### **INVASIVE SPECIES SPOTLIGHT**

# Eurasian watermilfoil

Myriophyllum spicatum

#### What it is

Eurasian watermilfoil is an aquatic plant invading lakes and reservoirs across Montana. Native to Europe, Asia, and northern Africa, it was first discovered in the eastern United States during the 1940s. It likely arrived in a ship's ballast water or was imported as an aquarium or private pond ornamental. The plant spread west as fragments attached to hulls and propellers of boats transported to other waters. It was first reported in Montana in Noxon and Cabinet Gorge reservoirs (Sanders County) in 2007.

#### Where it exists in Montana

In addition to Noxon and Cabinet Gorge, Eurasian watermilfoil is growing in Beaver Lake (near Whitefish), the Jefferson River, the Missouri River (to Canyon Ferry), and Fort Peck Reservoir

and the Missouri River downstream of Fort Peck Dam. The most recent population was found in Nilan Reservoir in 2021.

#### **How it spreads**

When stems and leaves are broken up by wave action or boat propellers, the fragments take root and form new plants. A single plant fragment can start an entirely new population.

#### Why we hate it

This fast-growing, rapidly spreading invasive crowds out native plants and reduces vegetation diversity. Dense mats of Eurasian watermilfoil also fill bays, clog boating channels, and surround docks, making swimming and boating impossible in some areas.

#### Often confused with

Eurasian watermilfoil looks a lot like northern watermilfoil, a beneficial native. Here's an ID tip: Northern watermilfoil has 5-10 leaflet pairs per leaf, while the invasive has 12-21 leaflet pairs per leaf. ■

Learn more at fwp.mt.gov/conservation/aquatic-invasive-species.

Illustration by Liz Bradford

## THE MICRO MANAGER

# "Cumulative Impacts"

A quick look at a concept or term commonly used in fisheries, wildlife, or state parks management.

Also known as "cumulative effects," these are the small, incremental human activities that, when combined, significantly damage fish and wildlife habitats or harm populations. While they may be insignificant in themselves, cumulative effects add up over time.

Think of it as a death by a thousand cuts.

For instance, it's illegal for a municipality or home owner to pump raw sewage into a river or stream. But Montana waters are still polluted by thousands of old septic systems that leak into groundwater or tributary streams. The cumulative effects of all these small releases can harm fish and aquatic insects.

When FWP wildlife managers review a mining proposal, they not only consider habitat that could be eliminated from the mining site itself, but also the cumulative effects of migration route disruptions and how roadways and utility corridors built to support the mine may combine to harm wildlife over time.

Another example: When landowners or communities place boulders ("riprap") on riverbanks to keep out spring floodwaters, that constricts the river and sends more water downstream. The cumulative effect of riprap installed along miles of shoreline is an increasingly powerful river that eventually blows out banks at some

point downstream and causes massive flooding and property damage. It also robs floodplains upstream of silt and nutrients necessary to grow cottonwoods and other native vegetation.

The challenge in managing for cumulative impacts is that they are often hard to measure, especially the way various effects interact with each other.



Tons of riprap line the Yellowstone River near Laurel.