Heritage Rank Status Factors

Elcode PDRAN0A040

Gname COPTIS TRIFOLIA

Gcomname Goldthread

Number of Occurrences

E = >300

Comments

Coptis trifolia is considered common in Canada, its main North American range. It is considered rare in Oregon where it has been designated as a sensitive species (pers. comm. J. Kagan, December 2001). This species is more frequent in western than eastern British Columbia (Douglas et al. 1990). In the eastern U.S., Coptis trifolia is rare in North Carolina, but reportedly more common in the northeast (Rhoads and Block 2000).

Number of Occurrences with Good Viability

F = Very many (>125) occurrences with good viability

Comments

Population Size

G = 100,000-1,000,000 individuals H = >1,000,000 individuals

Comments

In Oregon, there is 6100+ plants reported (ORNHIC 2002). Given the large range for this species, it is easily assumed that there should be more than 100,000 plants worldwide.

Range Extent

H = > 2,500,000 km2 (greater than 1,000,000 square miles)

Comments

Coptis trifolia occurs from Greenland across North America to Alaska, including most of Canada and the eastern U.S. C. trifolia also occurs in northeast Asia to northern Japan (Kartesz and Meachum 1999, M. Stein 1998). There are two disjunct populations in the western United States, in the states of Washington and Oregon.

Area of Occupancy

G = 2,000-20,000 km2 (500,000-5,000,000 acres)

LG = 20,000-200,000 km (about 12,500-125,000 miles)

Comments

Long-term Trend in Population Size, Extent of Occurrence, Area of Occupancy, and/or Number or Condition of Occurrences

E = Relatively Stable (±25% change)

Comments

Short-term Trend in Population Size, Extent of Occurrence, Area of Occupancy, and/or Number or Condition of Occurrences

E = Stable. Population, range, area occupied, and/or number or condition of occurrences unchanged or remaining within ±10% fluctuation

Comments

Threats

H = Unthreatened. Threats if any, when considered in comparison with natural fluctuation and change, are minimal or very localized, not leading to significant loss or degradation of populations, occurrences, or area even over a few decades' time. (Severity, scope, and/or immediacy of threat considered Insignificant.)

Scope Insignificant Severity Low Immediacy Insignificant

Comments

Many activities pose a threat to this understory species, such as logging, hydrologic change, soil disturbance and possibly high intensity fires; this species is collected to a certain extent for medicinal use, but collection probably does not pose a significant threat at this time across its range. Populations in Oregon, and perhaps other regions in western North America are relatively rare, so collecting in these areas could be detrimental to local populations. An asian cultivar, Coptis sinensis, is available for commercial use (Tilford 1998).

Number of Appropriately Protected and Managed Occurrences

D = Many (13-40) occurrences appropriately protected and managed

E = Very many (>40) occurrences appropriately protected and managed

Comments

Given the large range for this species, it is estimated that there are at least 13 protected sites if not more.

Intrinsic Vulnerability

B = Moderately Vulnerable. Species exhibits moderate age of maturity, frequency of reproduction, and/or fecundity such that populations generally tend to recover from decreases in abundance over a period of several years (on the order of 5-20 years or 2-5 generations); or species has moderate dispersal capability such that extirpated populations generally become reestablished through natural recolonization (unaided by humans). Ecological community occurrences may be susceptible to changes in composition and structure but tend to recover through natural processes given reasonable time (10-100 years).

Comments

Environmental Specificity

C = Moderate. Generalist or community with some key requirements scarce.

Comments This species grows in wet areas, seeps, along creeks and in depressions, mainly in coniferous forest.

Other Considerations

NRANK - N4. Previous edition by Kelly McConnell (2002).

Edition 11/18/2002 Edauthor Vrilakas, Sue

Grank G5 Grank Date 11/18/2002

Greasons

This widespread species is relatively frequent in the northern portion of its large, generally boreal range. It is sensitive to ecological disturbance and is sometimes collected from the wild for medicinal use. Given the large

range for this species, it is estimted that there are 300+ occurrences, more than 100,000 plants worldwide, and at least 13 protected sites, if not more than 40.

BCD Sources

New Sources

Oregon Natural Heritage Information Center. 2002. Oregon Natural Heritage Program data set. Oregon Natural Heritage Information Center, Portland, OR.