FISHERIES DIVISION
MICHIGAN DEPARTMENT OF NATURAL RESOURCES

Southern Lake Michigan Management Unit

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What is the SLMMU?

The Southern Lake Michigan Management Unit (SLMMU) encompasses all of the water that make up the watersheds that drain into the southern portion of Lake Michigan. Our work area includes all or portions of the following counties: Muskegon, Montcalm, Gratiot, Ottawa, Kent, Ionia, Clinton, Shiawassee, Allegan, Barry, Eaton, Ingham, Van Buren, Kalamazoo, Calhoun, Jackson, Berrien, Cass, St. Joseph, Branch, and Hillsdale. Most fisheries staff within this unit work out of the Plainwell Operation Service Center and include a Unit Manager, three Fisheries Biologists, a Technician Supervisor, three Technicians, two Fisheries Stateworkers, and an Administrative Assistant. Our two creel clerks work the ports of Grand Haven, Holland, Port Sheldon, South Haven, and St. Joseph.

Muskellunge Stocking

Wolf Lake State Fish Hatchery raised nearly 45,000 muskellunge this year. Muskellunge eggs are collected each spring from the Detroit River. These eggs are hatched, tank reared as fry, and transferred to ponds at the hatchery. The muskellunge are raised to a fall fingerling (approximately 9 inches) before being stocked in late October. Ten waters were stocked in southwest Michigan including:

Bankson Lake	326	Murray Lake	480
Round Lake	281	Lake Macatawa	2,670
Austin Lake	919	Mona Lake	1,043
Eagle Lake	405	Lower Grand River	3,000
Long Lake	314	Thornapple Lake	1,700

Chinook Salmon Net Pens

Net penning of Chinook salmon has been a common practice in Michigan since 1989. Through local partnerships with sport fishing organizations, marinas, and local businesses, 100,000's of Chinook salmon smolts are stocked at Lake Michigan ports each year.

Net penned Chinook salmon fingerlings typically have better condition, survival and homing ability compared to salmon that are directly stocked into rivers. Based on coded-wire tag data analysis from Michigan DNR studies during the 1990's, net pens tend to produce higher effective survival to the Lake Michigan fishery. The results of this study show that fish cultured in net pens provide almost twice the survival rate of direct stockings.

Each year in late April or early May, salmon fingerlings are transported from DNR hatcheries to the nets pens. The fish are fed and cared for by volunteers until they smolt. Typically, the net rearing lasts approximately one month before they are released. The salmon immediately start to feed on their own eating bugs as they swim out into Lake Michigan.

The southern Lake Michigan net pens include: Grand Haven, Holland, Saugatuck, South Haven, and St. Joseph.

Thank You Net Pen Cooperators !

Grand Haven Steelheaders

Grand Rapids Steelheaders

Outdoor Discovery Center of Wildlife Unlimited

South Haven Steelheaders

Southwestern Steelheaders

Saugatuck Charter Boat Association

Berrien County Sportsman Club

Habitat Enhancement Spotlight

Garfield Lake Outlet Fish Passage Project

Garfield Lake located south of Olivet connects to Indian Creek and the Battle Creek River. Fish passage up in to the lake was limited due to a perched or elevated culvert. Fisheries Division teamed up with the Calhoun County Conservation District, Civil Engineers, Inc., and Calhoun County Water Resources Commission to design a fish ramp and two-staged ditch. The DNR, Parks and Recreation Division equipment crew out of Allegan assisted in the construction of the project. The rock ramps elevated the stream bed and reconnected flow through the culvert to allow fish passage. The two stage ditch was constructed as a demonstration to show an alternative ditch design that would allow better bank stability –especially during high flow events. Most active agricultural drains require frequent dredging maintenance due to sedimentation and constant bank failure.

Congratulations to Kregg Smith, Senior Fisheries Biologist, for being named Calhoun County Conservationist of the Year for his efforts on the Garfield Lake Project.

Lake, River and Stream Surveys

During the spring, summer, and early Fall of 2013, the SLMMU staff completed 24 surveys. These surveys included walleye and rainbow trout stocking evaluations, status and trends surveys, regulation evaluations, general surveys, and natural resource damage assessments. Most stream surveys use electrofishing gear while lake surveys use a combination of netting and electrofishing gear to sample fish. A total of 15 streams and 9 lakes were surveyed (some streams had multiple sampling locations). Those waterbodies include:

Bear Creek (Kent County)
Bigelow Creek (Newaygo County)
Crockery Lake (Ottawa County)
Fisher Creek (Branch County)
Flat River (Kent County)
Grand River (Eaton, Ionia, & Kent counties)
Green Lake (Barry County)
Gun Lake (Barry County)
Howard Lake (Kalamazoo County)
Huntoon Creek (Jackson County)
Kalamazoo River (Calhoun County)
Kloeckner Creek (Clinton County)

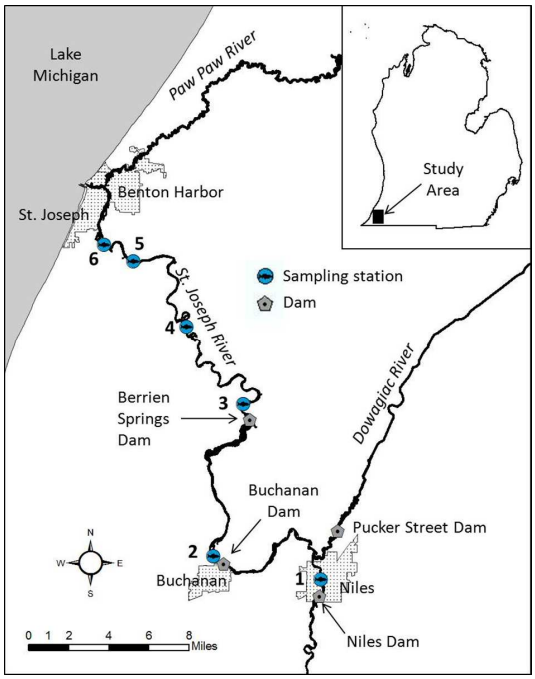
Lake Lavine (Branch County)
Lake Templene (St. Joseph County)
McCoy Creek (Berrien County)
North Scott Lake (Van Buren County)
Pipestone Creek (Berrien County)
Prairie River (St. Joseph County)
St. Joseph River (Berrien County)
Sand Creek (Berrien County)
Spring Brook (Kent County)
Talmadge Creek (Calhoun County)
Townline Lake (Montcalm County)

North Scott Lake

This lake was surveyed as part of the Status and Trends program for inland lakes. North Scott Lake (Van Buren County) is classified as a small lake at 79 acres with a maximum depth of 37 feet. The lake is heavily developed except for a wetland complex on the southeast shore that connects to South Scott Lake. North Scott Lake is characterized as a warm and eutrophic (productive) lake. During the 2013 MDNR survey, a total of 1,879 fish representing 20 species were caught. Bluegill were the most frequently collected species with a total of 705 caught, representing 38% of the catch. The bluegill ranged from one to eight inches in length. Black crappie were also abundant with 428 caught ranging from five to 12 inches in length. The yellow perch population was also good with 153 caught ranging in length from two to 13 inches. The main predators in the lake were largemouth bass (from 3 to 18 inches in length) and northern pike (from 12 to 25 inches in length). Other gamefish species captured included pumpkinseed sunfish and channel catfish. Other nongame species collected in the survey included bowfin, bullhead, brook silverside, common white sucker, golden shiner, grass pickerel, green sunfish, Johnny darter, lake chubsucker, spotted gar, and warmouth. Spotted gar, lake chubsucker, and grass pickerel are listed as species of greatest conservation need in the State of Michigan's Wildlife Action Plan. Listed species consist of only a few populations statewide or have exhibited declines in distribution and abundance over the past fifty years.

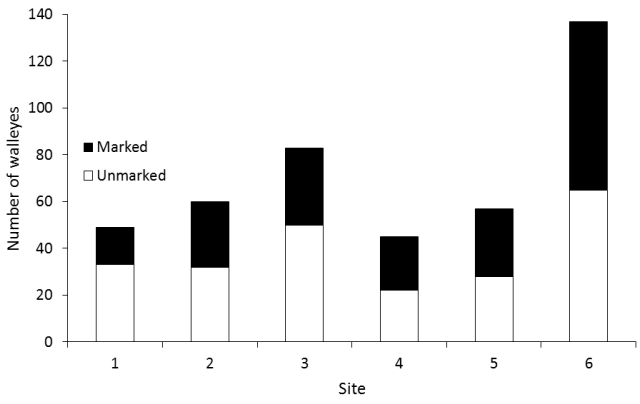
St. Joe River Walleye Assessment

Below is the abstract from Gunderman 2014, in press:

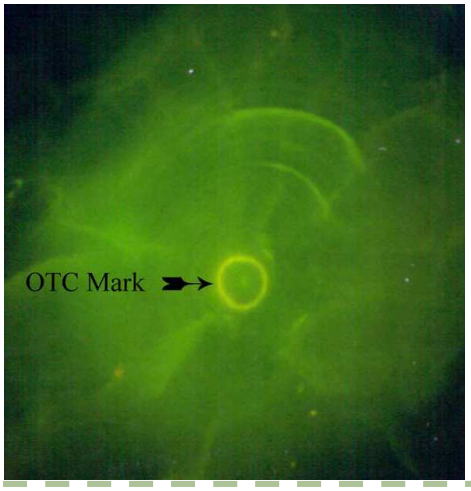


The Michigan Department of Natural Resources has been stocking walleyes in the lower St. Joseph River since 1980. Age-frequency data from creel surveys conducted on the river during the 1990s suggested substantial natural recruitment of walleyes in this system. As part of an effort to more accurately quantify the relative contributions of stocked and wild fish to the lower St. Joseph River walleye population, oxytetracycline-marked spring fingerlings were stocked at various locations downstream of the Niles, Buchanan, and Berrien Springs dams during 2005-2011. Fall electrofishing surveys were conducted annually at six sites between the Niles Dam and Benton Harbor during 2005-2012. Sagittal otoliths were removed from each walleye and examined for oxytetracycline marks, and ages of captured walleye were ascertained from dorsal fin ray samples. The total catch for all sampling efforts was 431 walleyes from the 2005-2012 year classes. Marked fish composed 47% of the catch. The percentage of marked fish varied by sampling site and cohort. Upstream movement of walleyes through the Berrien Springs fish ladder was limited. However, downstream movement of stocked walleyes past one or more dams was common. Catch-per-effort of unmarked young-of-year walleyes was highest in the stream reaches immediately downstream of dams. No significant correlations were observed between mean April discharge during the year of hatching and subsequent electrofishing catch rates for unmarked juvenile walleyes. Mean lengths at age for walleyes in the lower St. Joseph River exceeded statewide averages. General linear model results indicated that marginal mean lengths at age were significantly greater for walleyes collected downstream of the Berrien Springs Dam compared to fish captured upstream of the dam. Stocked fish strongly contribute to the walleye population in this system, and biennial stocking of spring fingerling walleyes is recommended to maintain the existing fishery.

Gunderman, B. 2014. Contribution of stocked and wild fish to the lower St. Joseph River walleye population. Michigan Department of Natural Resources, Fisheries Technical Report (in press), Ann Arbor.



Numbers of oxytetracycline-marked and unmarked walleyes captured in the St. Joseph River during fall electrofishing surveys, 2005-2012.



2014 Lake and Stream Surveys

During the spring and early summer, our unit conducts fish community surveys on lakes when water temperatures are between 55 and 75 degrees Fahrenheit. Our stream surveys are mostly conducted in July and August. A variety of gear types are used on lakes including nets and night-time electrofishing while day-time electrofishing is the main gear used on rivers and streams. Here is a list of waters that we plan to survey in 2014:

Grand River, Kent, Ionia, Eaton Co.

Portage Creek, Kalamazoo Co.

Pleasant Lake, St. Joseph Co.

Center Lake, Jackson Co.

Indian Lake, Cass Co.

Kalamazoo River, Calhoun and Allegan Co.

Coldwater Lake, Branch Co.

Sand Lake, Newaygo Co.

Brush Lake, Newaygo Co.

Looking Glass River, Clinton Co.

Plaster Creek, Kent Co.

Old Bitty Creek, Berrien Co.

Talmadge Creek, Calhoun Co.

Silver Creek, Allegan Co.

Wabasis Lake

Pokagon Creek, Cass Co.

Spring Brook, Kalamazoo Co.

Halfmoon Lake, Muskegon Co.

Prairie River, Branch Co.

Brush Creek, Van Buren Co.

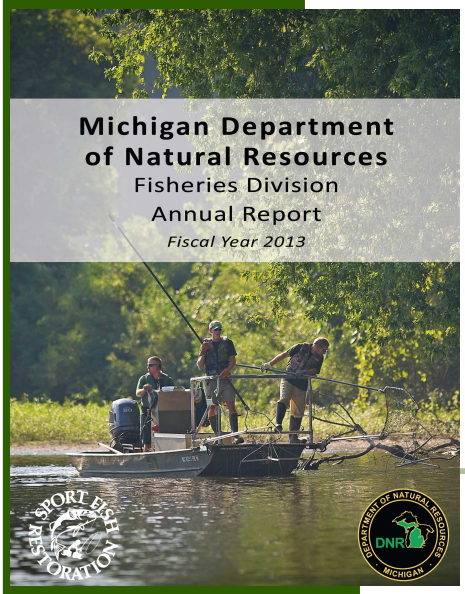
Fawn River, St. Joseph

White Bass

Links to our most recent Status of the Fishery Reports;

- Craig and Morrison lakes, Branch County: http://www.michigan.gov/documents/dnr/2013-160_433818_7.pdf
- Gull Lake, Kalamazoo County: http://www.michigan.gov/documents/dnr/2012-145_403602_7.pdf
- Nottawa Creek, Calhoun County: http://www.michigan.gov/documents/dnr/2013-167_442618_7.pdf

Interested in Learning More about Fisheries Division?



If so, check out our web page www.michigan.gov/fishing

Where you Can:

- Read our 2013-2017 Strategic Plan.
- Read our 2013 Annual Report.
- Buy a fishing license.
- Read or sign up to receive weekly fishing reports.
- Subscribe to email updates on a variety of topics.

Where Do We Stock Fish?

The SLMMU works closely with our hatcheries to stock fish in the near-shore waters of Lake Michigan and inland lakes and streams. To find out where we stock fish, and the history of fish stocking back to 1979, visit http://www.michigandnr.com/fishstock/ to use our online Fish Stocking Database.

Did you know?

Freshwater jellyfish exist in Michigan lakes

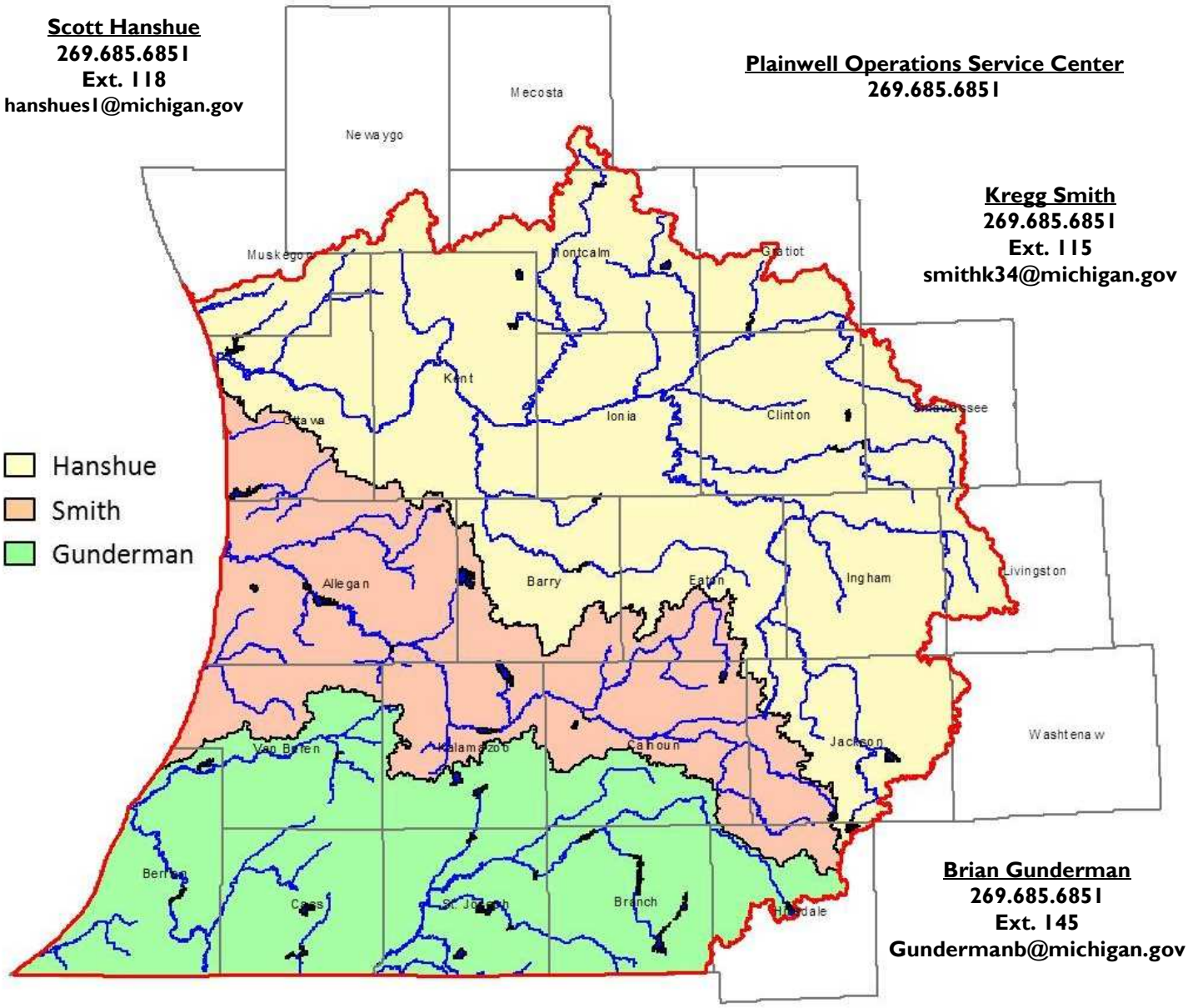
Learn more about these critters at: http://www.freshwaterjellyfish.org

52 Pound State Record Flathead Catfish

The beauty of fishing is that you never know what you might catch. Dale Blakely of Niles caught this huge flathead catfish while ice fishing Barron Lake in Cass County. It was only the second time that Mr. Blakely has ever gone ice fishing. He was fishing for bluegills and crappie with a small jig and wax worm when the beast hit. After a long hour battle, the fish was landed. This fish broke the previous state record that was 49.8 pounds caught in 2012 out of the St. Joseph River.

To obtain information on lake or stream surveys from this year or years prior or to ask any questions, please feel free to contact us. Use the map below to select the most appropriate biologist to contact;

MDNR Fisheries Division
Southern Lake Michigan Management Unit
Areas of Responsibilities



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