

Species: Pod-grass (*Scheuchzeria palustris*)  
Global Rank: G5  
State Rank: S1  
Climate Change Vulnerability Index: Extremely Vulnerable  
Confidence: Very High

Habitat:

Pod-grass is a circumboreal species in North America that ranges south to northern New Jersey, northern Pennsylvania, Wisconsin, Missouri, northern Idaho, and along the coast to northern California (NatureServe 2011). In Pennsylvania, pod-grass is found in a few cool, sphagnum bogs in the northeast and northwest portions of the state (Rhoads and Klein 1993; Rhoads and Block 2007). Pod-grass is typically confined to areas of permanent standing water and is usually part of the floating mat community (Tallis and Birks 1965).

Current Threats:

A main threat to this species is water fluctuations, even temporary ones can result in drying and mortality (NatureServe 2011).

Main Factors Contributing to Vulnerability Rank:

*Distribution relative to natural barriers:* Pod-grass is limited to a few isolated bogs in Pennsylvania that are surrounded by extensive forests that would likely serve as a barrier against movement to a new location.

*Dispersal and movement:* Little is known about the seed dispersal of this species but the large size of the seed would appear to preclude any effective long-distance dispersal (Tallis and Birks 1965).

*Predicted micro sensitivity to changes in temperature:* Pod-grass 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 small precipitation variation in the past 50 years.

*Predicted micro sensitivity to changes in precipitation, hydrology, or moisture regime:* Pod-grass is a wetland obligate species that is usually confined to areas of permanent standing water (Tallis and Birks 1965) and is highly sensitive to fluctuation in water levels (NatureServe 2011), a potential effect of climate change on the bogs where this species is found.

References:

NatureServe. 2011. NatureServe Central Databases. Arlington, Virginia. USA.

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

Rhoads, A. and W.M. Klein. 1993. The vascular flora of Pennsylvania annotated checklist and atlas. American Philosophical Society, Philadelphia, PA.

Tallis, J.H. and H.J.B. Birks. 1965. The past and present distribution of *Scheuchzeria palustris* L. in Europe. *Journal of Ecology* 53:287-298.