

Ecology and management of Flowering Rush in the Detroit Lakes Chain of Lakes

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Flowering Rush, *Butomus umbellatus*
Hardstem bulrush, *Schoenoplectus acutus*

Phenology and Ecology

- Measurements were taken from May 2010 to Oct 2011.
- Flowering rush grows up to 4 m depth and occupies the same habitat as native hardstem bulrush.
- Flowering rush and hardstem bulrush exhibited similar times of emergence, maximal growth and senescence.
- Hardstem bulrush was approximately 1 m taller than flowering rush during mid-summer.
- Flowering rush continually produced rhizome buds as their primary mode of reproduction.
- Approximately one bud per every two grams of rhizome, or 400 buds/m² were produced within the midst of a flowering rush bed.
- 50 – 100% of the biomass of flowering rush plants was found below ground.
- Bud production remains high all year long.

Management

- Trials in 2011 and 2012
- Diquat resulted in a significant decrease in above ground biomass. Diquat and Endothall seemed to reduce below ground biomass.
- Species richness was not impacted by herbicide treatments.
- Due to environmental conditions at Detroit Lakes, fast acting herbicides may be preferable. Treatments may be needed for multiple years to control rhizome biomass.

