

Species: Eastern Sand Cherry (*Prunus pumila* var. *depressa*)

Global Rank: G5T5

State Rank: S1

Climate Change Vulnerability Index: Not Vulnerable/Presumed Stable

Confidence: Moderate

Habitat:

Eastern sand cherry extends from Kentucky and Pennsylvania to Canada (Taylor 2006; NatureServe 2010). In Pennsylvania, this species occurs in cobble/sand riverine prairies along the Delaware and Susquehanna Rivers (Rhoads and Block 2007).

Current Threats:

Eastern sand cherry is threatened by alterations to hydrologic regime and displacement by exotic plant species.

Main Factors Contributing to Vulnerability Rank:

Eastern sand cherry may be sensitive to certain climate change related factors addressed in the CCVI, such as physical habitat restrictions (restricted to gravel/cobble substrate found on island heads and along shorelines) and reduction in ice scour action that helps to maintain the sparse, gravel/cobble substrate colonized by eastern sand cherry (however, flooding can have a similar effect). However, 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. The potential for longer distance dispersal via water, birds, or mammals, no strong ties to specific thermal or hydrological niches (as defined by the CCVI), and a habitat preference that benefits from flooding 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:

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

Rhoads, A. and T. Block. 2007. The Plants of Pennsylvania. 2nd Edition. Philadelphia. University of Pennsylvania Press.

Taylor, J. 2006. *Prunus pumila*. In: Fire Effects Information System, [Online]. U.S. Department of Agriculture, Forest Service, Rocky Mountain Research Station, Fire Sciences Laboratory. Available: <http://www.fs.fed.us/database/feis/> [Accessed: April 2011].