Species: Rhodora (*Rhododendron canadense*)
Global Rank: G5
State Rank: SNR
Climate Change Vulnerability Index: Highly Vulnerable
Confidence: Low

Habitat:

Rhodora is often locally abundant in bogs, peaty wetlands, and barrens in northeast Pennsylvania (Rhoads and Block 2007; Rhoads and Klein 1993). The range of rhodora extends from Newfoundland and Quebec west to Ontario and south to northeastern Pennsylvania and northern New Jersey (NatureServe 2011).

Threats:

Rhodora is likely to be sensitive to changes in temperature or hydrology at the sites it inhabits. Rhodora is mostly shade intolerant so tree species establishment and subsequent canopy development likely reduces populations of this shrub species.

Main Factors Contributing to Vulnerability Rank:

Distribution relative to natural barriers: Rhodora is limited to the northeastern corner of Pennsylvania where it represents the southern edge of its range.

Dispersal and movement: Rhodora seeds are wind and water dispersed (Campbell et al. 2003) and mostly limited to short distance dispersal within the site where established.

Predicted micro sensitivity to changes in temperature: Rhodora occur in microsites/microhabitats towards the cooler end of the spectrum. In Pennsylvania, rhodora is confined to the cooler, northeastern 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: Rhodora is somewhat to 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. Rhodora often occurs in wetlands but can also occur in drier, barren sites with no overstory canopy.

Forms part of a mutulism: Reliance on a mycorrhizal symbiont somewhat increases the vulnerability of rhodora to climate change effects (Largent et al. 2006).

References:

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