U.S. Fish & Wildlife Service

Clay Reed-mustard

Schoenocrambe argillacea

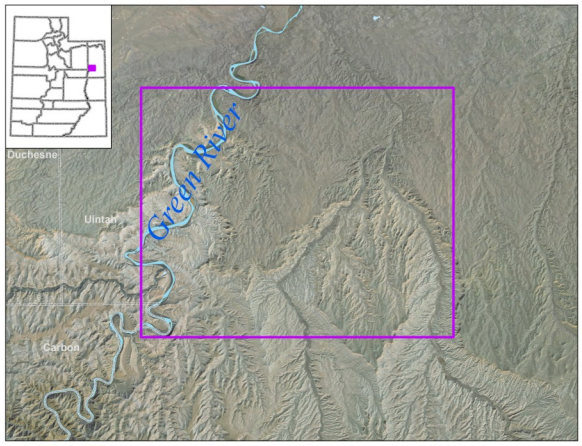
Clay Reed-mustard habitat / USFWS

What does the clay reed-mustard look like?

The clay reed-mustard is a diminutive perennial herbaceous plant in the mustard family. It grows 6 - 12 inches tall from a woody root crown. The leaves are very narrow, up to 1.5 inches long and usually less than 0.1 inch wide. The species produces small flowers, about 0.5 inches wide, in the months of April to May. The flower petals are pale lavender to whitish in color, and possess prominent purple veins.

Clay reed-mustard in bloom / BLM

This species can be confused with elegant thelypody and flaxleaf plainsmustard, two closely-related mustard species that grow in the same area. However, clay reed-mustard can be distinguished from these species by its flower color and petal shape.



Species Range / USFWS

We are in the process of officially updating the scientific name of clay reed-mustard in the federal register to *Hesperidanthus argillacea*, the most currently accepted taxonomy for this species.

Where does the clay reed-mustard occur?

This species grows on clay soils that are derived from a mixture of shales and sandstones from the zone of contact between the Uinta and Green River geologic formations in Uinta County, Utah. These soils tend to be rich in gypsum and overlain with sandstone talus. This species most commonly occurs on steep north-facing slopes. It is often found growing with other desert shrub species, including black sagebrush and shadscale saltbush.

Legal Status under the Endangered Species Act

On January 14, 1992 the clay reed-mustard was listed as threatened (57 FR 1398).

Why does the clay reed-mustard need protection?

At the time of listing, ongoing and potential oil and gas development (including potential oil shale

development) were threats to clay reed-mustard. Small populations and limited distribution were also threats. Oil and gas development continue to threaten this species, and the threat of oil shale development may become more tangible—oil shale production at one site in the Uinta Basin (not within clay reed-mustard habitat) is planned to begin in 2012. Clay reed-mustard's small population size and limited range continue to threaten the species, and we estimate that only 6,000 of these plants exist across its range.

Clay Reed-mustard / USFWS

What have we done to recover the clay reed-mustard?

In September 1994, 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 the rare plants, including clay reed-mustard.

We are currently working with the University of Wyoming to develop a predictive model for where this species occurs. This model will help us to identify potential areas for future surveys and avoidance areas for oil and gas developers.

What do we need to do to recover the clay reed-mustard?

In our last status review of clay reed-mustard (July 2011), we identified the following actions needed for species recovery:

- We recommend developing a reliable distribution map for this species.
- We recommend reliable, comprehensive population estimates be completed every 5 years and populations that are accessible by foot be routinely surveyed.
- We recommend establishing long-term demographic monitoring plots for clay reed-mustard. Information on survival, reproduction, and habitat condition should be collected.
- We recommend implementing research on clay reed-mustard's biology and life history, including reproduction and pollination.
- We will work proactively with Federal, Tribal, State, and private partners to determine biologically important areas for long-term species conservation. We recommend this information be used to establish formal land management designations, such as an Area of Critical Environmental Concern, that protect this species.
- We recommend avoiding oil and gas development in clay reed-mustard habitat.

More Information

To learn more about the clay reed-mustard 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:
www.fws.gov/endangered

The U.S. Fish and Wildlife Service Information, Planning and Conservation (IPaC) System:
ecos.fws.gov/ipac

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

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

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