## Rare Plant Status Review: *Pseudostellaria sierrae* Proposed List Change from List 3.2 to List 4.2 Nicholas Jensen (CNPS) and Roxanne Bittman (CNDDB) May 7, 2009

*Pseudostellaria sierrae* is an endemic, rhizomatous, perennial herb in the Caryophyllaceae. It is found in chaparral, cismontane woodland, lower montane coniferous forest, and upper montane coniferous forest habitats from approximately 1225 to 2040 meters in elevation. *P. sierrae* was published as a new taxon in *Novon* 12: 82-86 (2002) and is included in *The Jepson Manual* (2<sup>nd</sup> Edition, treatment available online at: http://ucjeps.berkeley.edu/tjm2/review/treatments/caryophyllaceae.html). *P. sierrae* flowers between May and August. *P. sierrae* was first reviewed for addition to the CNPS Inventory and to the CNDDB list in June 2004; it was proposed as a List 1B, but comments received moved it into List 3 due to questions about its full distribution, rarity and endangerment. There were 10 occurrences known to us in 2004.

Today, *P. sierrae* is known from approximately 45 occurrences in Butte, El Dorado, Mariposa, Nevada, Placer, Plumas, and Tuolumne counties (see Locations\_PseudostellariaSierrae.xls for more information on known occurrences). The population size at locations of *P. sierrae* is not well known. Field survey forms from 10 occurrences indicate that population numbers at locations of *P. sierrae* vary greatly, with numbers ranging from 55 plants at one occurrence to more than 1 million plants at 4 separate occurrences. Several occurrences of *P. sierrae* cover large areas. One occurrence in Nevada County (documented by several field survey forms) covers more than 600 acres. Two occurrences on the Plumas National Forest occupy 277 and 504 acres, respectively. According to several reports, *P. sierrae* can be quite common where it occurs (Allison Colwell, pers. comm. 2008, Glenn Clifton, pers. comm. 2008, Jim Belsher-Howe, pers. comm. with Misa Ward 2004).

The CNPS Inventory currently indicates that *P. sierrae* is potentially threatened by logging. There is no recent information about how land management activities affect this species. Information about how current land management activities affect *P. sierrae* is needed to accurately assess its conservation status.

Based on the available information about its rarity, it appears that *P. sierrae* should no longer be included on List 3 (plants about which we need more information). Potential options include placing *P. sierrae* on either List 1B or List 4. CNPS List 1B generally contains plants with fewer than 50 occurrences ranked as "excellent or "good" by CNDDB. CNPS List 4 contains plants of limited distribution or plants that are infrequent over a broad geographic area. Plants on this list generally have more than 50 extant occurrences are expected. This plant is not yet fully processed and mapped at the CNDDB, making a complete assessment more difficult. However, most of the raw data submitted so far comes from Sierra Pacific Industries staff and all of their field forms indicate sites ranked excellent or good. Consequently, CNPS and CNDDB recommend that *P. sierrae* be re-ranked to List 4.2.

## **Recommended Actions**

**CNPS:** Re-Rank to CNPS List 4.2 **CNDDB:** Keep on G3G4, S3S4

## Revised CNPS Inventory record:

Pseudostellaria sierrae Rabeler & R.L. Hartman Sierra starwort Caryophyllaceae List 4.2 El Dorado (ELD), Mariposa (MPA), Nevada (NEV), Placer (PLA), Plumas (PLU), Tuolumne (TUO) Chaparral (Chprl), Cismontane woodland (CmWld), Lower montane coniferous forest (LCFrs), Upper montane coniferous forest (UCFrs); elevation 1225-2040 meters. Perennial, rhizomatous herb, blooms May-Aug. Potentially threatened by logging. See *Novon* 12:82-86 (2002) for original description.