Norway Lake Association Attacks Problem Weeds Head-On

Seven years ago the members of a lake association connected to a small, historic lake in Cass County embarked on an endeavor to rid their beloved waters of nuisance vegetation. Just recently it became an important tool in its AIS control program as well.

Norway Lake, named for the pine tree variety that dominated its shoreline, is nearly 550 acres in size and is located just north of the city of Pine River. Historically, Norway is a shallow body of water; today its deepest hole is 13 feet, according to Paul Hamilton, President of the Norway Lake Association of Cass County.



While a power dam constructed on its Norway Brook tributary in 1911 brought electricity to Pine River residents and nearby villages for the first time, and expanded the lake's surface area, it did little to add to its depth. It's a circumstance that causes continuous frustration for lakeside residents and others who want to recreate on its waters.

"We were in a situation that about every other year the weeds (primarily coontail) became so dense by mid July that you couldn't navigate the lake," said Hamilton, "and the only way I could see to address the problem was through mechanical harvesting."



Cutting a channel for private property access under a DNR permit to do so. The sickle bar cuts the plants and the front conveyor brings them onboard and drops them onto a lower, rear conveyor.

After purchasing a used aquatic weed harvester from the Sauk River Watershed District, a core group of volunteers from the lake association took on the maintenance, transport and operation responsibilities. Soon, under DNR permit, the crew was removing 5,000 to 6,000 pounds of nuisance vegetation from the lake with each load.

"We can cut three to four feet below the surface," he explained, "and the permit allows us to take out up to half the surface of the lake that's more than 150 feet from shore. With the all-volunteer crew, we probably do 30 to 40 acres in a summer."

Besides creating an unobstructed surface pleasure boaters, water skiers and personal watercraft operators can easily use and enjoy, the association members discovered other benefits they hadn't counted on.

"Sometime during the course of my work with the DNR AIS Advisory Committee, I saw a study that said controlling excess vegetation improves the structure of the fish population," Hamilton explained. "It said that removing the top few feet reduces the number of hiding places for small panfish, so predator northern pike are more successful, and you tend to get fewer hammer-handle-size fish. Likewise, the surviving panfish have less competition and they grow larger, too. We're seeing that happen here, according to one of the anglers who fishes Norway Lake a lot.



The harvester leads the annual July 4 boat parade!

A recent vegetation survey of Norway Lake found a population of curly-leaf pondweed, according to Hamilton. "Three years ago it covered about 20 acres; we have that down to about 12 acres now, using a combination of mechanical harvesting and chemical treatment."

The benefits of physically reducing part of the pondweed biomass comes in the form of having to use less herbicide in the lakes, and of course the cost savings associated with using less chemicals, he said.



Offloading. The rear conveyor offloads to the trailer which has a live bottom. A typical load is about 5,000 lbs wet weight. The trailer also hauls the harvester to and from the lake.

"With coontail we found that if we hit an area pretty hard, we don't have to go back again for two or three years," he said. "And that's largely true with pondweed as well. In one portion of the lake, it was nearly impenetrable; we worked on it hard for a couple of years and now it's much less of an issue."



Composting the harvested plants. The plants are transported to a nearby property and offloaded by the trailers live bottom scrapers. The property owner tills the material into a very large garden at the site.

With financial help from state and county grants programs, the Norway Lake Association of Cass County is on a continual quest to maintain the lake's beauty and recreational value. "

"We hear from people who have been on the lake 30, maybe 40, years who tell us that they've never seen the water quality as good as it is now," Hamilton said, "We know people appreciate what we're doing, and it's comments like that that really keep the volunteers going."

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