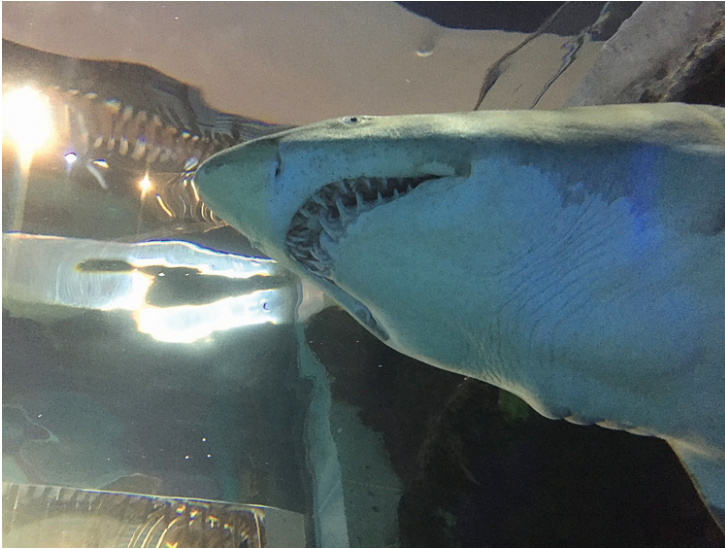


It was fish week in nerds



This week the NERDS really focused on fish! We started with a visit to White Lake Provincial Fish Culture Station, went as usual to our own hatchery, and then made a trip to Toronto to see the amazing Ripley's Aquarium. It was a pretty eventful week! On Monday we went to Sharbot Lake to visit the White Lake Provincial Fish Culture Station, a very large hatchery which houses nine different fish species, and produces over a million fish a year to be stocked into eastern and central Ontario lakes. Our tour guide was Tim Drew, manager of the facility.

We started off in the main building where most of the trout (Lake, Brook, Brown, Rainbow and Splake) are raised, along with an experimental species, Deep Water Cisco. There are about 15,000 fish in each of the large raceway tanks, more than our own hatchery produces in the whole facility. Of course our Bancroft fish are special, in that they are genetically adapted to living in our local lakes, and are used to rehabilitate lakes that are, or have to potential to become naturally reproducing lake trout lakes. The fish from the provincial hatcheries are mainly used in "Put, Grow and Take" lakes, where there is no expectation of having naturally reproducing populations, but where there is a demand for angling opportunities.

The Deep Water Cisco is an interesting fish. They live at around 400 feet below the surface of the water in the Great Lakes. They are a really important food source, but have been disappearing rapidly due to habitat loss and other factors. The White Lake Hatchery is working with a hatchery on the U.S. side of Lake Ontario, to develop culture techniques to raise these important fish.

Unfortunately as their nickname "Bloaters" indicates, it's tricky business. It is very hard to collect eggs from these fish to raise in a hatchery, because when they are brought up from 400 feet, they tend to expel the eggs on the way up! However, the hatchery staff have managed to develop some techniques for collecting them, and this year they may have enough (250,000) to meet their stocking target for the first time. They are also running controlled experiments to try to find out the best way to raise them once they are hatched.

Next we went outside to learn about walleye (pickerel) culture. At White Lake, the walleye are hatched inside, and then immediately put into outdoor ponds, which have been preloaded with lots of microscopic organisms to eat. Walleye are difficult to raise, because if they can't find food within a couple of days of hatching, they start eating each other! Once they have eaten all the food in the ponds, they have to be netted and brought inside, where they are switched over to an artificial diet until it is time to stock them out into the lakes.

In the next building we saw the walleye eggs, which should hatch shortly, and whitefish fry, which were just hatching. One of the hatchery staff was working on counting whitefish fry to be sure that they put the right number in each of the bigger tanks. We also saw many more tanks of the Deep Water Cisco that they are hoping to use as brood stock in the future, and some walleye brood stock. Some of the eggs that come into this hatchery are from wild collections, but many are from brood stock kept in this and other provincial hatcheries.

In the last building there was another experiment in progress. Many of our native mussels (clams) are disappearing due to habitat

loss. They are really important creatures in freshwater lake food chains. Staff at the White Lake hatchery have been working on developing culture techniques for some of these, in hopes of being able to help return these important animals to the lakes. A few small sturgeon are also here as part of another experiment. All-in-all, White Lake Fish Culture Station was a very interesting place to visit!

On Tuesday, we made our usual visit to our own hatchery to weigh and count our yearling fish & fry, as well as clean the tanks. It's pretty easy to clean a tank out, even if it can be a little gross. Plus someone has to do it, otherwise the filters might get jammed and we would have to look at something similar to this [aquarium filtration guide here](#) to get a new one. Once the cleaning and weighing is done we can get to the fun stuff and continue with our fly tying lessons. We want to increase our hook and catch percentage as much as we can. That's why we have also started reading books similar to [Drew Chicone's fly tying books](#) to try and develop our ability to tie effective flies. Our yearling fish are much bigger than those at White Lake because the water in our hatchery is warmer so that the fish can feed all winter. Water at White Lake comes directly out of the lake so it is very cold, and the fish don't eat much through the winter.

On Wednesday we had another eventful day when we left at 7 a.m. to go to Ripley's Aquarium in Toronto. We really liked the tank where you could pet the sting rays! There was also a lobster there that was about 70 years old with a claw as big as a normal lobster. They had to glue its claws together to keep it from crushing the other lobsters in the tank.

There were also 400 pound Groupers, and a tunnel through a tank where you could see sharks and sawfish swimming over your head! There was a Great Lakes tank with giant bass, paddlefish and sturgeon, as well as displays of creatures from both the Pacific and Atlantic sides of Canada, as well as other parts of the world. There was one tank of fish from tropical reefs, with over 100 different species. In the afternoon we did a workshop on careers at aquariums. There are also many interesting things for younger children to do, including climbing into a bubble inside the shark tank! It was definitely a fun place to visit.

Submitted by Josh Brown and Eric Legge