

**Added to California Rare Plant Rank 4.3 in the CNPS Inventory on  
October 15, 2015**

**Rare Plant Status Review: *Chrysosplenium glechomifolium***

**Proposed Addition to CRPR 4.3, G5 / S3**

Danny Slakey (CNPS), Aaron E. Sims (CNPS) and Roxanne Bittman (CNDDB)  
September 1, 2015

Changes made to the original document are in blue text.

**Background**

*Chrysosplenium glechomifolium* is a perennial herb in the Saxifragaceae that is endemic to the Pacific Northwest, distributed from northwestern California to British Columbia. It is included in *The Jepson Manual* (Elvander 1993), *The Jepson Manual, Second Edition* (Park 2012), and the *Flora of North America* (Freeman and Levensen 2009). The plant was originally described by Nuttall (1840) as *Chrysosplenium glechomaefolium*, and is now spelled as *C. glechomifolium* (Park 2012). The change in spelling was made to be in line with the conventions of modern botanical Latin (D. Wilken pers. comm. 2015). *Chrysosplenium glechomifolium* is the only member of the genus that occurs in California, and one of only six species that occur in North America north of Mexico (Freeman and Levensen 2009). The plant was initially recommended for addition to the Inventory based on the small number of herbarium specimens and references to it being “uncommon” (e.g. Elvander 1993). *Chrysosplenium glechomifolium* flowers in California from February to June (Consortium of California Herbaria, CCH, 2015; B. Hayashi pers. comm. 2015).

*Chrysosplenium glechomifolium* is restricted to moist, shaded areas. It grows in North Coast coniferous and riparian forests, along streambanks and sometimes in seeps (CCH 2015; J. Barrett forum post 2015). Some populations have been found along roadsides, but only in areas that experience inundation due to poorly functioning culverts or spring overflow (C. Sanville pers. comm. 2015). It grows between 10 and 220 meters in elevation in California (CCH 2015, CalFlora 2015).

There are only thirteen occurrences of *C. glechomifolium* in California that are based on herbarium specimens (CCH 2015; Consortium of Pacific Northwest Herbaria, CPNWH, 2015; Smith and Wheeler 1990-1991), but these under-represent the plant’s distribution within the State. The Green Diamond Resource Company (GDRC) provided 72 additional observations of this plant from California that were recorded between 2001 and 2014 (B. Hayashi pers. comm. 2015). However, only the observation date and some very coarse-scale location data were collected (e.g., USGS Quadrangle; Township and Range without a Section). As such, we simply mapped most of these occurrences to the approximate center of the Township/Range combination. Jeffery Barrett, California State Parks Botanist, provided an additional ten occurrences from State Parks in the north coast region (J. Barrett forum post 2015). We estimate the total number of occurrences in California to be approximately 45 35, but this number should be considered tentative, pending further surveys. Given that the GDRC recorded the

USGS Quadrangle for each observation, our list of Quadrangles where this plant has been found should be considered accurate. Most of the known occurrences of *C. glechomifolium* are likely on lands owned by the Green Diamond Resource Company, with a few additional occurrences in Redwood National Park, State Parks, or with unknown (probably private) landowners.

*Chrysosplenium glechomifolium* has a rather disjunct distribution in California. While the vast majority of occurrences are found in the far northern coast of California, three occurrences are known from Mendocino County, disjunct by about 150 km to the south. It is unclear if this represents a true disjunction, or if the area between the population centers is just under-surveyed.

Much of our information on *C. glechomifolium* is anecdotal, but it at least merits mention in this review. The GDRC has large amounts of data on other rare plants in the region with a comparable distribution, so a brief comparison is warranted. In surveys from 2001 to present, *C. glechomifolium* was found in 6.64% of the hundreds of GDRC timber harvest surveys (C. Sanville pers. comm. 2015). A frequently-encountered rare plant, *Erythronium revolutum* (CRPR 2B.2) was found in 4.93% of surveys, and is currently known from 131 occurrences in the CNDDDB. *Mitellastra caulescens* (CRPR 4.2) is more of a habitat generalist, but can often be found in moist habitats like *C. glechomifolium*. It was found in 8.65% of plots over the same time period (C. Sanville pers. comm. 2015). In terms of the status of individual occurrences, C. Sanville (pers. comm. 2015) stated: "I don't recall any of the populations I observed being very robust in area occupied or numbers of plants". However, B. Hayashi (pers. comm. 2015) noted that it was one of the more common riparian herbaceous plants along the Fern Canyon Trail in Redwood State and National Parks (See Occ. #7 in attached spreadsheet). In general, *C. glechomifolium* could have a tendency to be overlooked, as it often grows in areas that are away from trails (B. Keelan and B. Hayashi pers. comms. 2015), and has very inconspicuous flowers (CalPhotos 2015).

Threats to *C. glechomifolium* are probably minimal, primarily due to its habitat preferences. Although most known occurrences of *C. glechomifolium* are in timber harvest areas, they should receive protection due to their occurrence in riparian management zones (B. Hayashi pers. comm. 2015). Sanville (pers. comm. 2015) also noted, however, that some occurrences are found in "poorly functioning culvert inlets that back up water" and "old roads that have spring overflows", both of which are impacted heavily by timber harvest operations.

Based on the available information, CNPS and CNDDDB recommend adding *C. glechomifolium* to CRPR 4.3. If more information on this plant becomes available in the future, we will re-evaluate it at that time.

### **Recommended Actions**

CNPS: Add *Chrysosplenium glechomifolium* to CRPR 4.3

CNDDDB: Add *Chrysosplenium glechomifolium* to G5 / S3

Sent to: NW on 09/01/2015

### Draft CNPS Inventory Record

*Chrysosplenium glechomifolium* Nutt.

Pacific golden saxifrage

Saxifragaceae

CRPR 4.3

Oregon, Washington

Del Norte, Humboldt, Mendocino

Albion (553A) 3912327, Mathison Peak (568C) 3912336, Mendocino (569D) 3912337, Korbel (671C) 4012378, Lord-Ellis Summit (671A) 4012387, Blue Lake (671B) 4012388, Mcwhinney Creek (654A) 4012461, Fields Landing (654B) 4012461, Arcata South (672D) 4012471, Eureka (672C) 4012472, Arcata North (672A) 4012481, Panther Creek (688C) 4112318, Holter Ridge (705C) 4112338, Crannell (689D) 4112411, Trinidad (689C) 4112412, Rodgers Peak (689A) 4112421, Orick (706D) 4112421, Fern Canyon (706A) 4112441, [Sister Rocks \(723B\) 4112462](#), Requa (723D) 4112451, Childs Hill (723A) 4112461, Crescent City (740C) 4112472, High Divide (740A) 4112481, Smith River (740B) 4112482, [Hiouchi \(740D\) 4112471](#)

North Coast coniferous forest, [riparian forest](#) / {streambanks, sometimes seeps, [sometimes roadsides](#)}; Elevation 10-220 meters.

Perennial herb. Blooms February to June.

See *A Flora of North America: containing...* 1(4):589-590 (1840) [by J. Torrey and A. Gray](#) for original description.

### Literature Cited

Calflora. 2015. Information on wild California plants for conservation, education, and appreciation. Website <http://www.calflora.org/> [accessed 8 August 2015].

CalPhotos. 2015. CalPhotos: Plants. Regents of the University of California, Berkeley. Website <http://calphotos.berkeley.edu/flora/> [accessed 22 June 2015].

Consortium of California Herbaria (CCH). 2015. Data provided by the participants of the Consortium of California Herbaria. Regents of the University of California, Berkeley. Website <http://ucjeps.berkeley.edu/consortium/> [Accessed 22 June 2015].

Consortium of Pacific Northwest Herbaria, CPNWH. 2015. Providing access to specimen data and digital resources from herbaria throughout the Pacific Northwest North America. University of Washington, Burke Museum of Natural History and Culture, Seattle, WA. Website <http://www.pnwherbaria.org/data/search.php> [accessed 8 August 2015].

Elvander, P.E. 1993. *Chrysosplenium*. P. 1003 in Hickman, J.C. (ed.), *The Jepson Manual: Higher Plants of California*. University of California Press, Berkeley.

Freeman, C.C., N.D. Levens. 2009. *Chrysosplenium*. Pp. 70-75 in *Flora of North America* Editorial Committee (eds.), *Flora of North America North of Mexico*, Vol. 8. New York and Oxford.

Sent to: NW on 09/01/2015

Jepson, W.L. 1925. Manual of the Flowering Plants of California. University of California Press, Berkeley and Los Angeles.

Nuttall, T. 1840. *Chrysosplenium*. Pp. 589-590 in J. Torrey, A. Gray, A Flora of North America: containing abridged descriptions of all the known indigenous and naturalized plants growing north of Mexico; arranged according to the natural system, 1(4). Wiley & Putnam, New York (original description).

Park, M.S. 2012. *Chrysosplenium*. Pp1235-1236 in Baldwin, B.G., D.H. Goldman, D.J. Keil, R. Patterson, T.J. Rosatti, and D.H. Wilken (eds.), The Jepson Manual: Vascular Plants of California (2nd ed.). University of California Press, Berkeley and Los Angeles.

Smith, G.L. and C.R. Wheeler. 1990-1991. A Flora of the Vascular Plants of Mendocino County, California. University of San Francisco, San Francisco. 387 pp.