

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 2008). 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.

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:

Predicted micro sensitivity to changes in temperature: Creeping snowberry occur 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 precipitation change is likely to reduce the species' distribution, abundance, or habitat quality.

Dependence on other species for propagule dispersal: Creeping snowberry is dependent on a small number of species for propagule dispersal. Seed spread rate for creeping snowberry is slow and carried out mostly by chipmunks and deer mice (Hays 2001).

Literature Cited:

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.