Species: Leatherleaf (*Chamaedaphne calyculata*)
Global Rank: G5
State Rank: SNR
Climate Change Vulnerability Index: Moderately Vulnerable
Confidence: Very High

Habitat:

Leatherleaf occurs frequently in bogs and acidic wetlands in the northern tier of Pennsylvania and at high elevations along the Allegheny Front (Rhoads and Block 2007; Rhoads and Klein 1993). Leatherleaf is circumboreal and is found throughout Alaska and Canada. Its distribution extends southward through the Great Lake states and into the northeastern United States.

Current Threats:

Leatherleaf is likely to be sensitive to changes in temperature or hydrology at the sites it inhabits. Leatherleaf is shade intolerant so the development of a tall shrub layer or establishment of trees reduces leatherleaf cover at a site.

Main Factors Contributing to Vulnerability Rank:

Predicted micro sensitivity to changes in temperature: Leatherleaf occurs in microsites/microhabitats towards the cooler end of the spectrum.

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: Leatherleaf 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.

Forms part of a mutulism: Reliance on a mycorrhizal symbiont somewhat increases the vulnerability of leatherleaf to climate change effects (Selosse et al. 2007).

References:

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