Field notes

from the DNR Hinckley Area Fisheries Office

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

Winter 2019-2020

Photo: Water drains from one of the three Muskie rearing ponds in Hinckley.

2019 a success for fish rearing, stocking

Area Fisheries offices across the state found ideal conditions this year for raising Walleye and Muskellunge fingerlings in rearing ponds. Most area offices stocked 100% or more of their base quotas for Walleye in lakes, with many areas able to stock extra fingerlings. Muskellunge production was at or near an all-time high as well.

The success of a pond for producing Walleye fingerlings can vary greatly. It depends on the ability of the pond to produce the invertebrates and small fish the Walleye feed on. Other fish species cause problems by competing for food and by preying on the young Walleye. If a pond has a winterkill the previous winter due to low oxygen levels, predators can be reduced or eliminated, increasing chances for successful Walleye rearing. That appears to have been the case in 2019 in many ponds.

In the Hinckley area, we were able to stock all of the lakes scheduled for Walleye fingerling stocking with fish from our own ponds. Additional lakes were stocked under a previously arranged contract for purchase from fish farms. We also supplied fingerlings to several other area offices—something that we rarely do. More often than not, Hinckley ends up hauling Walleye from other areas.

The Hinckley area office also stocked local Muskie lakes with fingerlings grown in the 4 drainable ponds we operate. These fish are stocked in the ponds as "frylings" in early summer after being fed on a hatchery diet. Minnows are added to the ponds throughout the remainder of the summer and early fall to feed the growing fingerlings. Muskies from the Hinckley ponds also went to stock lakes in the Tower, Aitkin, and Duluth areas.

Fisheries specialists John Frank and Eric Sanft dip Muskie fingerlings from a rearing pond. The pond drains into the Grindstone River, and fish are directed into the trap. Hinckley Fisheries staff produced over 9600 Muskie fingerlings from four rearing ponds in 2019.

Lakes stocked in 2019

Walleye fry

Spider
Fish (Chisago County)
Skogman
Florence
Fannie
Long (Isanti County)
Francis
Baxter
Quamba
Fish (Kanabec County)
Oak
McCormick
Sand
Upper Pine

Walleye fingerlings

East Rush
West Rush
Goose
Island
Cross
Pokegama

Muskie fingerlings

East Rush
West Rush
Cross
Island

Other

Grindstone (Lake Trout, Rainbow Trout, Brown Trout)

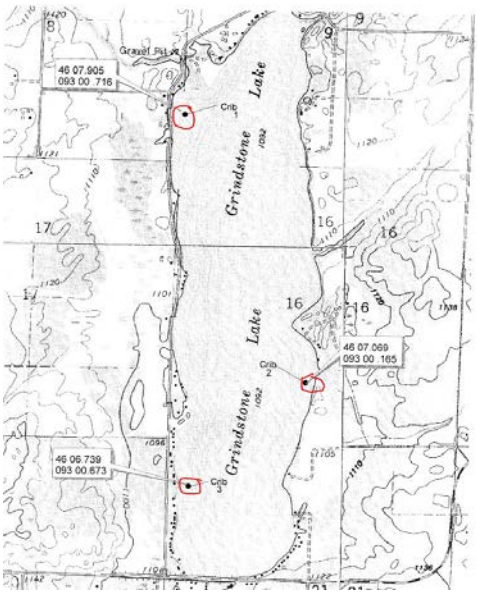
Minnesota Department of Natural Resources, Hinckley Area Fisheries Office
320-384-7721 hinckley.fisheries@state.mn.us www.mndnr.gov/areas/fisheries/hinckley

Ice Fishing Preview for the Hinckley Area 2019-20

By Nate Painovich, Fisheries Specialist

Grindstone Lake

Grindstone Lake is a unique lake for the area due to its deep water and diverse species composition. The lake has an average depth of 60 feet and a maximum depth of 153 feet. Grindstone Lake is currently managed for Lake, Brown, and Rainbow Trout; however, the lake also offers Northern Pike, Crappies, Bluegills, and Rainbow Smelt. Brown Trout and Rainbow Trout are stocked annually in the spring, and additional Rainbow Trout are stocked in the fall. Lake Trout are stocked every other year.



The Rainbow Trout bite can be great for the first couple weeks following the winter trout opener (January 18th, 2020). It is not uncommon to see hundreds of portable fish shacks scattered throughout the lake during opening weekend. Most people fish close to shore with small jigs and wax worms.

Ice fishing for smelt has become increasingly popular on Grindstone Lake within the past ten years. A winter creel survey on Grindstone Lake in 2015 revealed that Rainbow Smelt were targeted by 24 percent of angling parties. Smelt was the most commonly caught and harvested species during this survey, with an estimated 613 pounds (12,259 fish) harvested. Anglers fish for smelt suspended over deep holes in the lake with small jigs and waxworms.

Tip up fishing for Northern Pike is also a good option on Grindstone Lake. Anglers have success fishing shallow water flats next to mid-water reefs. There are some huge pike in Grindstone if you put in your time.

There are three artificial cribs in the lake that hold good numbers of bluegills and crappies. The GPS coordinates of these cribs are: Crib 1 (northwest side): 46.07.905, 093.00.716; Crib 2 (mid-east side south of point): 46.07.069, 093.00.165; and Crib 3 (southwest side): 46.06.739, 093.00.673.

Knife Lake

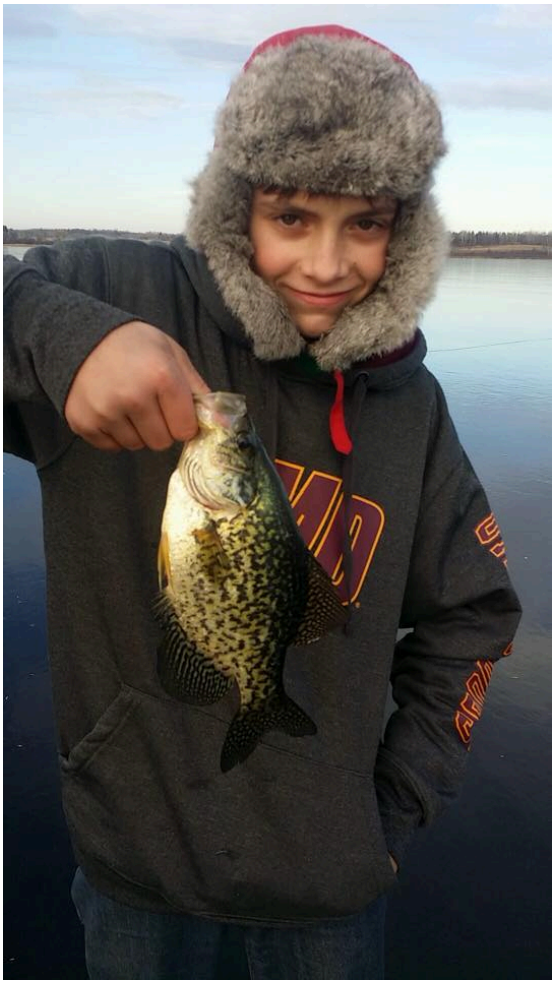
Knife Lake just north of Mora is a popular lake for locals during the winter months. Anglers enjoy good catches of nice sized crappies throughout the ice fishing season. Early morning and late evening are the best times to fish for panfish on Knife Lake. The 2019 Lake survey showed good numbers of Walleye and Northern Pike throughout the lake. For pike, most anglers fish tip ups with a large jig and sucker minnow close to weed points or the mouth of shallow water bays. A relatively shallow bay with a narrow opening is a good spot for pike the last few hours of daylight.

Anglers target walleyes throughout the hard water season on Knife Lake. Jigs with fathead minnows or shiners work the best. Transition areas or drop offs from mid-water reefs to deep water can be good during the middle of the day. Walleyes will move into shallow water to feed the last few hours of the day; the best places to fish at that time are close to weed points and shallow areas close to shore. Crappies inhabit the deep water holes throughout the lake, many anglers will have their houses in a group in these areas targeting crappies. Best times to fish for crappies are low light periods, but crappies will bite throughout the day, although they may not be as aggressive as in the evening. Special regulations on Knife lake are as follows; All walleyes from 18-24 inches must be immediately released and only one fish over 24 inches allowed in possession, all pike between 24-36 inches must be immediately released and possession limit is 3 fish with only one over 36 inches.

South Center Lake

There are quite a few good lakes around the Chisago City area, but South Center seems to be the front runner when it comes to ice fishing. The lake gets a large amount of fishing pressure throughout the winter months, but with 835 acres of water to fish, anglers can get away from the crowds and still have success.

The lake survey completed during the summer of 2019 indicated good numbers of Walleye and Northern Pike. Anglers can expect to catch good sized fish for both species. Walleyes can be hard to find and most anglers jump around the lake and drill many holes to find them.



Bluegill fishing on South Center is a perfect activity for the kids to see a lot of action, the fish are plentiful, but a little on the small side. Fisherman can find bluegills anywhere in the lake, but pay close attention to the many shallow water bays for bluegill hideouts.

Goose Lake

Goose Lake just southwest of Rush City has 754 total acres of fishable water and is divided into two basins. A lot of the pressure in this area focuses on the East and West Rush Lakes just west of Rush City, but this smaller lake close by can produce nice fish if you put your time in. Good numbers and size of crappies can be found in the deeper holes in the middle of the lake. The possession limit for crappies is five on Goose Lake.

Northern Pike numbers are up and the size structure is decent. Anglers use tip ups or jig for pike with large minnows. There are also some nice Walleyes in Goose Lake. Deep water reefs in the evenings and deep holes in the middle of the day are the key areas to search for wintertime walleyes. The minimum size limit for Walleyes is 17 inches on Goose Lake.

There is a public access on the east side of the north basin of Goose Lake. Remember, always use caution when ice fishing throughout the winter, safe ice fishing guidelines can be found here: www.dnr.state.mn.us/safety/ice/index.html

Also, remember to check fishing regulations for each individual lake before going out fishing. Some Lakes have special regulations beyond the statewide regulations. Good Luck and be safe!

Proposed Grindstone River dam removal at Hinckley is in environmental review phase

Since the last public meeting held in Hinckley in December 2018, progress has been made towards future removal of the Grindstone River dam in Hinckley. DNR staff spent considerable time during the summer of 2019 further exploring alternatives to removal, specifically the rock arch rapids option that would allow for retention of the current reservoir pool, and is also the project alternative preferred by the City of Hinckley. These efforts included meetings with a downstream landowner and multiple site visits by engineering staff. As suspected earlier in the project, constructing a rock arch rapids at this location contains many elements that complicate its feasibility – including the need to construct large containment berms and obtain easements from adjacent landowners, the existence of drainages in the location of the necessary berms, increased project costs, construction / maintenance access issues, FEMA floodplain concerns, and significantly reduced ecological benefit to the river system [as compared to dam removal]. These concerns were shared with Department leadership in late summer, and they reaffirmed their support to move forward with the dam removal alternative.

Since removal of the dam will result in the elimination of the Grindstone Reservoir, a DNR public water basin, Minnesota Environmental Review Rules state that preparation of an Environmental Impact Statement (EIS) is mandatory. The need for an EIS was not anticipated because artificial impoundments are not always designated as public water basins, and an EIS has not been required on previous dam removals conducted by the DNR. There are several steps to the EIS process, including public engagement. It is anticipated that the EIS will add at least one year to the planning process. DNR staff have been working on the first stage of the EIS process in recent months. We anticipate that early in 2020 there will be another public meeting to discuss the proposed project, the EIS process, and public engagement in the EIS development. This public meeting is a mandatory part of the EIS process. The EIS is intended to fully describe known negative impacts of a proposed activity and identify ways to avoid or minimize these impacts. This will ultimately improve outcomes for the project and better prepare the DNR for permitting and construction.

While the environmental review process takes place, DNR staff will be working on other aspects of the project that will allow us to move forward as quickly as possible once the EIS process is completed. Please continue to check our office website for updates (https://www.dnr.state.mn.us/areas/fisheries/hinckley/rivers/grindstone.html) and/or call our office at 320-384-7721. We will also use our website and local newspapers to communicate information about the next public meeting once scheduled.

Ecological benefits of dam removal

- Restoration of fish passage; removal of the Grindstone River dam will connect an additional 24 miles of river habitat to the downstream portion of the Grindstone River. Fish species diversity is currently lower above the dam than below.
- Restoration of rare mussel populations; many mussel species attach to specific fish species in the larval stage of their life cycle. They travel along with the fish and establish populations in different areas of the river.
- Restoration of normal sediment transport, which will benefit the stream stability, decrease erosion caused by the dam, improve water quality (turbidity and temperature) and improve habitat for riparian and aquatic species.

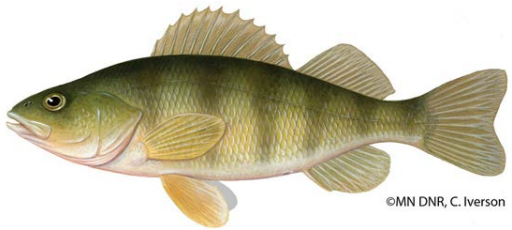
Lake survey highlights: big bullheads and perch

Fisheries Specialist Heath Weaver takes a look at some of the more interesting findings from our 2019 lake surveys. For more details, contact our office.

It was a busy season on **Knife Lake** with Walleye electrofishing in May, Largemouth Bass electrofishing in June, a standard lake assessment in September, and more Walleye electrofishing in October. The standard lake assessment included collecting tissue samples for contaminant testing for fish consumption guidelines, as well as a stable isotope study for the University of Minnesota. Overall, the fishery looked good. Walleye reproduction continues to sustain the population with a good catch rate of young of the year in October (86/hour). The Walleye gill net catch (4.78/net) was up from the catch in 2015 (2.92/net), and was the highest catch since 2006.

On the lighter side regarding Knife we have the Yellow Bullhead. I'm completely serious, it's a quality fishery. Half our catch was 12 inches or better, some were over 15, and we caught plenty. Yellow Bullhead are eager biters and scrappy fighters. Give bullhead angling a try. Parents take your kids. Children take your parents! Anchor near a small point along shore in the morning or evening, heck probably anytime. Live bait presented near the bottom with a bobber or even a sliding sinker will get bit. Catch and release is an option but the internet is loaded with ways to prepare them. I'm interested in a skin recipe for the grill. It's available on the Thundermist Lure You Tube channel, let me know how it turns out.

Another point of interest from the summer 2019 surveys is the Yellow Perch. I've been at this a while now and to be honest I couldn't have named a lake in our management area with fishable numbers of keeper size perch until this summer. I'm talking about **East Rush** and **Island** Lakes. I suppose there are anglers who will harvest 8 inch Perch and there are those who won't and then there are those who say they won't and do. But most would agree that a 9 incher is a fair fish. Well, half the Perch we netted on Island were 8.5 inches or better with a third exceeding nine. Though not quit as impressive, a third of the perch on East Rush reached the 8.5 inch mark and a fifth exceeded nine. You can check the internet for perch recipes, or just fry in butter with salt and pepper to taste.



The Kettle River is a scenic destination for a kayak fishing trip

Kettle River and Little Hay Creek surveys

Data courtesy of John Frank, Fisheries Specialist

Hinckley Fisheries crews surveyed the Kettle River by electrofishing boat in July 2019. Sixteen stations were sampled, from St. Croix State Park near the mouth of the river to the confluence with the Moose Horn River just south of Sturgeon Lake. Fish species sampled included Channel Catfish, Walleye, Smallmouth Bass, Largemouth Bass, Bluegill, Northern Pike, Lake Sturgeon, and several redhorse species. Numbers of most species were down from the last survey in 2014, even though five more stations were sampled in 2019. River sampling can be highly variable depending on flow conditions. A high water event that peaked on July 5th may have caused some fish to move from their usual summer areas. But more frequent flood events, the latest in 2016, have caused severe erosion and potentially altered fish habitat in the river. We will continue surveying the river every five years to determine long term trends in the fish population.

Brook Trout continue to thrive in Little Hay Creek in St. Croix State Park. An electrofishing survey conducted on August 21-22 yielded a total of 262 Brook Trout, slightly higher than the number from the last survey in 2017. The catch included 142 adults and 120 young-of-year. Adults ranged in size from 5.1-10.4 inches. The section downstream from the main park road (County Road 22) had more trout than the section upstream from the road. Little Hay Creek is inspected annually for beaver activity. If dams are found, a professional trapper is contracted to remove them. Surveys since the 1980's on Little Hay and Hay Creeks have found a negative correlation between numbers of beaver dams and numbers of Brook Trout.

Little Hay Creek offers an opportunity for a remote trout fishing experience. Fly fishing is not recommended due to the dense growth of alders along the banks. And if you go, bring bug spray!

Brook Trout holding their own in St. Croix tributaries

The rocky bluffs surrounding the St. Croix River south of Taylors Falls hold a well-kept secret. Numerous cold springs arise from the steep hillsides. If the flow is sufficient, the streams that emerge from the springs can support Brook Trout. The origin of these trout are somewhat of a mystery; there are no records of stocking, although in the late 1800s and early 1900s stocking records were not always kept. It is possible that these fish may be native to the St. Croix valley.

Hinckley Fisheries crews sampled two streams in August 2019 near the Osceola landing on the St. Croix River. Known only by their numbers, M-50-26 and M-50-27, these streams were designated as trout streams around 2000 after surveys in 1999 found Brook Trout. Because these streams are so small, sampling is done with a backpack electrofishing unit.

The good news: Brook Trout were still present in both streams. M-50-27 had the most, with 26 adult and 12 young of year sampled in approximately 2500 feet of stream. The adults were not trophy sized by any means—lengths ranged from 3.3-5.5 inches. In order for adult Brook Trout to grow to larger sizes, a stream needs to have plenty of deep pool habitat. M-50-27 has mostly shallow pools and riffles along its short course, which is not ideal habitat for big trout.

The bad news: M-50-26 has been altered by beaver activity over the years, making it extremely difficult to sample. Only one brook trout was caught in the approximately 1700 feet of stream that was walkable. It is likely that more trout are in the stream, well protected from intrusive fish specialists and their electric wands. But beavers generally have negative impacts on trout waters in Minnesota. Beaver dams can block fish passage, and the pools they create cause fine sediments and debris to build up on the bottom. Brook Trout need clean gravel stream beds for spawning. Beaver dams may also cause water temperatures to increase in the pools and immediately downstream: Brook Trout cannot survive in water that is above 65 degrees for extended periods.

If you are up for an adventure with the prospect of small trout, these streams can be accessed by boat from the Osceola landing. Locations are shown on the southern Minnesota trout stream maps on the DNR website. The lower portions of the streams are within the St. Croix National Scenic Riverway, but the upper reaches flow through private land. One caution: These streams are extremely difficult to find! One day our crew sampled what they thought was one of the streams, only to find that the stream abruptly ended in a steep ravine much sooner than it was supposed to. A check of GPS points indicated that it was indeed the wrong stream! Amazingly, they did catch a few trout.

Got questions? The DNR Information Center can help you:

- Get in touch with a Conservation Officer
- Learn what to do about injured or nuisance wildlife
- Learn to manage your shoreline for water quality

And more! If you're not sure who in the DNR you need to contact, they can help. Call **888-646-6367** (888-MINNDNR) or email info.dnr@state.mn.us

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