

## An ever changing lake

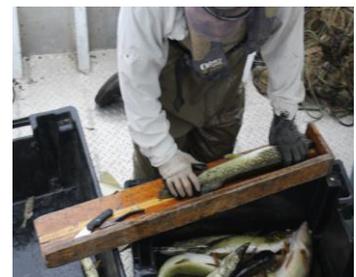
Fish Trap has been a big part of my family's life for over sixty years. I have enjoyed its beauty, cleanliness and recreational opportunities, including fishing, for many years. It has gone through and survived many natural changes in those years. I personally believe the discovery of zebra mussels five years ago has changed the lake more than the previous fifty combined. Our water clarity has dropped somewhat. We have seen an expanded level of weeds along our shorelines and our marine-related equipment shows visible signs of this new age. Some of this isn't related to zebra mussels; extreme weather events the last couple of years having influenced this current state our lake is in. Lower than normal snowfalls, early ice outs, late ice formation, heavy rains and high temperatures, along with continued run off from our properties has driven some of the current vegetational changes.

On top of this, zebra mussels have taken over our lake basin. They have not eradicated the weeds, as first thought. They have actually helped in the growth of some. What does this all mean? It does change how we enjoy swimming and using our beachfront areas. It also has influenced our decisions to actually use our water craft at times. What has it done to the fish population and our opportunities to catch fish? I can personally tell you that the fishing remains good. This year our family continued to catch crappies in the spring, bass and northern pike all summer, and walleyes later into the summer than we have previously experienced. The time of day and the locations have changed in many cases, but the fishing is still pretty good on Fish Trap.

I had the opportunity to spend a couple of mornings with our area Fisheries & Wildlife team from the Department of Natural Resources as they conducted one of our fish surveys. They continuously monitor our lake's fish activity, but every four years they do an extensive set of fish inventories to determine the real state of our lake. 2018 is the first full survey conducted since we have felt the full effects of the zebra mussel infestation.

In June they conducted detailed research focused on the pan fish population. The activity in August was directed more toward the larger, mainly, predator fish (northern pike, musky and walleye). This research took place over five days. One the first day they laid out 250 foot long by 6 foot high gill nets in three select locations. They are placed at the bottom, capturing any fish within six feet of the bottom. The depths range from 12 to 20 feet deep. These nets have five sections to them. Each one has a tighter mesh than the next. This allows them to capture small fish, such as perch, in the finer sections and larger fish in the wider gapped sections.

I observed the inventory activities on Tuesday and Wednesday. They pull up to a net and begin retrieving it from the finer mesh end. As they reach a fish they remove it from the net. If it is still alive it is quickly measured and released. For those fish not releasable, they are placed into a tub based on the mesh width they were captured in. Unfortunately not all fish survive the capture in the nets. The number they capture is a very small portion of the population of the lake but necessary in order to fully understand our lake's fish sustainability.



Once they have cleaned the entire net of fish they begin the data collection. Everything is entered into a laptop on the boat. Every fish is measured and identified as either male or female. The walleyes,

northern pike and muskies also have a small section of scales removed, along with a small piece of their anal fin ray. In the case of the walleye, the inner ear stones are removed. Each fish has its own envelope for placement of the samples. These samples are then tested to determine the age of each fish.

Each net I observed had a different mix of fish. The first one had no perch but had a 38 inch musky. The second had some perch but the predator fish captured were smaller than the first. The third was full of perch. Once they finish the testing of each net they reset that net at a different location in the lake. By placing the three nets in new locations each day they can get a complete picture of the fish population of our lake. They conduct this survey in twelve distinct areas of the lake, in bays, in open water and in established fish travel locations.



Once the survey was complete they combined that data with other surveys taken during the year, including one yet to be completed. They will be checking on the state of our walleye fry in the fall. In this study, the success level of the walleye fry stocking done every year is measured and thus determines the level of stocking support for the next couple of years.

They wait for the lab results to come back and add that information. They then summarize all the information and post it on the DNR web site soon after the first of next year. We will post the link to our web site when it is available. You can also access previous surveys done to compare our current results with past years.

I am excited to see the results. I have been a little concerned about the effects of zebra mussels, as it relates to the fishing in Fish Trap. I saw walleye of all sizes in every net I observed. I saw an abundance of bait fish, mostly perch but a few cisco, in most nets and I saw too many northern pike. Eric and Steve were also concerned about the numbers of northern pike, although it is a healthy population of fish. Our walleyes and northern pike are eating very well.

I want to thank Eric Altena, our DNR Area Supervisor and Steve Marod, our local Fisheries Specialist for allowing me to tag along and not get into the way too much. Eric will plan to attend our Annual Meeting in June, as he has in the past. He will be presenting his thoughts on the findings. He will also be asking for input into how we feel our "experimental lake" test has gone as it relates to the northern pike population. We do have a say into how they determine the best scenarios for fish habitat in our lake. Please plan to attend our Annual meeting. We need to hear your thoughts in order to guide us in everything we can do as property owners of this beautiful resource.