

Maguire Primrose

Primula maguirei



Maguire primrose / USFWS

What does the Maguire primrose look like?

The Maguire primrose (*Primula maguirei*) is a perennial herbaceous plant in the primrose family. This plant is 2 - 4 inches high and flowers from mid-April to mid-May. The reddish-lavender flowers are about 1 inch across and on top of long, leafless stems that can be up to 6 inches long.

Maguire primrose can reproduce sexually through pollination by bees, moths and hummingbirds. The primrose can also reproduce asexually, using underground rhizomes (or horizontal plant stems) to produce new shoots.

Where does the Maguire primrose occur?

Maguire primrose occurs solely within Logan Canyon, east of the city of Logan, in Cache County, Utah. The distribution of the species, like Logan Canyon itself, is linear and largely east-west in orientation. The total range of the species is narrowly distributed along a 10 mile swath straddling highway 89. The elevation gradient is between 4,800 feet to roughly 6,000 feet. Land ownership is primarily the U.S. Forest Service.

Maguire primrose occurs on cool, moss-covered dolomite cliff tops, notches and boulders where some soil has accumulated. The species may be physiologically dependent on the calcium and magnesium carbonates within its soil substrate. Generally, the species occurs on north-facing cliffs, with distribution limited by favorable temperature and moisture conditions. Snowmelt is an important source of moisture due

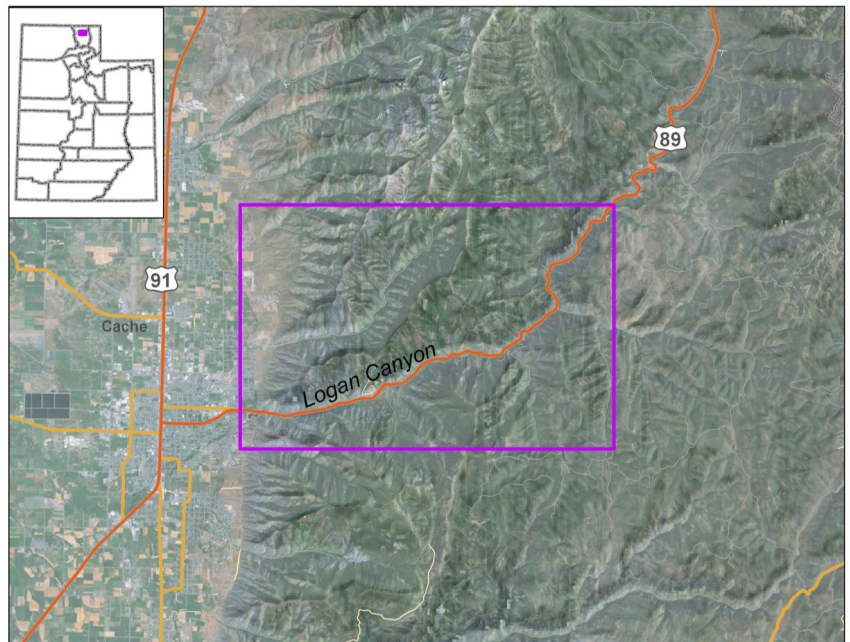
to the extent of spring seepage present in the cliff habitat.

Legal Status under the Endangered Species Act

Maguire primrose was listed as threatened on August 21, 1985 (50 FR 33731).

Why does the Maguire primrose need protection?

At the time of listing, we considered rock climbing and rappelling, transportation and



Species range / USFWS

utility construction, campground and trail development, and small population size as primary threats to Maguire primrose. The threat from rock climbing and rappelling is less now as a result of a combination of factors ranging from active management intervention (education and outreach and site closures) to improved survey data resulting in a better understanding of the location of plants relative to current climbing routes. The remaining threats are not as significant as we anticipated. Maguire primrose still occurs in small populations; however, we do not consider small population size in and of itself a threat unless there are other threats to the species that exasperate the risk of small population size.

What have we done to recover the Maguire primrose?

In September 1990, we published a recovery plan that lists necessary actions to recover the species. We are currently working with our Federal, State, and private partners to implement these recovery efforts.

The U.S. Forest Service's combined program of education, physical barriers, selective use of climbing closures and the

designation of the Logan Canyon Botanical Special Interest Area have collectively and substantively reduced threats to Maguire primrose and its habitat. In addition, we now have a better understanding of where the species occurs throughout its range, giving us an increased knowledge of how to further protect and recover this species.

What do we need to do to recover the Maguire primrose?

In our last status review of Maguire primrose (August 2011), we recommended a number of future actions that we consider necessary to recover this species:

- We recommend monitoring plant survivorship, growth and reproduction should continue in conjunction with assessing climbing patterns and intensities.
- We encourage the use of our office's guidelines for conducting and reporting botanical inventories and monitoring efforts. These guidelines help standardize population survey techniques and strengthen the use of quantitative measures to assess population trends.
- We recommend surveying areas of potentially suitable

habitat to refine estimates of total population size.

- Finally, we recommend continuing the collection of precipitation and humidity data to help assess the species' vulnerability to accelerated climate change.

More Information

To learn more about the Maguire primrose and conservation efforts on behalf of the species, please visit the following sites:

The U.S. Fish and Wildlife Service Endangered Species Program's website contains Federal Register notices and recovery documents: www.fws.gov/endangered

The U.S. Fish and Wildlife Service Information, Planning and Conservation (IPaC) System is a resource project proponents can use to find out about sensitive resources within the vicinity of a proposed project: ecos.fws.gov/ipac

Mountain-Prairie Regional Office's website contains an overview of listed plant species: <http://www.fws.gov/mountain-prairie/species/plants/>

The Utah Field Office's website contains species leads and important information regarding federally listed species in the state, including a copy of this fact sheet: www.fws.gov/utahfieldoffice



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