

2021/22 Addendum – Changes to Utah Species of Greatest Conservation Need

Summary of 2021/22 changes to Utah SGCN list

Remove these 13 SGCNs from 2015-2025 Utah Wildlife Action Plan:

Justification 1: reassessment of status and trends factors:

- **Big free-tailed bat.** Reassessment of status and trends resulted in this species no longer meeting our SGCN inclusion criteria.
- **Desert night lizard.** Reassessment of status and trends resulted in this species no longer meeting our SGCN inclusion criteria.
- **Utah milksnake.** Reassessment of status and trends resulted in this subspecies no longer meeting our SGCN inclusion criteria.

Justification 2: reassessment of socio-economic factors:

- **American bison.** Reassessment of socio-economic factors resulted in this species no longer meeting our SGCN inclusion criteria.
- **Black-necked gartersnake.** Reassessment of socio-economic factors resulted in this species no longer meeting our SGCN inclusion criteria.
- **Bighorn sheep.** Reassessment of socio-economic factors resulted in this species no longer meeting our SGCN inclusion criteria.
- **Great Plains toad.** Reassessment of socio-economic factors resulted in this species no longer meeting our SGCN inclusion criteria.
- **Many-lined skink.** Reassessment of socio-economic factors resulted in this species no longer meeting our SGCN inclusion criteria.
- **Mexican spadefoot.** Reassessment of socio-economic factors resulted in this species no longer meeting our SGCN inclusion criteria.
- **Plains spadefoot.** Reassessment of socio-economic factors resulted in this species no longer meeting our SGCN inclusion criteria.
- **Smith's black-headed snake.** Reassessment of socio-economic factors resulted in this species no longer meeting our SGCN inclusion criteria.
- **Spotted leaf-nosed snake.** Reassessment of socio-economic factors resulted in this species no longer meeting our SGCN inclusion criteria.
- **Western threadsnake.** Reassessment of socio-economic factors resulted in this species no longer meeting our SGCN inclusion criteria.

Add these 39 SGCNs to 2015-2025 Utah Wildlife Action Plan:

Justification 1: reassessment of threats factors:

- **Long-eared Myotis.** Reassessment of threats resulted in this species now meeting our SGCN inclusion criteria.
- **Long-legged Myotis.** Reassessment of threats resulted in this species now meeting our SGCN inclusion criteria.

2021/22 Addendum – Changes to Utah Species of Greatest Conservation Need

- **Yuma Myotis.** Reassessment of threats resulted in this species now meeting our SGCN inclusion criteria.

Justification 2: expansion of life forms considered for SGCN designation¹, using current criteria:

- **Autumn buttercup.** Heretofore, only jurisdictional wildlife were eligible for SGCN designation. We now evaluate plants for SGCN designation. This species meets current criteria.
- **Barneby ridge-cress.** Heretofore, only jurisdictional wildlife were eligible for SGCN designation. We now evaluate plants for SGCN designation. This species meets current criteria.
- **Barneby reed-mustard.** Heretofore, only jurisdictional wildlife were eligible for SGCN designation. We now evaluate plants for SGCN designation. This species meets current criteria.
- **Cisco milkvetch.** Heretofore, only jurisdictional wildlife were eligible for SGCN designation. We now evaluate plants for SGCN designation. This species meets current criteria.
- **Clay Phacelia.** Heretofore, only jurisdictional wildlife were eligible for SGCN designation. We now evaluate plants for SGCN designation. This species meets current criteria.
- **Clay reed-mustard.** Heretofore, only jurisdictional wildlife were eligible for SGCN designation. We now evaluate plants for SGCN designation. This species meets current criteria.
- **Coral Pink Sand Dunes tiger beetle.** Heretofore, only jurisdictional wildlife were eligible for SGCN designation. We now evaluate insects for SGCN designation. This species meets current criteria.
- **Deseret milkvetch.** Heretofore, only jurisdictional wildlife were eligible for SGCN designation. We now evaluate plants for SGCN designation. This species meets current criteria.
- **Despain pincushion cactus.** Heretofore, only jurisdictional wildlife were eligible for SGCN designation. We now evaluate plants for SGCN designation. This species meets current criteria.
- **Dwarf bearclaw-poppy.** Heretofore, only jurisdictional wildlife were eligible for SGCN designation. We now evaluate plants for SGCN designation. This species meets current criteria.
- **Gierisch's globemallow.** Heretofore, only jurisdictional wildlife were eligible for SGCN designation. We now evaluate plants for SGCN designation. This species meets current criteria.
- **Goose Creek milkvetch.** Heretofore, only jurisdictional wildlife were eligible for SGCN designation. We now evaluate plants for SGCN designation. This species meets current criteria.
- **Graham's beardtongue.** Heretofore, only jurisdictional wildlife were eligible for SGCN designation. We now evaluate plants for SGCN designation. This species meets current criteria.
- **Great Basin silverspot butterfly.** Heretofore, only jurisdictional wildlife were eligible for SGCN designation. We now evaluate insects for SGCN designation. This species meets current criteria.
- **Heliotrope milkvetch.** Heretofore, only jurisdictional wildlife were eligible for SGCN designation. We now evaluate plants for SGCN designation. This species meets current criteria.

¹ See page 11 of the 2015-2025 Utah Wildlife Action Plan (UWAP) for a discussion of "jurisdictional wildlife", which were the only taxa UDWR made eligible for consideration and designation as SGCNs. At the time of its preparation (ca. 2012-2015) plants and insects were determined to be outside the scope of the planning effort. Since the UWAP is a plan for a variety of stakeholders, UDWR is proposing some plant and insects for inclusion as SGCNs in this minor revision and expects to move toward incorporating additional plant and insect species in the future. All plant and insects proposed in this minor revision satisfy the UDWR's existing criteria-based process of evaluation before SGCN designation.

2021/22 Addendum – Changes to Utah Species of Greatest Conservation Need

- **Isely's milkvetch.** Heretofore, only jurisdictional wildlife were eligible for SGCN designation. We now evaluate plants for SGCN designation. This species meets current criteria.
- **Jones Cycladenia.** Heretofore, only jurisdictional wildlife were eligible for SGCN designation. We now evaluate plants for SGCN designation. This species meets current criteria.
- **Kodachrome bladderpod.** Heretofore, only jurisdictional wildlife were eligible for SGCN designation. We now evaluate plants for SGCN designation. This species meets current criteria.
- **Last Chance Townsendia.** Heretofore, only jurisdictional wildlife were eligible for SGCN designation. We now evaluate plants for SGCN designation. This species meets current criteria.
- **Maguire primrose.** Heretofore, only jurisdictional wildlife were eligible for SGCN designation. We now evaluate plants for SGCN designation. This species meets current criteria.
- **Mojave poppy bee.** Heretofore, only jurisdictional wildlife were eligible for SGCN designation. We now evaluate insects for SGCN designation. This species meets current criteria.
- **Monarch butterfly.** Heretofore, only jurisdictional wildlife were eligible for SGCN designation. We now evaluate insects for SGCN designation. This species meets current criteria.
- **Navajo sedge.** Heretofore, only jurisdictional wildlife were eligible for SGCN designation. We now evaluate plants for SGCN designation. This species meets current criteria.
- **Paradox milkvetch.** Heretofore, only jurisdictional wildlife were eligible for SGCN designation. We now evaluate plants for SGCN designation. This species meets current criteria.
- **Pariette cactus.** Heretofore, only jurisdictional wildlife were eligible for SGCN designation. We now evaluate plants for SGCN designation. This species meets current criteria.
- **Shivwits milkvetch.** Heretofore, only jurisdictional wildlife were eligible for SGCN designation. We now evaluate plants for SGCN designation. This species meets current criteria.
- **Shrubby reed-mustard.** Heretofore, only jurisdictional wildlife were eligible for SGCN designation. We now evaluate plants for SGCN designation. This species meets current criteria.
- **Siler pincushion cactus.** Heretofore, only jurisdictional wildlife were eligible for SGCN designation. We now evaluate plants for SGCN designation. This species meets current criteria.
- **Stage Station milkvetch.** Heretofore, only jurisdictional wildlife were eligible for SGCN designation. We now evaluate plants for SGCN designation. This species meets current criteria.
- **Uinta Basin hookless cactus.** Heretofore, only jurisdictional wildlife were eligible for SGCN designation. We now evaluate plants for SGCN designation. This species meets current criteria.
- **Ute ladies' tresses.** Heretofore, only jurisdictional wildlife were eligible for SGCN designation. We now evaluate plants for SGCN designation. This species meets current criteria.
- **Welsh's milkweed.** Heretofore, only jurisdictional wildlife were eligible for SGCN designation. We now evaluate plants for SGCN designation. This species meets current criteria.
- **Western bumble bee.** Heretofore, only jurisdictional wildlife were eligible for SGCN designation. We now evaluate insects for SGCN designation. This species meets current criteria.
- **White River beardtongue.** Heretofore, only jurisdictional wildlife were eligible for SGCN designation. We now evaluate plants for SGCN designation. This species meets current criteria.
- **Winkler's pincushion cactus.** Heretofore, only jurisdictional wildlife were eligible for SGCN designation. We now evaluate plants for SGCN designation. This species meets current criteria.
- **Wright fishhook cactus.** Heretofore, only jurisdictional wildlife were eligible for SGCN designation. We now evaluate plants for SGCN designation. This species meets current criteria.

2021/22 Addendum – Changes to Utah Species of Greatest Conservation Need

Locations of these changes in the Plan:

Plants and insects are new to our SWAP. These additions will modify:

- Table 2, Utah Species of Greatest Conservation Need, on or around SWAP page 17 (in the case of Plants) and SWAP page 15 (in the case of Insects),
- Key Habitats - Introduction/Terrestrial Key Habitats on SWAP page 21 make the following changes:
 - Add plants to the first bullet at the top of page so that it reads “...mountainsnails, shorebirds, plants, and most of our aquatic SGCNs.”
 - Add a new 4th bullet that reads “All Utah SGCN plant species have specialized habitat requirements and/or very limited distribution and are not directly associated with any of the 8 terrestrial key habitats (see table KH 1). Key habitats for the Utah plant SGCN species are identified in ESA recovery plans or state conservation agreements and strategies. Management of the extent and condition of the plant habitats will follow recommendations outlined in these plans.”
- Appendix – Species Accounts on or around SWAP page 293 (in the case of Plants) and SWAP page 267 (in the case of Insects), and also
- Appendix – Threats By SGCN Look-up Tables on or around SWAP page 356 (in the case of Plants); Plant Threat table is provided at the end of the Addendum.

Toads and spadefoots are amphibians. Amphibian changes will modify:

- Table 2, Utah Species of Greatest Conservation Need, on SWAP page 14, and also
- Table 1, Appendix – SGCNs Methods on SWAP page 241, as well as
- Appendix – Species Accounts (Amphibians) on or around SWAP page 242.

Sheep, bats, and bison are mammals. Mammal changes will modify:

- Table 2, Utah Species of Greatest Conservation Need on or around SWAP page 15, and also
- Appendix – Species Accounts (Mammals) on or around SWAP page 268.

Lizards and snakes are reptiles. Reptile changes will modify:

- Table 2, Utah Species of Greatest Conservation Need, on SWAP page 17, and also
- Table 1, Appendix – SGCNs Methods on SWAP page 241, as well as
- Appendix – Species Accounts (Reptiles) on or around SWAP page 293.

2021/22 Addendum – Changes to Utah Species of Greatest Conservation Need

Species accounts for new Utah SGCNs

Autumn Buttercup (*Ranunculus aestivalis*)

Description

- A small, perennial herb with yellow flowers and alternately divided leaves. Grows in wet communities on islands of peaty hummocks.
- Federally listed as endangered in 1989.

Abundance, Distribution and Habitat

- NatureServe 2019; S1/N1.
- Endemic to Utah.
- The wetland associated communities that host this plant are very geographically restricted to streamsides and floodplains in Garfield County adjacent to the Sevier River.
- Only three occurrences are known.

Barneby Ridge-cress (*Lepidium barnebyanum*)

Description

- A perennial herb in the Mustard family that forms dense cushions with many white to yellow flowers. Grows along semi-barren ridges in pinyon-juniper woodlands.
- Federally listed as endangered in 1990.

Abundance, Distribution and Habitat

- NatureServe 2009; S1/N1.
- Endemic to Utah.
- Restricted to somewhat barren knolls with shallow, fine textured soils within pinyon-juniper woodlands, only in the Indian Canyon area of Duchesne County.

Barneby Reed-Mustard (*Hesperidanthus barnebyi*)

Description

- A perennial herb in the Mustard family with white to lilac flowers. Grows on steep eroding slopes with sparse vegetation, including mixed desert shrub and pinyon-juniper communities.
- Federally listed as endangered in 1992.

Abundance, Distribution and Habitat

- NatureServe 2009; S1/N1.
- Endemic to Utah.
- Known only from Emery and Wayne Counties. Populations are generally restricted to the San Rafael Swell and Capitol Reef National Park on steep north-facing slopes on the Chinle Formation of the Colorado Plateau.

2021/22 Addendum – Changes to Utah Species of Greatest Conservation Need

Cisco Milkvetch (*Astragalus sabulosus*)

Description

- A clump-forming plant in the Legume family with yellow flowers and large, drooping, sausage-shaped fruits. Grows on Mancos shale, with mat-atriplex and shadscale plant communities.

Abundance, Distribution and Habitat

- NatureServe 2019; S1/N1.
- Endemic to Utah.
- Plants are restricted to the Cisco Desert of Green River Valley in Grand County in substrates derived from the Mancos Shale within mat saltbush communities.

Clay Phacelia (*Phacelia argillacea*)

Description

- An annual plant with abundantly hairy herbage and blue to violet flowers. Grows on steep, barren slopes of shale in sparse pinyon-juniper and mountain brush communities.
- Federally listed as endangered in 1978.

Abundance, Distribution and Habitat

- NatureServe 2012; S1/N1.
- Endemic to Utah.
- Restricted to two occurrences in Utah County on steep hillsides in sparse pinyon-juniper and mountain brush communities on the Green River Formation.

Clay Reed-mustard (*Hesperidanthus argillaceus*)

Description

- A perennial herb in the Mustard family with small white to lilac flowers. Tends to grow on north facing slopes with surface bedrock, scree, and fine textured soils. The soils are often gypsum-rich clays overlain with sandstone talus.
- Federally listed as threatened in 1992.

Abundance, Distribution and Habitat

- NatureServe 2009; S1/N1.
- Endemic to Utah.
- Habitat is generally restricted to the Book Cliffs area of Uintah County in northeastern Utah within desert shrub communities on rocky slopes and shale barrens within soils mentioned in the description section.

2021/22 Addendum – Changes to Utah Species of Greatest Conservation Need

Coral Pink Sand Dunes Tiger Beetle (*Cicindella albissima*)

Description

- A 1-cm-long tiger beetle with large eyes and mandibles and long, hairy legs. Head and legs are metallic green. Elytra are ivory-colored with a dorsal copper stripe.
- Adult beetles patrol dune crests and hunt for insect prey. Requires vegetated interdunal swales for suitable larval habitat (requires 2-3 years to complete life cycle).
- Proposed as federally threatened in 2012 but withdrawn in response to conservation strategy and agreement.

Abundance and Distribution

- NatureServe 2006; S1/N1.
- Current population estimate is approximately 3,200 adults. Restricted to a narrow, 8 mi² dune system in Kane County, Utah.

Deseret Milkvetch (*Astragalus desereticus*)

Description

- Perennial, almost stemless legume with white flowers with pinkish wings and deep pink keel tip.
- Federally listed as threatened in 1999, delisted in 2018. Now in obligatory post-delisting monitoring, in order to achieve recovered status.

Abundance and Distribution

- NatureServe 2018; S1/N1.
- Endemic to Utah.
- Restricted to steep south and west-facing slopes in sandy-gravelly soils weathered from conglomerate outcrops of the Moroni Formation within pinyon-juniper/ sagebrush vegetation communities near the town of Birdseye in Utah County.

Despain Pincushion Cactus (*Pediocactus despainii*)

Description

- Small cactus, usually with solitary spines. The crown of the stem at or near the ground level.
- Grows in desert pavements of cobble or pebble with mixed desert shrub and pinyon-juniper woodlands.
- Federally listed as endangered in 1987.

Abundance, Distribution and Habitat

- NatureServe 1987; S2/N2.
- Endemic to Utah.
- Restricted to Wayne and Emery Counties on soil types mentioned above in desert shrub and pinyon-juniper woodlands.

2021/22 Addendum – Changes to Utah Species of Greatest Conservation Need

Dwarf Bearclaw-Poppy (*Arctomecon humilis*)

Description

- Perennial plant with showy white flowers. Leaves are three-toothed and hairy, resembling a bear claw. Restricted to sparsely vegetated, gypsum soils. Reproduces sexually by seed, seed bank critical for species protection.
- Federally listed as endangered in 1979.

Abundance, Distribution and Habitat

- NatureServe 2013; S1/N1.
- Endemic to Utah.
- Populations are restricted to the Mojave Desert in Utah in Washington County, on gypsiferous clay soils within the vicinity of St. George.

Gierisch's globemallow (*Sphaeralcea gierischii*)

Description

- Perennial plant with deeply lobed leaves and orange flowers. Grows on gypsiferous soils, primarily on the Harrisburg Member of the Kaibab formation. Associated with warm desert shrub communities.
- Federally listed as endangered in 2013.

Abundance, Distribution and Habitat

- NatureServe 2013; S1/N1.
- Restricted to a small area near the Utah-Arizona state line on gypsiferous soils within the geologic formation mentioned above in saltbrush, ephedra and blackbrush vegetation communities in Washington County.

Goose Creek Milkvetch (*Astragalus anserinus*)

Description

- Small perennial plant in the Legume family with pink flowers followed by thinly villous pods. Grows on white tuffaceous outcrops in sagebrush and pinyon-juniper communities.

Abundance, Distribution and Habitat

- NatureServe 2004; S2/N2.
- Restricted to the northwest corner of Utah, extending into southern Idaho and northeastern Nevada within tuffaceous outcrops of the Salt Lake Formation within pinyon-juniper/ sagebrush communities. In Utah, known only from Box Elder County.

2021/22 Addendum – Changes to Utah Species of Greatest Conservation Need

Graham's Beardtongue (*Penstemon grahamii*)

Description

- Perennial plant with lavender flowers and thick, leathery leaves. Grows on gravelly clay soils of white calcareous shale knolls.

Abundance, Distribution and Habitat

- NatureServe 2009; S2/N2.
- Restricted to the Uinta Basin of northeastern Utah, extending into Colorado on sparsely vegetated white shale ledges and talus slopes within pinyon-juniper communities on the Green River Formation.

Great Basin Silverspot Butterfly (*Speyeria nokomis nokomis*)

Description

- Relatively large fritillary butterfly with silvery-white spots on ventral hindwing; males are bright orange with black markings, females are creamy yellow with brown markings.
- Reproduces sexually, completing full life cycle in one year; overwinter as pupae with adults emerging in spring. Requires bog violets (*Viola nephrophylla*) as exclusive larval host plant, woody vegetation as overwintering shelter for pupae, and a variety of flowering plants for adult nectar sources.
- Petitioned for federal listing in 2013; listing determination pending in FY2021.

Abundance and Distribution

- NatureServe 2019; S2/N3.
- Range encompasses east-central Utah, western Colorado, northern New Mexico, and Chuska Mountains of Arizona; found in moist habitats in mostly open meadows in mountain valleys and floodplains from 5,200-8,300 ft. where bog violets and nectar plants occur.
- Currently 20 colonies representing 11 populations are distributed across known range.

Heliotrope Milkvetch (*Astragalus montii*)

Description

- Small, tufted perennial plant in the Legume family with pink to purple flowers and mottled fruits. Grows in sub-alpine to alpine habitats in openings of spruce-fir forests or plateau margins.

Abundance, Distribution and Habitat

- NatureServe 2020, S3/N3.
- Endemic to Utah.
- Restricted to Tertiary Flagstaff limestone in high elevations of the Wasatch Plateau in Sanpete and Sevier Counties within openings of spruce-fir communities.

2021/22 Addendum – Changes to Utah Species of Greatest Conservation Need

Isely's Milkvetch (*Astragalus iselyi*)

Description

- Perennial plant in the Legume family with white flowers, drooping fruits and red stems. Grows in pinyon-juniper and desert shrub communities.

Abundance, Distribution and Habitat

- NatureServe 2011; S1/N1.
- Endemic to Utah
- Restricted to Grand and San Juan Counties within seleniferous soils in historic uranium mining areas within sparse pinyon-juniper woodlands primarily on and near the western foothills of the La Sal Mountains.

Jones Cycladenia (*Cycladenia humilis* var. *jonesii*)

Description

- Perennial forb with opposite leaves and showy purple-pink flowers. Grows in gypsiferous soils with sparse vegetation, usually occurring on steeper slopes. Its taxonomy is uncertain; Utah populations are probably genetically distinguishable from the California and Arizona populations.

Abundance, Distribution and Habitat

- NatureServe 1995; S2/N3N4.
- Found in Arizona, California and Utah. Populations are extremely disjunct in Utah, growing in Emery, Garfield, Grand and Kane Counties. Generally, the plant is restricted to gypsiferous, saline soils of the Cutler, Summerville and Chinle Formations.

Kodachrome Bladderpod (*Physaria tumulosa*)

Description

- A dense, mat forming plant in the Mustard family. Flowers are yellow. Grows on bare shale knolls and slopes in scattered pinyon-juniper woodlands.
- Federally listed as endangered in 1993.

Abundance, Distribution and Habitat

- NatureServe 2020; S3/N3.
- Endemic to Utah.
- Restricted to Kane County, primarily within the Grand Staircase-Escalante National Monument on White Cliffs of the Carmel Formation. Newly discovered populations may expand current distribution, for which genetic research is being conducted to confirm their identity.

2021/22 Addendum – Changes to Utah Species of Greatest Conservation Need

Last Chance Townsendia (*Townsendia aprica*)

Description

- A perennial, stemless daisy with yellow flower heads. Grows in soils from the Mancos Formation, soils often covered in biological soil crust.
- Federally listed as threatened in 1985.

Abundance, Distribution and Habitat

- NatureServe 2016; S2/N2.
- Endemic to Utah
- Restricted to Emery, Sevier and Wayne Counties, most often within the Blue Gate Member of Mancos Shale in saltbush and pinyon juniper communities.

Long-eared Myotis (*Myotis evotis*)

Description

- A small, insectivorous bat with a wide variety of habitat types in Utah, from lowland riparian and sagebrush to montane forests (Oliver 2000, UDWR data). For roosting, it uses a diversity of sites including live and dead trees, rock crevices, mines, caves, and buildings (NatureServe 2018). For wintering, its Utah habits are unknown, although presumably it hibernates.

Abundance and Distribution

- NatureServe 2016; S3S4/N4N5.
- Widely distributed in western North America from British Columbia through Baja California and east to the Dakotas and Colorado (NatureServe 2018). This bat is found throughout Utah (Oliver 2000, UDWR data).
- As mortality has recently been documented in this species, white-nose syndrome (WNS) disease is now identified as a grave threat. While it remains unknown how populations will be affected by WNS, given the large and rapid declines in other small-bodied bat species, increased conservation attention is warranted for long-eared myotis.

Long-legged myotis (*Myotis volans*)

Description

- A small, insectivorous bat commonly associated with forested habitats, though it has also been found in a variety of open habitats (Oliver 2000, UDWR data). Natural roost and maternity sites include crevices and hollows in live and dead trees, caves, rock outcrops, stream banks, and the ground. The species will also use some man-made crevices and hollows in buildings, bridges, and mines (Hayes and Wiles 2013). For wintering, its Utah habits are unknown, although presumably it hibernates.

Abundance and Distribution

- NatureServe 2016; S3S4/N5.

2021/22 Addendum – Changes to Utah Species of Greatest Conservation Need

- Widely distributed in western North America, from Alaska to central Mexico. This bat is found throughout Utah (Oliver 2000, UDWR data).
- As mortality has recently been documented in this species, white-nose syndrome (WNS) disease is now identified as a grave threat. While it remains unknown how populations will be affected by WNS, given the large and rapid declines in other small-bodied bat species, increased conservation attention is warranted for long-legged myotis.

Maguire Primrose (*Primula maguirei*)

Description

- Perennial plant with large showy rose to lavender flowers. Grows on moist, north-facing cliff walls.
- Federally listed as threatened in 1985.

Abundance, Distribution and Habitat

- NatureServe 2011; S1/N1.
- Endemic to Utah.
- Restricted to Logan Canyon in Cache County within damp ledges and crevices on steep canyon walls on dolomitic limestone of the Laketown Formation.

Mojave Poppy Bee (*Perdita meconis*)

Description

- Very small (0.5 cm) yellow-and-black fairy bee; males have yellow face. Solitary ground nester that reproduces sexually with a single spring generation; active from April to early June. Specialist pollinator for bear poppies (*Arctomecon* spp) and prickly poppies (*Argemone* spp) which have a patchy distribution.
- Petitioned for federal listing in 2018; listing determination pending in FY2024.

Abundance and Distribution

- NatureServe 2005; SX/N2 – potentially extirpated from Utah.
- Range extends through southeastern California, southern Nevada, southwestern Utah, and northwestern Arizona; found in creosote and mixed desert shrub with gypsum soils.
- Distribution data is considered incomplete, and rank is tentative.

Monarch Butterfly (*Danaus plexippus plexippus*)

Description

- Relatively large, orange-and-black patterned butterfly with white spots, with a distinct slow and sailing flight behavior.

2021/22 Addendum – Changes to Utah Species of Greatest Conservation Need

- Reproduces sexually; within one year 3-4 generations occur across range during periods of breeding and migration, with one long-lived generation spending winter months in roosting habitat.
- Requires milkweed (*Asclepias* spp) as larval host plant, available nectar resources throughout breeding and migratory range.
- Federally designated as Candidate in 2020.

Abundance and Distribution

- NatureServe 2015; SNR/NNR/G4. The large, sharp decline of North American migratory populations probably justify a national ranking of N3 or lower.
- Annual migrations occur, between breeding habitat and overwintering grounds. Range of western and eastern populations expands and contracts depending on the season. Breeding areas, migration routes, and winter roosts occur in different regions across North America.
- In Utah, meadow and riparian habitats support spring/summer breeding and late-season migratory behavior; western population coastal overwintering counts suggest fewer than 2000 individuals in fall 2020.

Navajo Sedge (*Carex specuicola*)

Description

- A grass-like species found in seeps, springs and hanging gardens.
- Federally listed as threatened in 1985.

Abundance, Distribution and Habitat

- NatureServe 1999; S1/N2.
- Found in Arizona and Utah. In Utah, it is known only from San Juan County growing in sandstone alcoves and hanging gardens associated with the San Juan River on the Colorado Plateau.

Paradox Milkvetch (*Astragalus holmgreniorum*)

Description

- Perennial legume with purple-pink flowers.
- Federally listed as endangered in 2001.

Abundance, Distribution and Habitat

- NatureServe 2019; S1/N1.
- Restricted to a narrow corridor in northwestern Arizona and southwestern Utah in the Mojave Desert of Washington County in warm desert shrub communities mostly within gravelly clay hills.

2021/22 Addendum – Changes to Utah Species of Greatest Conservation Need

Pariette Cactus (*Sclerocactus brevispinus*)

Description

- Small, spherically-shaped cactus with small purple to pink flowers and short spines. Grows on exposed clay hills, saltbush or sagebrush flats.
- Federally listed as threatened in 2009.

Abundance, Distribution and Habitat

- NatureServe 2015; S1/N1.
- Endemic to Utah.
- Thought to be restricted to a few miles across the Pariette Draw region of the central Uinta Basin on fine soils in clay badlands derived from the Uinta Formation within desert saltbush shrublands.

Shivwits Milkvetch (*Astragalus ampullarioides*)

Description

- Upright perennial legume with yellowish-cream flowers. Grows with warm desert shrubs, restricted to soils of the Chinle Formation.
- Federally listed as endangered in 2001.

Abundance, Distribution and Habitat

- NatureServe 2015; S1/N1.
- Endemic to Utah.
- Only found in Washington County growing within unstable clay shale soils of the Chinle Formation in warm desert shrub and pinyon juniper communities.

Shrubby Reed-mustard (*Hesperidanthus suffretescens*)

Description

- Perennial, clump-forming, herbaceous member of the Mustard family with yellow flowers. Grows in semi-barren, white shale soils with mixed desert shrub and pinyon-juniper communities.
- Federally listed as endangered in 1987.

Abundance, Distribution and Habitat

- NatureServe 2009; S1/N1.
- Endemic to Utah.
- Found only in the Uinta Basin of northeastern Utah in shale barrens within mixed desert shrub of the Green River Formation.

2021/22 Addendum – Changes to Utah Species of Greatest Conservation Need

Siler Pincushion Cactus (*Pediocactus sileri*)

Description

- Cactus with yellow flowers that commonly grows to 10 cm tall or more. Prefers soils high in gypsum
- Federally listed as threatened in 1993.

Abundance, Distribution and Habitat

- NatureServe 2013; S1/N2N3.
- Restricted to a narrow strip of western Arizona and Utah (Kane and Washington Counties), usually within gypsiferous clay and sandy soils of the Moenkopi Formation.

Stage Station Milkvetch (*Astragalus sabulosus var. vehiculus*)

Description

- Small, perennial legume with pinkish white flowers. Grows on the Morrison Formation with shadscale, woody-aster and galleta-grass communities.

Abundance, Distribution and Habitat

- NatureServe 2019; S1/N1.
- Endemic to Utah.
- Restricted to a single occurrence in the Courthouse Wash area of Grand County, within salt desert shrub communities on the Morrison Formation.

Uinta Basin Hookless Cactus (*Sclerocactus wetlandicus*)

Description

- Egg-shaped cactus with pink flowers. Grows in coarse textured soils topped with cobbles and pebbles.
- Federally listed as threatened in 2009.

Abundance, Distribution and Habitat

- NatureServe 2009; S3/N3.
- Endemic to Utah.
- Found only in the Uinta Basin of northeastern Utah, in Duchesne and Uintah Counties within mixed desert shrub, soils are derived from cobble and gravel stream deposits and cobbled surfaces on mesa slopes.

Ute Ladies' Tresses (*Spiranthes diluvialis*)

Description

- Small perennial orchid with white flowers. Grows in riparian communities with periodic disturbance events that help reduce competition.

2021/22 Addendum – Changes to Utah Species of Greatest Conservation Need

- Federally listed as endangered in 1992.

Abundance, Distribution and Habitat

- NatureServe 2020; S1/N2N3.
- Distribution extends from Utah to British Columbia. Most occurrences are in Utah and Colorado, found in moist to wet meadows, along streams, old oxbows, near springs or seeps and lake shores.
- Population trends are difficult to determine due to episodic hibernation of individuals.

Welsh's Milkweed (*Asclepias welshii*)

Description

- Large perennial plant with milky, white sap and large clusters of cream to pink colored flowers. Grows on unstable, shifting sand dunes with sparse vegetation. Can be outcompeted if the dune becomes stabilized by vegetation. An important host plant for pollinating insects.
- Federally listed as threatened in 1987.

Abundance, Distribution and Habitat

- NatureServe 2013; S1/N1.
- Restricted to a narrow corridor in northern Arizona and southern Utah (Kane County) within open sand dunes of the Navajo Sandstone within Ponderosa pine communities.

Western Bumble Bee (*Bombus occidentalis occidentalis*)

Description

- Large, furry-bodied bee with low buzzing sound when flying; segment pattern is mostly black and yellow with distinguishing white/buff segments on rear of abdomen. Reproduces sexually with annual eusocial colonies; mated queens leave colony and hibernate during winter months, and emerge in early spring to establish new colony. Requires suitable nesting habitat, diverse pollen and nectar forage available April-October.
- Petitioned for federal listing in 2015; listing determination pending in FY2023.

Abundance and Distribution

- NatureServe 2018; SNR/NNR/ G4. The large, sharp decline of populations probably justifies a national ranking of N3 or lower.
- Range extends through western United States and southern British Columbia; found in plains and prairies in northern range, but restricted to higher altitudes (>7000 ft) in southern portion of its range (including Utah). Infrequently detected in Utah, all records since 2007 have been found in subalpine/alpine habitat in Utah's mountain ranges.

2021/22 Addendum – Changes to Utah Species of Greatest Conservation Need

White River Beardtongue (*Penstemon albifluvis*)

Description

- Perennial plant with lavender to pale blue flowers. Grows on semi-barren, xeric soils usually mixed with fragmented shale. Recent research suggests recognition at species level (was formerly considered a variety of *Penstemon scariosus*).

Abundance, Distribution and Habitat

- NatureServe 2008; S2/N1.
- Restricted to a narrow range between eastern Utah (Uintah County) and western Colorado. Generally found in sparsely vegetated areas with pinyon-juniper and desert shrub communities on white shales derived from the Green River Formation.

Winkler's Pincushion Cactus (*Pediocactus winkleri*)

Description

- Small cactus with the crown of the stem at or very near ground level. Flowers are peach to pink in color. Grows in salt desert shrub communities, prefers southern exposed sites and desert pavement soils.
- Federally listed as threatened in 1998.

Abundance, Distribution and Habitat

- NatureServe 2013; S2/N2.
- Endemic to Utah.
- Found in Emery, Sevier and Wayne Counties within desert shrub communities in alkaline, silty or clay fine textured soils in desert pavements of cobble, pebble or gypsum soils primarily derived from the Dakota Formation.

Wright Fishhook Cactus (*Sclerocactus wrightiae*)

Description

- A small, ribbed cactus with solitary stems and white to pink flowers. Grows in a variety of soils, usually in areas with well-developed biological soil crusts. Associated with salt desert shrub and pinyon-juniper communities.
- Federally listed as endangered in 1979.

Abundance, Distribution and Habitat

- NatureServe 2013; S2/N2.
- Endemic to Utah.
- Known from Emery, Garfield, Sevier and Wayne Counties near the Fremont River and San Rafael Swell area on exposed, highly alkaline, often bare clay hills within desert grasslands or salt desert shrub communities.

2021/22 Addendum – Changes to Utah Species of Greatest Conservation Need

Yuma myotis (*Myotis yumanensis*)

Description

- A small, insectivorous bat that is most common in lower elevations, in association with water (Oliver 2000, UDWR data). However, this bat has been found from a wide range of elevations and habitats. Day roosts, night roosts, and maternity colonies have been found in buildings, bridges, caves and mines. For wintering, its Utah habits are unknown, although presumably it hibernates.

Abundance and Distribution

- NatureServe 2016; S3/N4N5.
- Distributed west of the Rocky Mountains from southern British Columbia to central Mexico. In Utah, this bat is found statewide but is most common in the southern portion of the state, and in desert regions (Oliver 2000, UDWR data).
- As mortality has recently been documented in this species, white-nose syndrome (WNS) disease is now identified as a grave threat. While it remains unknown how populations will be affected by WNS, given the large and rapid declines in other small-bodied bat species, increased conservation attention is warranted for Yuma myotis.

Appendix – Threats By SGCN Look-up Tables

Plants

Species Common Name Level 2 Threat name	Threat Impact			Grand Total
	Very High	High	Medium	
Autumn Buttercup		2	10	12
Livestock Farming and Ranching		1	1	2
Dams and Water Management / Use			3	3
Invasive Non-native / Alien Species			1	1
Problematic Native Species		1	1	2
Habitat Shifting and Alteration			1	1
Droughts			1	1
Temperature Extremes			1	1
Climate Change			1	1
Barneby Ridgegrass	1	1	4	6
Oil and Gas drilling			1	1
Roads and Railroads			1	1
Problematic Native Species	1	1		2
Droughts			1	1
Climate Change			1	1
Barneby's Reed-Mustard		3	4	7

2021/22 Addendum – Changes to Utah Species of Greatest Conservation Need

Problematic Native Species			2	2
Habitat Shifting and Alteration	1			1
Droughts	1			1
Temperature Extremes	1			1
Storms and Flooding			1	1
Climate Change			1	1
Cisco Milkvetch	1		6	7
Livestock Farming and Ranching	1			1
Oil and Gas drilling			1	1
Renewable Energy			1	1
Roads and Railroads			1	1
Problematic Native Species			1	1
Droughts			1	1
Climate Change			1	1
Clay Phacelia	1	4	3	8
Livestock Farming and Ranching			1	1
Invasive Non-native / Alien Species	1	1		2
Problematic Native Species		2		2
Avalanches / Landslides			1	1
Droughts		1		1
Climate Change			1	1
Clay Reed-mustard		4	3	7
Livestock Farming and Ranching	1			1
Oil and Gas drilling	1			1
Mining and Quarrying	1			1
Recreational Activities			1	1
Work and Other Activities			1	1
Droughts		1		1
Climate Change			1	1
Deseret Milkvetch	1		6	7
Livestock Farming and Ranching			1	1
Problematic Native Species	1		1	2
Droughts			1	1
Temperature Extremes			1	1
Storms and Flooding			1	1
Climate Change			1	1
Despain Pincushion Cactus			7	7
Livestock Farming and Ranching			1	1
Oil and Gas drilling			1	1
Mining and Quarrying			1	1
Gathering Terrestrial Plants			1	1
Recreational Activities			1	1
Droughts			1	1
Climate Change			1	1
Dwarf Bearclaw-poppy	6	4	6	16

2021/22 Addendum – Changes to Utah Species of Greatest Conservation Need

Housing and Urban Areas	1			1
Commercial and Industrial Areas			1	1
Mining and Quarrying	1			1
Roads and Railroads	1			1
Gathering Terrestrial Plants			1	1
Recreational Activities	1	1	1	3
Problematic Native Species	1		1	2
Droughts		1		1
Temperature Extremes		1		1
Storms and Flooding		1		1
Inadequate Understanding of Ecology and Life History			1	1
Climate Change			1	1
Inadequate Restoration Tools or Methods	1			1
Gierisch's globemallow	1	1	5	7
Livestock Farming and Ranching			1	1
Mining and Quarrying	1			1
Fire and Fire Suppression			1	1
Invasive Non-native / Alien Species		1		1
Garbage and solid waste			1	1
Droughts			1	1
Climate Change			1	1
Goose Creek Milkvetch			4	4
Fire and Fire Suppression			1	1
Invasive Non-native / Alien Species			1	1
Droughts			1	1
Climate Change			1	1
Graham's Beardtongue		2	4	6
Livestock Farming and Ranching			1	1
Mining and Quarrying		2		2
Problematic Native Species			1	1
Droughts			1	1
Climate Change			1	1
Heliotrope Milkvetch		2	3	5
Invasive Non-native / Alien Species		1		1
Problematic Native Species		1		1
Habitat Shifting and Alteration			1	1
Droughts			1	1
Climate Change			1	1
Isely's Milkvetch		3	2	5
Mining and Quarrying		1		1
Roads and Railroads			1	1
Problematic Native Species		1		1
Droughts		1		1
Climate Change			1	1
Jones Cycladenia			4	4

2021/22 Addendum – Changes to Utah Species of Greatest Conservation Need

Problematic Native Species			1	1
Droughts			1	1
Taxonomic Debate			1	1
Climate Change			1	1
Kodachrome Bladderpod			2	2
Droughts			1	1
Climate Change			1	1
Last Chance Townsendia	1	1	9	11
Livestock Farming and Ranching		1		1
Oil and Gas drilling			1	1
Mining and Quarrying			1	1
Invasive Non-native / Alien Species			1	1
Problematic Native Species	1		2	3
Habitat Shifting and Alteration			1	1
Droughts			1	1
Temperature Extremes			1	1
Climate Change			1	1
Maguire Primrose		2	2	4
Invasive Non-native / Alien Species		1		1
Problematic Native Species		1		1
Droughts			1	1
Climate Change			1	1
Navajo Sedge		1	4	5
Livestock Farming and Ranching			1	1
Dams and Water Management / Use			1	1
Problematic Native Species			1	1
Droughts		1		1
Climate Change			1	1
Paradox Milkvetch		3	7	10
Housing and Urban Areas		1		1
Livestock Farming and Ranching			1	1
Mining and Quarrying			1	1
Invasive Non-native / Alien Species			1	1
Problematic Native Species		2		2
Droughts			1	1
Temperature Extremes			1	1
Storms and Flooding			1	1
Climate Change			1	1
Pariette Cactus		4	6	10
Livestock Farming and Ranching		1		1
Oil and Gas drilling		1		1
Problematic Native Species		2	1	3
Introduced genetic material			1	1
Habitat Shifting and Alteration			1	1
Droughts			1	1

2021/22 Addendum – Changes to Utah Species of Greatest Conservation Need

Temperature Extremes			1	1
Climate Change			1	1
Shivwits Milkvetch	1	3	1	5
Housing and Urban Areas	1			1
Livestock Farming and Ranching		1		1
Invasive Non-native / Alien Species		1		1
Droughts		1		1
Temperature Extremes			1	1
Shrubby Reed-mustard	1	6	4	11
Commercial and Industrial Areas	1			1
Livestock Farming and Ranching		1		1
Oil and Gas drilling		1		1
Mining and Quarrying		2		2
Problematic Native Species		2		2
Habitat Shifting and Alteration			1	1
Droughts			1	1
Temperature Extremes			1	1
Climate Change			1	1
Siler Pincushion Cactus			5	5
Livestock Farming and Ranching			1	1
Oil and Gas drilling			1	1
Recreational Activities			1	1
Droughts			1	1
Climate Change			1	1
Stage Station Milkvetch		1	5	6
Livestock Farming and Ranching		1		1
Oil and Gas drilling			1	1
Renewable Energy			1	1
Problematic Native Species			1	1
Droughts			1	1
Climate Change			1	1
Uinta Basin Hookless Cactus		2	11	13
Livestock Farming and Ranching		1		1
Oil and Gas drilling		1		1
Mining and Quarrying			3	3
Invasive Non-native / Alien Species			1	1
Problematic Native Species			3	3
Habitat Shifting and Alteration			1	1
Droughts			1	1
Temperature Extremes			1	1
Climate Change			1	1
Ute Ladies' Tresses	1	8	8	17
Housing and Urban Areas			1	1
Recreational Activities			1	1
Dams and Water Management / Use	1	3	1	5

2021/22 Addendum – Changes to Utah Species of Greatest Conservation Need

Other Ecosystem Modifications	1		1
Invasive Non-native / Alien Species		1	1
Problematic Native Species	2	1	3
Habitat Shifting and Alteration	1		1
Droughts	1		1
Temperature Extremes		1	1
Storms and Flooding		1	1
Climate Change		1	1
Welsh's Milkweed	7	2	9
Problematic Native Species	2		2
Droughts		1	1
Housing and Urban Areas	1		1
Livestock Farming and Ranching	2		2
Invasive Non-native / Alien Species	1		1
Droughts	1		1
Temperature Extremes		1	1
White River Beardtongue	2	3	5
Livestock Farming and Ranching		1	1
Mining and Quarrying	2		2
Droughts		1	1
Climate Change		1	1
Winkler's Pincushion Cactus	2	5	7
Livestock Farming and Ranching		1	1
Gathering Terrestrial Plants		1	1
Problematic Native Species	2	1	3
Droughts		1	1
Climate Change		1	1
Wright Fishhook Cactus	4	8	12
Livestock Farming and Ranching	1		1
Oil and Gas drilling	1		1
Mining and Quarrying	1		1
Gathering Terrestrial Plants		1	1
Recreational Activities	1		1
Problematic Native Species		3	3
Habitat Shifting and Alteration		1	1
Droughts		1	1
Temperature Extremes		1	1
Climate Change		1	1
Grand Total	14	73	153
			240