NPS

Limnorchis zothecina



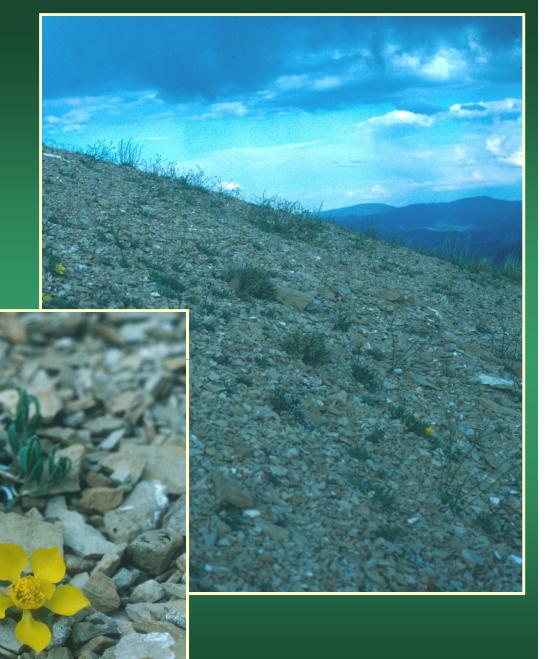


*Mentzelia rhizomata*Roan Cliffs blazing star

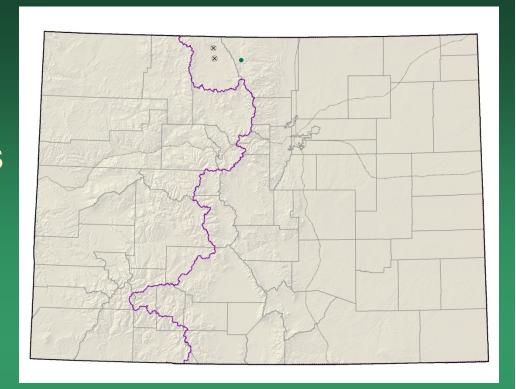


- <u>Federal status</u>: none
- Heritage ranks: G2/S2
- Global distribution: Colorado endemic (Rio Blanco County)
- Last observed in Colorado: 2001
- Colorado occurrences: 24 (9 are historical)
- Colorado individuals: >24,500
- Primary threats: Oil shale mining and oil and gas development
- Land ownership/management: BLM, private

Mentzelia rhizomata

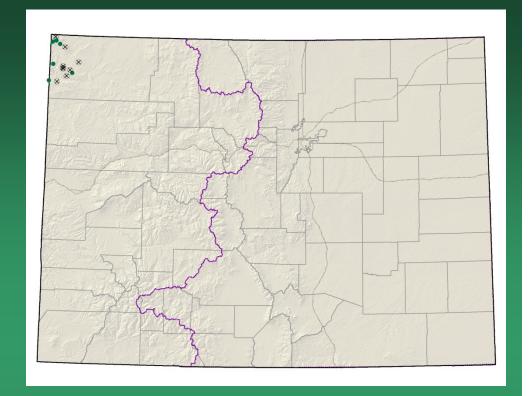


*Mertensia humilis*Rocky Mountain bluebells

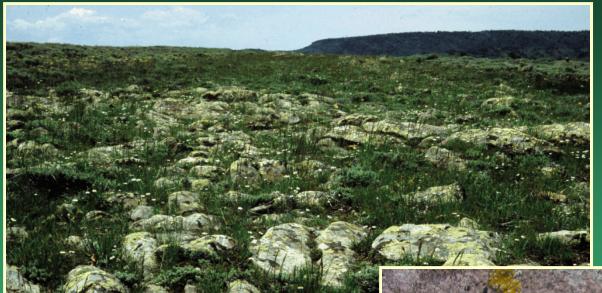


- <u>Federal status</u>: none
- Heritage ranks: G2/S1
- Global distribution: Wyoming and Colorado (Jackson and Larimer counties)
- <u>Last observed in Colorado</u>: 2001
- Colorado occurrences: 3 (2 are historical)
- Colorado individuals: unknown
- Primary threats: none known
- <u>Land ownership/management</u>: private, USFS

Oenothera acutissima narrow-leaf evening-primrose



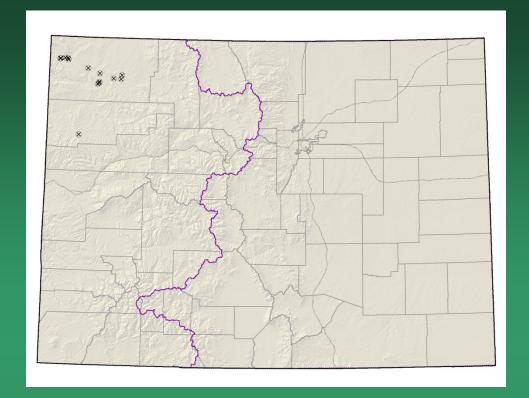
- Federal status: BLM sensitive
- Heritage ranks: G2/S2
- Global distribution: Utah and Colorado (Moffat County)
- <u>Last observed in Colorado</u>: 2008
- Colorado occurrences: 15 (9 are historical)
- Colorado individuals: >4,000
- Primary threats: hydrologic alteration, habitat degradation from livestock use
- Land ownership/management: BLM, state, private, NPS



Oenothera acutissima



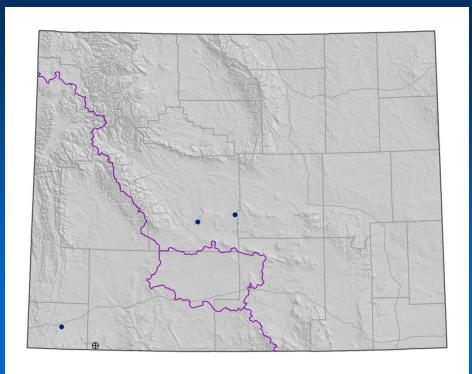
Oxytropis besseyi var. obnapiformis Bessey's locoweed



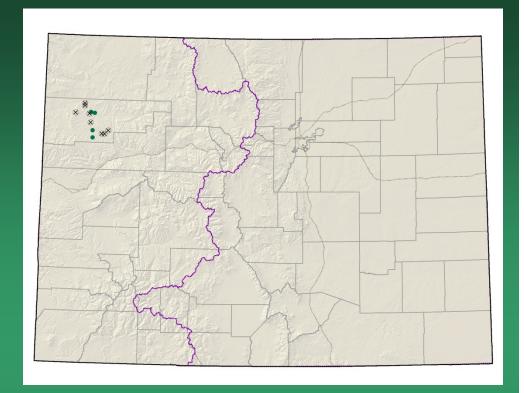
- <u>Federal status</u>: none
- Heritage ranks: G5T2/S2
- Global distribution: Utah, Wyoming, and Colorado (Moffat and Rio Blanco Cos.)
- <u>Last observed in Colorado</u>: 1988
- Colorado occurrences: 14 (all are historical)
- Colorado individuals: unknown, perhaps in the 100s
- Primary threats: oil and gas development
- Land ownership/management: BLM, NPS, private

Oxytropis besseyi var. obnapiformis Maybell locoweed or Bessey's locoweed

- Federal status: None
- Heritage ranks: G5T2/S1
- Last observed in Wyoming: 1997
- Wyoming occurrences: 4 (1 historic)
- o Primary threats: mining, OHV
- <u>Land ownership/management</u>: BLM Kemmerer FO, BLM Lander FO, State



Penstemon fremontii var. glabrescens Fremont's beardtongue

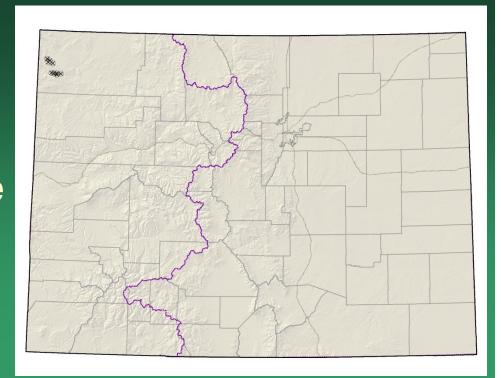


- Federal status: none
- Heritage ranks: G3G4T2/S2
- Global distribution: Colorado endemic (Rio Blanco County)
- Last observed in Colorado: 1991
- Colorado occurrences: 12 (8 are historical)
- Colorado individuals: unknown
- Primary threats: oil and gas development
- <u>Land ownership/management</u>: BLM, state

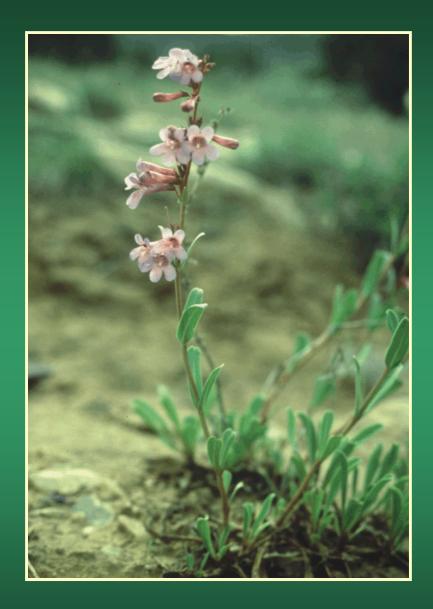
Penstemon fremontii var. glabrescens



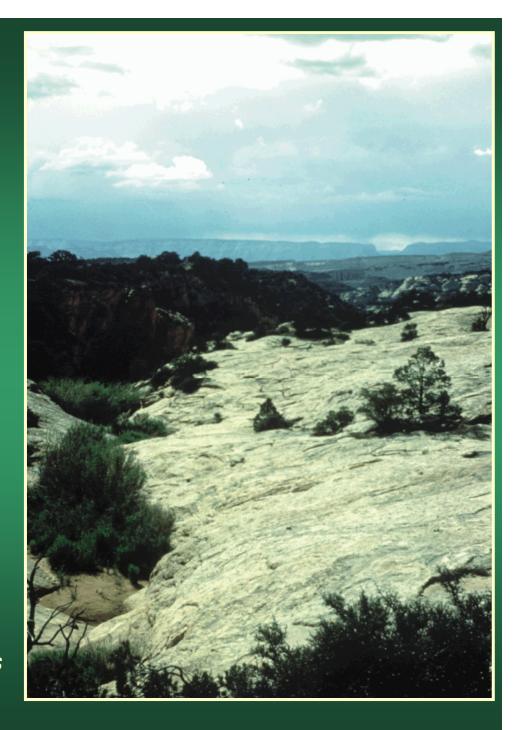
Penstemon scariosus var. cyanomontanus Blue Mountain beardtongue



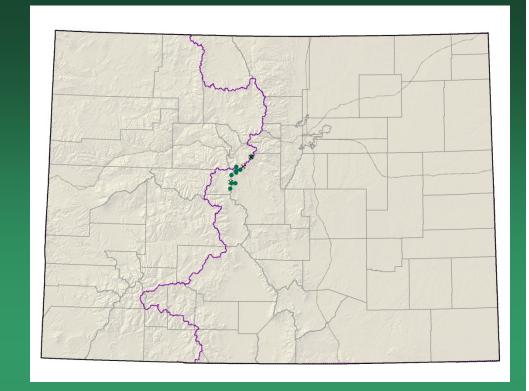
- Federal status: none
- Heritage ranks: G4T2/S2
- Global distribution: Utah and Colorado (Moffat County)
- <u>Last observed in Colorado</u>: 1988
- Colorado occurrences: 9 (all are historical)
- Colorado individuals: >16,000
- Primary threats: incompatible grazing
- <u>Land ownership/management</u>: NPS, BLM



Penstemon scariosus var. cyanomontanus



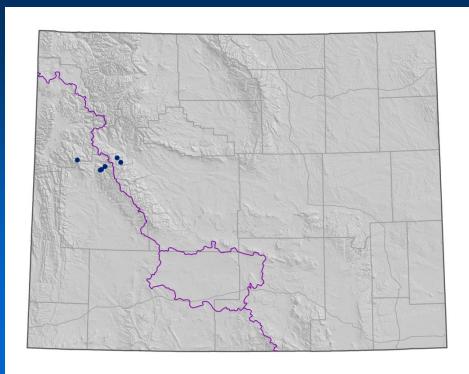
Saussurea weberi Weber's saw-wort



- Federal status: BLM sensitive
- Heritage ranks: G2G3/S2
- <u>Global distribution</u>: Regional endemic of southwest Montana, northwest Wyoming, and central Colorado (Custer, Park and Summit counties)
- Last observed in Colorado: 2009
- Colorado occurrences: 13 (3 are historical)
- Colorado individuals: >6300
- Primary threats: may be threatened by mining and alpine grazing
- <u>Land ownership/management</u>: USFS, private

Saussurea weberi Weber's saw-wort

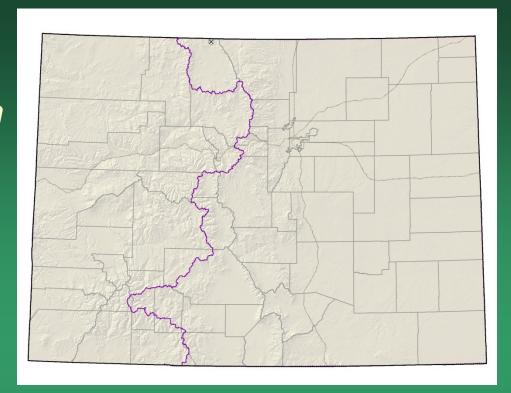
- <u>Federal status</u>: USFS R4
 Sensitive
- Heritage ranks: G2G3/S2
- Last observed in Wyoming: 2006
- Wyoming occurrences: 6
- o Primary threats: possibly recreational use
- <u>Land ownership/management</u>: Bridger-Teton NF, Shoshone NF







Thelypodium paniculatum Northwest thelypody



- Federal status: none
- Heritage ranks: G2/SH
- Global distribution: Idaho, Montana, Wyoming, and Colorado (Jackson County)
- <u>Last observed in Colorado</u>: 1903
- Colorado occurrences: 1 historical
- Colorado individuals: unknown
- Primary threats: altered hydrology?
- <u>Land ownership/management</u>: USFS



Thanks to all who have contributed pictures to the presentations

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Janis Huggins R. Price

Bill Jennings David C. Reed

Barry Johnston James Reveal

Colorado Natural Heritage Program

The Nature Conservancy

And others – let us know if you recognize a photo

Colorado Natural Heritage Program: www.cnhp.colostate.edu cnhpblog.blogspot.com

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