Element Code: PMLIL0U042

Changed from 1B.3 to 4.3 in the CNPS Inventory on 22 April 2019

Rare Plant Status Review: *Erythronium citrinum* var. *roderickii* Proposed change from California Rare Plant Rank 1B.3 to 4.3, G4T3 / S3 to G4T3T4 / S3S4

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Changes made to the original document are in blue text.

Erythronium citrinum Wats. var. roderickii Shevock & Allen is a perennial bulbiferous herb in the Liliaceae known from the Trinity Mountains in Trinity and Shasta County, California. It has been included in the CNPS Inventory since the 5th Edition (Skinner, Pavlik 1994), and is included in *The Jepson Manual, Second Edition* (Allen 2012) and the Flora of North America, Vol. 26 (Allen and Robertson 2002). Erythronium citrinum var. roderickii occurs on serpentine in lower montane coniferous forest at an approximate elevation of 545 to 1435 meters, and flowers between March and June.

Erythronium citrinum var. roderickii is currently known from 67 occurrences in Trinity and Shasta Counties. With additional data taken from the Global Biodiversity Information Facility (GBIF 2016) database there are potentially 2 additional occurrences. None of the occurrences are considered historical (occurrences not seen in the past 20 years are considered historical by the CNDDB), and all are considered to be extant. Out of the 66 occurrences, 55 are currently ranked as either "excellent" or "good" (A or B), while 7 are ranked "fair" (C), and 4 are unranked by CNDDB. The population sizes of Erythronium citrinum var. roderickii are fairly well known, with data available for 62 of the 66 occurrences. Nearly half of the occurrences (31) have population counts/estimates of over 1,000 individuals. Based on the available data, the total number of known individuals of Erythronium citrinum var. roderickii in California is estimated to be over 2,300,000 plants (population count/estimate data is available in the attached "Locations ErythroniumCitrinumRoderickii" spreadsheet). The majority of occurrences (59) of *Erythronium citrinum* var. roderickii are at least partially on private land, mostly managed by timber companies. Twenty of its occurrences are included on both private timber company lands as well as on Shasta-Trinity National Forest, and 8 of its occurrences are solely on Shasta-Trinity National Forest.

More than half of the occurrences of *Erythronium citrinum* var. *roderickii* are noted to be threatened by direct and indirect impacts of timber harvest activities, including: road construction, road maintenance, and erosion (CNDDB 2016). Possible threats to *Erythronium citrinum* var. *roderickii* are grazing, trampling, foot traffic, over-collecting, and ORV activity (CNDDB 2016). However, the significance of these threats (and possible threats) to *E. citrinum* var. *roderickii* are not well documented or known, and the majority of its populations are reported as being stable.

With 56 occurrences ranked as "excellent" or "good" by CNDDB, *Erythronium citrinum* var. *roderickii* has met the general level of meriting down ranking from California Rare Plant Rank 1B to 4 based on occurrence numbers alone (in general, California Rare Plant Rank 1B contains plants that are known from fewer than 50 occurrences ranked

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as "excellent" or "good" by CNDDB). According to Julie Nelson (pers. comm. 2012), *E. citrinum* var. *roderickii* is common and abundant within its restricted range, and would best be treated as a regional endemic list 4 taxon; it was subsequently removed from the Forest Service Region 5 Sensitive Species List in 2012. After being removed from the USFS Sensitive Species List, the Shasta-Trinity National Forest stopped submitting occurrence reports for *E. citrinum* var. *roderickii*, and therefore any new occurrences that may have been discovered by Shasta-T staff are not included in the CNDDB. *Erythronium citrinum* var. *roderickii* is still considered a sensitive species by the Bureau of Land Management.

Erythronium citrinum var. roderickii does not appear to be in a trend towards extirpation in California at this time, and therefore currently appears to not be eligible for state listing. Nevertheless, the condition of *E. citrinum* var. roderickii occurrences after timber harvest and associated activities, along with information on the long-term trends and viability of populations in California, should continue to be documented and assessed in order to adequate determine the conservations status of this species.

Since half of its occurrences are on Sierra Pacific Industries (SPI) lands and timber harvest activities may pose significant threats to *Erythronium citrinum* var. *roderickii*, SPI has developed a monitoring plan that includes surveys, assessment, monitoring, and reporting on populations of *E. citrinum* var. *roderickii* from five harvest units at three Timber Harvest Plan (THP) projects. SPI will prepare reports that summarize the results during each year monitoring activities occur, for years 1, 3, 6, and 10 over a 10 year period, and submit their reports and findings to CNDDB for assessment (SPI 2019).

Based on the available information, CNPS and CNDDB recommend re-ranking *Erythronium citrinum* var. *roderickii* from California Rare Plant Rank 1B.3 to 4.3. If occurrences of *Erythronium citrinum* var. *roderickii* in California begin to trend downward, and/or if threats to its survival increase, CNPS and CNDDB will re-evaluate its status at that time.

Recommended Actions

CNPS: Change from California Rare Plant Rank 1B.3 to 4.3

CNDDB: Change from G4T3 / S3 to G4T3T4 / S3S4

Current CNPS Inventory Record

Erythronium citrinum Wats. var. roderickii Shevock & Allen Scott Mountains fawn lily

Liliaceae

CRPR 1B.3

Shasta, Trinity

Junction City (650A) 40123F1, Damnation Peak (666A) 40122H5, Trinity Center (666B) 40122H6, Covington Mill (667A) 40122H7, Chicken Hawk Hill (682C) 41122A4, Mumbo Basin (683A) 41122B5, Tangle Blue Lake (683B) 41122B6, Carrville (683C) 41122A6, Whisky Bill Peak (683D) 41122A5, Ycatapom Peak (684D) 41122A7 Lower montane coniferous forest / serpentinite, often rocky; elevation 550 – 1600 meters.

Perennial bulbiferous herb. Blooms March – June.

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Threatened by logging and vehicles. Possibly threatened by road construction and maintenance, and erosion. Not in *TJM* (1993). See *Phytologia* 71(2):101-103 (1991) for original description.

Available online at: http://www.rareplants.cnps.org/detail/1676.html

Revised CNPS Inventory Record

Erythronium citrinum Wats. var. roderickii Shevock & Allen Scott Mountains fawn lily Liliaceae CRPR 4.3

Shasta, Trinity

Junction City (650A) 40123F1, Damnation Peak (666A) 40122H5, Trinity Center (666B) 40122H6, Covington Mill (667A) 40122H7, Chicken Hawk Hill (682C) 41122A4, Mumbo Basin (683A) 41122B5, Tangle Blue Lake (683B) 41122B6, Carrville (683C) 41122A6, Whisky Bill Peak (683D) 41122A5, Ycatapom Peak (684D) 41122A7 Lower montane coniferous forest / serpentinite, often rocky; elevation 545 – 1435 meters.

Perennial bulbiferous herb. Blooms March – June.

Previously CRPR 1B.3; more common than originally thought. Threatened by logging and vehicles. Possibly threatened by road construction and maintenance, and erosion. Not in *TJM* (1993). See *Phytologia* 71(2):101-103 (1991) for original description.

Literature Cited

Allen, G.A. 2012. *Erythronium.* Pp. 1386 in The Jepson Manual: Vascular Plants of California (2nd ed.). University of California Press, Berkeley and Los Angeles.

and K.R. Robertson. 2002. *Erythronium.* Pp. 153 in Flora of North America Editorial Committee (eds.), Flora of North America North of Mexico, Vol. 26. New York and Oxford.

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Calflora. 2016. Information on wild California plants for conservation, education, and appreciation. Website http://www.calflora.org/ [accessed 14 December 2016].

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