

Field Notes

From the Hinckley Area Fisheries Office

Fisheries management news from the Chisago, Isanti, Kanabec, and Pine County area

Fall/Winter 2020

2020 poses challenges, opportunities for Fisheries work

2020 has been an unprecedented year for everyone as we suddenly had to adjust to new ways of living our lives and going about business. In a field like fisheries management, much of the work is hands-on and working closely at times with others. The question of “How can we do our work safely while maintaining social distancing?” was taken seriously in all Divisions and levels of the DNR.

We began working from home the week of March 16, along with most other DNR employees. Late winter until ice out is usually a time when we are doing in-office work, so this was as good a time as any to make the transition. Unfortunately, this meant we were not able to meet with walk-in customers. We value our interactions with our stakeholders and the best way to reach us continues to be through our office email: hinckley.fisheries@state.mn.us.

Changes to lake sampling

Our lake survey season normally begins at or just before ice out, as this is the best time to target certain species with trap nets. We had not yet been authorized to do any field work at the time of ice out, so the following surveys were *not* completed:

- Ice out trap netting, Knife Lake, to evaluate Northern Pike special regulation
- Muskie trap netting, Cross Lake, to recapture marked fish from 2019 and estimate population size
- Trap netting for Bluegill, Cross Lake and Pokegama Lake, to evaluate fish sizes for possible special regulations

These assessments are important to our management decisions and we hope to reschedule all but the Muskie netting in 2021.

Lake surveys usually make up a big part of our summer field work. After discussing alternatives, we decided to postpone most lake surveys scheduled for 2020 until a future year. We did decide to set gill nets only on Grindstone Lake for the 2020 scheduled survey because the target trout species are

mainly caught in deep gill net sets. Social distancing is easier to achieve with gill nets than other fish sampling gear.

River and stream sampling completed

We were able to complete our river and stream surveys as scheduled, as these can be done while maintaining social distancing. We sampled the Snake River by boat electrofishing in July and August, and did backpack electrofishing on Lawrence Creek and Hay Creek, designated trout streams, in September. Survey reports will be available in spring 2021.

Other surveys completed

Other survey work we do each year includes nearshore fish sampling, lakeshore habitat evaluations, vegetation point intercept surveys, and floating-leaf and emergent vegetation mapping. These were all completed as scheduled in 2020.

Habitat work

In addition to lake and stream surveys, we also conduct a wide range of habitat-related work annually. Most of this work was done as usual in 2020, including the following:

- Completion of the Scoping Environmental Assessment Worksheet for the proposed removal of the Grindstone River dam at Hinckley.
- Monitoring beaver dam activity on designated trout streams and coordinating trapping and dam removal
- Maintenance such as sign posting at Aquatic Management Areas (AMAs)
- Monitoring of trout stream easements
- Temperature monitoring on designated trout streams

Although field season 2020 definitely presented some challenges, it provided Hinckley Fisheries staff the opportunity to focus on less traditional, yet necessary fisheries work and also consider new ways of safely accomplishing our more standard activities.

Fish production and stocking in 2020: despite challenges, many goals met

The Minnesota DNR, along with some neighboring states, canceled all fish egg take operations for the spring of 2020. According to a press release dated April 14:

“The Minnesota Department of Natural Resources will cancel its 2020 egg take operations for walleye, northern pike, muskellunge and steelhead because the work cannot be done safely under COVID-19 social distancing guidelines.

Collecting eggs and sperm from spawning fish in the wild is a labor intensive effort that requires teams of 6-8 people working in close proximity. After a careful examination of whether the egg take process could be re-engineered, the DNR determined that it was not possible to safely handle fish during the egg take and practice appropriate social distancing to protect staff from COVID-19.”

The lack of egg take in the spring of 2020 altered our day to day activities and fish stocking efforts. This was most evident in our muskie rearing operations. We normally raise muskies in three drainable ponds near our office in Hinckley and in one in St. Croix State Park. Our rearing efforts provide up to a quarter of all muskie fingerlings stocked in the state each year. Fisheries Specialist Heath Weaver normally spends time each week spring through fall filling the ponds, stocking the muskie frylings as well as minnows to feed them, maintaining water levels and outlets, and painstakingly draining the ponds in fall for harvest. The ponds remained mostly dry this year, allowing Heath time to work on other projects, such as taking the lead role in a recreational use survey (see article in this issue).

Walleye fry stocking

Some lakes are stocked with walleye fry in the spring annually or biennially. Due to the lack of egg take, we were unable to stock fry in several lakes as planned. **However, we were able to partner with the Mille Lacs Band of Ojibwe, who stocked Ann Lake with its quota of fry from their egg take and hatchery efforts.** We are excited about this partnership and we hope to continue it in the future, perhaps expanding to meet some of our future walleye fingerling needs along with fry when opportunity arises.

Walleye fingerling stocking

Without a walleye egg take this year, we could not raise walleye fingerlings in natural rearing ponds as usual. However, some of our ponds had yearlings left over from a very successful production year in 2019. **That, along with yearling walleye provided by other DNR Fisheries offices, and fingerling walleye purchased from private vendors, helped us to complete most of our walleye stocking quotas for fall 2020.** Statewide, over 65,000 pounds of walleye fingerlings and yearlings were stocked into lakes to provide fishing opportunities where Walleye have low or no natural reproduction.

Trout stocking

Trout stocking in Grindstone Lake and Crooked Creek took place as usual in the spring, since these fish were ready to go from the Lanesboro hatchery. Brown trout and rainbow trout were stocked

both places. **Fall stocking of 4000 rainbow trout in Grindstone was also completed as scheduled, with the addition of some “bonus” large brood stock rainbows. At over 2 pounds apiece, these large trout should add some excitement to the winter trout season, which opens January 16, 2021.**

What does this mean for fish populations and future fish rearing?

According to DNR Fisheries section manager Brad Parsons, missing one year of stocking of a fish species will not cause long term harm to the fish population of any waterbody. “Fish populations naturally are made up of fish hatched in different years, so a missing or weak year class is not uncommon,” said Parsons. **“In fact, in lakes with natural reproduction, a strong year class often follows a weak year class, so not stocking for one year might actually benefit the following year’s stocked fry.”**

Walleye

There are a few lakes in the Hinckley management area where natural reproduction accounts for all or most of the walleye population, including Knife Lake and Fish Lake near Mora. **Electrofishing surveys in these lakes in fall 2020 revealed healthy walleye recruitment from the spring hatch.** For lakes not stocked with walleye fry as planned in 2020, we will review individual lake management plans to prioritize stocking efforts in 2021.

Muskie

The lakes we manage for muskie include East and West Rush, Cross, and Island. While these lakes were not stocked with muskie fingerlings in 2020, **we happened to have excellent muskie fingerling production in 2019. In that year all of these lakes received numbers of muskie fingerlings significantly above their quotas. That should help to make up for the lack of muskie fingerling stocking in 2020.** These lakes all maintain low density populations of muskies, and it has proven very difficult to show a relationship between numbers of fingerlings stocked and population numbers in our surveys.

Other species

By far most of the fish species in lakes and rivers in the Hinckley management area occur naturally, with no stocking needed. These include northern pike, largemouth bass, sunfish, crappies, and perch. A few small fishing lakes in our area did have evidence of winterkill in the winter of 2019-2020. We are making plans to restock the lakes that have public access in the spring of 2021 to re-establish breeding populations of several fish species.

We are hopeful that we can resume normal fish production operations in 2021, and there are some reasons to believe that it could be a better year than normal. Many of the natural walleye rearing ponds winterkilled in the winter of 2019-2020, and could do so again in 2020-2021. That, along with removal of walleye fingerlings from our harvest operations, reduces competition for future year classes of fingerlings. This may lead to increased walleye growth and pond productivity. But, as with many things in life and in fish production, we will just have to wait and see.

Survey documents recreational use on area lakes

By Heath Weaver, Fisheries Specialist

The field season of 2020 was like none before. With much of our typical work postponed or cut back in the spring and summer, opportunities arose to do projects that otherwise would not get completed. With early record fishing license sales and many folks with more time to spend outdoors, we were interested to find what the levels of lake use would be.

In the mid-1980s the Hinckley Fisheries office conducted a public access based use survey on selected lakes in Pine and Kanabec counties. We decided to do a similar survey in 2020, expanded to include twenty four of our most popular lakes and including at least one lake from each of the four counties covered by our office.

Methods

From access points on the chosen lakes we created a route that could be driven in an eight hour work day. At each access we recorded the number of vehicles with trailers, along with other vehicles, swimmers and shore-anglers, as well as time of day and weather conditions.

From the fishing opener until the end of August the route was driven on 46 weekdays and 18 weekend days. To vary the time of day each lake was visited, start times alternated between an early shift starting at 6 AM and a late shift starting at noon. Additionally, the route start and end points and direction of travel varied throughout the season.

Results

For this study we considered vehicles with trailers to reflect recreational use or pressure on the lake. Figure 1 is the average or mean count throughout the survey for each lake, separated between weekdays and weekend days. Some lakes had more than one access visited which were combined for the average. Also, some connected lakes were combined on the chart.

The second chart (fig. 2) is a representation of how crowded a lake is. It is basically the average counts from figure 1 adjusted for the lake or lakes' size in acres. In order to compare the data from the mid- 1980s, scores were ranked. Therefore figure 2 shows how the lakes ranked compared to others at that time.

The final chart (fig. 3) is a graphic showing how access use changed throughout the survey. It is the average of the sum from all of the stops each day the route was driven. Counts appeared surprisingly consistent especially on weekdays from the end of June through the end of August.

While this survey provides insights into how much use lakes receive, it does not tell us everything. For example, we had no way of knowing for sure how many boats on a lake were fishing parties or other recreational users. We also had no way of counting how many lakeshore residents were out boating. And of course, we don't know how well the fishing was going. Answering these questions requires a full season creel survey focusing on one or two specific lakes, with angler interviews as well as counts. We tentatively have plans for such a survey next year on Knife and Grindstone Lakes.

We plan to repeat this survey in a future, non-pandemic influenced year for comparison. Hopefully this will help us better understand recreational use trends and variations in use from lake to lake and year to year.

A more detailed study report will be available in the spring of 2021. For more information on the study and results, please contact our office at hinckley.fisheries@state.mn.us.

Figure 1. Average vehicle count for each lake

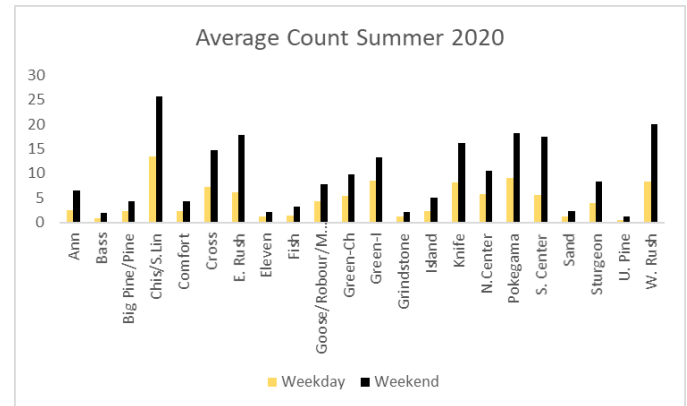


Figure 2. Vehicle counts adjusted for lake size

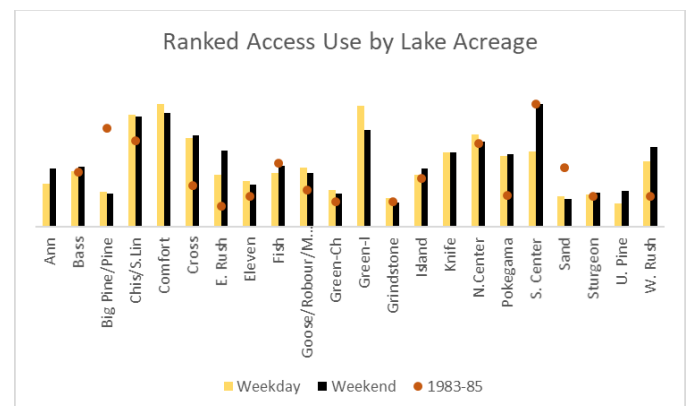
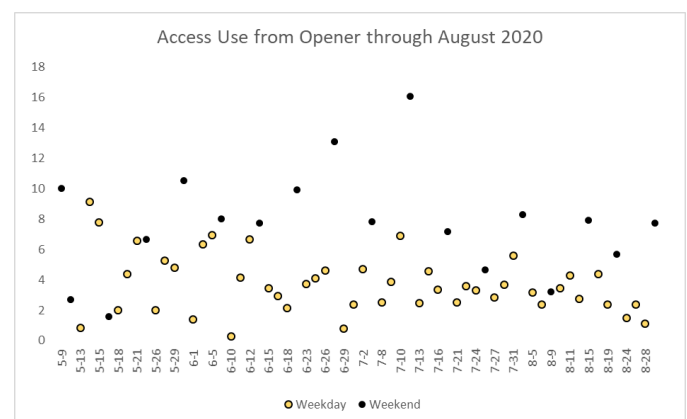


Figure 3. Average vehicle counts by date



Staff spotlight: John Frank



I am originally from Rice Lake, Wisconsin, (population 8,370 SALUTE!!). It is in the northwestern part of the state, between Superior and Eau Claire. So yes, I am a fan of the Green Bay Packers!!!

I became interested in an outdoor career probably because I fished a lot growing up and enjoyed spending time in the boat and fishing from shore. This interest continued through high school and college when I was looking at what type college degree I was going to pursue. I also knew that I did not want a job where I had to wear a shirt and tie every day or work in a shopping mall kiosk selling sunglasses.

I earned an Associate Degree equivalent from the University of Wisconsin Barron County Campus, then I transferred to the University of Wisconsin Stevens Point where I completed my Bachelor of Science in Water Resources, Fisheries Option with a Minor in Biology.

I worked for several different agencies before joining the Minnesota Department of Natural Resources. During and just after college I worked for the US Forest Service in Park Falls, WI doing stream survey work on a stream classification system. After that I worked for the Wisconsin Department of Natural Resources at the Escanaba Lake Research Station for a couple years seasonally doing mostly creel survey but also doing some fish survey work and studies for

walleye, northern pike and musky. I worked one summer for the UW Madison Research Station on a yellow perch mercury contamination study. I worked for the US Forest Service in southeast Alaska one summer working with cutthroat trout and salmon. After all of these seasonal jobs I finally got my first permanent job in New Hampshire. I worked there for 3.5 years. Out there the primary focus was stream trout, lake trout, and landlocked salmon but there were a few warmwater species such as pickerel, bass, and yellow perch. I joined the MN DNR in October of 1999 and have been at the Hinckley Fisheries Office since that time.

My main job duties at the Hinckley office include being responsible for stream and river surveys, keeper of the lake sturgeon database and sampling them, coordinating the musky surveys in our area, teaching 3rd to 6th grade students about fish at four aquatic education events every year, help as needed with fish production and stocking, monitor angling pressure on our trout streams with cameras, and other jobs as needed. The thing I like most about the job is that we get to work outside basically from mid-April through the first part of November, even though some days are not the greatest weather it is still better than being in the office.

When I am not working I have a few things that keep me busy. I have been an active member of the Hinckley Lions Club for over 15 years, I am active in my church, and I am active in my community. As far as hobbies go I make maple syrup every year, I enjoy camping, fishing, deer hunting, cooking, building custom fishing rods, and barbecuing.

Note: John has taken many first place prizes for his barbeque at the annual Hinckley Rib Fest!

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