Species: Dewdrop (*Dalibarda repens*)
Global Rank: G5
State Rank: SNR
Climate Change Vulnerability Index: Extremely Vulnerable
Confidence: Low

Habitat:

Dewdrop primarily occurs in the Northeast and Midwest, from Nova Scotia and Quebec to Minnesota and extends south through Pennsylvania and New Jersey to West Virginia and barely extends into North Carolina (NatureServe 2011). In Pennsylvania, dewdrop is found occasionally in bogs, peaty barrens, and cool, mossy woods mostly in the northern tier of the state and at higher elevations along the Allegheny Front (Rhoads and Klein 1993; Rhoads and Block 2007).

Current Threats:

Drainage of wetlands presents a low-level threat for this species (Southern Appalachian Species Viability Project 2002; NatureServe 2011).

Main Factors Contributing to Vulnerability Rank:

Distribution relative to natural topographic or geographic habitat barriers: Dewdrop is limited to rich, moist woods and bogs along the Allegheny front and northern tier of Pennsylvania. Movement to new sites may likely be impeded by extensive upland forests surrounding these areas.

Dispersal and movement: Little is known about the seed dispersal mechanisms of this species, however, dispersal is likely limited to only a short distance within a site.

Predicted micro sensitivity changes in temperature: In Pennsylvania, dewdrop occurs mostly in the cooler portions of the state. The species is found in the northern tier and at higher elevations along the Allegheny Front (Rhoads and Block 2007).

Predicted macro sensitivity to changes in precipitation, hydrology, or moisture regime: Considering the mean annual precipitation across the current range of dewdrop in Pennsylvania, the species has experienced slightly lower than average precipitation variation in the past 50 years.

Predicted micro sensitivity to changes in precipitation, hydrology, or moisture regime: As a facultative wetland species, dewdrop is somewhat dependent on a moisture regime that is most likely vulnerable to alteration as a result of climate change and the expected direction of moisture change is likely to reduce the species' distribution, abundance, or habitat quality.

Interspecific interactions: Dewdrop may form mycorrhizal associations that could somewhat increase it's vulnerability to climate change. Dewdrop belongs to the Rosaceae Family, a family that commonly forms mycorrhizal symbionts (Hossler 2010).

References:

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