

Flowering Rush (*Butomus umbellatus*)

Identification: Flowering rush is an aquatic species resembling a large sedge, but it belongs to its own family, Butomaceae. Leaves are triangular in cross section (photo at right, top), narrow and twisted toward the leaf tip. Flowering rush is easy to identify when flowering; 20-50 flowers grow in a round cluster that resembles an umbrella. Each flower is $\frac{3}{4}$ to 1 inch wide, with six light pink to rose-colored petals, nine stamens, and six carpels (photo at right, bottom). The roots are fleshy and rhizomatous. Note: flowering rush does not always flower. On Flathead Lake, it may resemble the native Bristly Sedge, *Carex comosa*, a rare species.

Impacts: Flowering rush grows prolifically in irrigation canals, impeding water flow. Some infested canal systems in southern Idaho must be chained every 2-3 years to control flowering rush and increase water availability. Flowering rush also impacts recreational activities by colonizing open waters and interfering with boat propellers, swimming, and fishing. Flowering rush can adversely impact native fish species by forming dense stands in waters previously unvegetated or sparsely vegetated by aquatic plants.

Habitat: Flowering rush grows along lake shores, slow moving waters, irrigation ditches and in wetlands. It typically grows in shallow waters, but has been observed in very clear water up to 20 feet deep in Flathead Lake. When depths are greater than about 10 feet, it modifies its growth form: submersed leaves become limp and ribbon-like.

Spread: Flowering rush has buoyant rhizomes that fragment easily, facilitating long distance dispersal. Ideal conditions for rhizome establishment are shallow, sparsely vegetated or unvegetated silty substrates and water currents less than 2 mph. In Montana flowering rush occurs on Flathead Lake and the upper and lower Flathead River. Populations continue down the Clark Fork River reaching the Clark Fork delta at the head of Lake Pend Oreille (Idaho).

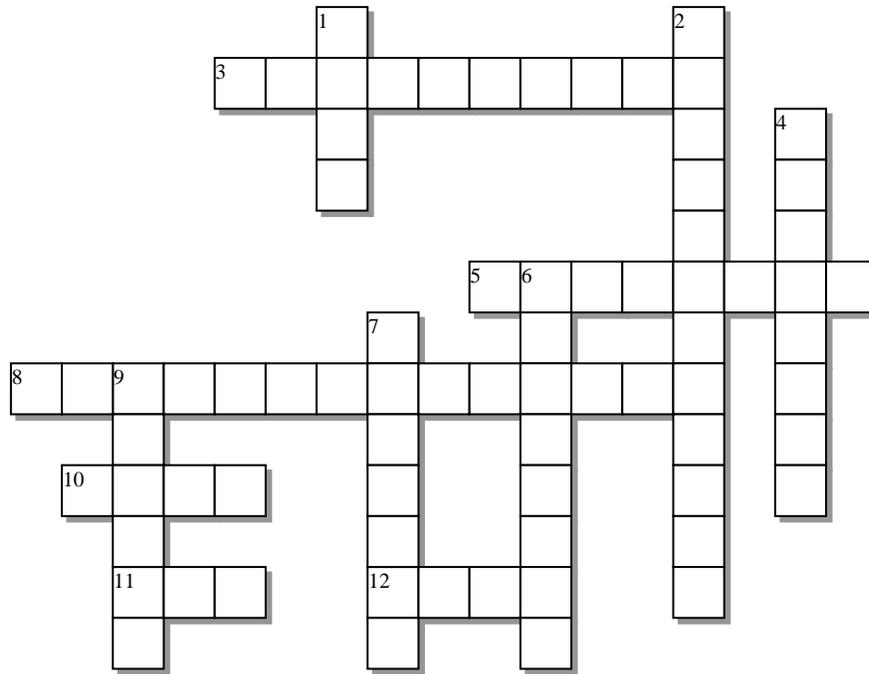
Management Priorities: Flowering rush is listed in Montana as a Priority 1B noxious weed. Education and prevention of further spread are the main management priorities for flowering rush. Thoroughly wash all recreational equipment and remove any plant parts wrapped around boat propellers and stuck to trailers. Dispose of plant material away from the shores. Research is ongoing to

find effective control strategies. For existing infestations, bottom barriers have been effective at suppressing flowering rush (photo at left). Keep a vigilant eye when recreating in Montana waters and report any findings to the Montana Department of Agriculture; Montana Fish, Wildlife and Parks; or your county Extension agent or weed coordinator. For more information on this species, see "Biology, Ecology and Management of Flowering Rush (*Butomus umbellatus*)", available at:

<http://msuextension.org/publications/AgandNaturalResources/EB0201.pdf>



Weed Post Puzzle: Test your knowledge of Flowering Rush



Across:

- 3 - While "Sedges have edges, and rushes are round", flowering rush is neither a true sedge nor a rush, but its stem is _____ in cross-section
- 5 - Fertile types of flowering rush are diploid, but the sterile Montana populations are _____*
- 8 - These are placed around docks with flowering rush infestations to reduce fowling boat propellers
- 10 - Rhizomes discharged through _____ Dam have established in the lower Flathead River and down the Clark Fork*
- 11 - At depths greater than _____ feet, flowering rush modifies its growth form, becoming limp and more ribbon-like
- 12 - Each rose colored flower contains _____ stamens

Down:

- 1 - Who's a flowering rush fan? Hungry non-native _____ that ambush their prey and use flowering rush for cover*
- 2 - When not flowering, flowering rush may resemble a large version of this native species (common name)
- 4 - Got flowering rush in your canal? Might need to do this every 2-3 years
- 6 - These flowering rush parts are buoyant, fragment easily, and establish in slow moving waters
- 7 - Yellowflag iris, purple loosestrife, and flowering rush were introduced intentionally for display in water _____*
- 9 - While it prefers shallow waters, it may grow at depths up to _____ feet

*Refer to the Extension Bulletin for answers to these questions. Solutions are posted on the MSU Extension Invasive Rangeland Weed website: <http://www.msuextension.org/invasiveplantsMangold/extensionsub.html>

