## Hello anglers!

The Ministry of Natural Resources and Forestry (MNRF) is undertaking an exciting research project to provide new information on lake trout movement and habitat use in Lake Simcoe. The results will allow us to better understand this important and highly sought-after cold-water species, which in turn will help support management objectives to increase the quality of this dynamic fishery.

## **Fish Tagging**

In October 2020, 50 lake trout were surgically implanted with acoustic transmitters which "ping" (transmit) their unique identification every few minutes to receivers set up at 30 strategic locations around the lake. Movement patterns can be determined by downloading the receiver station data which contain the pings and time stamps when fish with internal transmitters were near the receivers. Some of these internal transmitters also contain depth and temperature loggers which further increase our understanding of where fish are spending their time. We will be tagging more fish and adding more receivers in the future. On these same fish, staff also inserted external Floy 'spaghetti' type tags below the dorsal fin.

In 2019, external tags were also inserted in 239 lake trout captured in trap nets throughout Lake Simcoe. Each tag displays an MNRF phone number and a unique identification number. Important data on each fish (such as location captured, size, wild or clipped) is recorded in a database. If the lake trout is recaptured by MNRF staff or an angler, this valuable information is used as part of our research study.

## Anglers are key to success!

You can help our research by reporting any tagged lake trout that you catch in Lake Simcoe. Your continued support is vital. Also, now that we are tagging fish with internal acoustic tags, it is extremely valuable to our research study if anglers can release any tagged fish they capture. Put simply, if a tagged fish is released, we can use the capture information provided by anglers, and importantly, we can continue to collect the valuable data throughout the lifetime of the fish. If harvested, our ability to learn new information from that fish ends.

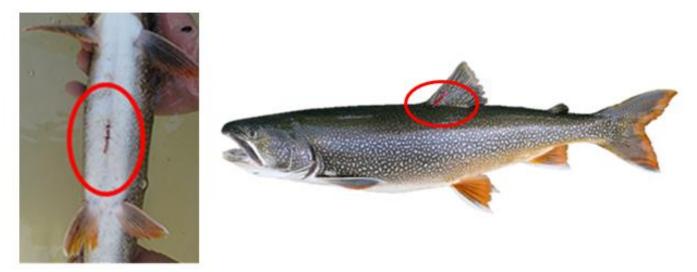
We would like to commend the Lake Simcoe angling community for being fully engaged in reporting fish tagged in 2019. To date, your response has been remarkable. You have already reported 34 tagged lake trout! When you call the number on the tag, we ask you to report the unique tag identification number, general location of their catch, depth, size of fish, whether it was clipped or not (indicating wild or stocked), your name and contact information, and most importantly if you harvested the fish or live released it. We are also extremely grateful for all those who have released their tagged lake trout so far.

Your assistance in this program is crucial and greatly appreciated!

## Caught a tagged lake trout on Lake Simcoe?

Beginning in late October 2020, some of the externally tagged trout will also have internal transmitters. Reporting these tagged fish is extremely important. We ask that you please check for an external tag located just below the dorsal fin on any lake trout you catch (see image below for location). After recording the phone number and 4-digit fishidentification number (found on either side of the tag), we encourage you to live release the fish, while leaving the tag intact. If there is algae growth over the number, use a thumbnail or pen knife to scrape it off to better read the numbers. If you'd like to take a photo of the fish or tag before release, please do so quickly with as little handling or out of water time as possible to reduce the stress on the fish. When convenient, please call the phone number on the tag to report the unique fish identification number and other information mentioned above.

Fish with transmitters may also have visible sutures (see photo below) or signs of scarring in this area within a few months of tagging; this is normal. If a fish with a transmitter cannot be released due to injury or otherwise, we would still greatly appreciate your contribution by reporting the same information as above as well as calling or texting (705) 313-3874 so we can arrange to retrieve the transmitter to be reused in another fish. If you catch a fish with a transmitter before December 1, 2020, please do not consume the fish to avoid exposure to the fish anesthetic used during the surgery.



Visible sutures on a fish with an internal transmitter (left) and the external Floy tag (right).

Your participation in this project is greatly appreciated. We hope that you are as interested as we are to learn more about the movement, habitat usage and behaviour of lake trout in Lake Simcoe. Happy angling!