

2025 Forest Lake Property Owner's Flowering Rush Management Guide

Flowering Rush in various stages of growth



Invasive species cause recreational, economic and ecological damage--changing how residents and visitors use and enjoy Minnesota waters.

-- Minnesota Department of Natural Resources



Background

Flowering rush (*Butomus umbellatus*) is an aquatic invasive species (AIS) that has been present in Minnesota since 1968 that originated from Europe and Western Asia. It is a perennial plant that grows one to four feet along shorelines in shallow, slow-moving water. Flowering rush has the ability to form dense growth along shoreland areas that impedes navigation, can overtake habitat and outcompete native aquatic plants for space and resources, and is unsuitable shelter, food, and nesting habitat for native animals.

Flowering rush in Forest Lake was first confirmed in 1998 by the Minnesota DNR. In 2014, the CLFLWD initiated management by conducting surveys that identified an estimated 7.82 acres of flowering rush present. The District has since conducted aggressive annual treatments to reduce the species abundance by as much as 99%. However, flowering rush is an aggressive invader and regrowth each season is expected. Forest Lake's flowering rush is unique in that it is the only population in Minnesota with viable seed heads.

Identification

Flowering rush has triangular leaves and round flowering stems. It may grow as an emergent in up to 10 feet of water, or in deeper waters up to 10 to 20 feet as a submerged plant with flexible leaves suspended in the water column. Emergent triangular leaves are twisted spirally toward the leaf tip. Both forms have fleshy, rhizomatous roots. Roots are also bulb-like and appear to "hug" one another. The flowers are 2-2.5 cm wide with six pink to rose-colored petals that grow in a round cluster of 20 to 50 atop a round stalk. Flowers are typically in bloom from June to early-Fall.

If landowners would like help with identification of flowering rush, they can contact Matthew Hendrickson, CLFLWD Technician via email at matthew.hendrickson@clflwd.org or by phone at 651-395-5852.

2025 Treatment Plan and Schedule

This will be the eleventh year of flowering rush treatment and management on Forest Lake. The CLFLWD will continue the aggressive treatment including multiple rounds of herbicide treatment and seedhead removal. As in previous years, the herbicide being used contains Diquat or Imazapyr as the active ingredients. Maps of the treatment locations, and all safety information can be found at www.clflwd.org or by contacting the CLFLWD Office at 651-395-5850. Water use restrictions will be posted around large treatment areas immediately following herbicide treatments.

Treatment and Management Schedule

July 11th:	Initial Flowering Rush Delineation Survey (BWS)
Late July-Early August:	Flower Removal #1 (District Staff)
Early August:	Shoreline Walk, Spot and Area Treatments (PLM)
Mid-August:	Flower Removal #2 (District Staff)
Late August:	Second Delineation/Assessment Survey (BWS)
Early September:	Flower Removal #3 (District Staff)
Mid-September:	Shoreline Walk, Spot and Area Treatments as (PLM)
Mid-October:	Final Assessment Survey (BWS)

How Landowners Can Help

For the 2025 season, we are requesting lakeshore property owners monitor their shorelines for flowering rush growth and clip seed heads if present. Forest Lake's flowering rush population is unique for Minnesota as it is the only lake population that has viable seed heads. Clipping the flowers and seed heads is crucial for reducing the species abundance and distribution around Forest Lake. Forest Lake's shoreline is more than 15 miles long and is difficult for staff to survey alone, which is why the District is asking for your assistance this season. Below are some steps to help manage flowering rush along your property:

Confirm Identification:

Before performing any management along your shoreline, confirm what you are about to remove is flowering rush. Removal of native vegetation can create opportunities for flowering rush to further establish itself.

Remove Flowers and Seed Heads:

Once you have confirmed the plant is flowering rush, you can clip or break off the flowers and seed heads. To limit the spread of seeds, it is encouraged that the flowers and seed heads are clipped over a plastic bag. The CLFLWD coordinates herbicide treatments annually and is only requesting landowners mechanically remove the plant from their shoreline. Any herbicide treatment will require a DNR permit and may require an applicator license to perform.

Properly Dispose of Plant

Material:

Double bag the clippings in thick trash bags and dispose of them in the trash. Do not compost the plant material as this could spread the plant to new locations.

Report Removal to the CLFLWD:

To track the distribution and number of seed heads collected in a season, the District is requesting landowners report their removal activities to Matthew Hendrickson, CLFLWD Technician via email at matthew.hendrickson@clflwd.org or by phone at 651-395-5852.



Minnesota Native Plant Look-A-Likes



Lake Sedge

Carex lacustris is a common sedge of lake shores, drainage ditches, woodland ponds, and open wetlands, often forming large stands.



Giant Bur-reed

Usually found in water less than 3 feet and can grow out of the water in moist soils. Flat or triangle stems with a unique spiky ball like seed mid-summer.



Arrowheads

Sagittaria are found in wet ditches and the shallow waters of lakes, ponds and streams. The arrowhead shape is not easily seen on new growth.



Sweet-flag

Usually found in clumps or small colonies. Flat leaves and stems, that when broke give off a sweet odor. Unique finger-like seedheads mid-summer.



Hard-stem Bulrush

Often found in standing water in depths of up to 5 feet and forming dense stands. Round stems with a cluster of flowers on the top mid-summer.



Cattails

One of the most common aquatic emergent plants. Flat leaves growing from a thick base. Brown spike flowers that release fluffy seeds later in the summer and fall.



Soft-stem Bulrush

Often found in standing water in depths of up to 3 feet and forming dense stands. Round stems with a cluster of flowers on the top mid-summer.



River Bulrush

Often found in water less than three feet and will grow out of the water on moist soils. Unique triangle stem with a brown cluster of flowers in late summer.

Photos and information courtesy of minnesotawildflowers.info and dnr.state.mn.us

Before performing any management along your shoreline, confirm what you are about to remove is flowering rush. Removal of native vegetation can create opportunities for flowering rush to further establish itself. If you need help identifying the plant, please feel free to send photos to the CLFLWD. All AIS questions, including Flowering Rush questions, can be directed to Matthew Hendrickson, CLFLWD Technician via email at matthew.hendrickson@clflwd.org or by phone at 651-395-5852.

