

Seaside gilia

(*Gilia millefoliata*)

ENDANGERED



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

Family

Polemoniaceae

Plant description

Gilia millefoliata is a densely glandular, annual forb with a faint skunk-like odor. The stems are 8-30 cm, with a short main stem and long-decumbent branches. The 1-2 pinnate-lobed leaves (lobes 2-5 mm) are somewhat fleshy and arranged in a basal rosette; upper leaves are shorter and palmate. Inflorescences are in clusters with 2-6 flowers and pedicels 2-5 mm long. Calyces are 4-6 mm long (8-11 mm while in fruit) and glandular, with the purple or colorless membranes narrower than lobes. The funnel-shaped corolla is 8-11 mm long with a yellow tube, pale yellow throat with paired purple spots, and lobes 3-5 mm wide, obovate, and blue-white. The stamen and style reach approximately the base of the corolla lobes; pollen is white. Fruits are 7-9 mm and narrowly ovoid to ellipsoid.

When to survey

Surveys should occur when plants are in flower from March to July.

Habitat

In Oregon, *G. millefoliata* occurs in loose and semi-stabilized sand dunes and flats as part of the coastal strand plant community. It grows at elevations between 0-150 feet and can be found along lake edges and coastline where the sandy substrate does not typically blow around. Seaside gilia co-occurs with the federally threatened *Phacelia argentea* and state-endangered *Abronia umbellata* var. *breviflora*. It also commonly occurs with *Lupinus littoralis*, *Cardionema ramosissimum*, *Festuca rubra* ssp. *juncea*, and *Eriogonum latifolium*. In California, *G. millefoliata* is noted to occur in stabilized or semi-stabilized dune habitats and sandy grasslands where sandy soils are exposed between vegetation.

Range

Gilia millefoliata was found in coastal habitats as far north as Lincoln County, Oregon and south to San Mateo County, California. In Oregon, populations of seaside gilia are known from 10 occurrences in Lincoln, Coos, and Curry Counties although the Lincoln County populations are presumed extirpated. A *Gilia millefoliata* herbarium specimen was collected in 1902 from Multnomah County, however it was never properly mapped, reported, or relocated making this presumed extirpated population questionable.

Oregon counties

Coos and Curry; presumed extirpated in Lincoln

Federal status

Species of concern

Threats

The major threat of *G. millefoliata* is loss of habitat and encroachment of native and invasive species. Non-native species such as *Ammophila arenaria*, *Hypochaeris radicata*, and *Vulpia myuros* are commonly documented at seaside gilia sites. Encroachment of native species such as *Pinus contorta* also pose a major threat as they can colonize the vulnerable habitat of *G. millefoliata*. Controlling plant encroachment on dune habitat is the major focus for habitat restoration for the sensitive plant species that share habitat with *G. millefoliata*. Lepidopteran larvae have also been found to damage foliage and seed capsules but are not a major threat to the survival of *G. millefoliata*. Small population sizes are another concern as it can reduce genetic diversity and reproductive success. Climate change also has the potential to decrease survivability of the species.

References

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