

Colorado State Wildlife Action Plan

2025 Revision and Updates to Plants of Greatest Conservation Need

Colorado Rare Plant Symposium
September 28, 2023



Presented by:
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CNAP Coordinator

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Colorado Natural Areas Program: Showcasing our state's natural features & biodiversity

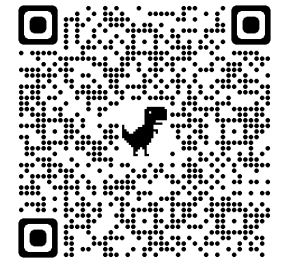
- Statewide program within CPW Species Conservation Unit
- Created by statute in 1977
- Highlights and protects Colorado's significant natural features through ***voluntary agreements*** with landowners
- Advised by Governor appointed Colorado Natural Areas Council
- Small staff, large volunteer steward program

Hoosier Ridge Natural Area,
Park County



Explore Colorado's Natural Areas

Story map Link:
[Arcg.is/1ymCnL0](https://arcg.is/1ymCnL0)



Colorado Natural Areas and Significant Natural Features

Colorado Natural Areas Program

Browse through the tab labeled "All Colorado Natural Areas" to learn about all 95 of Colorado's spectacular State Natural Areas. Scroll through the additional tabs to learn more about a selection of the significant features for which State Natural Areas were designated, including unique geologic and fossil features, rare plants, natural communities, and uncommon wildlife and insects. Exact locations may not be shown for every feature or State Natural Area due to privacy concerns or sensitive data. Sites that can be visited by the public are noted. All photos taken by CNAP staff unless otherwise noted.



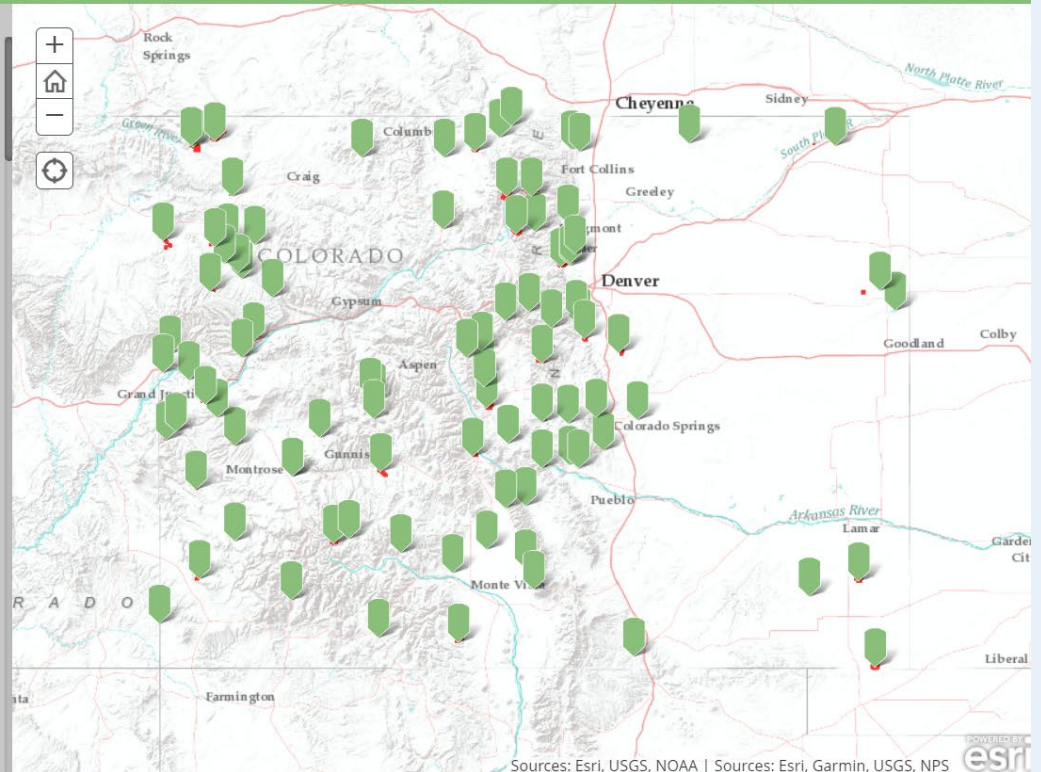
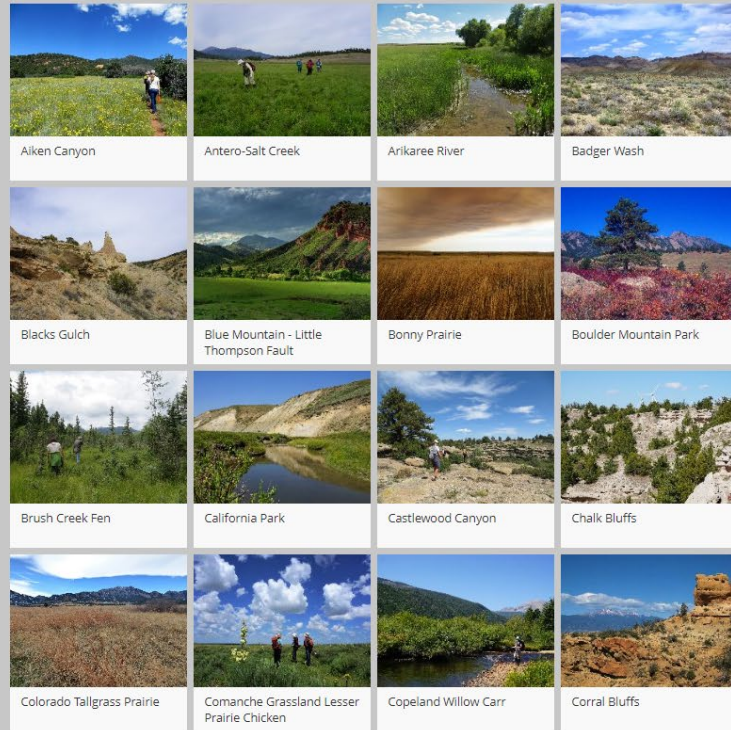
All Colorado Natural Areas

Geology & Paleontology

Natural Communities

Rare Plants

Wildlife & Insects



Sources: Esri, USGS, NOAA | Sources: Esri, Garmin, USGS, NPS



Protecting Colorado's Rare Plants

- CNAP has a strong emphasis on rare plant conservation
- Works collaboratively with rare plant conservation partners
- Conservation actions guided by SWAP rare plant addendum: Colorado has 117 plants of greatest conservation need





New CNAP Designation and Expansions

- NEW designation- Coal Creek Tallgrass Prairie Natural Area
 - Owned by City of Boulder OSMP, 1,458 acres
 - High quality xeric tallgrass prairie and associated species
- Expansions w/City of Boulder:
 - White Rocks Natural Area: 105 to 1477 acres
 - Colorado Tallgrass Prairie Natural Area: 269 to 1,347 acres





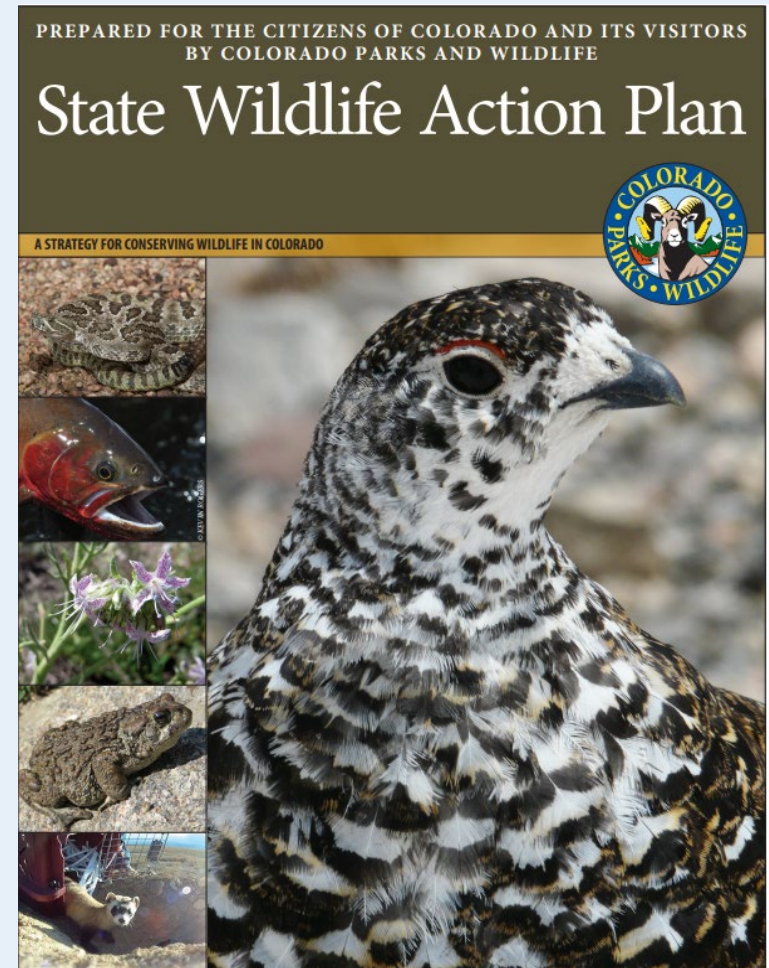
Colorado State Wildlife Action Plan

2025 Revision



SWAP Background

- Overarching state strategy for conserving Species of Greatest Conservation Need and their habitats
- Formulated with conservation partners across Colorado
- Tool for guiding conservation priorities & actions
- 2015 SWAP included 117 rare plants in an addendum



Why is the SWAP Important for Plants?



- Provides a list of priority species that can guide conservation actions (research, monitoring, management, land protection, etc.)
- May be used to guide funding priorities and opportunities
- Not just a CPW document, a plan for all conservation agencies, organizations, advocates, etc.





SWAP Revision Timeline

- CPW finalizing contract with CNHP, hiring SWAP coordinator
- Now – Dec. 31, 2024: Develop draft SWAP revision
- Jan 2025 – Sept 2025: Revision and finalization
- Sept 30, 2025: Final draft revision to FWS for approval
- 2025-2035: Ten-year programmatic implementation





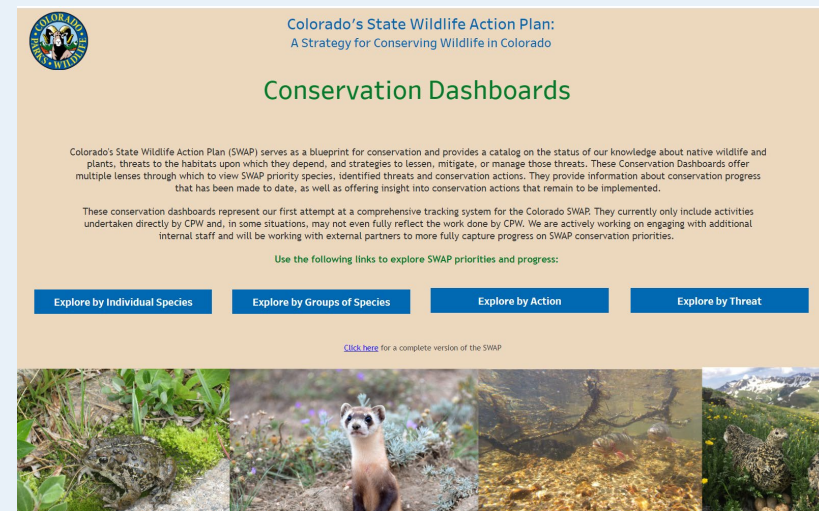
Required Components

- 1) Species of Greatest Conservation Need
- 2) Locations and conditions of key habitats
- 3) Threats
- 4) Conservation actions
- 5) Monitoring species and habitats
- 6) Procedures to review the plan
- 7) Coordination with agencies & tribes
- 8) Broad public participation



2025 SWAP Changes & Upgrades

- Incorporation of plants and invertebrates into the main SWAP
- Addition of Species of Greatest Information Need (SGIN)
- Final product will be web-based and include tracking dashboards
- Improve awareness and alignment with other plans





Future Opportunities for Input

- Stakeholder input:
 - In person meetings
 - Virtual meetings
 - Electronic forms



Plants of Greatest Conservation Need: Tier 1 & 2 Status Review

Jessica Smith
Colorado Natural Heritage
Program

20th Annual Rare Plant Symposium
Adams State University, Alamosa, CO
September 22, 2023



Astragalus naturitensis, Naturita milkvetch, Tier 2





How are Ranks Updated?

- CNHP, NatureServe, other state heritage programs share responsibility for assigning ranks
 - NatureServe calculator
- What causes rank change?
 - Additional occurrence information
 - Updated threat information
 - Updated taxonomic information
- CNHP - reviewed ranks for 51 PGCN since 2022
 - 35 have been updated



Tier 1 Species – Less Rare

From G1 -> G1G2

- *Astragalus microcymbus* (2023)
- *Astragalus schmolliae* (2023)
- *Ipomopsis polyantha* (2022)

From G1 -> G2

- *Astragalus osterhoutii* (2022)
- *Descurainia kenheilii* (2022)
- *Lomatium latilobum* (2022)
- *Phacelia formosula* (2022)

From G1G2 -> G2

- *Astragalus deterior* (2023)
- *Eriogonum brandegeei* (2022)
- *Eutrema penlandii* (2020)
- *Hackelia gracilentata* (2023)
- *Lepidium huberi* (2019)
- *Physaria rollinsii* (2023)

Others:

- *Oenothera coloradensis*,
G3T2 -> G3T2
– S1 to S1S2 (2022)



Tier 1 - Taxonomic Changes

Dropped from Tracking List

- *Draba weberi*
- *Corispermum navicula*

Pending

- *Phacelia gina-glenneae* (G1Q)
- *Sclerocactus dawsonii*



Phacelia gina-glenneae, Troublesome phacelia, Tier 1,
Photo by Pat Murphy



Potential G1 Species Additions

New to tracking list

- *Penstemon bleaklyi*,
Bleakly's Beardtounge,
G1/S1

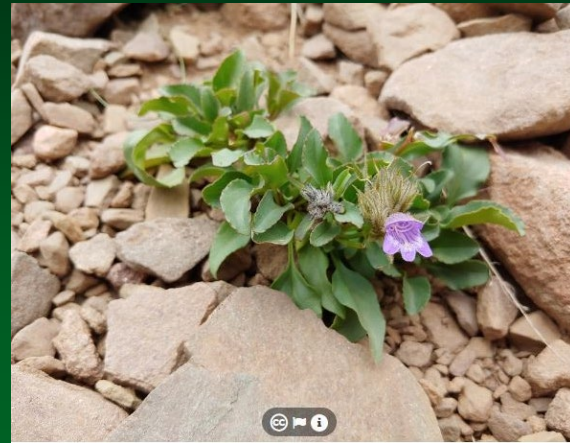


Photo @ Jennifer Ackerfield, <https://www.inaturalist.org/>

- *Senecio inexpectatus*,
Prickly Groundsel,
G5T1/S1



Photo ©Al Schneider, <http://www.swcoloradowildflowers.com>



Tier 2 Species – Less Rare

Scientific Name*	Common Name	2015 Global & State Status Ranks	2023 Global & State Status Ranks
<i>Astragalus anisus</i>	Gunnison Milkvetch	G2G3 / S2S3	G3/S3
<i>Astragalus equisolensis</i>	Horseshoe Milkvetch	G5T1/S1	G5T2?/S2
<i>Astragalus iodopetalus</i>	Violet Milkvetch	G2 / S1	G3/S2
<i>Astragalus missouriensis</i> var. <i>humistratus</i>	Missouri Milkvetch	G5T1/S1	G5T2/S2
<i>Astragalus naturitensis</i>	Naturita Milkvetch	G2G3 / S2S3	G3/S3
<i>Astragalus piscator</i>	Fisher Towers Milkvetch	G2G3 / S1	G3/S1
<i>Astragalus rafaensis</i>	San Rafael Milkvetch	G2G3 / S1	G3/S3
<i>Boechea crandallii</i>	Crandall's Rockcress	G2 / S2	G3G4/S3S4
<i>Botrychium lineare</i>	Narrowleaf Grapefern	G2G3 / S2S3	G3/S2S3
<i>Calochortus ciscoensis</i>	Cisco Seego Lily	G2 / S1	G3/S1
<i>Castilleja puberula</i>	Downy Indian- paintbrush	G2G3 / S2S3	G3/S2S3
<i>Chylismia eastwoodiae</i> (<i>Camissonia eastwoodiae</i>)	Eastwood Evening- primrose	G2 / S1	G3/S2
<i>Cirsium perplexans</i>	Adobe Hills Thistle	G2G3 / S2S3	G3/S3



Tier 2 Species – Less Rare

<i>Delphinium alpestre</i>	Colorado Larkspur	G4T2 / S2	G3/S2
<i>Draba graminea</i>	San Juan Draba	G2 / S2	G3/S3
<i>Draba grayana</i>	Gray's Peak Whitlow-grass	G2 / S2	G3/S3
<i>Draba smithii</i>	Smith Whitlow- grass	G2 / S2	G3 / S3
<i>Erigeron kachinensis</i>	Kachina Daisy	G2 / S1	G3 / S1
<i>Eriogonum coloradense</i>	Colorado Wild Buckwheat	G2 / S2	G3 / S3
<i>Herrickia horrida</i>	Canadian River Spiny Aster	G2? / S1	G3 / S1
<i>Ipomopsis aggregata ssp. weberi</i>	Rabbit Ears Gilia	G5T2 / S2	G5T3Q / S3
<i>Lepidium crenatum</i>	Alkaline Pepperwort	G2 / S2	G3 / S3
<i>Mertensia humilis</i>	Rocky Mountain Bluebells	G2 / S1	G3 / S1
<i>Oonopsis monocephala</i>	Rayless Goldenweed	G3G4T2 / S2	G3G4T3/ S3
<i>Penstemon mensarum</i>	Grand Mesa Penstemon	G2 / S2	G3 / S3
<i>Platanthera zothecina</i> (<i>Anticlea vaginatus</i>)	Alcove Bog- orchid	G2 / S2	G3 / S1S2
<i>Saussurea weberi</i>	Weber Saussurea	G2G3 / S2	G3 / S2S3
<i>Telesonix jamesii</i>	James' Telesonix	G2 / S2	G3G4 / S3
<i>Townsendia fendleri</i>	Fendler's Townsend-daisy	G2 / S2	G3 / S2
<i>Townsendia rothrockii</i>	Rothrock Townsend-daisy	G2G3 / S2S3	G3 / S3



Potential G2 Species Additions

Scientific Name	Common Name	Global & State Status Ranks	Estimated % Range in Colorado	Number of EOs in Colorado	Notes
<i>Cirsium culebraense</i>	Culebra Thistle	G2/S2 (NM S1)	High	5	Recently described by Ackerfield (2022).
<i>Iliamna crandallii</i>	Crandall's Wild-hollyhock	G2/S2	Endemic	8	"Q" recently removed from G rank. Ackerfield lumped this taxon with <i>I. rivularis</i> in 2015; split again in 2022. CNHP tracked throughout.
<i>Solidago capulinensis</i>	Capulin Goldenrod	G2/S1 (NM S1)	Medium	7	Started tracking in 2019.
<i>Erigeron abajoensis</i>	Abajo Daisy	G2G3/S1 (AZ S1, UT S2, NM not ranked)	Low	1	Currently not included in Ackerfield (2022); possibly in future edition; in FNA for CO (Heil et al. 2013).
<i>Primula pauciflora</i> <i>var. zionense</i>	Zion Shootingstar	G5T2T3/S1 (UT S2)	Low	1	Added to CNHP tracking list with update to Ackerfield 2022 nomenclature.



Photo @ J. Ackerfield, <https://www.inaturalist.org/>



<https://swbiodiversity.org/seinet/>



Photo @ Stacey Anderson



Photo © Al Schneider
<http://www.swcoloradowildflowers.com>





Thank you!

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Colorado State Wildlife Action Plan

<https://cpw.state.co.us/aboutus/Pages/StateWildlifeActionPlan.aspx>

