

Rare Plant Status Review: *Iliamna bakeri*
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Distribution

Iliamna bakeri (Baker's globe mallow) is a perennial herb in the Malvaceae. Its flowers are solitary or occur in small axillary clusters. For a more detailed plant description, visit <http://www.rabeconsulting.com/pastprojects/finalisimo.pdf>. In California, this plant ranges from Siskiyou, Trinity and Shasta counties east to Lassen and Modoc counties and west and south to Colusa, Lake, Mendocino, and Tehama counties. It is also in Oregon in three counties.

Habitat

Iliamna bakeri (hereafter abbreviated as ILBA) occurs on dry slopes in chaparral, pinyon-juniper and Great Basin scrub vegetation. It also occurs in pine and white fir forests after fires. ILBA grows from 1000 to about 2500 meters in elevation.

ILBA follows disturbance, such as fires, in some cases. In other sites, such as on volcanic lava flows in Shasta and Siskiyou counties, the plant germinates without fire. Populations may be short lived and may disappear after 5-10 years, retreating to the seed bank until the next appropriate disturbance.

Abundance and Status

Currently, ILBA is on CNPS List 1B (.2). However, comments at the meeting for the review of this plant for the 6th edition of the CNPS *Inventory* (2001) indicated a mix of opinions regarding the appropriateness of upgrading the plant (from List 4 as in the 5th edition). Opinions varied depending on whether local observers had seen a lot of the plant or not. ILBA is ranked globally by Natureserve as "apparently secure" globally (G4). Field surveys conducted over the past few years have resulted in much additional data. After reviewing both the processed and unprocessed data for ILBA, we note that there are currently just under 50 viable sites in California, with the potential to find more, prompting a review of this plant for possible re-downgrade to List 4. Below is a summary table showing the current numbers of occurrences and plants.

ILBA SUMMARY TABLE

Based on data sheets not yet entered in CNDDDB as of 03/10/06
plus 48 occurrences in CNDDDB

OCCURRENCE STATUS	NUMBER OF OCCURRENCES
Excellent to Good	44
Historical sites	15
Fair to Poor	42
Unknown rank for site	3
Total Occurrences	104
Estimated number of plants known to date	>2 million

As of March 2006, there are approximately 104 occurrences of ILBA known to CNDDDB and CNPS. Most sites contain numbers of plants from 1 to a few thousand. However, 2 sites had reports of 1 million plants each: EO 2 on the Gallatin quad which was a post-burn site and EO 5 on the

Observation Peak quad where over 1 million plants were estimated in 2002. It is likely that plant numbers are not very informative for this species since it appears to be a fire follower. It very likely produces large numbers of individuals following a fire, and later dies out, remaining as seed bank in wait for another disturbance event.

Site rankings were based on a combination of field reporter opinion (what they indicated on the field survey form), number of plants, and habitat quality. For this plant, the reporters seemed to use the EO rank fairly accurately, and we saw no need to modify many of them. However, where the reporter provided a high rank for sites with very small numbers of plants (<10), we adjusted the rank to "Fair" or "Poor."

Threats

The major activities within ILBA's occurrences are logging and grazing. Some sites list lack of fire and invasives as additional threats. With changes in federal land management policy, it is possible that "lack of fire" is less relevant today. Most occurrences were found during pre-harvest THP surveys.

Recommended Possible Actions

The high number of extant occurrences (104) and total plants (>2,000,000), and the probability for more occurrences being found suggest that downgrading to CNPS List 4.2 and re-ranking to CNDDDB G4/S4.2 are warranted at this time. Just less than half of these occurrences are ranked "Good" or better, and it is reasonable to conclude that these are viable because there are no known biological factors or threats that suggest otherwise. It is likely that there are more "good" occurrences from a seed bank perspective, since the true extent of this plant is hard to estimate without an appropriate fire regime. The threshold for CNPS List 1B is typically 50 occurrences in the state, and the threshold for S3 is typically 21-80 occurrences and 3000-10,000 plants. Removal from the CNPS Inventory and CNDDDB is probably not appropriate due to the ephemeral nature of the populations and the widespread timber harvest activities in the plant's range.

CNPS: Downgrade to CNPS List 4.2

CNDDDB: Rerank to G4/S4.2

General: Regardless of ranking, ILBA should be monitored at a number of sites under various management regimes and in various ecological situations to ensure the plant is not declining over time. ILBA habitat should be managed for long-term viability of the species and the ecosystem it depends on.