In partnership with the Michigan Department of Natural Resources (DNR) Fisheries Division, Sturgeon For Tomorrow has been having an absolute blast facilitating Sturgeon in the Classroom (STC). Students from Cheboygan, Onaway, Alpena, Lapeer, Lake Orion and Holt welcomed their very own sturgeon in October 2014 when the fish was only about five inches long.

Classrooms adopt a fall fingerling lake sturgeon that has been raised at the streamside hatchery on the Black River. Students nurture their sturgeon by setting up feeding regimes, water temperature and water chemistry monitoring, maintenance of the tank and filters, while they are also learning science, technology, engineering and math (STEM) curriculum. Frozen bloodworms are the menu for the young lake sturgeon that grew from 5 inches up to 18 inches over a period of seven months. That’s pretty impressive for a relic that can grow to be 8 feet in length and weigh over 200 pounds.

Just as the students were ready to be released from school, so too was the sturgeon. “Releasing the fish was by far the best part of the program,” said Ann Douglas, 5th grade teacher at Cheboygan Middle School. “The students were amazed while visiting the hatchery seeing the different sizes and life stages of the sturgeon, and when we went to the spawning site on the river, researchers were tagging them and pulling out four-footers!”

By raising this native fish, students are learning about threatened and endangered species, clean air, clean water and the importance of stewardship.

Students from each school released their sturgeon wondering if they will ever see their little buddies again. Each fish was implanted with a PIT tag, so when captured in the future the classes will be notified of date, location, length, weight, etc. of their classmate. The students hope for a better future for the iconic lake sturgeon and feel honored to have had the opportunity to learn about such a charismatic fish.

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**From the President**

Did you know that direct exposure to nature is essential for physical and emotional health? In the book *Last Child in the Woods: Saving Our Children From Nature-Deficit Disorder*, Author Richard Louv writes that nature is not just a beautiful backdrop to life, the outdoors is as essential to a child’s health and well being as good nutrition and plenty of sleep. Louv presents a compelling argument that children, and the rest of us for that matter, require regular contact with nature to maintain physical and emotional health. You can nourish a child’s spirit by giving them opportunities to garden, care for animals, explore rivers, or build a fort in the woods. As Louv points out, a child uses all the senses when they are out in nature. Also, the experience is direct, a stark contrast to the indirect, passive experience of sitting in front of a TV or computer. *Last Child in the Woods* amounts to a warning to society to take action before it’s too late. If our children and grandchildren become alienated from nature, they are unlikely to protect it. Children raised on video games, trips to the shopping mall, and vacations in Disneyland are unlikely to become defenders of the natural world. When nature itself suffers a deficit, we’ll all be in trouble.

As children’s connections to nature diminish and the social, psychological, and spiritual implications become apparent, new research shows that nature can offer powerful therapy for such maladies as depression, obesity, and attention deficit disorder. Nature-based education dramatically improves standardized test scores and grade-point averages and develops skills in problem solving, critical thinking, and decision making.

Armed with this knowledge, we are strategically investing resources in our outreach-education programming. We are facilitating guided viewing tours at the Black River, facilitating hatchery tours and expanding Sturgeon in the Classroom. In mid-May of this year we will be collaborating with the Michigan Boy Scouts Council for their Spring Camporee. About 250 boy scouts ages 11-19 will be camping alongside the river and in the wilderness to experience the annual sturgeon migrations. We are partnering with Huron Pines and the Tip of the Mitt Watershed Council to present programs to our youth on sturgeon biology, habitat conservation/protection, aquatic macro invertebrates sampling and reproductive ecology/early life history (hatchery).

We will also continue to fund research and stocking in collaboration with DNR, MSU and the Tribes. And, because the Sturgeon Shivaree continues to grow bigger and better than ever, we will need all hands on deck. If you feel compelled to participate in any of our programs, we need to hear from you. Please call me at 231-625-2776. It’s for the sturgeon!

With gratitude,

*Brenda Archambo*
www.sturgeonfortomorrow.org/shivaree

The Black Lake Sturgeon Shivaree has such an enthusiastic vibe (pardon the pun)! Many diverse guests thanked us (and you) for bringing this longstanding cultural event back to Black Lake. Many stories were told and the camaraderie was enlightening. Everyone enjoyed themselves immensely and advocated loudly to see the Shivaree continue. Mark your calendars now for the 2016 Black Lake Sturgeon Shivaree, February 5-6, 2016!

The Black Lake Sturgeon Season opened Saturday, February 7th at 8am with 303 registered anglers (up from 228 in 2014). With a quota of five fish, season closed opening day at about 1:27pm. James Bodinger of Wisconsin harvested the largest sturgeon weighing in at 80 pounds, 69 inches in length.

Summary of Shivaree Events

Candlelight Ceremony: SFT president Brenda Archambo conducted a Candlelight Ceremony in Jimmie Mitchell’s absence. About 200 participants paid homage to the sturgeon available for harvest. Candles were lit, lanterns were flown and fireworks were released into the night sky in honor of the sturgeon.

Youth Activities: Maureen Stine of Natureology entertained children by setting up a portable shanty and having underwater viewing, jigging, casting, face painting and the children painted lead-free jigs that they were able to take home. All children were given a ‘Sturgy Activity Book’ to take home as well.

Ice Fishing Contest: Sponsored by the Black Lake Sportsman’s Club: 166 registered anglers (up from 120 in 2014) $1,330.00 Payout.

Poker Run: 52 players, $840.00 payout to David H. from Howell. David donated back $100.00—Thank you!!!

Shivaree Raffle: Ken A. from Cheboygan won the Custom Ice Chain Saw, Don K. from Howell won the Jiffy Ice Auger and Leian E. from Harbor Springs won the Frabill Portable Shanty.

Volunteers! Over 100 volunteers helped and are the lifeblood of making this event run smoothly. A huge thank you to all!

A special thank you to our volunteer coordinator Patty Archambo and to Deb McCall for event management.

On behalf of the iconic lake sturgeon and the Board of Directors of Sturgeon For Tomorrow, we sincerely appreciate your generosity and hope you will continue to support us in our future endeavors.

SHIVAREE SPONSORS

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Black Lake Sportsman’s Club
Black Lake UAW Family Education Center
City of Onaway – Sturgeon Capitol of MI
Natureology (Youth Activities)

Ice Fishing Contest
Black Lake Sportsman’s Club

Friends of the Shivaree
Kevin Borowiak
The 2014 Black Lake research season began in early May when Michigan State University (MSU) and Michigan Department of Natural Resources (MDNR) researchers spotted a five foot lake sturgeon ascending the Upper Black River upstream of the Sturgeon for Tomorrow Ste B guarding area. After a prolonged winter combined with a rapidly warming spring, the adult run was rather compressed into a single 3 week long spawning event. Due to this delayed beginning of the spawning season and a rapid increase in temperatures at the end of the sampling season, 2014 proved to be one of the shorter adult surveys conducted on the upper Black River.

A total of 257 lake sturgeon were captured throughout the spawning season which ran from early May to early June. Gametes were collected from spawning lake sturgeon (34 crosses from 20 females) and were transported to the Streamside rearing facility for fertilization and rearing. Researchers noted no evidence of poaching this year for the second consecutive year. Expanded sturgeon guarding activities at additional locations over past years seem to have helped deter these incidents.

Researchers also captured wild larval lake sturgeon as they dispersed downstream. Previous research has found that these wild larvae represent the best stock source genetically, so these larvae are captured and brought back to the Streamside Rearing Facility in an effort to enhance survival of this unique stock source. This year, larval sampling began on May 26th and ran until June 28th. Throughout the spawning and larval drift period the river water levels regularly fluctuated, but provided ample opportunity to sample drifting larvae. Researchers captured over 15,000 dispersing larvae during evening larval drift surveys.

Ongoing research involved extensive habitat mapping in efforts to assess larval sturgeon habitat. Several passes with a side band sonar unit produced a georeferenced substrate and depth map of the river bottom. This mapping effort was validated through a series of transect sampling that assessed substrate size, water depth, water velocity, aquatic invertebrate community, and counts of larval sturgeon. This will allow researchers to assess preferred habitat for larval sturgeon, and develop a model that could be used to assess habitat in other river systems.

In addition to assessing larval sturgeon habitat, researchers additionally were looking into larval sturgeon predators. This entailed a large effort of sampling for potential predators by barge electrofishing stretches of the river, spanning from the spawning grounds to the larval drift site. Predation was assessed via gastric lavage, which flushes the stomach to look for larval sturgeon and their DNA.

During early August, MSU, MDNR, and tribal researchers conducted assessments in the Black River in an attempt to monitor natural recruitment of young-of-the-year lake sturgeon. This year, four young-of-the-year lake sturgeon were captured during these assessments, compared to zero that were captured last year.

On August 23rd Black Lake was stocked with 500 juvenile lake sturgeon. All sturgeon stocked into Black Lake were tagged with PIT tags. On that same day, 478 were additionally stocked into Mullett Lake. Additionally, another 232 juvenile lake sturgeon were stocked into Mullett Lake on September 25th. For an ongoing research project, 300 juvenile lake sturgeon were stocked into both Tower Reservoir and Kleber Reservoir, as well as 54 age 1 sturgeon to each reservoir.

We would like to thank all of you for your assistance on the river and your support during the off-season.

MSU Team; Nick Gezon, Jared Militello, Charles Wlasniewski, Kyle James Broadway, Lindsey Adams, Brittany Woodward and Nathan Barton.


The streamside rearing facility/sturgeon hatchery is an important component of lake sturgeon rehabilitation efforts in the Cheboygan River watershed. These efforts involve the Black Lake Chapter of Sturgeon for Tomorrow, the Department of Natural Resources, Michigan State University and Tower-Kleber Limited Partnership. The facility conducts research to determine growth and survival of lake sturgeon, thanks to DNR, federal, Great Lakes Fishery Trust and Sturgeon for Tomorrow funds. Results provide much-needed guidance for managers involved in lake sturgeon recovery efforts, while improving the effectiveness of lake sturgeon culture and stocking efforts. "Many of these stocking efforts were public events that shined a spotlight on how important lake sturgeon are to our state," said DNR Fisheries Division Chief, Jim Dexter. "Michigan has a long history with the lake sturgeon and working with our partners helps us to move forward toward protecting them for the future."

The Little Traverse Bay Band of Odawa Indians (LTBB) also reared and released 677 Black Lake sturgeon fingerlings into the Sturgeon River (Burt Lake) on August 28, 2014.
The Great Lake Sturgeon Book selected for 2014 Notable Book Tour

Every year, the Library of Michigan selects up to twenty of the most notable books, either written by a Michigan resident or about Michigan or the Great Lakes. The selected books are honored in the year after their publication or copyright date. Each selected title speaks to our state’s rich cultural, historical, and literary heritage and proves without a doubt that some of the greatest stories are found in the Great Lakes State.

The Great Lake Sturgeon Edited by Nancy Auer and Dave Dempsey (Michigan State University Press) was selected as one of the notable books of 2014. Sturgeon For Tomorrow president Brenda Archambo wrote a chapter in the book titled, ‘Sturgeon For Tomorrow’ which she dedicated to the people of the sturgeon. Brenda joined editor Dave Dempsey at the Cheboygan Area Public Library in May and facilitated a book review. Brenda also joined chapter author Marty Holtgren from the Little River Band of Ottawa Indians at the Mackinaw Area Library in September to discuss the scope of their chapters.

This collected volume captures many aspects of the remarkable Great Lakes sturgeon, from the mythical to the critically real. Lake sturgeon is sacred to some, impressive to many and endangered in the Great Lakes. A fish whose ancestry reaches back millions of years and that can live over a century and grow to six feet or more, the Great Lakes lake sturgeon was once considered useless, and then overfished nearly to extinction. Blending history, biology, folklore, environmental science, and policy, this accessible book seeks to reach a broad audience and tell the story of the Great Lakes lake sturgeon in a manner as diverse as its subject.

To order your ($25.00) copy call 231-625-2776 or email info@sturgeonfortomorrow.org.

Welcome New Board Member Charlie Maltby

Charlie was born and raised in Cheboygan. He is grateful to have been lucky to remain here with his wife Amy and raise their two daughters Madelyn and Gloria. Charlie has worked for the Michigan DNR for the past 20 years at a variety of positions and now within the Parks and Recreation Division. He is currently the supervisor at Otsego Lake State Park and oversees all of the forest recreation programs in the Pigeon River State Forest. Charlie has a love of the outdoors and enjoys hunting, fishing, trapping and gathering. He is an avid scuba diver for the past 8 years, enjoying the natural beauty we have below the water in our lakes and rivers. He enjoys teaching and showings others interesting things in nature and has been a Hunter Safety instructor for approximately 7 years. Charlie is happy to be on the Sturgeon for Tomorrow Board so that he can continue to teach and educate folks about the Lake Sturgeon as well as learning new things for myself. Welcome Charlie!

Run With the Sturgeon

Proceeds from the races will benefit the Friends of the St. Clair River and Sturgeon for Tomorrow

- Drop-in Meet the Scientist 20-minute workshops
- View live lake sturgeon on shore with U.S. Fish and Wildlife Service and DNR scientists
- Learn about the Great Lakes at outdoor exhibits
- Taste the limited special edition sturgeon beer brewed exclusively for Sturgeon Festival
- Kids Activities
- Sturgeon Cruise

sturgeonfestival.com
**Did You Know?**

The Black Lake Watershed is large, encompassing 547 square miles or 350,000 acres. It comprises 37.7 per-cent of the 1,461-square-mile Cheboygan River Watershed. Black Lake's Watershed is 35.04 times larger than the surface area of the Lake (a ratio of 35.04:1, or simply 35.04). This is fairly high for large lakes in Northern Michigan. For example, the watershed-to-surface area ratio for Burt Lake is 14.8 and for Mullett Lake, only 9.

Several rivers and streams flow into Black Lake. The major tributaries to the Lake are the Upper Black River (57 river miles) and the Rainy River (24 river miles). Additionally two major rivers flow into the Upper Black and indirectly into Black Lake: Canada Creek and the East Branch (21 river miles each). Other important tributaries include Tomahawk Creek, Milligan Creek, Stony Creek, and Mud Creek. Numerous smaller streams also flow into Black Lake and its tributary rivers.

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**Sturgeon For Tomorrow** accepts contributions, memorials and honorariums for special occasions, including birthdays, anniversaries, and special tributes.

Thank you to the following individuals and families who have contributed in honor of their loved ones in 2014.

**In Memory of Ruby Mae Archambo**
Kathryn Bezotte
Bob and Mary Bonner
Jimmy and Evelyn Connors
Billy and Dona Crist
Graham and Sandra Edwards
Bob and Beth Garner
Charlotte Louria
Bob and Paula Maczka
Dan Manning
Ed and Barb Mason
Alice Mushlock
Butch, Paul, Dick, Patsy, Bill, Ray & Peggy Page
Shirley Skellenger and Alice Chaloner
Shelby Stempky
Charlene Swihart
Doug and Ellie Wilson
James and Susan Ziegler

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**In Memory of Gerry Gray**
Kathy Bezotte
William and Judy Goldsmith
Kathy Gray and Friends
Kathleen LaLonde

**In Memory of Ulis Janney**
Mary Janney

**In Memory of James and Maureen Rentz**
Joseph T. Rentz

**In Memory of Robert Shoemaker**
Jeffrey and Erica Fossmo
Jen Gemski
Gypsy Nickel Lounge
Beth, Steve and Jake Worden
William and Beverly Worden

**In Memory of Don Snyder**
Mary Janney

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The 15th Annual Sturgeon For Tomorrow Banquet was a huge success!

Thank you Sponsors, Big Spenders and contributors who have given generously to lake sturgeon recovery programs.

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**Gerald Gray**
(1948-2014)
Gerald Robert Gray Jr. age 66 of Rogers City went home to the lord on the anniversary of his late sister’s birth, August 13, 2014 at Tendercare in Alpena.

He was born January 24, 1948 in Lansing to Gerald and Beatrice (Schmitt) Gray.

Gerald was an avid outdoorsman and constant volunteer in the community.

Mr. Gray is survived by his wife, Kathy, 3 children, Susan (fiancée, Ron Metevier) Ratz of Lincoln, Annelise Gray of Indiana, and Timothy Gray of Rogers City, 4 Grandchildren, Nicholas Ratz, Joshua Ratz, Cameron Metevier, and Trevor Metevier and sister, Ellen (Richard) Zissler of Tennessee.

He was preceded in death by his parents, Gerald and Beatrice and his sister Jeanne Gray.
Please join us in thanking the following donors for their generous gifts. Your contributions are making a measurable difference in lake sturgeon

2014 CONTRIBUTIONS
Daniel J. Adams
Christine Baker
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Kevin Borowiak
Dave and Lorraine Borowicz
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Wm Scott Brown
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Sally Wilson
Kevin and Jackie Winkle
Dr Philip and Patricia Woolcott

Sturgeon Guards Needed
Late April through early June

Sturgeon for Tomorrow is seeking volunteers to stand vigil along the Upper Black River to protect spawning lake sturgeon.

“It’s a unique and rewarding experience to witness the spectacular sight of these majestic fish, which can live up to 100 years and weigh over 200 pounds, swimming up into the Black River and to take part in safeguarding one of Michigan’s most valuable natural resources,” said Ann Feldhauser, volunteer Coordinator.

Individuals or groups interested in volunteering should contact Ann Feldhauser at: 906-201-2484 or register online at: www.sturgeonfortomorrow.org/guarding-program.php

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Dedicated to the future of our sturgeon.

Sturgeon General Volume 16 Issue 1 WINTER 2015

Upcoming Events 2015

February
6-7: Black Lake Sturgeon Shivaree
6: Black Lake Sturgeon Season Opens
19: Sturgeon Advisory Council Meeting

March
31: SFT Scholarships application deadline

April
Register for Sturgeon Guarding Program

May
Sturgeon Guarding Program—All month
Guided Sturgeon Viewing Tours
Research: Netting, tagging and larval sampling

June-July
Hatchery Rearing/Research

August
Sturgeon Hatchery Tours Date TBD
Sturgeon Releases: Date TBD

September
12: 17th Annual SFT Banquet, Cheboygan

www.sturgeonfortomorrow.org

Please visit our partners:
stclairsturgeon.org
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