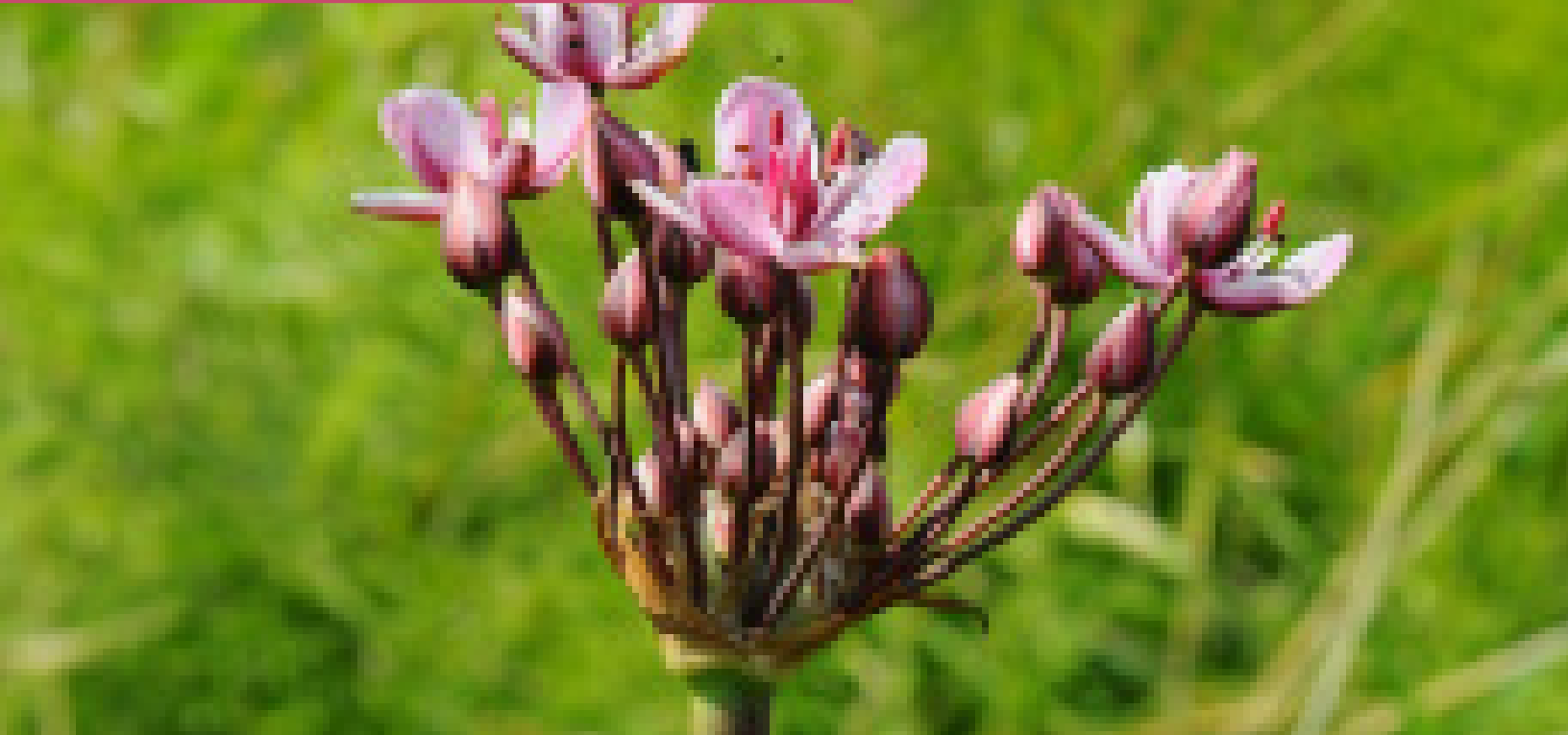


FLOWERING RUSH

Butomus umbrellatus



CONTROL

Hand Pulling

Hand pulling and digging can be an efficient method of removal for isolated plants downstream from larger infestations. This is only effective if the entirety of the root is removed, as disturbance to small amounts of root can cause a bloom in reproductive structures. Raking and pulling alone are not recommended for control.

Cutting

Cutting rush below the water surface can be an efficient form of control in terms of limiting abundance. Cutting and bagging the plant material collected will be most efficient if repeated throughout the summer as flowering rush grows back from the root cyclically.

Biological control

There are no known biological agents currently available for management.

Grazing

N/A

Ideal Timing for Treatment Options		
Spring	Summer	Fall
Cutting		
	Digging/Pulling	
	Foliar Spray	

Herbicide

Due to the thin leaves of flowering rush, spraying herbicide on infestations within a waterbody is ineffective as it can easily wash off and damage desirable native wetland species. If the populations are dry banks or shallow water, only non-selective herbicide is available for use. The herbicide chart on the back lists approved controls for flowering rush. Always consult product labels and read them carefully to ensure correct species/land management usage and chemical application.



Flowering Rush Life Cycle

Life Cycle	Root	Leaves	Stems	Flower	Seed/Fruit
Perennial	Thick creeping rhizomes	Erect or floating leaves, opposite, 3 feet long and ½ inch wide with smooth edges, triangular cross section, and twisted ends.	Leafless, green and round in cross section.	Umbrella-shaped clusters of pink to white flowers, 1 inch in diameter, with three small sepals and three larger petals.	Dark brown, beaked fruits, ½ inch long. Rarely produces seed

Herbicides for Flowering Rush, *Butomus umbellatus*

Active Ingredient	Rate	Efficacy	Comments
Diquat	0.5-0.8lb/acre	Early and late summer	Yearly treatments twice a year, all in one wetting agent shown to improve effectiveness. Broad-spectrum herbicide will cause harm to non-target. Reduces submerged and emergent leaves, do not apply to water with high turbidity.
Glyphosate	5% ai	Late summer postemergence	Nonselective, Broad-spectrum herbicide. Biodegrades and binds in soil faster compared to other herbicides.
Imazapyr	2 quarts/acre	One midsummer treatment with at least 1 ft of plant above the water	Prohibited in water bodies, Broad-spectrum, will cause harm to non-target species.
Imazamox	1.5lb/acre	Early spring, two weeks before water level rises	Refer to label when near potable water intakes. Broad-spectrum, will cause harm to non target species.

Information on diagnostic identifying characteristics adapted from "Montana's Noxious Weeds" by Pokorny and Mangold, Montana State University Extension Bulletin EB0159.