

**Added to California Rare Plant Rank 1B.3 on September 28, 2012****Rare Plant Status Review: *Erigeron lassenianus* var. *deficiens*****Proposed New Add to Rank 1B.3, G3G4T2 / S2S3**

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**Background**

*Erigeron lassenianus* var. *deficiens* is a perennial herb in the Asteraceae family that is nearly endemic to Plumas County, California. It is included in the *Flora of North America* (FNA, available online at [http://www.efloras.org/florataxon.aspx?flora\\_id=1&taxon\\_id=250068350](http://www.efloras.org/florataxon.aspx?flora_id=1&taxon_id=250068350)), *The Jepson Manual, Second Edition* (TJM 2, available online at [http://ucjeps.berkeley.edu/cgi-bin/get\\_IJM.pl?tid=7307](http://ucjeps.berkeley.edu/cgi-bin/get_IJM.pl?tid=7307)), and *The Jepson Manual* (TJM, 1993). It was first described by Cronquist (1947), and was treated as a synonym of *Erigeron lassenianus* by Munz and Keck (1959) and Abrams (1960) before being recognized again in more recent floras. *Erigeron lassenianus* var. *deficiens* was previously considered for inclusion in the 6<sup>th</sup> edition of the CNPS Inventory (2001) but its inclusion was postponed due to some taxonomic questions. Cronquist (1947) described it as a variety of *E. lassenianus* because the two plants are very similar morphologically, with the exception that var. *deficiens* has only discoid flowers, while var. *lassenianus* has an outer row of ray flowers. According to G. Clifton (2001) there is no precedent for treating two plants with such major differences in floral morphology as varieties of a single species. Additionally, *E. lassenianus* var. *deficiens* has 3-veined leaves, while var. *lassenianus* has 1-veined leaves (TJM 2, G. Clifton pers. comm. 1998). The two varieties have some geographic overlap (TJM 2), but they are not known to co-occur and there is no documented evidence of intergradation. *Erigeron lassenianus* var. *deficiens* is also morphologically similar to *E. eatonii*, *E. jonesii*, and *E. corymbosus* (Cronquist 1947), but the three latter taxa all have ray flowers, and the latter two do not occur in California (FNA). Additionally, there is some variation within *E. lassenianus* var. *deficiens*: plants from the type locality and non-serpentine areas have wider leaves than those found on serpentinite, and the two forms may represent distinct taxa (G. Clifton pers. comm. 1998). *Erigeron lassenianus* var. *deficiens* flowers from June to September (FNA, TJM 2).

*Erigeron lassenianus* var. *deficiens* is generally found on gravelly sites in lower montane coniferous forests. It is sometimes found on serpentinite, but extensive populations have been found off of serpentinite as well. It is frequently found in forest openings, such as roadsides and logging sites. It grows between 1360 and 1980 meters in elevation (Plumas National Forest Plant Occurrence Discovery Records 1993-2010; see "Localities" section of attached spreadsheet).

There are currently about twenty known occurrences of *Erigeron lassenianus* var. *deficiens*, and the large majority of these occur on the Plumas National Forest. Only one occurrence is known from Sierra County (Ahart 6527); the rest are from Plumas County. It is not on the Plumas National Forest's sensitive plant list, but it is considered

by the US Forest Service as a plant of “special interest”, so USFS botanists have been documenting it since the early 1990s, and few new populations are being found (L. Janeway pers. comm. 2007). Therefore, it is likely that the 20 known occurrences are fairly representative of the plant’s overall abundance. Although limited in distribution and number of occurrences, *E. lassenianus* var. *deficiens* can often be locally common. Several herbarium voucher labels note that it is “common” or “very common” (e.g., *Ahart 1989, 9855*). A few occurrences are very large, such as those near the Little Grass Valley Reservoir that contain thousands or tens of thousands of plants and extend over a mile in length (Plumas National Forest Plant Occurrence Discovery Records 1993-2010). Of the twenty known occurrences, only two are historical (occurrences not documented in the past twenty years are considered historical by the CNDDDB). Four specimens from Plumas County in the Consortium of California Herbaria (CCH) have not been identified to variety and should be examined. Five other specimens at the Rancho Santa Ana Botanic Garden Herbarium, also not treated to variety in the CCH, have been verified as var. *lassenianus* by D. Bell (pers. comm. 2012) and comments have been submitted to the Consortium by the first author in order to allow database managers to make the corrections as needed.

Threats to *E. lassenianus* var. *deficiens* should be considered minimal. Although potential threats, such as logging and opening roads to traffic are noted in survey forms, the plant apparently does fairly well with some degree of disturbance. Some survey forms also note forest succession as a potential threat (Plumas National Forest Plant Occurrence Discovery Records 1993-2010).

Based on the available information, CNPS and CNDDDB recommend adding *Erigeron lassenianus* var. *deficiens* to California Rare Plant Rank 1B.3. Although this plant should probably not be considered a variety of *E. lassenianus*, it must be recognized under that name until a new name is validly published. CNPS and CNDDDB do not recommend adding it to Rank 3, because this taxonomic issue does not affect the known abundance or distribution of the plant, but rather deals only with its relationship to other taxa. If the serpentine and non-serpentine forms of *E. lassenianus* var. *deficiens* are later shown to be distinct taxa, CNPS and CNDDDB will re-evaluate their status at that time.

### **Recommended Actions**

CNPS: Add to CNPS 1B.3

CNDDDB: Add to CNDDDB G3G4T2T3 / S2S3

### **Draft CNPS Inventory Record**

*Erigeron lassenianus* Greene var. *deficiens* Cronquist

Plumas rayless daisy

Asteraceae

Rank 1B.3

Plumas, Sierra

American House (574A) 3912161, CanyonDam (606A) 4012121, Chester (624C) 4012132, Dogwood Peak (590D) 3912171, Goodyears Bar (573C) 3912058, Greenville (605B) 4012028, Haskins Valley (590C) 3912172, La Porte (573B) 3912068, Lake Almanor (6606B) 4012122, Meadow Valley (590A) 3912181, Onion Valley (589C) 3912078, Twain (606D) 4012111

Lower montane coniferous forest / gravelly, sometimes serpentinite, sometimes disturbed sites; elevation 1360 – 1980 meters.

Perennial herb. Blooms June – September.

Known mostly from Plumas NF. Potentially threatened by logging, vehicles, and habitat alteration. Plants on serpentinite may be unique; further study needed. See *Brittonia* 6(2):171 (1947) for original description.