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
Danny Slakey (CNPS), Aaron Sims (CNPS) and Roxanne Bittman (CNDDB)
August 23, 2012

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, The Jepson Manual, Second Edition (TJM 2, available online at 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. Erigeronlassenianus var. deficiens was previously considered for inclusion in the 6th 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 CNDDB). 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 CNDDB 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 CNDDB 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 CNDDB will re-evaluate their
status at that time.

**Recommended Actions**
CNPS: Add to CNPS 1B.3
CNDDB: Add to CNDDB G3G4T2T3 / S2S3

**Draft CNPS Inventory Record**
*Erigeronlassenianus* Greene var. *deficiens* Cronquist
Plumas rayless daisy
Asteraceae
Rank 1B.3
Plumas, Sierra

Sent to SN on 08/23/2012
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 serpentine, sometimes disturbed sites; elevation 1360 – 1980 meters.


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