

Species: Creeping Snowberry (*Gaultheria hispidula*)
Global Rank: G5
State Rank: S3
Climate Change Vulnerability Index: Extremely Vulnerable
Confidence: Very High

Habitat:

Creeping snowberry is very specific to partially shaded peatland margins and wet conifer woods in Pennsylvania (Rhoads and Block 2007). Creeping snowberry occurs in the boreal region of North America from southern Canada and the northern United States to the mountains of West Virginia and Maryland. In Pennsylvania, creeping snowberry appears to be confined to the Allegheny Plateau.

Current Threats:

Creeping snowberry is likely to be sensitive to changes in temperature or hydrology at the sites it inhabits. Therefore, disturbances that reduce tree canopy cover or alter the natural hydrological regime may negatively impact the species (PNHP 2007).

Main Factors Contributing to Vulnerability Rank:

Distribution relative to natural barriers: Creeping snowberry is limited to isolated, high elevation wetlands in the northern tier of Pennsylvania (Allegheny Plateau) where it represents the southern edge of its range.

Predicted micro sensitivity to changes in temperature: Creeping snowberry occurs in microsites/microhabitats towards the cooler end of the spectrum. In Pennsylvania, creeping snowberry is confined to the cooler northern tier portion of the state.

Predicted macro sensitivity to changes in precipitation, hydrology, or moisture regime: Within the species range in Pennsylvania, the species has experienced a less than average precipitation variation in the past 50 years.

Predicted micro sensitivity to changes in precipitation, hydrology, or moisture regime: Creeping snowberry is moderately dependent on a moisture regime that is highly vulnerable to loss or reduction with climate change and the expected direction of moisture change is likely to reduce the species' distribution, abundance, or habitat quality.

Interspecific interactions: Reliance on a mycorrhizal symbiont somewhat increases the vulnerability of creeping snowberry to climate change effects.

References:

Hays, M. 2001. Conservation assessment for creeping snowberry (*Gaultheria hispidula*). USDA Forest Service, Eastern Region.

Pennsylvania Natural Heritage Program. 2007. PNHP Fact Sheet – Creeping Snowberry.

Rhoads, A. and T. Block. 2007. The Plants of Pennsylvania. 2nd Edition. Philadelphia. University of Pennsylvania Press.