



## SPECIES SPOTLIGHT:

### Douglas' Meadowfoam (*Limnanthes douglasii*)

by Andrea Williams, CNGA Vice-President, photos courtesy the author

Douglas' meadowfoam is a spring-blooming annual wildflower comprised of at least five subspecies. The "classic," most widespread subspecies (*L. douglasii* ssp. *douglasii*) has yellow-centered, white-tipped flowers, giving rise to another common name "poached egg plant." Other subspecies include yellow-flowered *L. douglasii* ssp. *sulphurea*, and three white-flowered subspecies parsed by their petal vein and anther colors. Meadowfoams can be told from similarly yellow-centered, white-tipped tidytops (*Layia* sp.) by their highly dissected leaves and five heart-shaped petals.

While some subspecies are considered rare, the main subspecies of Douglas' meadowfoam is not uncommon. Found from south of the San Francisco Bay Area north to southern Oregon, it prefers wet meadows and tolerates grazing and clay soils. Douglas' meadowfoam can also be found in cultivation, where its tolerance of heavy soils and unattractiveness to slugs and snails (not to mention its profusion of showy flowers and ferny foliage) make it a star performer. Meadowfoam also attracts a variety of beneficial insects, including hoverflies and other pollinators, giving one even more reasons to add it to a garden's palette.

In 2016, as part of an effort to measure the health of Mt. Tamalpais in Marin, I compiled a list of species that had been extirpated (gone locally extinct) from the mountain. I was surprised at the number of species that had gone "missing" based on their having been previously collected but not seen within the past 50 years

([http://www.norcalbotanists.org/files/NCB\\_2017Poster\\_35\\_Williams.pdf](http://www.norcalbotanists.org/files/NCB_2017Poster_35_Williams.pdf)). Another surprise was the number of grassland species on that list, especially those dependent on wet meadows—including Douglas' meadowfoam. Still a common sight just a few miles north and west, the species appears to be gone from previously collected locales on Mt. Tamalpais, in Mill Valley, and north of San Rafael. It may also be extirpated from the East Bay, although *L. douglasii* ssp. *rosea* is still present.



The quiet disappearance of a spectacular wildflower from several sites in the Bay Area is a matter of concern and cause for some speculation: is it a change in land use patterns—a lack of grazing and fire and a profusion of people—or is it a changing climate, or a response to invasive species; or perhaps more than one cause? Given that the species still occurs more coastally, and in ungrazed areas, Douglas' meadowfoam may be an example of a "climate refugee," although in this case populations are disappearing inland and remaining north and west in cooler spots. Climate projections vary in the predicted amount of rainfall, but both temperatures and variability are likely to increase (<http://climate.calcommons.org/crn/mmw>), resulting in plants "experiencing" more drought stress regardless of how much rain comes. So whatever future comes, it appears to be less hospitable to Douglas' meadowfoam.

