



# CLEAN BOATS CLEAN WATERS PROGRAM

## For Aquatic Invasive Species (AIS) Prevention

The Cedar Lake District hires students to remind boaters to take steps to prevent aquatic invasive species from entering the lake at the boat landing. Plant fragments and animals attached to boats, trailers, and other gear, and water in live wells can readily transport aquatic invasive species. Staff also gather watercraft inspection data which increases understanding of boater behavior on Cedar Lake and statewide!

Monitors report that, so far this summer, there has not been any evidence of AIS. A zebra mussel 'trap' was installed on the dock at the North Landing. It is checked regularly because of known infestations in both Bass and Bone Lakes.

Simple steps to prevent Aquatic Invasive Species introduction:

### Step 1 & 2 – Inspect and Remove

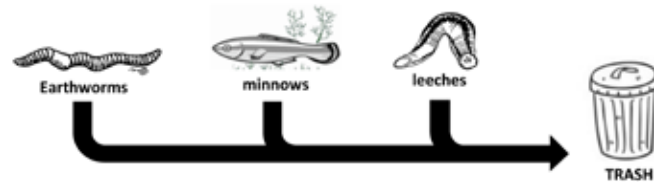
Plants and animals can easily attach to boats and equipment or become entangled in boat motors and fishing lines and then move to another lake.

### Step 3 – Drain Boat and Equipment

### Step 4 – Drain Live Wells & Containers

Many organisms, such as spiny water fleas and juvenile zebra mussels, are invisible to the naked eye and easily transported in water from one waterbody to the next. Live bait can also transport AIS and can carry disease.

#### Types of Live Bait:



For Suspected AIS:  
Contact Bob Goodlad  
715-248-7672  
rgoodlad@frontiernet.net

## EURASIAN WATER MILFOIL

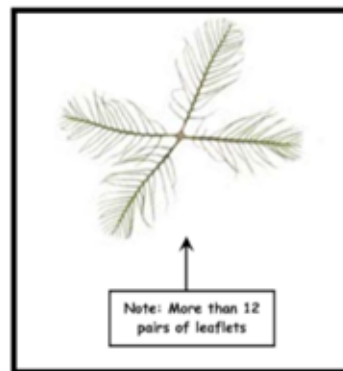
Eurasian water milfoil is an aquatic invasive species of concern in this area. It is found in nearby Pike Lake (Amery) and in several St. Croix County Lakes including Bass Lake, Goose Pond, Lake St. Croix, Little Falls Lake, Lake Mallalieu, the New Richmond Flowage, and Perch Lake. It is also present in many Twin Cities area lakes.

Eurasian water milfoil is a concern because it:

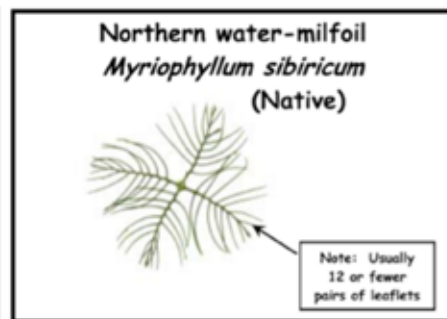
- Invades lakes, rivers, and other water bodies and thrives in areas that have been subjected to various kinds of natural and man-made disturbance.
- Can form large, floating mats of vegetation on the surface of water bodies, preventing light penetration for native aquatic plants and impeding water traffic.
- Is winter-hardy, able to overwinter in frozen lakes and ponds in northern states and Canada.

Prevention efforts such as Clean Boats, Clean Waters will help to keep this plant and other AIS out of Cedar Lake.

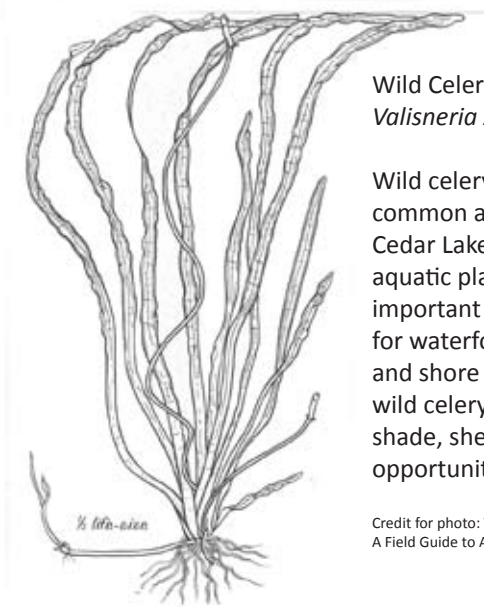
**Eurasian water milfoil**  
*Myriophyllum spicatum*



**Northern water-milfoil**  
*Myriophyllum sibiricum*  
(Native)



Regular monitoring and a plan for rapid response are important if aquatic invasive species are introduced into the lake. The Cedar Lake Rapid Response Plan, recently developed by the Cedar Lake P&R District Board identifies Clean Boats Clean Waters Coordinator, Bob Goodlad as the initial contact for suspected Eurasian water milfoil and other aquatic invasive species on the lake. The rapid response plan also includes steps to verify identification, undertake appropriate control measures, and seek grant support.



Wild Celery  
*Valisneria Americana*

Wild celery is the most common aquatic plant in Cedar Lake. This native aquatic plant is an important source of food for waterfowl, marsh birds, and shore birds. Beds of wild celery also provide shade, shelter, and feeding opportunities for fish.

Credit for photo: Through the Looking Glass. A Field Guide to Aquatic Plants.

## VALUES OF NATIVE AQUATIC PLANTS

While we go to great lengths to prevent invasive aquatic plants from entering Cedar Lake, native plants provide significant benefits to the lake. These benefits will be enhanced as water clarity increases following an alum treatment.

Native aquatic plants serve these important functions for Cedar Lake:

- 1) By covering the lake bottom, they prevent the establishment of non-native invasive species such as Eurasian Water Milfoil - just like good grass cover prevents weeds in your lawn.
- 2) Plant roots stabilize bottom sediments and shorelines, preventing suspension of nutrients and the resulting algae blooms.
- 3) Some aquatic plants take up nutrients from the water column also preventing algae blooms.
- 4) Native aquatic plants support aquatic life including fish and waterfowl. They also support the growth of zooplankton - small critters that eat algae in the lake.

Because of the benefits that native plants provide, their removal is limited by state regulation. The maximum width of removal allowed in a corridor around (and including) your dock is 30 feet. This removal must be by manual methods only, such as raking or hand-pulling. Chemical application is illegal without a DNR permit, and it must be performed by a licensed applicator.

## NATIVE PLANTS AND NATURAL SHORELINES

Native plants along the shoreline also provide many benefits. Some Cedar Lake owners have shorelines that haven't been altered. Others can plant native plants to bring back these benefits. We will provide some simple ideas for small scale plantings at the annual meeting. Here are some of the benefits you can bring to your shoreline.

### Keep the water clean

A thick cover of vegetation and an intact duff layer of leaves and pine needles serve to slow water flow allowing runoff water to soak into the soil or be filtered by the vegetation. The deep roots of native grasses and shrubs help to hold soil in place. Soil carries nutrients, which are better kept on your land than in the lake, where they can fuel algae growth.

### Provide a home

Diverse mixtures of native trees, shrubs, and groundcover are important for the creatures that make their homes near the water. Trees and shrubs along the water's edge provide shade for fish and places for shoreline birds to nest and find food. Plants in the water and near the shore provide cover for fish, frogs, salamanders, turtles, and the aquatic insects that feed them. Think about how your waterfront experience is enhanced by the sight of a loon or heron on the water, a turtle sunning itself on a log, or the call of a frog at dusk. All of these creatures depend on vegetation near the shore. Remarkably, as much as ninety percent of the living things in lakes and rivers are found along a lake's shallow margins and shores.

### Create natural beauty

Buffers of natural vegetation screen views to and from the lake and create a wonderful sense of privacy. There are many beautiful native flowers, grasses, shrubs, and trees to choose from!



Swamp milkweed is a native flower blooming along Cedar Lake shorelines this time of year. The flowers of this plant attract butterflies which seek pollen and their caterpillars which eat the leaves. The monarch butterfly is especially attracted to milkweeds.