Pelican Lake

Land & Water Conservation Department

Michele Sadauskas, County Conservationist
Stephanie Boismenue, AIS Coordinator
Jonna Stephens Jewell, Program Assistant

Oneida County Courthouse
P O Box 400, Rhinelander, Wisconsin 54501
Phone (715) 369-7835 Fax (715) 369-6268

Pelican Lake AIS Monitoring and Eurasian Watermilfoil Removal Report

Field Dates:	August 13th, 2020
WBIC:	1579900
Previous AIS Findings:	Banded Mystery Snail, Chinese Mystery Snail, Curly-Leaf Pondweed, Eurasian Water-Milfoil, Ornamental water lilies, Purple Loosestrife, Rusty Crayfish
New AIS Findings:	None
Field Crew:	Stephanie Boismenue, AIS Coordinator, and Rachel Cook, AIS Project Assistant, Oneida County Land and Water Conservation Department
Report By:	Rachel Cook

On August 13th, 2020, Stephanie and I went to Pelican Lake for AIS monitoring and to investigate the growth of Eurasian Watermilfoil. Pelican Lake is a 3,545-acre eutrophic drainage lake in Oneida County. It has 5 public boat landings located on HWY G, Roothouse Road, Chicago Point Drive (carry-in only), Sabinois Point Drive, and off of HWY 45, respectively (seen in Figure 2). The shoreline of Pelican Lake is almost completely occupied by private residences, some of the perimeters being very urbanized. The lake has a maximum depth of 39ft, and the substrate is reported to be 40% sand, 20% gravel, 10% rock, and 30% muck. Along with reporting the depth and substrate, the Wisconsin Department of Natural Resources also reports that the lake has musky, largemouth bass, smallmouth bass, walleye, and northern pike present.

The weather while conducting research on Pelican Lake was not ideal. The outside temperature was 65 degrees Fahrenheit, the sky was cloudy and there was fairly constant wind. This made the surface of the water slightly wavy and caused the canoe to drift in certain areas of the lake. We began monitoring at the boat landing on HWY G on the southern side of the lake and paddled around the lake in a clockwise direction. Stephanie and I did a shoreline scan while meandering in and out with the canoe between different depths. We looked on the shoreline itself and also in the water, noting the plants and animals we had observed in the process.

Stephanie and I did observe many Chinese Mystery Snails in the sand as well as floating on vegetation. We also saw evidence of Rusty Crayfish in the sandy and rocky areas. We focused, however, on Eurasian Watermilfoil as it was recently reported to us by a resident. We talked with this resident, who pointed us to the spots where it had been sighted, and Stephanie and I used aqua scopes to view the areas underwater. We also pulled the different plants up to show the residents the differences between EWM and the native lookalikes. The most common plants found in the area near the resident's home were Water Marigold and Slender Naiad, but we did find fragments of EWM floating on their shoreline, indicating it may be growing elsewhere on the lake.

After checking the shoreline and talking with residents, Stephanie and I paddled further into Treacherous Bay, looking within areas of Bulrush and other vegetation for fragments of EWM. We did find many fragments on the south-western side of the lake, as well as a few rooted plants. We collected all the fragments and rooted plants that we could find and discarded them in a trash bag after leaving the lake. We worked until about 3:00 p.m. and then stopped for the day. This is a project that requires future monitoring sessions as EWM grows adventitiously, and since we were not able to monitor the entire lake or look on the sediment in deeper areas. Future hand removal or chemical treatments should be kept in consideration for Pelican Lake.

Findings: Taken 12:30 p.m. – 3:00 p.m. on August 13th, 2020

<u>Aquatic Invasive Species:</u>
Chinese Mystery Snails, Rusty Crayfish, Eurasian Watermilfoil

Figure 1. Map of Oneida County, WI with Pelican Lake circled in red.

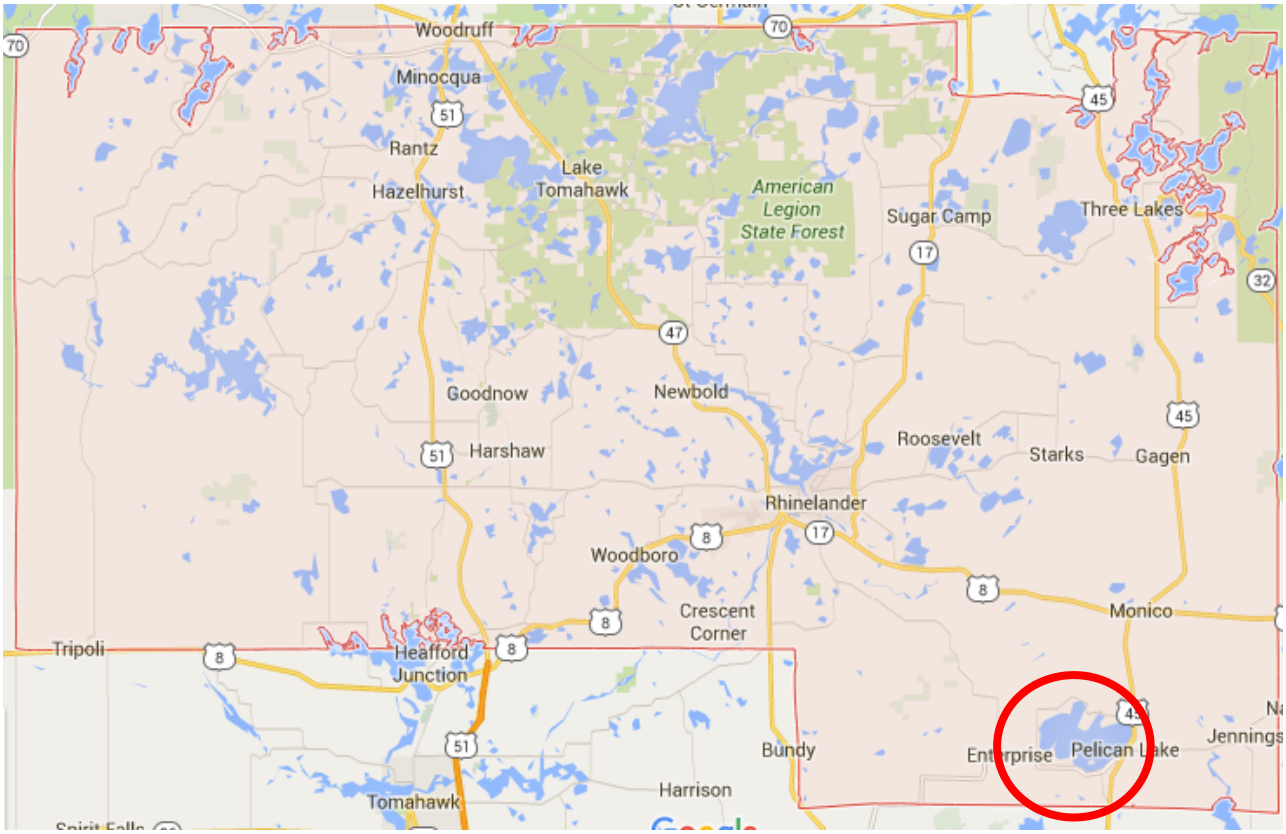

Figure 2. Map of Pelican lake with boat landings, monitored areas, and EWM locations marked.

Boat landings

Monitored areas

EWM locations

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Pelican Lake Landing Only AIS Monitoring & Signage Installation at Weaver's Resort and Campground Report

WBIC:	1579900
Previous AIS Findings:	Aquatic Forget-Me-Nots*, Banded Mystery Snail, Chinese Mystery Snail, Curly- Leaf Pondweed, Eurasian Water-Milfoil, Hybrid Cattail*, Ornamental Water Lilies, Purple Loosestrife, Rusty Crayfish, Yellow Iris, Zebra Mussel* (* = not verified)
New AIS Findings:	None
Field Date:	June 20th, 2018
Field Crew:	Aubrey Nycz, AIS Project Leader, Jody Partin, AIS Project Assistant, Vanessa Niemczyk, AIS Project Assistant Oneida County Land and Water Conservation Department
Report by:	Aubrey Nycz, AIS Project Leader

On June 20th, 2018, Aubrey Nycz, AIS Project Leader, Jody Partin, AIS Project Assistant, and Vanessa Niemczyk, AIS Project Assistant, headed to Weaver's Resort and Campground, located on Pelican Lake, to perform an AIS landing check, as well as to install a new boat landing sign near the boat launch. The main duties performed during AIS landing checks are to inspect shoreline vegetation, shallow aquatic vegetation, deeper aquatic vegetation (via rake), and to look for invasive animals. Monitoring is usually completed along a 100-150 foot stretch on both sides of the boat launch.

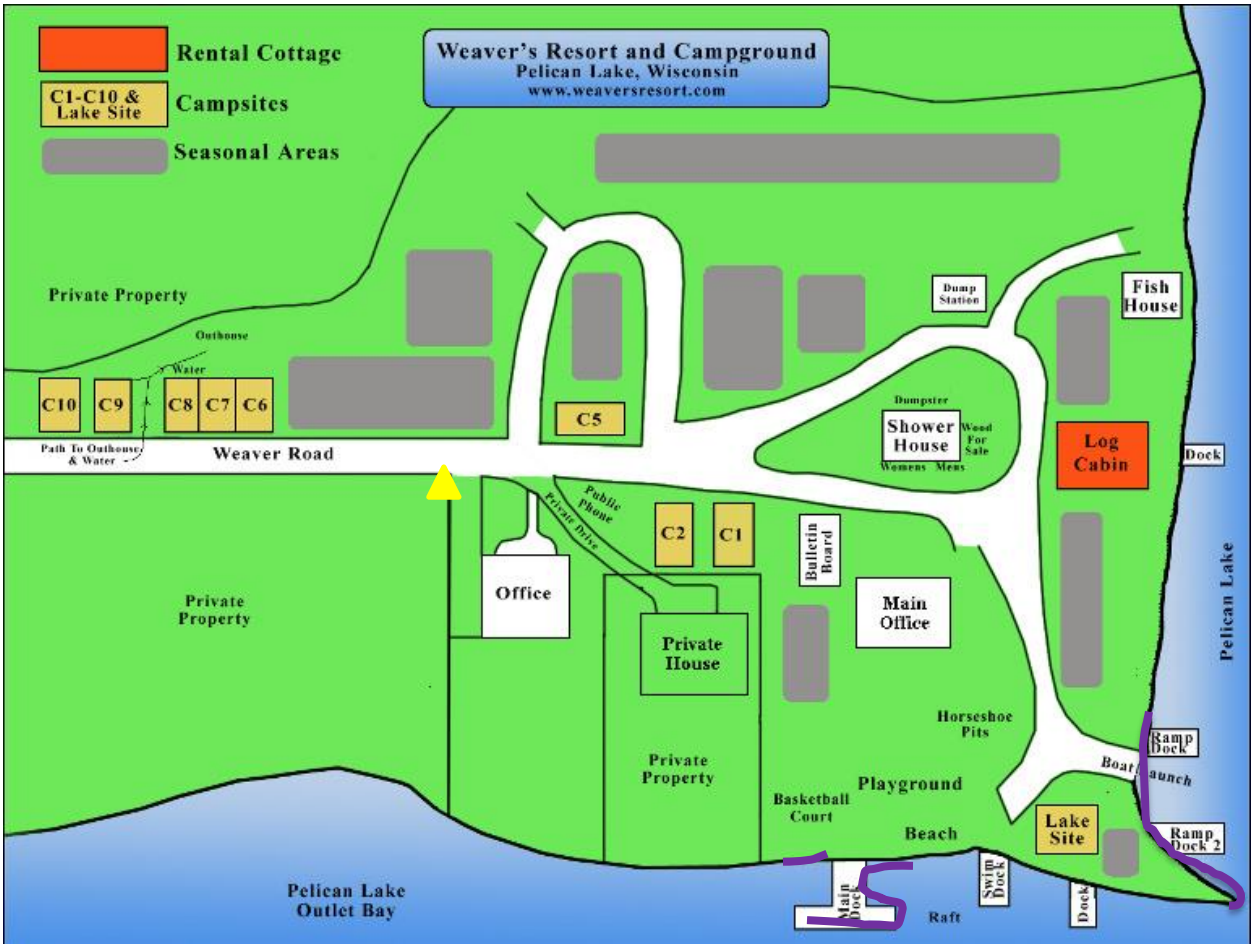
The boat landing at the resort had three old invasive species signs posted (a yellow sign and two green invasive species signs); therefore, our team removed the outdated ones, and we replaced them with the new black and red WDNR "*inspect, remove, drain, never move"* sign. After removing the old signs and posting the updated ones, we obtained a GPS reading near the boat launch and completed a boat landing survey form, in order to inform the Wisconsin Department of Natural Resources that this boat landing is now up to date on their invasive species information.

While at the boat landing, the team performed a shoreline inspection. We walked along the shoreline and raked the bottom of the lake to check for plant growth and animal activity. Through our observations, we found Chinese Mystery Snails (invasive), Wandering Pond Snails

(native), Great Pond Snails (native), Orb Snails (native), Clasping Leaf Pondweed (native), and Yellow Iris (invasive). It is recommended that any invasive snails and yellow iris plants be removed from the water/shoreline and disposed of, in order to prevent the spread of these invasives.

To complete our boat landing monitoring, we filled out an Aquatic Invasives Surveillance Monitoring Report and entered the information that we found into the Wisconsin Department of Natural Resources' Surface Water Integrated Monitoring System (SWIMS).

Figure 1. The purple lines indicate the parts of the shoreline where the Oneida County AIS team monitored (image taken from *weaversresort.com*)



Resources: WDNR

List of Plants and Animals Observed at Weaver's Resort and Campground

Chinese Mystery Snails	An aquatic snail that can grow up to 2 inches long. The shell is light brown to dark brown in color and narrow at the tip. This snail is invasive.	 Photo by: Stephanie Boismenue
Wandering Pond Snails	An aquatic snail with an oval shell containing straight, lateral lines. The snail is usually about the size of an acorn. This snail is native.	 Photo by: Jiří Novák
Great Pond Snails	An aquatic snail with an elongated shell, forming a cone shape at the tip. The shell is typically a light brown to a whitish color. This snail is native.	 Photo by: freshwaterhabitats.org
Orb Snails	An aquatic snail that is circular in shape. The shell is typically a light brown color. This snail is native	 Photo by: https://en.wikipedia.org/wiki/Planorbidae
Clasping Leaf Pondweed	An aquatic plant with gently wavy and smooth leaf edges. Leaf tips are pointed. This plant is native.	 Photo by: Paul Skawinski
Yellow Iris	A flowering plant with dark green or blue-green leaves and yellow petals. This plant grows to be 3-5 feet tall. The center of the leaves are thick. This plant is invasive.	 Photo by: Dawn Sucee

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Pelican Lake Eurasian Watermilfoil Inspection Report

Field Dates:	July 27th, 2017
WBIC:	1579900
Previous AIS Findings:	Banded Mystery Snail, Chinese Mystery Snail, Curly-Leaf Pondweed, Eurasian Water-Milfoil, Ornamental water lilies, Purple Loosestrife, Rusty Crayfish
New AIS Findings:	None
Field Crew:	Thomas Boisvert and Derek Thorn, AIS Project Assistants
Report By:	Thomas Boisvert and Derek Thorn

On Thursday, July 27th, 2017, the Oneida County AIS team went to Pelican Lake to look for a few remaining Eurasian Water Milfoil (EWM) plants. A lakes management company, Onterra, had indicated that only a few EWM plants were present on Pelican Lake during the early summer of 2017. Onterra collected the coordinates of the plants' locations, however, they were unable to remove the rooted plants.

This is the second time that the Oneida County AIS team has visited Pelican Lake during 2017 in hopes of removing the last remaining EWM plants in the area. The first visit to Pelican Lake was unsuccessful as our team was unable to locate the rooted EWM plants. We did find some free floating plants, which we removed, but we were not able to find where these fragments were coming from. Unfortunately, the second attempt was also unsuccessful in finding rooted EWM plants, but once again, fragments were found and removed.

On both days, the area with EWM plants was searched intensely. Canoes and kayaks were used to scan the deeper areas, and aquascopes were used to help our team look at the lake's floor in greater detail. When searching the area, we made sure to use caution in order to not stir the sediment up. This was to ensure that if the EWM plants were in the area, they would not be broken into smaller pieces.

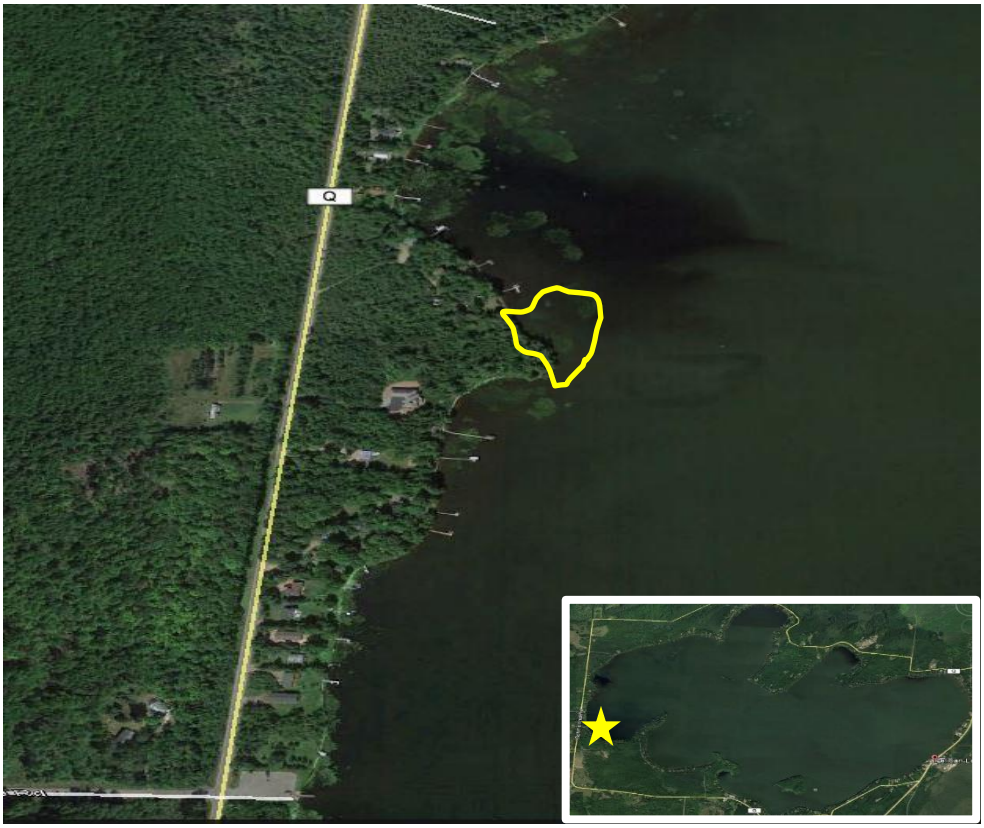

Figure 1: Yellow line/star represents area searched for EWM, and the inset is Pelican Lake as a whole.

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Jean Hansen, County Conservationist
Michele Sadauskas, AIS Coordinator
Jonna Stephens Jewell, Program Assistant

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Pelican Lake AIS Monitoring Report

WBIC:	1579900
Previous AIS Findings:	Banded Mystery Snail, Chinese Mystery Snail, Curly-Leaf Pondweed, Eurasian Water-Milfoil, Purple Loosestrife, Rusty Crayfish
New AIS Findings:	Dead Zebra Mussel Shell *(see AIS findings below)*
Field Date:	September 16, 2015
Field Crew:	Stephanie Boismenue and Sara Mills, AIS Project Assistants, Oneida County Land and Water Conservation Department
Report by:	Sara Mills

Stephanie and I monitored Pelican Lake with the assistance of a Pelican Lake Property Owners Association member on September 16, 2015. It is a 3545 acres lake located in the towns of Schoepke and Enterprise (Figure 1). It is a drainage lake connecting with the Pelican River on the north end of the lake. It has a maximum depth of 39 feet. There are three public boat landings. The WDNR lists Pelican Lake's trophic state as eutrophic and substrates as 40% sand, 20% gravel, 10% rock and 30% muck. Eutrophic lakes are characterized by an excessive amount of nutrients, allowing the lake to support an abundance of plants and algae.

The conditions for lake monitoring were windy and partly cloudy. We monitored public boat landings and rocky areas (Figure 2) because we were specifically looking for zebra mussels. We were concerned about Pelican Lake having zebra mussels due to its close proximity to Lake Metonga in Crandon, which is infested with zebra mussels, and because Stephanie had previously found another dead zebra mussel shell at the Highway G landing. We meandered the shoreline in the areas, used an aquascope to eliminate glare on the water surface, and we checked under and around all solid surfaces.

Findings

Aquatic Invasive Species:

At the public boat landing on Highway G we found a dead half shell of a zebra mussel (Figure 2). We found the shell in between the pylons of the concrete ramp. A crew from the DNR had performed zebra mussel veliger tows on the lake prior to our visit. The results of their tow came back negative for zebra mussel veligers in the lake, however, there are outstanding tows that need to be tested. Due to the location that we found the shell and the condition of the shell, we believe that the dead shell was on a boat as they entered Pelican Lake and it fell off. Weeks later, a Clean Boats Clean Waters watercraft inspector at the same boat landing inspected a boat attempting to enter the lake that had two zebra mussels attached. Although we didn't find any live zebra mussels in the lake, boaters and property owners should remain vigilant in checking boats, piers, etc. for zebra mussels and report anything suspicious. In all the areas that we monitored, we found many banded mystery snails, Chinese mystery snails, and rusty crayfish.

Figure 1. Map of Oneida County, WI with Pelican Lake circled.

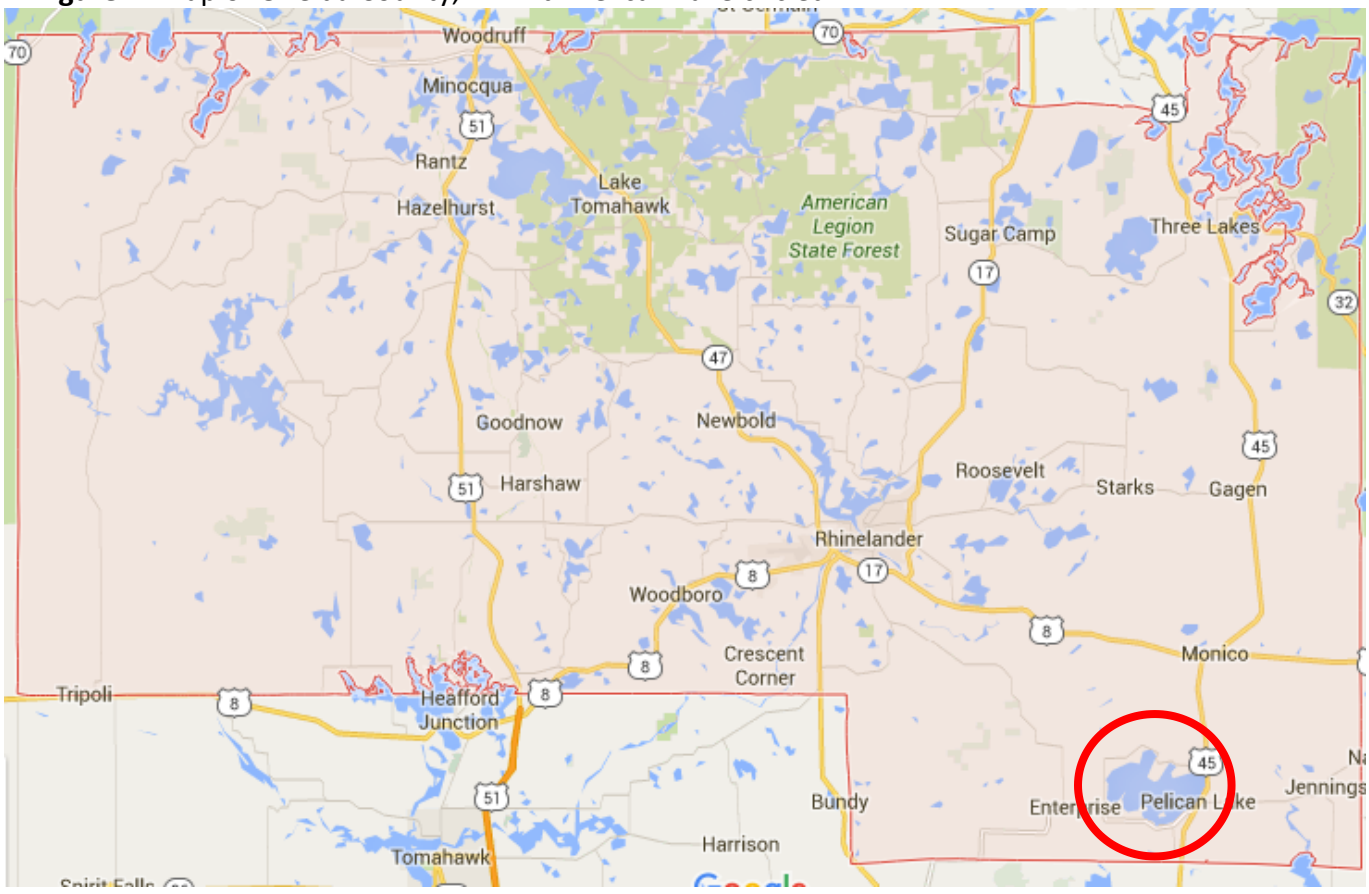

Figure 2. Map of Pelican Lake with locations of AIS presence/absence checks chosen for potential zebra mussels, public boat landings, and zebra mussel shell labeled.

Resources: http://dnr.wi.gov/lakes/lakepages/LakeDetail.aspx?wbic=1579900&page=facts