

Cedar Lake, St. Croix County, WI, AIS Surveys-June, July 2023

On June 14, 2023, an early-season AIS meander survey was conducted, and on July 19, 2023, a late-season AIS meander survey was conducted. The early-season timing is designed to catch species with peak growth (*Potamogeton crispus*-curly leaf pondweed) or are easy to identify (yellow iris-*Iris pseudacorus*, which flowers) in June. The late-season is to be done later when other species are robust and easy to locate if present.

The entire littoral zone of Cedar Lake was traveled at a low speed (2 mph). Any suspect species observed were sampled and examined. Any verified AIS had their location recorded. The shoreline at the water's edge was also observed around the entire lake to locate emergent or near-shore AIS.

Random rake samples were also used near the boat landings, and numerous meander passes occurred adjacent to the boat landings. New infestations of AIS are likely to happen in the boat landing areas from transported boats from other lakes.

Early-season results

The early-season AIS survey resulted in the observation of three non-native, invasive species. These species were yellow iris, curly-leaf pondweed, and narrow-leaf cattail.



Yellow iris-*Iris pseudacorus*



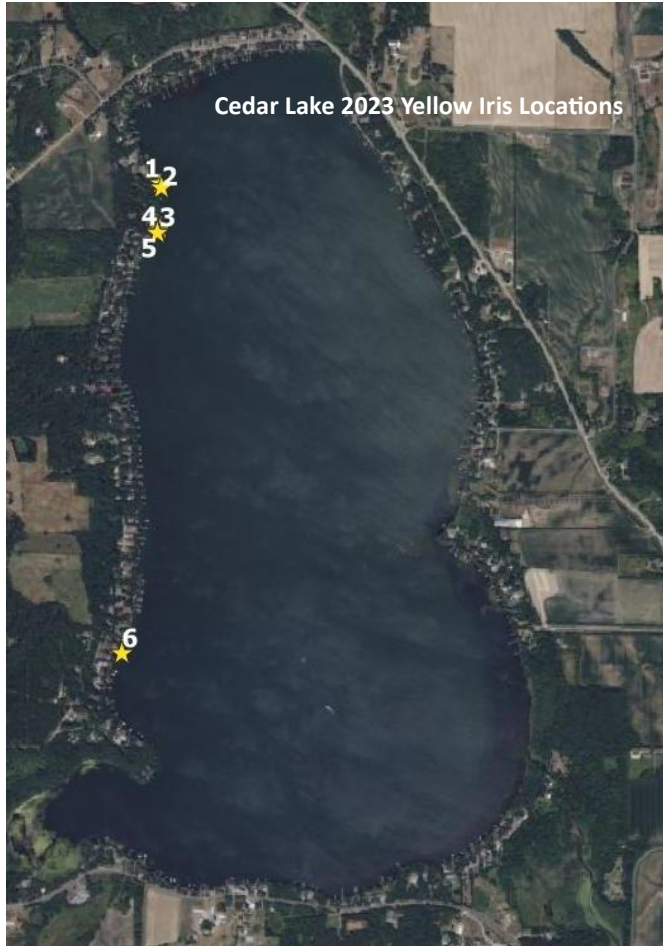
Curly-leaf pondweed-*Potamogeton crispus*



Narrow-leaf cattail-*Typha angustifolia*

Iris pseudacorus-Yellow iris

Yellow iris locations are shown in the map below:



Yellow Iris Site	Latitude	Longitude
1	45.226586	-92.57876
2	45.226429	-92.578717
3	45.224939	-92.578832
4	45.224839	-92.578915
5	45.224783	-92.578943
6	45.209454	-92.580884

All locations had a small number of plants and did not occur as beds of yellow iris.

Recommendation: Hand removal or herbicide application should be considered so these plants do not spread to wetland areas such as in the southwest portion of Cedar Lake.

Potamogeton crispus-curly-leaf pondweed (CLP)

Curly leaf pondweed was observed in many areas of Cedar Lake. The yellow marker on the map below shows where CLP was observed to be very dense and reaching the surface. This area has extensive coverage of CLP that could reduce navigation with boats due to the density and growth at the surface, where motor props can encounter it. The CLP was not mapped due to the large areas. CLP can vary extensively from year to year.

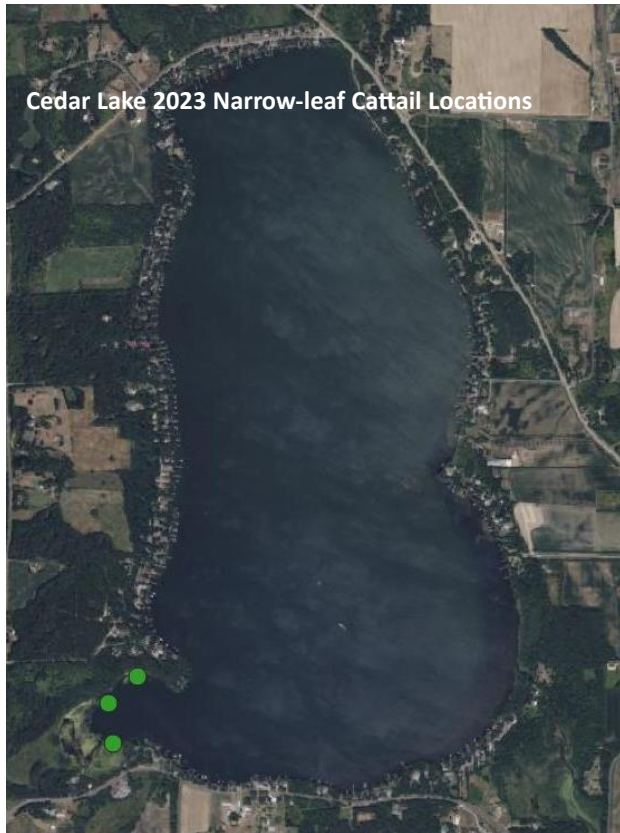


Recommendation: Continue monitor and consider mitigation if determined to be an annual nuisance for the use of Cedar Lake. CLP has been documented in Cedar Lake for many years and was not an emphasis in the management plan, likely due to an established population that has not been deemed a significant issue for Cedar Lake.

Narrow-leaf cattail

Narrow-leaf cattail was observed in the southwest bay of Cedar Lake. There are some rather large beds of this plant present. It has likely been established for many years in Cedar Lake. Although considered a restricted invasive species in Wisconsin, mitigation does not typically occur unless there is evidence it is a new introduction into a native cattail bed. Narrow cattail is very common in many lakes and wetlands in Wisconsin.

The green dots on the map below show where some beds were observed. The plant's beds were not mapped.



Recommendation: Continue to monitor for new areas if this is a concern; otherwise, it is likely growing where it can in Cedar Lake, as it has probably been present for several years.

Late-season Results

Only one additional AIS species was observed in Cedar Lake beyond what was observed in June. This species was the Chinese mystery snail. Numerous snails were seen floating on the lake's surface. These locations were not recorded. Chinese mystery snails are very common in northern Wisconsin lakes, and no mitigation methods would be successful.



Chinese mystery snail

Although Eurasian watermilfoil has been documented and managed in Cedar Lake in the past, no EWM plants were observed during the meander survey. A separate EWM evaluation was completed, and those findings are summarized in a separate document.