

Heritage Ranking Form - Global Rank

Scientific Name: Perideridia erythrorhiza

Common Name: Red-root Yampah

Classification: Vascular Plant

Range Extent: D = 1,000-5,000 sq km (~400-2,000 sq mi)

Estimated range is 1165 km² when adding convex hull of each disjunct population separately (north, west, and east).

Area of Occupancy: E = 26-125 4-km² grid cells

Comments: 28 4km² grid cells occupied

Number of Occurrences: C = 21 - 80

Comments: 22 extant EOs using 1 km separation distance.

Population Size: E = 26-125 4-km² grid cells

Comments: Estimated population of 287,300 from counts made from 1989-1999. Mid-range population estimate from Malaby 2005 conservation assessment is 667,150, but could be as many as 1,667,000. These counts do not include planted populations managed by USFS/ODA.

Good Viability: B = Very few (1-3) occurrences with excellent or good viability or ecological integrity

Comments: 8 EOs with good viability using 1 km separation distance

Environmental Specificity: Not Evaluated

Comments: None

Short Term Trends: G = Relatively Stable (<=10% change)

Comments: While two populations have likely been lost to development in the last ten years, those populations with revisit data have remained stable or increased.

Long Term Trends: U = Unknown

Comments: None

Threat Impact: B = High

Comments: Threatened by housing development, agricultural development, grazing, herbicides, competition with exotics, and altered hydrology due to nickel mining (Meinke 1998 cited by Center for Plant Conservation n.d.). May also be threatened by off-road vehicles. Some populations are near towns or other developments, some have already been lost to development. Many populations are on private land that is grazed or could be converted to agriculture. Yampah seems to tolerate light to moderate grazing. Mining activities could impact sites in the Siskiyou Mountains (Malaby 2005). Fire does not seem to harm this species and may be beneficial (Malaby 2005). Ranked as not vulnerable/presumed stable to climate change.

Intrinsic Vulnerability: C = Not intrinsically vulnerable

Comments: Plants produce a lot of seed, no known pollinator limitations, germination rates vary but are high at some sites (Malaby 2005).

Heritage Rank: G2

Comments: Mid-range population estimate from Malaby 2005 conservation assessment is 667,150, but could be as many as 1,667,000. Although there are many populations threatened by development or agriculture, several large, apparently stable populations exist, with at least one present in each of the three population areas. Yampah seems to tolerate some amount of grazing and has persisted in semi-degraded habitats. The northern population seems to be in the best shape while the Siskiyou population is the most tenuous. Rank should be re-assessed if the taxon is split into subspecies or if several sites are lost to development.

Rank Notes: None

Reference: Malaby, S. 2005. Conservation assessment for *Perideridia erythrorhiza* (Piper) Chuang & Constance (Reed Root Yampa). USDA Forest Service Region 6, USDI Bureau of Land Management, Oregon-Washington. Meinke, R. 2006. Experimental outplanting of *Perideridia erythrorhiza* ("klamathense") on the Fremont-Winema National Forest. Prepared for the Fremont-Winema National Forest. 15 pp.

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