

Rare Plant Status Review: *Calamagrostis bolanderi*
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Calamagrostis bolanderi (Bolander's reed grass) is a clump-forming, perennial grass known from the north coast fog belt in California. It is endemic to California and is only known from Mendocino, Sonoma, and perhaps Humboldt counties. The Humboldt County occurrence from Big Lagoon Marsh may be out of range, though the specimen has not been checked for accuracy of determination.

Habitat

This grass prefers open, mesic sites such as the sides of drainages, swales and flats, seasonal and permanent wetlands, fens, and wet meadows. Surrounding natural community types can include coastal prairie, north coast coniferous forest, closed-cone coniferous forest, and northern coastal scrub. It grows from near sea level to 185 m in elevation.

Distribution and Abundance

During the last revision of the CNPS (California Native Plant Society) *Inventory of Rare and Endangered Plants* (2001), *Calamagrostis bolanderi* was upgraded from List 4 to List 1B, based upon consensus by the local experts who participated in the review at that time. During that review, the CNPS and CNDDDB (California Natural Diversity Database) were aware of only 12 occupied 7.5' USGS quadrangles and fewer than 30 occurrences. Based upon that information, it is currently ranked as a G2 / S2.2 by CNDDDB.

Following subsequent field surveys during 2000-2002, primarily by registered professional foresters, timber company botanists, and others, additional data have been received, prompting a review of the decision to upgrade the status of this plant.

CNDDDB OCCURRENCE STATUS ¹	NUMBER OF OCCURRENCES
"Excellent" or "Good" Sites	34
Historical Sites	Not counted
"Fair" to "Poor" Sites	34
"Possibly Extirpated" sites	None known
Lumped Sites	Not processed, so none
"Unknown" Rank for Site	35
Total Number of Occurrences	103
Total Plants Known to Date	66,838

¹ Based on data in CNDDDB as of February 6, 2003

Currently, although no occurrences have yet been mapped into the CNDDDB, there are approximately 103 probable occurrences in the files at the California Department of Fish and Game, representing about 66,800 individual clumps of the *Calamagrostis*. Even if one assumes a conservative estimate of 10% error rate in identification, the total number of occurrences and plants indicate placement on List 4. Additionally, private timberlands are typically unsurveyed or undersurveyed, and thus it is likely that additional occurrences for this taxon remain undiscovered and/or unreported. Grasses (Poaceae) are often not keyed to species, increasing the possibility of underreporting for this taxon.

Threats

Threats include logging, road building and maintenance, and the encroachment of its habitat by invasive, non-native grasses such as *Holcus lanatus* (velvet grass), *Dactylis glomerata* (orchard grass), *Cortaderia jubata* (weedy pampas grass), and *Anthoxanthum odoratum* (sweet vernal grass).

Recommended Actions

CNPS: Downgrade to CNPS List 4.

CNDDDB: Rerank to G3/S3.2.

General: Monitor *Calamagrostis bolanderi* under various management regimes on private timber lands to ascertain its status over time. Manage *Calamagrostis* habitat for long-term viability of the species. Weed control may be needed to maintain *Calamagrostis* in the landscape after disturbance such as logging.