

Heritage Ranking Form - Global Rank

Scientific Name: Castilleja chlorotica

Common Name: Green-tinged paintbrush

Classification: Vascular Plant

Range Extent: E = 5,000-20,000 sq km (~2,000-8,000 sq mi)

Comments: 3672 square miles; Oregon endemic; ORBIC occurrences used for convex hull

Area of Occupancy: F = 126-500 4-km² grid cells

Comments: 191 grid cells

Number of

Occurrences: C = 21 - 80

Comments: 63 occurrences (1 km separation distance)

Population Size: G = 100,000 - 1,000,000 individuals

Comments: Estimated at least 150,000; populations are continuous but scattered-patchy causing difficulty in determining the endpoints of the surveys. In a Deschutes NF biological evaluation (2006), USFS botanists estimate 30,000 on the Deschutes and 500,000 on the Fremont.

Good Viability: D = Some (13-40) occurrences with excellent or good viability or ecological integrity

Comments: 13 occurrences with over 1000 plants reported; 8 occurrences with over 500 plants

Environmental

Specificity: B = Narrow. Specialist or community with key requirements common

Comments: Hemiparasitic on shrubs, mostly likely Artemisia tridentata and Purshia tridentata.

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

Comments: None

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

Comments: None

Threat Impact: Not Evaluated

Comments: None

Intrinsic Vulnerability: AB = Highly to moderately vulnerable

Comments: Hemiparasitic; grows in mid to late seral stage shrub habitat. This species may be unable to colonize or recolonize a site until the host plant has become well established. FS botanists speculate that 20 years is not out of the question (Powers 2006).

Heritage Rank: G3?

Comments: Although occurrence numbers and plant abundance are high, it's intrinsic vulnerability to fire is a concern. It is hemiparasitic on mature shrubs within an area where fire suppression has been the historic norm. The high fuel loads now pose a serious threat in that any fire could potentially kill the host shrub. Re-establishment of the plant after a burn would take some time since the host shrub would have to become established first and could conceivably take up to 20 years. If fire management changes, then this species may be down ranked to a G4.

Rank Notes: None

Reference: Powers, Charmane. 2006. Opine Project Biological Evaluation: Threatened, Endangered, and Sensitive Plants. USDA Forest Service, Bend/Fort Rock Ranger District, Deschutes NF

Rank Date: 8/1/2010

Rank Author: Vrillakas, Sue

Oregon Biodiversity Information Center
Institute for Natural Resources
Portland State University
Mail Stop: INR, PO Box 751
Portland, OR 97207-0751
503-725-9950
www.orbic.pdx.edu