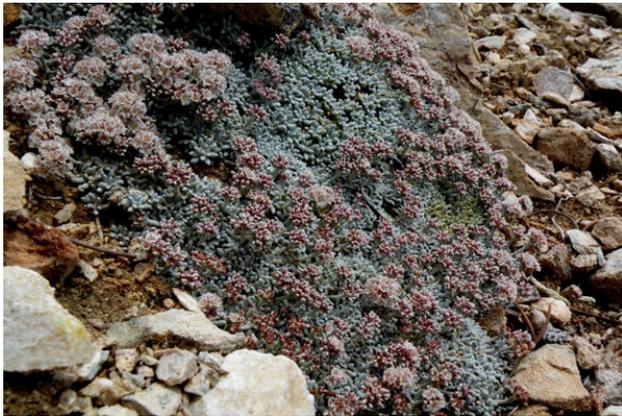


FRISCO BUCKWHEAT

Eriogonum soredium Reveal

Plant Symbol = ERSO2

Contributed by: USDA NRCS Idaho Plant Materials Program



Frisco buckwheat. Daniela Roth, USDI Fish and Wildlife Service

Status

In 2007 the US Fish and Wildlife Service (FWS) was petitioned to list Frisco buckwheat as either endangered or threatened. In 2011 FWS announced a determination that listing was warranted; however listing of Frisco buckwheat was precluded by higher priority actions (USDI-FWS 2011). Please consult the PLANTS Web site and your State Department of Natural Resources for this plant's current status (e.g., threatened or endangered species, state noxious status, and wetland indicator values).

Description

General: Buckwheat family (Polygonaceae). Frisco buckwheat is a mound forming perennial sub-shrub. The plant lies close to the ground reaching heights of only 2 to 4 cm (0.8 to 1.6 in) with the mounds spreading as much as 50 cm (20 in) across. The leaves are elliptic to oblong, 2 to 5 mm (0.08 to 0.2 in) long with white tomentum (a covering of closely matted or fine hairs) on both surfaces. The inflorescence is a cluster of white or pink flowers, 2 to 3 mm (0.08 to 0.12 in) long. The fruit is a 2 to 2.5 mm (0.08 to 0.1 in) long achene (Welsh et al. 2008).

Distribution:

Frisco buckwheat is endemic to the Great Basin. It is known from four populations in the San Francisco Mountains in north-central Beaver County, Utah. All populations occur on privately owned lands. Frisco

buckwheat shares the same distribution as Ostler's pepperweed (*Lepidium ostleri*).

Population estimates vary widely. The mound-forming nature of the plants makes it difficult to make accurate plant estimates where each mound could be counted as one or several plants. For current distribution, please consult the Plant Profile page for this species on the PLANTS Web site.

Habitat: Frisco buckwheat is found only on soils derived from Ordovician limestone outcrops. These rare soils are home to other rare plant species including Ostler's pepperweed and Frisco clover (*Trifolium friscanum*). All four populations of Frisco buckwheat exist on sparsely populated slopes in pinion-juniper and sagebrush communities from 1,890 to 2,200 m (6,200 to 7,200 ft). Other associated species include Mormon tea (*Ephedra* sp.), snakeweed (*Gutierrezia sarothrae*), dwarf mountain mahogany (*Cercocarpus intricatus*), and rock goldenrod (*Petroradia pumila*) (USDI-FWS 2011).

Adaptation

Frisco buckwheat is adapted to white limestone outcrops in areas receiving 200 to 300 mm (8 to 12 in) mean annual precipitation. Frisco buckwheat populations cover approximately 52 acres out of approximately 845 acres of suitable habitat. It is unknown if there are other factors limiting Frisco buckwheat distribution (USDI FWS 2011).

Establishment

There is no known seed establishment information for Frisco buckwheat.

Management

Over 90 percent of the known habitat for Frisco buckwheat occurs on private mining claims. There are no laws protecting endangered plant species on private, State or Tribal lands in Utah. However, mining operations must prepare State environmental impact assessments and address the potential effects on State and federally listed species for operations that create 5 acres or more surface disturbance.

Pests and Potential Problems

The greatest threat to Frisco buckwheat comes from mining operations in close proximity to Frisco buckwheat populations. The area has historically been mined for precious metals, and is currently used for gravel quarrying for crushed limestone. These operations are expected to increase in the future due to increased demand (USDI-FWS 2011).

Environmental Concerns

There are a number of environmental factors which may affect Frisco buckwheat. Prolonged drought due to climate change has the potential to eliminate the small populations of Frisco buckwheat. Additionally, invasion of cheatgrass (*Bromus tectorum*) has the potential to greatly increase the fire return interval in the Great Basin (Whisenant 1990). Frisco buckwheat is adapted to sparsely covered plant communities and is likely not adapted to frequent fires (USDI-FWS 2011).

Seeds and Plant Production

There is no known plant propagation information for Frisco buckwheat.

References

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