



## Aquatic Invasive Species Quick Guide

### Flowering Rush (*Butomus umbellatus* L.)

**Description:** Flowering rush is a non-native, perennial aquatic plant in the family Butomaceae which grows from dark rhizomes that may be lumpy or hairy. Large, narrow leaves are dark green, usually twisted, triangular in cross-section, and originate from a basal cluster. Leaves are often slightly cupped at the base where they partially sheath each other. Plants are typically emergent and 3-5 feet tall, but can grow submerged to over 10 feet deep. A large umbel inflorescence is held on a round stalk and contains many pink flowers with 3 sepals, 3 petals, and red anthers.



Flowering rush has a large, showy inflorescence on a round stalk.

**North American Distribution:** Flowering rush has been reported across most of the northern United States and Canada.



Creamy white bulbils are produced on the rhizomes and resemble small onions.

**Dispersal Vectors:** Flowering rush was introduced from Eurasia as an ornamental plant for water gardens and other wet sites. It spreads locally by rhizomes, and produces asexual reproductive structures called bulbils (also called bulblets), which can dislodge from the parent plant and sprout new plants elsewhere. Fragments of the rhizome can also produce new plants. Muskrats may transport flowering rush short distances when building their huts, and waterfowl hunters may contribute to spread by using it in construction of hunting blinds.

**Ecological Impacts:** Populations can spread quickly by rhizomes and bulbils, crowding out valuable native species and decreasing plant and animal diversity. Its ability to grow on wet shores, as an emergent, or as a submergent allow it to create large, dense colonies. Colonies can be dense enough to prevent passage of boats.

**Control Options:** Small patches of flowering rush can be manually removed by gently digging up the rhizomes and removing all plant material from the site. Care should be taken to remove all bulbils and rhizome fragments. This is more easily done by reaching under the rhizome with bare hands rather than using a shovel. Removing the plants in as few pieces as possible will result in less risk of rhizome fragmentation and dislodged bulbils.

Chemical control of flowering rush is difficult due to the narrow, waxy leaves. Research is ongoing to find an herbicide that effectively controls flowering rush without serious negative effects on beneficial native vegetation. Most states require chemical use permits for any herbicide treatments in standing water or wetland situations.



This emergent stand of flowering rush in 2 feet of water is preventing passage of a kayak.

No effective biological control agent is known at this time.

#### Additional Information:

Madsen, J.D., B. Sartain, G. Turnage, and M. Marko. 2013. Herbicide trials for management of flowering rush in Detroit Lakes, Minnesota for 2012. Geosystems Research Institute Report 5059, Geosystems Research Institute, Mississippi State University, Mississippi State, MS. April 2013.

Minnesota Sea Grant. Flowering Rush. [www.seagrant.umn.edu/ais/flowering\\_rush](http://www.seagrant.umn.edu/ais/flowering_rush)

**Photo credit:** Paul Skawinski

This Quick Guide is part of a series on aquatic invasive species, and may be reproduced for educational purposes. Visit us at [www.goldensandsrcd.org/our-work/water](http://www.goldensandsrcd.org/our-work/water) to download this series of handouts.

Developed by Golden Sands Resource Conservation & Development (RC&D) Council, Inc. as part of an aquatic invasive species (AIS) education program, supported by an AIS grant from the Wisconsin Department of Natural Resources.