# FISHERIES DIVISION MICHIGAN DEPARTMENT OF NATURAL RESOURCES

### Southern Lake Huron

### Management Unit



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### What is the SLHMU?

The Southern Lake Huron Management Unit (SLHMU) encompasses the southern Michigan shores of Lake Huron including Saginaw Bay and all of the waters that make up the watersheds that drain into the southern portion of Lake Huron. Our work area includes all or portions of the following counties: Arenac, Bay, Clare, Genesee, Gladwin, Gratiot, Huron, Iosco, Isabella, Lapeer, Livingston, Midland, Oakland, Ogemaw, Roscommon, Saginaw, Sanilac, Shiawassee, St. Clair, and Tuscola. Fisheries staff working in this unit include a Unit Manager and Management Biologist who work out of the Bay City Operations Service Center, a Management Biologist stationed at the Lapeer State Game Area, a technician staff who work out of the Bay City Fisheries Warehouse, and 5 Fisheries Assistants (creel clerks) who work out of various ports.





### Who we are.

We are public trustees employed to fulfill the mission, vision, and values of the Michigan DNR, Fisheries Division.

#### **Fisheries Division Mission**

To protect and enhance Michigan's aquatic life and habitats for the benefit of current and future generations.

#### **Fisheries Division Vision**

To provide world-class freshwater fishing opportunities, supported by healthy aquatic environments, which enhance the quality of life in Michigan.

#### **Fisheries Division Values**

The following six values guide the work for the Michigan Department of Natural Resources, Fisheries Division:

 Integrity
 Leadership
 Innovation

 Professionalism
 Collaboration
 Transparency

### Fisheries Technician Don Barnard Retires



In August 2015, Southern Lake Huron Fisheries Technician Don Barnard retired. Don worked in the natural resource field for over 35 years. He held several short-term positions with DNR Waterways, Parks, and Fisheries divisions and with the U.S. Fish and Wildlife Service before obtaining a permanent position as a Fisheries Technician. In 1987, Don began his Fisheries Technician career in Imlay City; was briefly assigned to Rose Lake and Clare; then found a resting place in Bay City.

When Don is not working, he spends a great deal of time hunting the elusive whitetail, casting his 1000 casts for the trophy muskie, and setting traps for furbearers and varmints. Don is an active member of St. Paul Lutheran Church and is now studying to become a Deacon. Don and his wife Vicki (retired from DEQ) have one daughter who is in her last semester at Western Michigan University studying geology. With Don's absence, the SLH Unit and Fisheries Division will be losing a vast amount of experience and knowledge which will take a long time to replace. SLH wishes Don and his family the best of luck in retirement years.

Post script: We recently heard from Don and in the first three months of retirement he harvested a Michigan black bear, traveled to North Dakota to hunt pheasants, visited Glacier National Park, and tagged a cow elk in Michigan which is a once in a lifetime opportunity!

### Southern Lake Huron Fishery

(A summary of data from the Great Lakes Creel Census)

Fishing effort on Saginaw Bay and the Saginaw and Tittabawassee rivers increased to 959,879 angler hours in 2015, up 7 percent from 2014 (891,618 angler hours). Walleye harvest, however, fell to 161,927 fish, down from 221,488 fish in 2014. Analysis of creel data by month indicates most of the decline was in the bay fishery during the months of June, July and August. The walleye may have headed out into the main basin of Lake Huron earlier in the summer than usual due to a lack of forage inside Saginaw Bay. Surveys conducted the previous September (2014) showed the forage base to be at its lowest biomass since the mid -1970's. Hopefully, liberalized harvest regulations for walleye will reduce the population somewhat and allow some recovery of the forage base.

The Saginaw Bay yellow perch fishery showed some signs of improvement in 2015. Perch harvest (open water and ice fishery combined) for 2015 was 142,692 fish, up 40 percent from a historic low of 101,488 in 2014. Unfortunately, the perch fishery still remains a shadow of what it once was and no one should interpret this small improvement as a "recovery". Sport harvest of perch consistently exceeded a million fish annually from 1984 through 1998. In 2015, for the second straight year, more walleye were taken than perch! Clearly, the yellow perch population is still depressed and has a long road to recovery. Heavy predation on juvenile perch by walleye, other predatory fishes, and double-crested cormorants is believed to be the main reason the perch population is depressed.

Most of the improvement in the perch fishery in 2015 came in the months of September and October. Perch fishing remained very good in late fall and early winter. Growth rates of perch that survive the first year of life are very fast and some good sized perch are available. There may have been some improvement in juvenile perch survival that accounts for the increase in harvest, but only time and more data will tell.

Lexington was the most productive blue-water port on the outside of the Thumb in 2015 with a 41 percent increase in angler hours over 2014. Atlantic salmon harvest at Lexington was 246 fish compared to only 7 in 2014. Lake trout, steelhead and yellow perch harvests also increased while Chinook and coho salmon harvests remained essentially unchanged from 2014.

Fishing pressure at Port Sanilac and Harbor Beach declined relative to 2014, as did harvest of most species. Lake trout and steelhead harvest increased slightly at Harbor Beach in 2015.





### New Saginaw Bay Walleye & Yellow Perch Regulations

Fisheries Division embarked on a major effort to gather public comment on proposed changes to walleye and yellow perch regulations for Saginaw Bay and the Saginaw River in the spring of 2015. Regulation changes were discussed at Sea Grant Fisheries Workshops in April, at the annual Coffee & Conversations meeting in May, and at a focused public meeting in early June. Final regulation proposals were formulated after receiving input from these meetings and from a web survey set up on the Fisheries Division homepage. The proposals went before the Natural Resources Commission (NRC) in the fall. They were approved and given immediate effect by the NRC on October 8<sup>th</sup>.

For walleye, the daily bag limit increased from five to eight fish per day and the minimum size limit was reduced from 15 to 13 inches. For yellow perch, the daily bag limit was reduced from 50 to 25 fish.

The waters of Lake Huron where these regulation changes are in place are known as Lake Huron Management Unit MH-4. Basically, MH-4 takes in all of the waters of Saginaw Bay and includes Tawas Bay and the tip of the Thumb. Also included under the new regulations is the mainstem of the Saginaw River upstream to the Center Street (Douglas G. Schenk) Bridge in the south end of the City of Saginaw. Visit this link to see the new regulation boundaries:

http://www.michigan.gov/dnr/0,4570,7-153-10364 63235-366879--,00.html

These regulations were put in place to try to restore a better balance between predator fishes and the prey base in the Saginaw Bay fish community and to relieve predation pressure on juvenile yellow perch. Other management initiatives toward this goal include reductions in commercial yellow perch harvest through targeted relocation of some commercial operations, increased control of local cormorant populations, and (eventually) re-establishment of lake herring to diversify the forage base.

Only time will tell if these initiatives result in increases in yellow perch populations. Changes in the fish community due to changes in climate or exotic invasive species could be greater than any changes brought about by new regulations. However, these are the "levers we can pull and the knobs we can turn", so we'll see what effects these new regulations have going forward.

#### Yellow Perch, Perca flavescens



#### Walleye, Sander vitreus



### Lake Huron Fishery - Atlantic Salmon

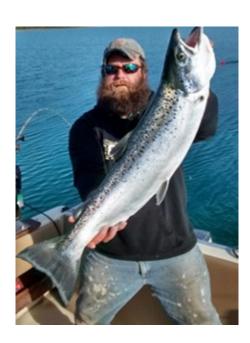
Fisheries Division began planting Atlantic Salmon in Lexington harbor in 2013 as part of a lake-wide experiment to see if Atlantics could adapt to the current Lake Huron food web and partially replace Chinook Salmon in the blue-water fishery (Chinook populations declined sharply after the collapse of alewife in 2003.). Other Atlantic Salmon plant sites included the St. Mary's River, the Thunder Bay River at Alpena, and the Au Sable River at Oscoda.

Unfortunately, we saw no return of Atlantics to Lexington in 2014. However, in late October of 2015, our creel clerk at Lexington reported several Atlantics caught and more observed jumping in the harbor.

We electrofished Lexington harbor on November 2<sup>nd</sup> and collected 10 mature Atlantics while observing many more. They are very energetic and hard to net! The fish we boated averaged 20 to 24 inches in length and 4 to 5 pounds in weight and were in beautiful condition. Their size and our knowledge of Atlantic Salmon biology in Lake Huron indicate they were most likely from the 2014 Lexington plant.

As our Hatcheries Section continues to improve its ability to raise Atlantic Salmon, we are hopeful of seeing improved returns of Atlantics in future years.





### Southern Lake Huron Fishery - Commercial Fishing

Beginning in June of 2015, Fisheries Division partnered with state licensed commercial fisherman Dana Serafin to explore new fishing grounds for Lake Whitefish in Lake Huron south of Harbor Beach and north of Port Sanilac in an area lightly fished by sport anglers. This experimental fishery will continue for two more years. If Mr. Serafin finds the whitefish fishery to be economically viable, he would be granted a permanent license in exchange for surrendering his four Saginaw Bay licenses and leaving Saginaw Bay permanently. Over the past couple of years, Mr. Serafin's Saginaw Bay operation has accounted for slightly more than 50 percent of the commercial yellow perch harvest in the bay.

Mr. Serafin's success in the first year of the whitefish experiment was very encouraging. His catch was almost 100,000 pounds, despite missing the spring fishing season and fishing only half the number of nets allowed under the permit. By-kill of other species (mainly lake trout) was very low over the entire fishing season.

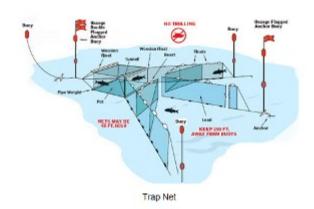
This experiment could prove to be a win – win situation for both commercial and sport fishing interests. It has the potential to harvest a lucrative and sustainable whitefish stock in an area of southern Lake Huron that has gone un-fished for 30 years while at the same time reducing commercial harvest of yellow perch in Saginaw Bay, reducing by-kill of walleye, and relieving conflicts over fishing grounds between sport and commercial fishermen.

Learn more of the Harbor Beach Research Fishery at:

http://www.michigan.gov/dnr/0,4570,7-153-10364 52259-355666--,00.html



iced lake whitefish. Lake Huron



### Dam Projects

#### Frankenmuth Fish Passage Project

Congratulations to the City of Frankenmuth on their replacement of the Frankenmuth Dam with the new Frankenmuth Rock Ramp. A project conceived 10 years ago became a reality in October 2015 through the ardent work of many but most notably Sheila Stamaris with the Frankenmuth Downtown Development Authority. The rock ramp reconnects an estimated 73 miles of the Cass River. For more information on the Frankenmuth Fish Passage Project visit:

#### http://www.frankenmuthcity.com/information/damproject







#### Shiatown Dam Removal

In early 2015, the Friends of the Shiawassee River received an additional \$362,000 from the DNR Aquatic Habitat Grant Program towards the removal of the Shiatown Dam on the Shiawassee River. With additional funding from the USFWS (\$30,000), Saginaw Bay Watershed Initiative Network (\$62,000), and DNR Dams Management Program (\$162,000) the project is scheduled to begin the summer of 2016.



#### Other Dams

The City of Corunna, with assistance from the Friends of the Shiawassee River, has prepared preengineering for the removal of the Corunna Dam on the Shiawassee River. Funding is currently being sought after to complete the project.

The City of Flint continues to pursue funding for the replacement of the Hamilton Dam on the Flint River with a modified rock ramp structure. This project has many complex issues associated with it and conceptual designs estimate \$3.7 million is needed.

### SLHMU Walleye and Northern Pike Production

Each year, newly hatched walleye (fry) obtained from our hatcheries are put into rearing ponds in April and allowed to grow to until they reach I -2 inches. The fingerlings are then harvested in June and stocked into various water bodies around the State. In 2015, SLHMU raised I million walleye fingerlings for stocking.

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Kawkawlin Rearing Pond	533,082
Auburn East Rearing Pond	416,886
Auburn West Rearing Pond	Idle
Tawas Rearing Pond	81,438
Au Gres Rearing Pond	47,573
	1,078,979



SLHMU also produces northern pike fingerlings from its Sanford Rearing Marsh. Adult northern pike (pairs of males and females) are transferred from Sanford Lake to the rearing marsh and allowed to reproduce naturally and free of predators. After 6 weeks, the rearing marsh is drained and northern pike fingerlings are harvested and stocked into public waters. In 2015, the Sanford Rearing Marsh produced 3,676 fingerlings averaging 4.8 inches.



In 2016, SLHMU plans to operate all 5 walleye rearing ponds along with the Sanford Rearing Marsh. We look forward to another productive year.

To obtain information on where we stock fish, visit the DNR, Fisheries website at: <a href="http://www.michigan.gov/dnr/0,4570,7-153-10364">http://www.michigan.gov/dnr/0,4570,7-153-10364</a> 53405-355970--,00.html



### Walleye Pond Maintenance

Our Auburn walleye rearing ponds are dependent upon an electric pump to fill. Unfortunately, this spring when pond-filling time rolled around the crew was unable to start the pump. A licensed electrician was consulted and examination of the system revealed need for a new motor starter and found major problem with the 1800 feet of buried electrical cable. The pond electrical system requires a 480V -200 amp three phase power supply. Investigation discovered only one phase service was coming from the primary pole on 9 Mile Road. Apparently a power line shorted and blew out the pump motor starter. To make matters worse, the may pole (which holds the switch and meter socket) was rotted at the base. Fisheries Division costs to upgrade the entire system including new motor starter, buried cable, pole, and labor was \$18,000.

Additional electric work was also performed at our Kawkawlin Pond. For us, it's the cost of doing business. SLH annually raised 1-1.5 million walleye for stocking in our area as well as across Lower Michigan. As a division, we estimate our 1-2 inch spring fingerling walleye cost 6 cents each which is pretty cheap in the overall scheme of things.

We are happy to say that all necessary repairs have been made and we are not only safer when operating this equipment but also closer to modern day components.









### Inland Lake and Stream Surveys

During the course of the year, SLHMU conducts a number of inland lake and stream surveys. Typically, habitat and biological data is collected during open water season and analyzed during the winter months. Completed reports are ready in the spring of the following year.

#### The following surveys were conducted in 2015 and reports are available upon request:

Shamrock Lake, Clare County Gut Lake, Clare County Trout Lake, Gladwin County Indian Lake(s), Livingston County Grebe Lake, Ogemaw County Sanford Lake, Midland County

#### Inland Lakes

Long Lake, Lapeer County
Buell Lake, Genesee County
Holloway Reservoir, Genesee County
Lake Chemung Livingston County
Buck Creek Pond, Iosco County

#### Streams

Pine River, Gratiot County Squaw Creek, Lapeer County N. Br. Tobacco River, Clare County Shiawassee River, Saginaw County Coldwater River, Isabella County Beaver Creek, Saginaw County Houghton Creek, Ogemaw County Pine River, Isabella County

#### The following lakes and streams are scheduled for surveying in 2016:

Holloway Reservoir, Genesee County Round Lake, Isabella County Hoffman Lake, Isabella County Johnson Lake, Ogemaw County Haithco Lake, Saginaw County

#### **Inland Lakes**

Lake Chemung, Livingston County Long Lake, Isabella County Strong Lake, Mecosta County W. Twin Lake, Roscommon County

#### **Streams**

Shiawassee River, Shiawassee County Cass River, Tuscola County Vaughn Creek, Ogemaw County Silver Creek, Ogemaw County Hunters Creek, Lapeer County N. Br. Tobacco River, Clare County

Status of the fishery reports are available for select waters and are listed by county. Check this link to see them:

http://www.michigan.gov/dnr/0,4570,7-153-10364\_52259\_19056-333302--,00.html

### Sanford Lake Creel Census

During June, July, and August of 2015, Fisheries Division conducted an angler creel survey of Sanford Lake, Midland County. Sanford Lake (1250 acres) is the lower most impoundment of the Tittabawassee River. Jessica Haller, a LSSU Fisheries and Wildlife student, was hired to interview anglers and capture data on fishing effort, preference, and harvest. The creel census would provide supplemental information to a 2015 fisheries survey of the lake.

The creel information is still be analyzed but early indications are:

- 295 angler interviews were obtained.
- Effort and preference was mostly for panfish.
- Harvest was mostly black crappie and bluegill.
- Catch and release was common for large and smallmouth bass, and northern pike.
- Anglers harvested an estimated 75 walleye but also released and estimated 110 walleye.

A complete summary of this information and the 2015 fisheries survey will be reported as a Status of the Fishery Report sometime in March. Check back with us if you are interested in this survey.







### Equipment Spotlight—

In this newsletter issue, we highlight our John Deere tractor, Model 5403. This tractor was purchased in 2008 and has been an essential piece of equipment for SLH Management Unit. Since the tractor is equipped with a front end bucket our versatility options are greatly enhanced.

Some may wonder why a fisheries unit would need a tractor? Our John Deere is used though out the year with varying projects from snow removal in the winter, planting in the summer, to mowing brush into late fall.

Our tractor is an integral part of our Walleye Rearing Program and without this implement we would not be able to have the success we do with raising walleye fingerlings. In the spring, if water levels are too low to use our electric pump, we resort to using the tractor hooked up to a Crisafulli pump to fill the ponds with water. Obviously, without water we would not be able to raise any fish at all. In late summer, after the ponds are drained and dried, this tractor gives us the ability to work the ground which allows a much better production of zooplankton (the main source of food for walleye fry). The pond is disked, seeded, and then cultipacked for planting a mixture of barley and rye in the pond bottom. Barley and rye return nutrients to the soil and provide cover for the next generation of zooplankton. Barley also inhibits the growth of filamentous algae.

Our tractor is also used on a regular basis to provide assistance to DNR Wildlife Division. The tractor, equipped with a 10 foot brush hog, allows for the mowing of dikes and over-grown areas of managed wildlife zones. It is very effective at helping control exotic species like phragmites.

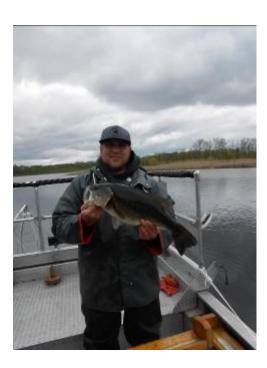
When properly maintained, tractors have a long life span and we envision our John Deere to be working for us for many years to come.







Jim Morgan from Oscoda sent us this photo of a 26 lb., 47 inch, Great Lakes Muskellunge he caught in Tawas Bay, May 6, 2015. Nicely done!



Jeremy Lowell shows off a largemouth bass collected with electrofishing gear during a survey of Buell Lake, Genesee County.

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