

U.S. Fish & Wildlife Service

# Kremmling Osterhout milkvetch

*Astragalus osterhoutii*

*Kremmling Osterhout milkvetch* / Megan McGuire, BLM

When Congress passed the Endangered Species Act (ESA) in 1973, it recognized that many of our nation's native plants and animals were in danger of becoming extinct. The U.S. Fish and Wildlife Service administers the ESA to preserve these imperiled species and their habitats for future generations.

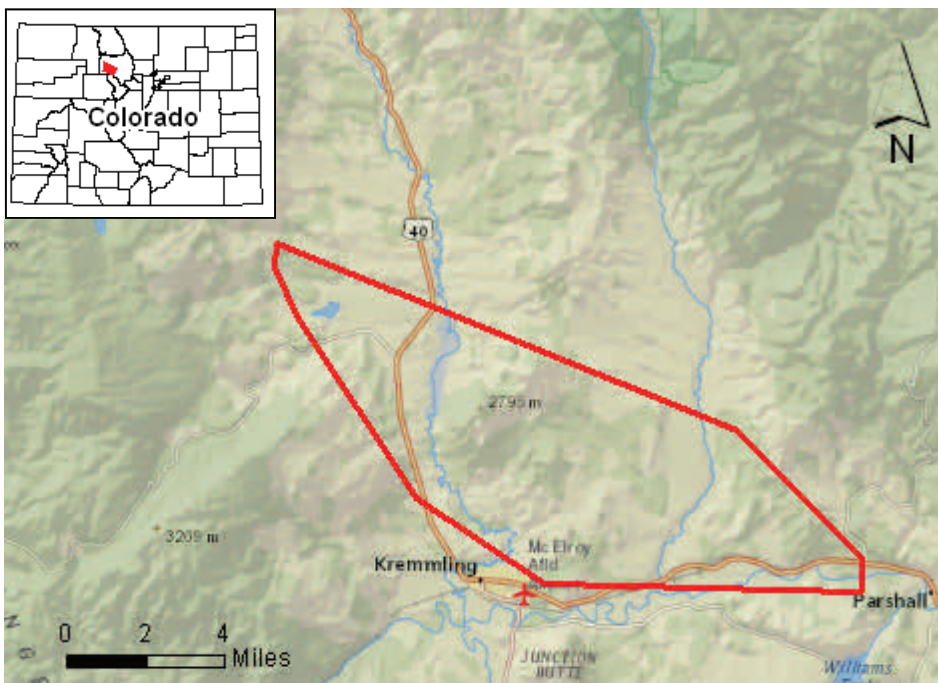
The Kremmling Osterhout milkvetch was listed as endangered on July 13, 1989 (54 FR 29658).

## What does the Kremmling Osterhout milkvetch look like?

The Kremmling Osterhout milkvetch is a non-woody (herbaceous) plant species in the pea family (Fabaceae). It has many slender and erect stems that grow to, on average, 12 to 40 inches tall. Its leaves are made up of many narrow leaflets, each up to 1 1/2 inches long. In summer, the Kremmling Osterhout milkvetch's creamy white flowers bloom, hanging along the end of each flowering stalk. In fall, its long, green fruits often turn maroon red when mature. Though distinctive, the



Peter Gordon / BLM



Kremmling Osterhout milkvetch may be confused with other milkvetch species in the area.

## Where does the Kremmling Osterhout milkvetch grow?

The Kremmling Osterhout milkvetch was first collected by George Osterhout, a Colorado botanist, in 1905. The species is known only to a 15 mile range near the town of Kremmling in Middle Park of northern Colorado, a high elevation sagebrush valley surrounded by ranges of the Rocky Mountains. The Kremmling Osterhout milkvetch grows in five scattered populations on barren shale soils. These soils are rich in selenium, which the Kremmling Osterhout milkvetch concentrates in its tissues, giving the plants a distinctive garlic-like odor.



*Kremmling Osterhout milkvetch habitat* / Megan McGuire, BLM

**Why does the Kremmling Osterhout milkvetch need protection?**

The Kremmling Osterhout milkvetch is threatened by off-highway vehicle (OHV) recreation, road and utility construction and maintenance, mining, oil and gas exploration, concentrated livestock use, land development, and other land uses occurring within the species habitat. Some plants were lost when Wolford Dam was constructed. Additional threats include climate change and nonnative invasive plants (weeds). Due to its limited range and few numbers, its vulnerability to habitat modification and loss is high. Therefore, protection of existing populations is vital to the survival of the species.

**What have we done to recover the Kremmling Osterhout milkvetch?**

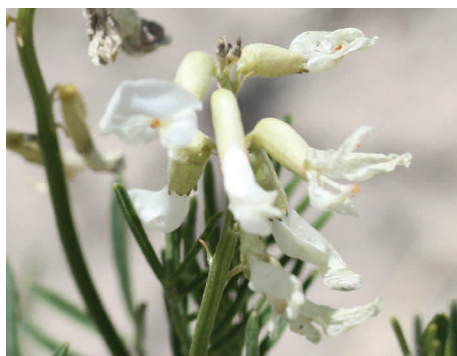
We have worked with Federal, State, and private partners to implement recovery objectives, including:

- Numerous research and conservation projects have been funded, such as reproductive, habitat and life history studies, and genetic research.
- The Rare Plant Conservation Initiative has developed a Conservation Action Plan for the rare and threatened species in the Middle Park area outlining and prioritizing conservation actions.
- An educational kiosk was constructed at an OHV recreation area nearby Kremmling Osterhout milkvetch habitat.

- Federal and State partners have worked to incorporate species conservation in travel management plans.
- Monitoring plots have been established on Federal and State lands.
- An Area of Critical Environmental Concern to protect the species and its fragile habitat will likely be designated in the near future.

**What do we need to do to recover the Kremmling Osterhout milkvetch?**

- Address the impacts from threats including concentrated livestock use, weeds, OHV recreation, land development, and other land uses.
- Continue surveying for and monitoring populations.
- Conduct education and outreach in the community.
- Help private landowners and the State to conserve the species, its habitat and areas for pollinators.



*Kremmling Osterhout milkvetch close-up* / USFWS

- Establish additional conservation areas on Federal, State, and private lands for Kremmling milkvetch.
- Update our Recovery Plan for the species.

**What can you do to help conserve the Kremmling Osterhout milkvetch?**

- “Stay the trail.”
- Funding and assistance may be available to help conserve the species on private and local government lands. Funding opportunities could include costs for fencing, tax credits, or assistance with conservation easements.
- Spread the word about this local treasure!
- Contact us and network with others working to conserve the species.
- Participate in recovery planning, conservation and outreach efforts.



*Kremmling Osterhout milkvetch fruits in fall* / Ellen Mayo, USFWS

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