Red Rock sunflower (Helianthus devernii): Overview and conservation status

Jamey McClinton, Administrator

Nevada Division of Natural Heritage



Photo: James Bailey, iNaturalist

Photo: Matt Berger, iNaturalist



Description and taxonomy

- Species: Helianthus devernii T.M. Draper
- Family: Asteraceae (Sunflower family), Section: Ciliares, Series: Pumili
- Flowers June September
- Nearest relative: *Helianthus pumilus* Nutt.
- Distinguishing characteristics:

Perennial plant with multiple smooth whitish stems emerging in a tuft from a woody rootstock and growing to approximately 1m tall. Narrow, gland-dotted leaves lacking petioles grow up the stems in both opposite and alternate arrangements. Stems are topped with yellow flowerheads composed of both disk and ray flowers, and ray flowers have petals less than 11mm long.

Taxon history

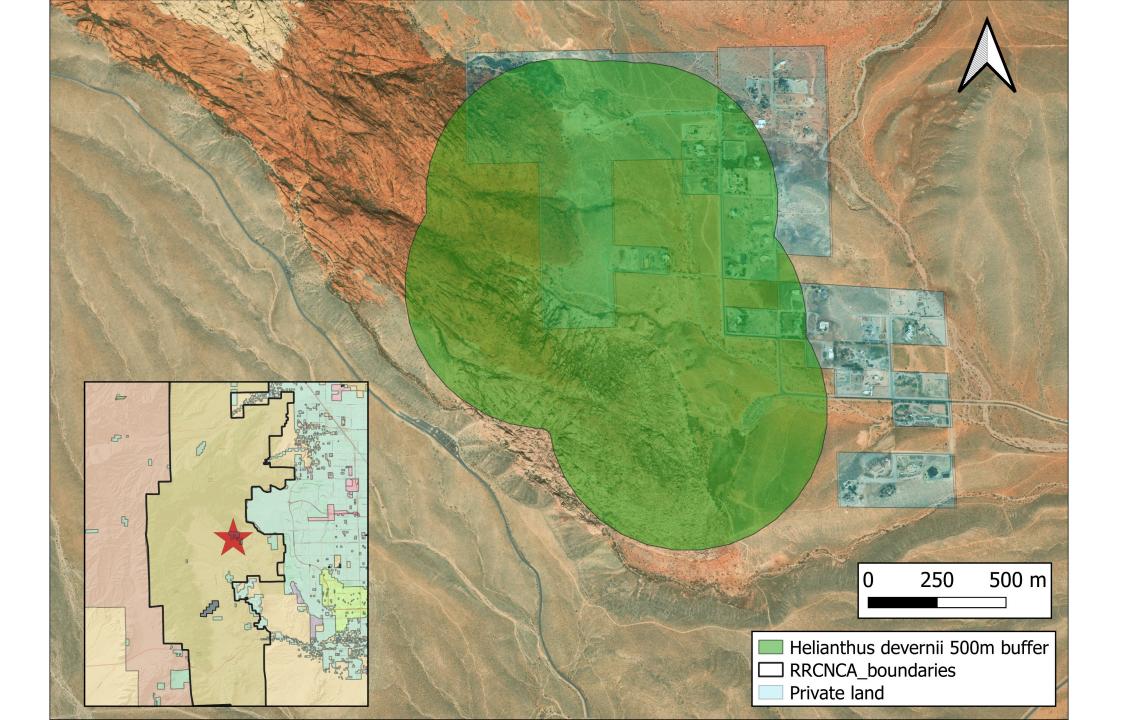
- 2007: First detected & collected
- 2021: Species described & published (Draper and Esque 2021).
- 2022: Petition submitted to the Nevada Division of Forestry (NDF) by the Nevada Division of Natural Heritage (NDNH) to add *Helianthus devernii* to the NV list of fully protected native flora.
- 2023: Added to the BLM Special Status Species List, listed as Endangered by NV Native Plant Society.



Geographic distribution and land ownership

- Moist alkaline soils, desert spring vegetation
- 2 springs, Red Rock Canyon National Conservation Area (RRCNCA)
- 0.95 acres (3,850 m²)
- Total geographic extent: 0.25 km²
- About 55% of the habitat and 38% of the plants are located on BLM lands, while 45% of the habitat and 62% of the plants are on the adjacent private inholding.



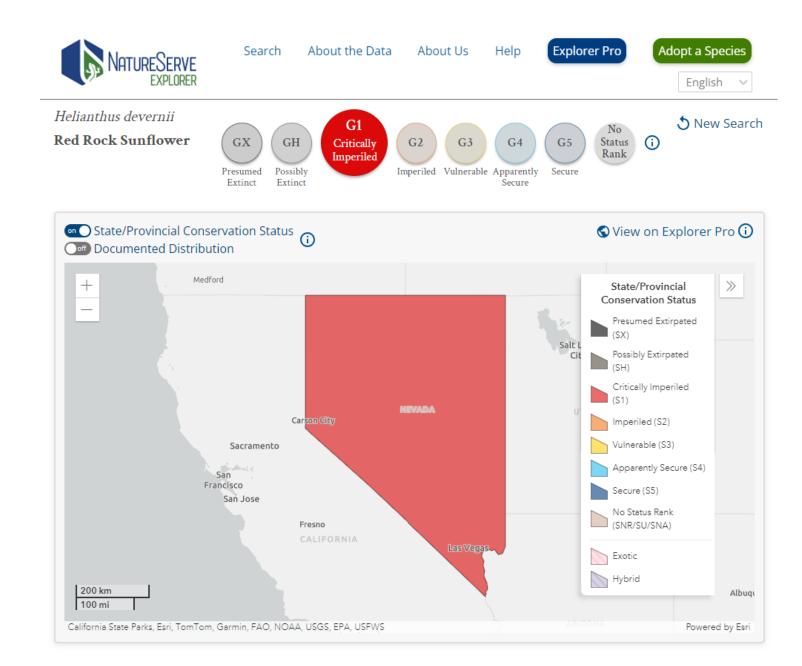


Abundance and threats

- 725 individuals
- Inherently vulnerable due to extreme rarity
- Additional threats:
 - Habitat alteration and trampling due to outdoor recreation, burros
 - Wildfire due to proliferation of invasive grasses
 - Hydrologic alteration
 - Climate change

Conservation status

- NDNH/NatureServe: S1G1, Critically imperiled
- BLM: Sensitive
- Nevada Native Plant Society: Endangered
- Significant undiscovered populations unlikely



Reasons for petition

- Distinctive species
- Extreme rarity
- Threats
- High potential benefit of special management



Arctomecon merriamii using Red Rock Sunflower as a nurse plant. Photo: Lilly Setters, iNaturalist

Questions?

jmcclinton@heritage.nv.gov

Photo: Andrew Newmark, iNaturalist