Element Code: PMLIL0U0C0 Added to CNPS List 2.2 on 7/23/07

Rare Plant Status Review: *Erythronium oregonum* Kristi Lazar (CNPS) and Roxanne Bittman (CNDDB) May 9, 2007

Background

Erythronium oregonum is a bulbiferous, perennial herb in the Liliaceae. *E. oregonum* is known from northern California as well as British Columbia, Oregon, and Washington. There are 9 specimens of *E. oregonum* collected in California with 1 specimen from Mendocino, Siskiyou, and Trinity Counties and 6 specimens collected in Humboldt County.

This species was placed on CNPS' Considered But Rejected list in the 6th edition of the CNPS *Inventory* (2001) due to a comment that this species is likely a white form of *E. revolutum*. However, *E. oregonum* and *E. revolutum* are 2 distinct species in *The Jepson Manual* (1993) and will continue to be treated as separate species in the new edition of *The Jepson Manual*. *E. oregonum* and *E. revolutum* are also treated as separate species in the *Flora of North America*. *E. revolutum* is currently on CNPS' List 2.2.

Geraldine Allen and Joseph Antos conducted a study on the morphological and ecological variation between *E. oregonum* and *E. revolutum* in 1988 and found that while the two species can hybridize where their ranges overlap, they are consistently different in a number of morphological characters and in ecological requirements; they are also geographically separated, for the most part (*Madrono* 35(1): 32-38 (1988)). *E. oregonum* is most common on dry, open sites in forest openings and rock outcrops and only occasionally occurs in wetter locations. *E. revolutum*, in contrast, tends to occur under deciduous trees on relatively wet sites (such as stream terraces).

E. oregonum is most readily distinguished from *E. revolutum* by its white tepals (versus pink for *revolutum*). Other differences between the two species involve length of stigma lobes, curvature of tepals, anther position, and leaf position (*Madrono* 35(1): 32-38 (1988)). Based on the key given by Hitckcock and Cronquist "Flora of the Pacific Northwest", the main characters that separate the two species are the length of the undehisced anthers and the length of the capsules (with *E. oregonum* having longer anthers and capsules). Forms of *E. oregonum* from the southern part of the range with pale anthers (versus the typical golden-yellow anthers) have been called subspecies *leucandrum*; however, this taxonomy is not widely accepted. *E. oregonum* is fairly common in Oregon (S4 rank), and appears to be well distributed in British Colombia and Washington. *E. oregonum* is known from 9 occurrences in California based on herbarium specimens and requires review for inclusion in both the CNPS Inventory and the CNDDB.

Recommended Actions

CNPS: Add to CNPS List 2.2

CNDDB: Add to CNDDB as G5 / S2.2

Please review the draft CNPS Inventory record below, respond Yes or No on the proposal to add this species to the Inventory and CNDDB, and provide any edits/comments. If responding No, please provide supporting information.

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Draft CNPS Inventory Record

Erythronium oregonum Applegate "giant fawn lily" List 2.2 Liliaceae

Humboldt, Mendocino, Siskiyou, Trinity; Oregon, Washington, and elsewhere

600A [Bell Springs/3912385], 635C [Weott/4012338], 653B [laqua Buttes/4012368], 670B [Willow Creek/4012386], 670C [Grouse Mtn/4012376], 671A [Lord Ellis Summit/4012387], 671C [Korbel/4012378], 687C [Hoopa/4112316], 703B [Somes Bar/4112344]

Cismontane oak woodland, meadows and seeps / sometimes serpentinite, rocky, openings; elevation 100-500 meters.

Perennial herb; blooms March-May.

Need quad for Trinity County. California populations are geographically separate; may be a white form of *E. revolutum*. Specimens with white anthers sometimes referred to as ssp. *leucandrum*. See *Madrono* 3: 99 (1935) for original description and *Madrono* 35(1): 32-38 (1988) for taxonomic treatment.