

***Glyceria maxima* (Poaceae), Sweet Reed Grass, an Exotic Grass New to the Illinois Flora**

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ABSTRACT

Glyceria maxima (Hartman) Holmberg (Poaceae, sweet reed grass) is reported for Illinois based on recently collected specimens from Illinois Beach State Park, Lake County, Illinois.

Since the publication of the Vascular Flora of Illinois (Mohlenbrock 2002), new state records have continued to appear. In 2005, one of us (Nelson) noted a large vegetative grass in a natural area of Illinois Beach State Park, Lake Co., Illinois. A specimen was collected on 20 May 2006 (*Nelson s.n.*, EIU 71133) and was subsequently identified (Tucker). The compressed sheaths with a rough texture suggested *Glyceria maxima* (Hartman) Holmberg. This Eurasian grass, sometimes considered synonymous with the native *Glyceria grandis* S. Wats. (Dore and McNeill 1980; Tucker 1996) has been reported only from Connecticut, Massachusetts and Wisconsin (USDA, NRCS 2007; Tucker, 2007). In the field, *G. maxima* can be distinguished from *G. grandis* by the rough sheaths of the introduced species. Further identification information is provided in the treatment by Barkworth and Anderton (2007) for *Flora of North America*.

Later in the season, on 4 August 2006, Nelson collected flowering material of *Glyceria maxima* (*Nelson s.n.*, EIU 71381) from which Tucker and Ebinger confirmed the identification previously based on vegetative specimens. An image of the flowering specimen was sent to Stephen Darbyshire (DAO), who also confirmed the identification. A duplicate of this specimen was deposited at the Illinois Natural History Survey Herbarium (ILLS).

Though first collected in 2006 at Illinois Beach State Park, *Glyceria maxima* had been at that site for at least a quarter-century. An oddly different, circular patch has shown up on aerial photos since 1982. Until recently it was thought to be reed canary grass and did not

receive management attention. It has apparently been expanding in a circular pattern from around a manhole cover that was installed many years ago as a part of a sanitary sewer project. Perhaps it was brought to the site by workers or equipment during one of many repairs on the sanitary sewer line. It seems likely that the original source of this population, whether from seeds, rhizomes, or sod, was from nearby Wisconsin, where it is known from four counties in the vicinity of Milwaukee and Kenosha (USDA, NRCS 2007). Sweet reed grass has not been found in any other part of the park.

Based on the diameter of the patch compared to the width of the road, the population of sweet reed grass has approximately quadrupled in area from 1982 to 2005. This grass is clearly an aggressive invasive wetland species, as it has displaced a dense stand of cattails. In 2006, it covered ca. 1.35 acres (0.5 ha) within the cattail stand. This is a clear example of why it is important to insist that all construction equipment be pressure washed before being allowed entry into high quality natural areas.

The population of sweet reed grass was treated with 3% Glypho (aquatic approved Glyphosate) in early August of 2006. Several weeks later, the treated areas were completely brown, but a second application will be made in 2007, if there are any remaining plants.

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