Owyhee clover (Trifolium owyheense)



ENDANGERED







Flowers (left), habit (center), and habitat (right) of Owyhee clover. Photos by ODA staff. If downloading images from this website, please credit the photographer.

Family

Fabaceae

Plant description

Owyhee clover is a glaucous perennial with one to several spreading stems up to 20 cm long growing from a thick woody taproot, often with numerous rhizomes. Leaves are few on petioles up to 2.5 times the length of the leaflets. Leaflets are thick and broad, green with white crescents, more or less emarginate, and sparingly denticulate. Leaflets three, the central leaflet 0.9 (-1.2)-2.0 cm long by 0.7 (-1.4)-2.3 cm wide, the two lateral leaflets somewhat oblique and tending to slightly overlap the central leaflet. Stipules are thick, foliaceous, and slightly lobed, each pair partially fused at the base. The rounded flowering head is 2.5-4 cm long, comprised of 20-30 flowers, and lacks an involucre. The calyx tube is villose, inflating with age, 0.5-0.6 (-0.8) cm long, the subequal linear teeth nearly as long as the tube and with soft-aristulate apices. The corolla is 1.2-1.8 cm long, the banner rose colored above and whitish at the base, the tips of the keel and sometimes the wings a deep reddish rose. Seeds are elliptic and spotted, with 2-3 produced per flower.

Distinguishing characteristics

Owyhee clover overlaps in range with the more common and widespread *Trifolium* macrocephalum. Although both species have large, showy inflorescences, the latter is easily distinguished by its leaves, which are usually comprised of five to six leaflets, rather than three as in Owyhee clover.

When to survey

Surveys for Owyhee clover should be completed when the species is in flower, typically May through mid to late June.

Habitat

Owyhee clover usually occurs on barren slopes and mounds in diatomaceous talus or volcanic ash from lower slope to ridge crest locations at elevations ranging from 830-1650 m (2700-5400 ft).

Surrounding plant communities are dominated by sagebrush, juniper, and bunchgrasses. Plant species often occurring in direct association with Owyhee clover include Agropyron spicatum, Astragalus cusickii var. sterilis, Bromus tectorum, Eriogonum novonudum, E. vimineum, Mimulus cusickii, Phacelia lutea, P. hastata, Senecio ertterae, and Mentzelia packardiae.

Range

Owyhee clover is restricted to the remote Owyhee Uplands of eastern Malheur County in southeastern Oregon and adjacent Owyhee County, Idaho within the Northern Basin and Range ecoregion. The vast majority of occurrences are located in Oregon.

Oregon counties

Malheur

Federal status

Species of Concern

Threats

Livestock grazing, non-native weed invasions, off-road vehicle use, rangeland improvement (spraying and seeding), road maintenance, and potential mining activities threaten this species. Evidence indicates that Owyhee clover may also be negatively impacted by rabbit and deer herbivory.

Did you know?

Owyhee clover plants often grow together in large clumps forming carpets of low-growing leaves. Because the plants are rhizomatous, with connections obscured beneath the soil, it is impossible to determine the number of individual plants within a given clump, a factor that complicates monitoring efforts. In response, researchers propose using leaf and inflorescence counts as a possible basis for population monitoring.

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