

THE REMOVAL PROCESS

Fyke Nets

These nets are typically set up perpendicular to the shoreline, and are used to capture fish that we consider “broadcast spawners”. These fish do not build nests, instead they broadcast eggs as they swim along the shoreline. As they swim along the shoreline they will run into a portion of the net that essentially acts as a fence, forcing the fish through a series of funnels until they find themselves trapped in the last chamber of the net. The net can then be lifted from a boat and the fish scooped out and sorted into holding tanks.

For the purposes of this project, we use these nets immediately after ice out for about a week to capture and remove northern pike from Roberts Lake. This is the only time that northern pike are vulnerable to our gear, so a very high number of nets will be set in the lake to capture as many pike as possible. The crew will sort through the catch to gather pike and largemouth bass, all other fish are released unharmed.

The goal for the rehabilitation project is to reduce the abundance of adult northern pike from 7.4/acre to 3.0/acre. It will likely take a number of years to meet the goal of the project, but good progress was made in 2019 when 895 adults (2.2/acre) were removed by the Mole Lake Fisheries Team.

*****These nets are marked by a number of floats and buoys. Please be respectful and avoid these nets if possible*****



Electrofishing

A specially designed boat, called a “boomshocker” is used to capture fish species that are not easily captured by fyke nets. An onboard generator provides electricity that is pushed into the water through the electrodes that dangle off the front of the boat. When the boat passes over the top of a fish, the fish will become momentarily stunned. Crew members at the front of the boat use a long handled net to capture the stunned fish and place them into a holding tank onboard the boat. Electrofishing is only effective in shallow water, so you will observe this boat slowly moving along the shoreline and weed beds of Roberts Lake during both day and night.



Electrofishing is primarily used to capture and remove largemouth bass during this project, although if northern pike are captured they will also be removed. All other fish species are left unharmed during these removal efforts. The goal of this project is to reduce the abundance of adult largemouth bass from 9.1/acre to 1.5/acre.

The Mole Lake Fisheries Crew spent many hours electrofishing Roberts Lake during 2019. They made great progress toward the goals of this project by removing 3,228 adult largemouth bass (7.8/acre).

As juvenile largemouth bass mature into adults the population will grow. Removal of adult largemouth bass will continue until a relative abundance of 5.5 adults/mile is reached.

Mini Fyke Nets

Mini Fyke Nets function the same way that the full sized fyke nets operate, however, the mesh size (and often times the overall size of the net) is much smaller. The smaller mesh size allows for the capture of much smaller fish, that would be able to swim through the mesh on the larger nets. These nets also have a guard at the entrance of the net that stops larger fish from entering and being trapped inside the net.

A high number of these nets will be set along the shoreline of Roberts Lake during the months of August and September for the purpose of removing juvenile largemouth bass and bluegill. The removal of juvenile largemouth bass is essential to the success of the rehabilitation project, as it will limit the number of largemouth bass that would grow and become part of the adult population. Bluegill captured during this survey (the majority are fish that have just recently hatched) are removed for two reasons. The first of which is to reduce the competition with juvenile yellow perch, allowing the perch population to expand quicker. The second reason is to keep bluegill from becoming overabundant while we reduce the numbers of predatory fish in Roberts Lake.

*****These nets are marked the same way that the larger nets are marked. We kindly ask that you avoid these nets if possible*****

