## Changed from California Rare Plant Rank 1B.3 to 4.2 in the CNPS Inventory on August 26, 2016

# Rare Plant Status Review: *Smilax jamesii*Proposed change from California Rare Plant Rank 1B.3 to 4.2, G3 / S3 to G3G4 / S3S4

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Changes made to the original document appear in blue text.

#### **Background**

*Smilax jamesii* G.A. Wallace is a perennial rhizomatous herb in the Smilacaceae (formerly Liliaceae) known from the Klamath, Cascade Foothills, and High Cascade Ranges of California. It has been included in the CNPS Inventory since the 2<sup>nd</sup> Edition (Smith et al. 1980), and is included in *The Jepson Manual* (McNeal 1993), *The Jepson Manual, Second Edition* (McNeal 2012), and the *Flora of North America, Vol. 26* (Holmes 2002). *Smilax jamesii* occurs in streambanks and lake margins as well as marshes and swamps in coniferous forests at an approximate elevation of 505 to 1975 meters, and flowers between May and October.

Smilax jamesii is currently known from 158 occurrences throughout Del Norte, Shasta, Siskiyou, and Trinity counties within the CNDDB; additional occurrences are known but have not been reported to CNDDB (R. Fallscheer and S. Erwin pers. comms. 2016). With additional data taken from unprocessed field survey forms submitted to the CNDDB, Calflora (2016), and the Global Biodiversity Information Facility (GBIF 2016) database there is a potential for 16 more occurrences. Additional records of S. jamesii in GBIF (2016) and Calflora (2016) are from the same location of occurrences already included in the CNDDB. At least ten of the total occurrences in the CNDDB are considered historical (occurrences not seen in the past 20 years are considered historical by the CNDDB), with one of the historical occurrences being over 50 years old and one other occurrence having an unknown sighting date. Although all of the occurrences are presumed to be extant, the oldest occurrence from 1910 (EO 34) should be sought after and assessed in order to determine its current status. Of the 148 recent occurrences, a total of 63 are currently ranked as either "excellent" or "good" (A or B), while 71 of the recent occurrences are ranked either "fair" or "poor" (C or D) by CNDDB. A total of 24 occurrences in the CNDDB have an unknown occurrence rank. The population sizes of *Smilax jamesii* are fairly well known, with data available for 120 of the occurrences. More than a third (44) of these occurrences have population counts/estimates of 50 individuals or more, with 22 occurrences estimated to have over 100 individuals. Based on the available data, the total number of known individuals of S. jamesii in California is estimated to be over 9,500 plants (population count/estimate data is available in the attached "Locations SmilaxJamesii" spreadsheet).

Slightly more than half of the occurrences (88 occurrences) of *S. jamesii* in the CNDDB are on private land, mostly managed by timber companies. The other half of the occurrences are on The McCloud River Preserve (2), Klamath National Forest (25), Shasta-Trinity National Forest (40), Six Rivers National Forest (2) and unknown land

ownership (1) (see "Locations\_SmilaxJamesii" spreadsheet for a breakdown of occurrences).

More than half of the occurrences of *S. jamesii* in the CNDDB (2016) are noted to be threatened by direct and indirect impacts of timber harvest activities, including: road construction, road maintenance, slope disturbance and erosion. Possible threats to *S. jamesii* are grazing, trampling, foot traffic, recreational use, improper burning regimes, surface water diversion, non-native plant impacts, and ORV activity (CNDDB 2016).

With 63 occurrences ranked as "excellent" or "good" by CNDDB, *S. jamesii* has met the minimum requirement for down ranking from California Rare Plant Rank 1B to 4, based on numbers of "good" occurrences (in general, California Rare Plant Rank 1B contains plants that are known from fewer than 50 occurrences ranked as "excellent" or "good" by CNDDB). *Smilax jamesii* does not appear to be experiencing a trend towards extirpation in California at this time, and therefore appears to not be eligible for state listing. Nevertheless, the condition of *S. jamesii* 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 determine the conservation status of this species.

Based on the available information, CNPS and CNDDB recommend re-ranking *Smilax jamesii* from California Rare Plant Rank 1B.3 to 4.2. If occurrences of *S. jamesii* 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 4.2

CNDDB: Change from G3 / S3 to G3G4 / S3S4

#### **Current CNPS Inventory Record**

Smilax jamesii Wallace English Peak greenbrier Smilacaceae CRPR 1B.3

Del Norte, Shasta, Siskiyou, Trinity

Burney (662B) 40121H6, Burney Mtn. West (662C) 40121G6, Chalk Mtn. (663A) 40121H7, Roaring Creek (663B) 40121H8, Hatchet Mtn. Pass (663D) 40121G7, Goose Gap (664A) 40122H1, Damnation Peak (666A) 40122H5, Trinity Center (666B) 40122H6, Papoose Creek (666C) 40122G6, Schell Mtn. (666D) 40122G5, Covington Mill (667A) 40122H7, Siligo Peak (667B) 40122H8, Rush Creek Lakes (667C) 40122G8, Trinity Dam (667D) 40122G7, Mt. Hilton (668A) 40123H1, Pondosa (679B) 41121B6, Dead Horse Summit (680A) 41121B7, Big Bend (680C) 41121A8, Skunk Ridge (680D) 41121A7, Shoeinhorse Mtn. (681D) 41122A1, Tangle Blue Lake (683B) 41122B6, Carrville (683C) 41122A6, Whisky Bill Peak (683D) 41122A5, Caribou Lake (684C) 41122A8, Ycatapom Peak (684D) 41122A7, Youngs Peak (686A) 41123B3, English Peak (702B) 41123D2, Sawyers Bar (702C) 41123C2, Tanners Peak (702D) 41123C1, Greenview (718C) 41122E8, Grider Valley (719B) 41123F2, Marble Mountain

(719C) 41123E2, Boulder Peak (719D) 41123E1, Ukonom Lake (720D) 41123E3, Chimney Rock (721C) 41123E6

Broadleafed upland forest, lower montane coniferous forest, marshes and swamps, north coast coniferous forest, upper montane coniferous forest / streambanks and lake margins; elevation 560 – 2500 meters.

Perennial rhizomatous herb. Blooms May – October.

Threatened by logging. Possibly threatened by road maintenance, recreational activities, and non-native plants. See *Brittonia* 31:416-421 (1979) for original description.

Available online at: http://www.rareplants.cnps.org/detail/1479.html

### **Revised CNPS Inventory Record**

Smilax jamesii G.A. Wallace English Peak greenbrier Smilacaceae CRPR 4.2

Del Norte, Shasta, Siskiyou, Trinity

Lewiston (649A) 4012267, Weaverville (649B) 4012268, Burney (662B) 40121H6, Burney Mtn. West (662C) 40121G6, Chalk Mtn. (663A) 40121H7, Roaring Creek (663B) 40121H8, Hatchet Mtn. Pass (663D) 40121G7, Goose Gap (664A) 40122H1, Damnation Peak (666A) 40122H5, Trinity Center (666B) 40122H6, Papoose Creek (666C) 40122G6, Schell Mtn. (666D) 40122G5, Covington Mill (667A) 40122H7, Siligo Peak (667B) 40122H8, Rush Creek Lakes (667C) 40122G8, Trinity Dam (667D) 40122G7, Mt. Hilton (668A) 40123H1, Pondosa (679B) 41121B6, Dead Horse Summit (680A) 41121B7. Big Bend (680C) 41121A8. Skunk Ridge (680D) 41121A7. Shoeinhorse Mtn. (681D) 41122A1, Tangle Blue Lake (683B) 41122B6, Carrville (683C) 41122A6, Whisky Bill Peak (683D) 41122A5, Caribou Lake (684C) 41122A8, Ycatapom Peak (684D) 41122A7, Youngs Peak (686A) 41123B3, English Peak (702B) 41123D2, Sawyers Bar (702C) 41123C2, Tanners Peak (702D) 41123C1, Somes Bar (703B) 4112344, Greenview (718C) 41122E8, Grider Valley (719B) 41123F2, Marble Mountain (719C) 41123E2, Boulder Peak (719D) 41123E1, Ukonom Lake (720D) 41123E3, Chimney Rock (721C) 41123E6, Devils Punchbowl (738C) 4112376 Broadleafed upland forest, lower montane coniferous forest, marshes and swamps, north coast coniferous forest, upper montane coniferous forest / streambanks and lake margins, sometimes mesic depressions; elevation 505 – 1975 meters. Perennial rhizomatous herb. Blooms May – October.

Previously CRPR 1B.3; more common than originally thought. Potentially threatened by logging and associated road usage. Possibly threatened by vehicles, recreational activities, foot traffic, grazing, trampling, alteration of fire regimes, hydrological alterations, and non-native plants. See *Brittonia* 31:416-421 (1979) for original description.

#### **Literature Cited**

California Natural Diversity Database (CNDDB). 2016. RareFind 5 [Internet]. California Department of Fish and Wildlife [Government Version, June 2016].

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McNeal, D.W. 1993. *Smilax.* Pp. in The Jepson Manual: Higher Plants of California. University of California Press, Berkeley.

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Smith, J.P., Jr., R.J. Cole, and J.O. Sawyer, Jr. 1980. Inventory of Rare and Endangered Vascular Plants of California. Special Publication No. 1 (2nd Edition). California Native Plant Society, Berkeley. 115 pp.