

Species: Toothcup (*Rotala ramosior*)

Global Rank: G5

State Rank: S3

Climate Change Vulnerability Index: Not Vulnerable/Presumed Stable

Confidence: Moderate

Habitat:

Toothcup occurs throughout most of the United States and in southern Canada (NatureServe 2010). Toothcup is typically found in early successional wet habitats such as mudflats and lake, pond, and reservoir shores and almost always on newly exposed shores following water drawdowns (Mattrick 2001).

Current Threats:

Toothcup is threatened by alterations to hydrologic regime and displacement by exotic plant species.

Main Factors Contributing to Vulnerability Rank:

Although toothcup may be sensitive to certain climate change related factors addressed in the CCVI, such as changes in moisture regimes, results from the CCVI suggest that the species is Not Vulnerable/Presumed Stable. Available evidence does not suggest that abundance and/or range extent within Pennsylvania will change substantially by 2050 although actual range boundaries may change. Multiple vehicles for dispersal (e.g., wind, gravity, water, and the feet of waterfowl) and a preference towards warmer environments are characteristics that contribute to the short-term climate change resilience indicated by the CCVI. However, additional stressors that may affect the species are not considered in the CCVI and should also be evaluated when planning conservation related activities.

References:

Mattrick, C. 2001. *Rotala ramosior* (L.) Koehne (Toothcup) Conservation and Research Plan. New England Wild Flower Society, Framingham, Massachusetts. USA.

NatureServe. 2010. NatureServe Central Databases. Arlington, Virginia. USA.