Barneby Ridge-cress

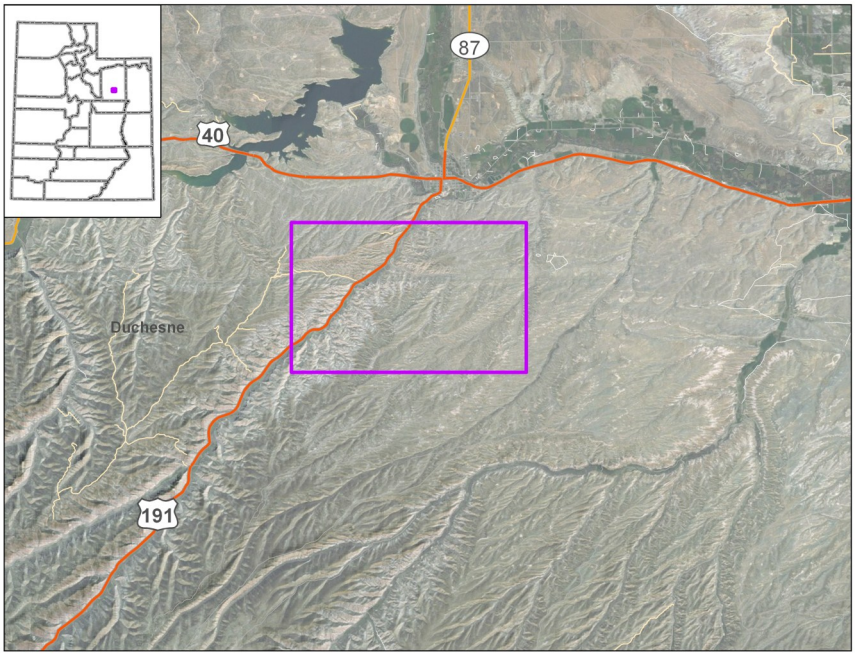
Lepidium barnebyanum

Barneby Ridge-cress / Bucky Secakuku, Bureau of Indian Affairs

What does the Barneby ridge-cress look like?

Barneby ridge-cress is an herbaceous perennial in the mustard family. It grows 2 - 6 inches tall and up to 8 inches wide. The stems are smooth with narrow leaves clustering at the base of the plant. The Barneby ridge-cress blooms in May with cream-colored flowers that are about ¼ inch across. Barneby ridge-cress is closely related to Jone's pepperweed, however the plants look completely different. The Barneby ridge-cress is a diminutive cushion like plant whereas Jone's pepperweed is not. Barneby ridge-cress may be confused with other diminutive cushion-like plants that grow in the same habitat, but the Barneby ridge-cress is unmistakable when flowering.

Jessi Brunson / USFWS



Species Range / USFWS

Where does the Barneby ridge-cress occur?

Barneby ridge-cress is endemic to the Indian Canyon drainage, which is mainly on Ute Tribal lands, and grows with other mound-forming species in piñon-juniper communities. It is found on ridge crests of white shale outcrops in the Uinta and Green River formations at 5,900 - 6,600 feet in Duchesne County, Utah.

Legal Status under the Endangered Species Act

The Barneby ridge-cress was listed as endangered on September 28, 1990 (55 FR 39860).

Barneby Ridge-cress habitat / USFWS

Why does the Barneby ridge-cress need protection?

When Barneby ridge-cress was listed, the primary threats were oil and gas development and recreational off-road vehicle use. Other factors that may have negatively impacted the species included low rates of seed maturity, restricted range, and livestock grazing. Recently the threats from livestock grazing and off-road vehicle use have been minimized, although the threat of oil and gas development has increased. The species' reproductive fitness and ability to adapt to environmental changes remain a concern. Because of its restricted range, this species is still vulnerable to stochastic events. Invasive weeds occur within Barneby ridge-cress habitat and may become a threat to this species.

What have we done to recover the Barneby ridge-cress?

In July 1993, we published a recovery plan that lists necessary actions to recover the species. We are working with our Federal, State, and private partners to implement these recovery efforts. Since 2006, we have participated in the public-private partnership of the Uinta Basin Rare Plant Forum. Members of this forum work to identify conservation actions for rare plants, including the Barneby ridge-cress. For the last two years, we also worked with the Bureau of Indian Affairs and private partners to conduct surveys for Barneby ridge-cress. We are also working with the University of Wyoming to develop a habitat model and species distribution map for the Barneby ridge-cress. We continue to work with the Bureau of Indian Affairs to reduce impacts from oil and gas development and complete surveys for this species across its range.

What do we need to do to recover the Barneby ridge-cress?

In our last status review of the Barneby ridge-cress (July 2011), we recommended a number of future actions that we consider necessary to recover this species:

- Continuing surveys within the species' known range and establishing population monitoring.
- Implementing research on Barneby ridge-cress' biology and life history, including reproduction.
- Addressing the impacts from invasive weeds, dust, habitat fragmentation, and other indirect impacts from oil and gas development.
- Establishing a conservation area or management plan to protect the species in perpetuity.
- Working with Denver Botanic Gardens to complete seed collection for this species.

Jessi Brunson / USFWS

More Information

To learn more about Barneby ridge-cress and conservation efforts on behalf of the species, please visit the following sites:

The U.S. Fish and Wildlife Service's 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: ecos.fws.gov/ipac

Mountain-Prairie Regional Office's website: http://www.fws.gov/mountain-prairie/species/plants/

Utah Field Office's website: www.fws.gov/utahfieldoffice

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