## Eurasian Watermilfoil (*Myriophyllum spicatum* L.)

**Identification**: Eurasian watermilfoil (hereafter referred to as EWM) is a submersed aquatic plant. Leaves are whorled in groups of four and each leaf consists of 14 or more paired leaflets. While flowering may be prolific, germination is rare and most reproduction is asexual from root crown buds and stem fragments. This plant can be difficult to distinguish from two native milfoils. Refer to the Extension bulletin in the link below for more information.

**Impacts:** EWM forms dense tangled beds that can displace submersed native plant communities, impact recreation, clog agricultural and drinking water supplies, and negatively impact fish and wildlife. **Habitat**: EWM colonizes rivers, lakes and other water bodies. It can tolerate moving water, and water currents and wave action facilitate fragmentation, enabling dispersal. Optimum depth ranges from 3 to 13 feet, but it can grow in water up to 24 feet deep if the water is very clear. It was first reported in Montana in Noxon Reservoir in 2007. In 2010 numerous records came from six additional counties (Table 1).



(John Halpop).



Eurasian Watermilfoil at Hayden Lake, Idaho (Ryan Wersal).

**Spread**: Plants spread through stem fragmentation. Water recreation (primarily boats and boat trailers) is the predominant vector of long distance dispersal. Management priorities: EWM is a priority 1B noxious

weed in Montana. After prevention, early detection and immediate action to contain and eradicate infestations are the most important management actions for EWM. For more information on identification as well as management options see "Biology, Ecology, and Management of Eurasian Watermilfoil" EB193.

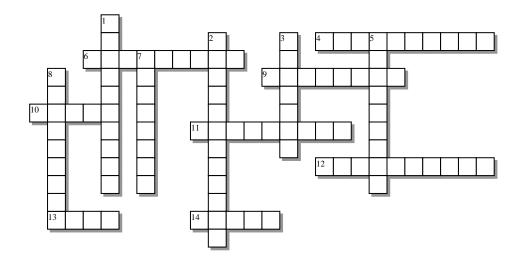
http://msuextension.org/publications/AgandNaturalResour ces/EB0193.pdf

Table 1. Eurasian watermilfoil records submitted to INVADERS Database. http://invader.dbs.umt.edu/

Year	County	Notes from INVADERS Database
2007	Sanders	Noxon Reservoir (first confirmed record in Montana)
2010	Broadwater	Cottonwood Channel (upper reaches of Canyon Ferry Reservoir, north of Townsend)
2010	Broadwater	Toston Dam, plants scattered at least 1 mile upstream from dam
2010	Gallatin	Jefferson River 0.5 and 1.5 miles below Williams Bridge Fishing Access
2010	Gallatin	Jefferson River at Drouillard Fishing Access.
2010	Garfield/McCone	Prairie Dog Island, near Buggy and Little Buggy Creek. Some plants were 8-10' long
2010	McCone	Big Dry Arm
2010	McCone	Rock Creek Marina
2010	Phillips	Plant observed floating in the water, upstream from Timber Creek and Bone Trail
2010	Valley	First dredge cut below Fort Peck Dam
2010	Valley	Fort Peck Marina
2010	Valley	Pines Boat Ramp

Please note: An Invasive Aquatic Plant Management Plan is being developed for the state of Montana. A session at the MWCA Annual Conference on Thursday, January 13<sup>th</sup> is dedicated to discussing this plan. Please join this session to learn more about the plan and provide constructive feedback.

## Weed Post Puzzle: Test your knowledge of **Eurasian watermilfoil**



## **Across:**

- 4 Common name for the native watermilfoil with less than 14 paired leaflets
- 6 River in Gallatin County where EWM has been reported
- 9 Marina in Valley County where EWM has been reported
- 10 Reservoir where EWM was first reported in 2007
- 11 Pieces of stem that are the primary method of **EWM** dispersal
- 12 This naturally facilitates fragmentation and dispersal (two words)
- 13 Number of leaves in an EWM whorl
- 14 Structure on flowering stem needed to differentiate EWM from whorl-leaf watermilfoil

## Down:

- 1 Most important management criteria to protect non-infested water bodies from EWM invasion
- 2 What humans use to transport water craft long distances and can inadvertently transport EWM (two words)
- 3 Adjective describing how EWM leaves are arranged
- 5 Marina in McCone County where EWM has been reported
- 7 Minimum number of paired leaflets for EWM
- 8 Common name for the native watermilfoil with highly dissected bracts that are longer than the flowers

Answers are posted to the MSU Extension Invasive Rangeland Weed website: http://www.msuextension.org/invasiveplantsMangold/extensionsub.html

For EWM educational materials contact the Eurasian Watermilfoil Task Force at aquaticweeds@sanderscounty.mt.gov or visit www.protectyourwaters.org



