



## Illinois Lake Michigan Program field sampling activities during 2023

The Illinois DNR Fisheries/Lake Michigan Program bulletin is a report highlighting Lake Michigan fishing information and field sampling

activities from 2023. The report covers sport fish harvest in Illinois waters, salmon and trout stocking, lakewide prey fish survey results,

lake trout sampling, yellow perch abundance and recruitment, nearshore bass population assessments and more.

### ► ***Sport and Charter Harvest of Salmonids Increases***

Total harvest of salmon and trout in Illinois waters increased by 50% compared to 2022 and corresponded to an 8% increase in effort (angler hours) for sport anglers and 4% increase for charter anglers. Changes in the composition of the catch also occurred. The most notable change was an increase in sport and charter harvest of Coho and Chinook Salmon, as well as Rainbow Trout. Sport harvest of Coho Salmon more than doubled and charter harvest was up 19% from 2022. Similarly, harvest of Chinook Salmon increased 39% for sport anglers and 43% for charter anglers. Harvest of Lake Trout also increased for both sport and charter anglers in 2023. Brown trout continue to be a relatively small part of overall Illinois harvest.

### ► ***2023 Fish Stocking Totals and Changes in Stocking Plans for 2024***

Stocking numbers for the Illinois waters of Lake Michigan remain at the increased levels that began in 2020. Jake Wolf

Hatchery staff delivered healthy salmon and trout fingerlings to meet these increased quotas in 2022 and 2023, despite high staff turnover. Additionally, the USFWS reared and stocked approximately 120,000 Lake Trout at Julian's Reef during each of the past 2 years.

Illinois DNR is trying a new strain of Brown Trout in 2024. Over the past 20+ years, Plymouth Rock strain eggs were reared at Jake Wolf Hatchery and stocked as large (5- to 6-inch) fingerlings during July. This year, Crawford strain eggs were obtained from the FWS federal hatchery system and will be reared at Jake Wolf before stocking at 11 locations along the Illinois shoreline during May. Earlier stocking is possible because the Crawford strain spawn earlier and grow faster than the Plymouth Rock strain. We are anticipating that earlier stocking and faster growth will lead to better Brown Trout survival and higher returns to Illinois anglers.

### **IL Lake Michigan 2023 field sampling activities**

*Continued on page 10*

### ***In this issue...***

Anglers asked to report tagged brown Trout for new Rifle River study .....	2
Why is US cracking down on PFAs? .....	3
First step to stopping Asian carp is recognizing them .....	4
DEC proposes implementing black bass fishing tournament permit.....	4
Kenosha club receives thousands Chinook salmon .....	5
Canada, Alaska suspend fishing of Yukon River Chinook for 7 years.....	5
The sturgeon spawn is on .....	6
Changes to striped bass fishing regs .....	6
DNR 2023 Fish Stocking Summary.....	6
Register for BOW summer workshop .....	7
Apply to join Ohio's Conservation Teen Advisory Council .....	7
More summer Beyond BOW events.....	8
New ballast water findings .....	9
Meeting on Lake Michigan whitefish trawl rule .....	9
Lake Michigan field sampling cont. .	10-11

## 2024 Spring Hearing statewide results now available

The Wisconsin DNR 2024 Spring Hearing questions and results are now available. More than 18,800 people responded to the 2024 Spring Hearing questionnaire either in person April 8 or online April 10-13. For results and questions: [available on the DNR website](#).

"I'm really pleased to see the amount of participation we had for this year's Spring Hearings. There were a lot of different topics and issues included, and I'm very happy with the input and public discussions we had both in person and online this year," said Wisconsin Conservation Congress Chair Rob Bohmann. "It tells me the public is interested in being engaged in resource manage-

ment in Wisconsin and it clearly matters to them; it's great to see."

The annual Spring Hearing is an opportunity for the public to provide input on a wide array of natural resources-related proposed rule change questions presented by the DNR and advisory questions presented by the [Conservation Congress](#). Public input received through this process is advisory to Natural Resources Board members, department staff and anyone working on these issues. Results from the public input will be considered by the Conservation Congress at their annual convention in May, and will be forwarded to the DNR and Natural Resources Board in June. ♦

## DNR asks anglers to report tagged brown trout for new Rifle River study

The MDNR is asking Rifle River and Saginaw Bay anglers to keep an eye out for brown trout with a tag or clip and to report information about these fish as part of a new study.

This spring, the DNR initiated a pilot study to gauge brown trout movement in the Rifle River and their exchange between the river and Saginaw Bay. Over the next two years, approximately 20 brown trout in this vicinity will be tagged with an internal acoustic telemetry tag. Acoustic tags, also called transmitters, send a series of pings to nearby receivers, which essentially act as underwater computers anchored to the lake bottom. These tags connect with the network of receivers in Saginaw Bay and the main basin to collect fish movement information.

Local anglers recently have reported an increase in catch rates of lake-run brown trout. The Rifle River is annually stocked with the Sturgeon River strain of brown trout to create a resident stream fishery, but this strain of the species can exhibit lake-run behavior, meaning that they migrate from the river to the Great Lakes. This pilot study will provide preliminary data to determine the extent to which this may be occurring and assist the DNR with future management



decisions.

Along with the tags for the pilot study, brown trout stocked in the Rifle River are marked with one of four fin clips specific to stocking location: left pelvic, right pelvic, left pectoral and right pectoral. ([See diagram.](#))

"Information collected from the telemetry study and catch reports of clipped brown trout will help DNR fisheries managers evaluate the effectiveness of current actions and adapt future decisions accordingly," said April Simmons, DNR fisheries management biologist. "The resulting data will be a big step toward answering important questions about the exchange of these fish between the Rifle River and Saginaw Bay."

Anyone who catches a tagged or clipped fish is asked to report the following information using the tag return form at [Michigan.gov/EyesInTheField](https://Michigan.gov/EyesInTheField):

- Species.
- Length.
- Weight (if known).
- Capture date and location.
- Tag location (tagged or fin-clipped and where on the fish's body).
- Identification number (if tagged).

Full-body photo of fish (if clipped, please ensure the clip can be seen). Some tagged fish may have a Floy tag – a long, narrow, colored, noodle-like tag – but all tagged fish will have a clipped anal fin.

If you catch and keep a tagged brown trout, please be sure to remove the internal transmitter from the fish, rinse it with water and store it at room temperature. **Do not freeze the transmitter.** For a \$100 reward and arrangements to return the transmitter, or for questions about the study, contact [April Simmons](#) at 989-686-2295 (Monday through Friday, 9 a.m. to 5 p.m.).

Learn more about marked and tagged fish at [Michigan.gov/TaggedFish](https://Michigan.gov/TaggedFish). ✧



• Established 1972 •

### President

Daniel N. Thomas, *Illinois*

### Vice President

*Open*

### Secretary

Michael D. Sanger, *Wisconsin*

### Treasurer

Thomas G. Couston, *Wisconsin*

### DIRECTORS

*Illinois* – Robert Gaik

*Indiana* – Mike Schoonveld

*New York* – Thomas Marks

*Ohio* – Rick Unger

*Ontario* – Darryl Choronzey

*Pennsylvania* – Ed Kissell

*Wisconsin* – Robert Wincek

### Position Statement

Representing a major interest in the aquatic resources of the Great Lakes states and the province of Ontario, the Great Lakes Sport Fishing Council is a confederation of organizations and individuals with a concern for the present and future of sport fishing, our natural resources and the ecosystem in which we live. We encourage the wise use of our resources and a search for the truth about the issues confronting us.

### Inland Seas Angler

## GREAT LAKES BASIN REPORT

### Publisher

Dan Thomas, 630/941-1351

### Editor

Jeanette Thomas

### Webmaster

Chad Lapa

© Copyright 2024 by Great Lakes Basin Publications, the *INLAND SEAS ANGLERS-GREAT LAKES BASIN REPORT* is the newsletter of the Great Lakes Sport Fishing Council, a federally recognized not-for-profit 501(c)(3) organization, and recognized for tax-deductible giving by the federal government.

Opinions expressed are those of the authors and not necessarily those of GLSFC, its officers or staff. Reproduction of any material by paid-up members is encouraged, but appropriate credit must be given. Reproduction by others without written permission is prohibited.

### Address Change:

Send six weeks in advance with old mailing label to GREAT LAKES BASIN REPORT, P.O. Box 297, Elmhurst, IL 60126, (630) 941-1351 or [glslc444@gmail.com](mailto:glslc444@gmail.com).

## Why is the U.S. cracking down on PFAS and what are these ‘forever chemicals’?

On April 10, the Environmental Protection Agency [finalized limits on certain common types of PFAS chemicals](#) in drinking water. It is the first time a nationwide limit on so-called forever chemicals has been imposed on water providers. EPA administrator Michael Regan called it the biggest action the agency has ever taken on PFAS, saying the rule will reduce exposure for 100 million people.

The regulation represents a new era for public health and drinking water. The Biden administration has also proposed new rules that would force utilities to [remove harmful lead pipes](#). It's part of their overall goal to making tap water safer. Utilities are alarmed at these new requirements and the billions of dollars they will cost.

Here are the essential things to know about the family of chemicals and EPA's latest action.

### WHAT ARE PFAS?

PFAS, or perfluoroalkyl and polyfluoroalkyl substances, are a group of chemicals that have been around for decades and have now spread into the nation's air, water and soil. They were manufactured by companies such as 3M, Chemours and others because they were incredibly useful. They helped eggs slide across non-stick frying pans, ensured that firefighting foam suffocates flames and helped clothes withstand the rain and keep people dry. The chemicals resist breaking down, however, which means they stay around in the environment.

### SO, WHAT'S THE PROBLEM?

Environmental activists say that PFAS manufacturers knew about the health harms of PFAS long before they were made public. The same attributes that make the chemicals so valuable—resistance to breakdown—make them hazardous to people.

The regulation represents a new era for public health and drinking

water. The Biden administration has also proposed new rules that would force utilities to remove harmful lead pipes. It's part of their overall goal to make tap water safer.

PFAS accumulate in the body, which is why EPA set their limits for drinking water at four parts per trillion for two common types—PFOA and PFOS—that are phased out of manufacturing but still are present in the environment. Health experts say low doses of the chemicals can build up in the body over time, so even small amounts are a problem.

There's a wide range of health harms now associated with exposure to certain PFAS, many largely phased out. Cases of kidney disease, low birth weight and high cholesterol in addition to certain cancers can be prevented by removing PFAS from water, according to the EPA.

The guidance on PFOA and PFOS has changed dramatically in recent years as scientific understanding has advanced. The EPA in 2016 said the combined amount of the two substances should not exceed 70 parts per trillion. Now the EPA says no amount is safe.

### WHAT DOES THE NEW RULE DO?

In short, the rule sets limits on several common types of PFAS. The EPA says there is enough evidence to limit PFOA and PFOS at the lowest level they can be reliably detected.

For some other types, the limit is 10 parts per trillion, and there are also limits on certain PFAS combinations.

Water providers will have three years to test for PFAS. They'll also need to tell the public if results are too high.

And if results are a concern, utilities have two more years to install treatment. The EPA estimates that six to 10 per cent of water systems will have levels above the EPA's new limits.

As a result of the rule, the EPA says nearly 10,000 fewer deaths will

occur in the coming decades and tens of thousands of severe illnesses will be avoided.

### WHAT ARE PEOPLE SAYING ABOUT IT?

Well, quite a lot.

Environmental and public health groups have argued that limits should have been in place long ago, but they are generally thrilled with the announcement. They like that it sets limits for PFOA and PFOS [at very low levels](#) and that the agency did not agree with some utility groups that wanted a more lenient limit.

They are happy the Biden administration has finally acted to reduce PFAS in tap water, a source of PFAS that's easier to address than others. They acknowledge it will cost a lot for communities to install treatment facilities, but say that billions of dollars are available from the infrastructure law and court settlements will provide billions more.

Water providers are not the ones that put PFAS in the environment, but now they face mandates to remove it. That's going to be a big change for them.

They've said the EPA's \$1.5 billion annual cost estimate is too low, water bills for consumers will go up and the health benefits of the rule aren't big enough, especially at low PFAS concentrations, to justify all the expense.

In addition, they say this rule will hurt small communities that have fewer resources and will have a harder time complying.

Then there are the practical challenges. Utilities say they will struggle to find enough experts and workers and the material needed to remove PFAS.

And there are concerns that consumers who hear about high levels of PFAS in their drinking water might stop consuming tap water altogether, further deteriorating trust in an important public resource. ✧

## The first step to stopping invasive Asian carp is recognizing them

Like enemies at the gate, invasive carp are threatening to populate the Great Lakes. Collectively known as “Asian carps,” bighead, black, grass and silver carp are notorious for outcompeting native fish and destroying habitat, including wetlands. The most imminent threat comes from grass carp, which have reproducing populations in two U.S. tributaries of Lake Erie. So far, bighead, black and silver carp remain confined to the Mississippi River. Should these fish-farm escapees become established in the Great Lakes, they would also severely damage the region’s \$556 million a year sportfishing industry by harming populations of everything from bass to muskies. Anglers can serve as the first line of defense against these aquatic invaders.

Voracious eaters of zooplankton, detritus and small invertebrates, these are a deep-bodied fish with a large, toothless mouth and a very large head, where the eyes are located forward and

low. Bighead can push five feet in length, and weigh more than 80 pounds.

### BLACK CARP

Capable of growing as long as six feet and weighing up to 200 pounds, black carp feed mostly on zooplankton, insect larvae and detritus when they’re young, then primarily mollusks as adults. Elongated with a pointed head and a small toothless mouth, black carp are mostly brown to black, but bluish-grey to white on the belly

### GRASS CARP

Also featuring large scales that appear cross-hatched, grass carp have a short dorsal fin and small eyes that sit in line with the mouth. Unlike non-invasive common carp, their mouth is jawed (not suckered), and they don’t have barbels. Mostly black to olive-brown in color, they can weigh more than 80 pounds and push the tape to five feet. They feed mostly on aquatic plants.

### SILVER CARP

Prone to vaulting out of the water at the sound of a boat motor, silver carp have a large, broad head encompassing almost a third of their size. Deep-bodied, they have a toothless, upturned lower jaw, with low-set eyes. Silver with a slate gray head and a white belly, these phytoplankton-eaters can tip the scales at more than 80 pounds and reach four feet in length

### BIGHEAD CARP

Bighead Carp is a deep-bodied, or wide, fish with a large toothless mouth and very large head. They mature in 2 to 3 years, commonly weighing up to 40 lbs., but can grow to more than 80 lbs. Their eyes are located forward and low on the head, well below the axis of the body. Gill rakers are long, comb-like and close-set allowing the carp to strain planktonic organisms from the water for food. They have also been known to hybridize (cross-breed) with silver carp and produce viable, reproductive offspring. ✧

## DEC proposed regulation to implement black bass fishing tournament permit *Public comments accepted through **June 10***

New York DEC announced the release of a regulatory proposal to implement a fishing tournament permit and reporting system for black bass (largemouth bass and smallmouth bass). The no-cost black bass tournament permitting and reporting system would help identify the distribution and occurrence of black bass tournaments across the state.

Black bass are New York’s most sought-after freshwater sportfish. The number of black bass fishing tournaments has increased significantly over time, but the overall scope and scale of tournament activity in New York is currently unknown, limiting the ability of DEC fisheries biologists to fully understand and manage these important fisheries for the benefit of both tournament and recreational anglers.

The information derived from the free permit system would help DEC respond to issues such as user conflicts, overuse of the resource, and concerns about fish populations. Tournament catch data would also be used by fisheries biologist to further DEC’s understanding of black bass fisheries for improved management. In addition, the proposed regulation would allow for the listing of approved tournaments on DEC’s website. Having this information publicly available would assist tournament organizers with scheduling and inform recreational anglers about when and where tournaments are held.

Highlights include:

- Requiring free permits for black bass fishing tournaments held on or after January 1, 2025;
- Defining a fishing tournament and a fishing tournament director;

- Setting timeframes for permit applications, report submissions, and DEC review; and
- Providing DEC with the ability to place conditions on tournaments.

The [full text and a summary of the proposed regulation](#) are available on DEC’s website and additional information is available on the [Black Bass Fishing Tournament Permit webpage](#). DEC is interested in anglers’ viewpoints and encourages public feedback on this proposal. Comments will be accepted through June 10, 2024, and can be submitted via e-mail to [regulations.fish@dec.ny.gov](mailto:regulations.fish@dec.ny.gov) (subject: "Fishing Tournament Permits Proposal Comments") or via mail to the Inland Fisheries Section, NYSDEC, 625 Broadway, Albany, NY 12233-4753.

**Contact:** Lori Severino, 518-402-8000, [PressOffice@dec.ny.gov](mailto:PressOffice@dec.ny.gov) ✧



## Kenosha club receives thousands of Chinook salmon to be released into Lake Michigan

The Kenosha Sportfishing and Conservation Association has received 40,000 Chinook salmon from the Wisconsin DNR to eventually be released into Lake Michigan. Before the Chinook salmon arrived, the association made several changes to its salmon rearing pond in hopes of having more fish survive while in their care.

Walter Kreuser, president of Kenosha Sportfishing and Conservation, said they now have oxygen lines connected to each one of their four ponds. They are also controlling the flow of the well-water they pump into each of the ponds instead of having it flow freely between all of them. The goal is to keep temperatures low for the Chinooks.

“We are trying to do two things with it,” said Kreuser. “The largest thing is to cut our electricity cost and by doing this, we are trying to naturally aerate the water instead of having to run



a third big air pump to pump oxygen.”

After weeks of preparation, the DNR brought the Chinooks to the Kenosha Sportfishing and Conservation Association, which will take care of them until May.

Aaron Schiller, a DNR fisheries biologist, said every year they raise millions of Chinooks and other types of fish so they can be released into Lake Michigan from Kenosha to Gills Rock.

“By doing programs like this, we hope to imprint better and return at a higher rate to that location so

we stock all of the harbors going up the coast and we try to spread out that stocking so that everybody has fishing opportunities closer to home,” said Schiller.

Kreuser said this group of fish is expected to return to the Kenosha area in three years to spawn.

“In the meantime, they are eating machines,” said Kreuser. “They are eating all of the alewives that are a nuisance fish. They are also eating the gobies at the bottom, which is an invasive species, so these fish here are cleaning up the water for us and a byproduct of that is great fish and great eating.”

While the Chinooks are here, Kreuser said it’s an opportunity to teach the public why these fish are so vital for Wisconsin. To learn more about the Kenosha Sportfishing and Conservation Association, click [here](#). ✧

## Canada, Alaska suspend fishing of Yukon River Chinook salmon for 7 years Feds, Alaska sign new agreement to help the species recover

In a bid to help the recovery of the Yukon River Chinook salmon run, the federal government and the State of Alaska have agreed to implement a seven-year moratorium on fishing the species. The suspension, in effect for one full life cycle of a salmon, includes commercial fishing and recreational angling in the Yukon River main stem and its Canadian tributaries. Representatives from Fisheries and Oceans Canada and the Alaska Department of Fish and Game signed the agreement on April 15.

The number of Chinook salmon crossing the international border into Canadian waters has for years plummeted, with the last two years yielding some of the worst tallies recorded on the Yukon River. Last

year, [about 15,000 of the fish](#) made it to Eagle, Alaska, near the Yukon border. It was even worse in 2022. A minimum of 42,500 Chinook are supposed to get to their Canadian spawning waters to meet conservation goals.

Calling the run “depressed,” the new agreement states the salmon are under immense pressure from things like habitat degradation linked to resource and [hydroelectric development](#), hatchery production, and climate change. The agreement sets a new target of 71,000 Canadian-origin fish reaching their spawning grounds, for the next seven years. Hitting that target includes reducing bycatch associated with, for instance, the offshore pollock fishery,

restoring in-river habitats, and launching more research into [diseases that could be contributing to low survival rates](#). The agreement also says the governments will seek more funding for restoring the run.

Steve Gotch, a senior director with Fisheries and Oceans Canada, said the fishing suspension is a big one because as much as 95 per cent of the migrating Chinook are caught by commercial fisheries on the river in both Alaska and Canada, or in the river's estuary. The rest are caught in the ocean. “There just aren't enough fish to really accommodate any harvest and we need every one of those Chinook salmon to reach the spawning ground to help rebuild this population into the future,” he said. ✧

## The sturgeon spawn is on!

As of April 13, 2024, sturgeon have begun spawning in certain locations.

**Princeton Dam, Upper Fox River:** No sturgeon have been observed yet.

**Sturgeon Trail, New London, Wolf River:** Sturgeon are actively spawning! DNR crews will likely be out sampling at this location sometime today.

**Bamboo Bend, Shiocton, Wolf River:** Sturgeon are actively spawning! DNR crews will likely be out sampling at this location sometime today.

**Shawano Dam, Wolf River:** Some sturgeon have been spotted, but no spawning activity has started yet.

**De Pere Dam, Lower Fox River:** No sturgeon have been observed yet, but they could start showing up in the next couple of weeks.

**Peshtigo Dam, Peshtigo River:** A few sturgeon were seen from the viewing platform in Peshtigo, along with a mix of walleyes and suckers spawning.

Sturgeon patterns can change rapidly. Though they may be at one location in the morning, they may not be that evening. As a result, if you'd like to see them at a specific location, make sure you get out and see them soon. Updates will be made on our sturgeon spawning webpage as changes occur. Stay informed: <https://dnr.wisconsin.gov/topic/Fishing/sturgeon/SturgeonSpawning.html>

If you do head out during the spawn, don't forget to grab a pair of polarized sunglasses. This will help you see the lake sturgeon in the water.

Can't make it out to see them in person? Check out the underwater cameras at [Bamboo Bend at Shiocton](#) and at [the Shawano Dam](#).

In a couple weeks, you may also see lake sturgeon spawning on the [lower Fox River in De Pere](#), the [lower Peshtigo River in Peshtigo](#) and the Chippewa River. Because sturgeon spawn based on many environmental factors, primarily water temperatures, sturgeon patterns can change rapidly.

*continued*

## Changes to recreational striped bass fishing regulations

DEC has announced new recreational fishing regulations for striped bass in the Hudson River. Effective May 1, striped bass caught in the Hudson River and tributaries north of the George Washington Bridge may only be kept if they are between 23" - 28" long. The Hudson River striped bass fishing season and bag limit remains unchanged, with targeted angling allowed between April 1 and November 30 and a one fish bag limit.

The new regulations, required and approved by the Atlantic States Marine Fisheries Commission (ASMFC), reduce recreational striped bass harvests by 14.1% while balancing the preferences of anglers. This action was taken in response to the large increase in the coastal recreational harvest of striped bass in 2022, and repeated years of poor reproductive success in the Chesapeake Bay. Since November 2023, DEC has been conducting outreach to New York fishing stakeholders on potential changes to striped bass regulations through public meetings, press releases, social media posts, and electronic newsletters. For current fishing limits, check [DEC's Recreational Saltwater Fishing Regulations](#).

Anglers must enroll in the annual no-fee [Recreational Marine Fishing Registry](#) before fishing New York's Marine and Coastal District waters or when fishing in the Hudson River and its tributaries for "migratory fish of the sea." Anglers can enroll for the registry online, by phone (866-933-2257, option 2), or by visiting a license-issuing agent location. ✧



*Continued from column 1*  
[Spawning locations will be posted to the DNR's Lake Sturgeon Spawning webpage](#) as sturgeon are spotted. ✧

## DNR publishes 2023 Fish Stocking Summary

### *Over 6 Million Fish Stocked Across Wisconsin Waters*

**MADISON, Wis.** – The Wisconsin DNR released the 2023 fish stocking numbers for inland waterbodies and the Great Lakes. The DNR raises millions of yearling and fingerling fish to stock into Wisconsin waters every year. Over 6 million fish were stocked in 2023, which helped fulfill the quotas submitted by county fisheries biologists.

DNR fish crews have stocked fish in inland waters, Lake Michigan, Lake Superior and their tributaries across the state in 2023.

The following summaries provide total fish stocked by species in Wisconsin waters in 2023:

#### **Inland Waters**

- 204,467 brook trout
- 324,422 brown trout
- 90,565 lake trout
- 80 largemouth bass
- 35,786 muskellunge
- 108,969 northern pike
- 251,508 rainbow trout
- 1,964,192 walleye

#### **Lake Michigan**

- 49,998 brook trout
- 455,253 brown trout
- 1,386,492 Chinook salmon
- 500,189 coho salmon
- 591 lake sturgeon
- 7,681 muskellunge
- 522,852 rainbow trout

#### **Lake Superior**

- 174,906 brown trout
- 73,251 lake trout
- 40,816 splake
- 100,000 walleye

This data does not include the stocking of newly hatched fry, fish stocked by private fish farms under a stocking permit, fish stocked by the USFWS or fish stocked by our tribal partners. Visit the DNR's [Fish Stocking database](#) to view stocking data from previous years or specific waters. ✧

## Register now for BOW summer workshop at Bay Cliff Health Camp in Marquette County

Registration is open for this summer's Becoming an Outdoors Woman program, which is set for May 31–June 2, in Marquette County, MI. This will mark the 27th annual summer BOW gathering for women, 18 and older, who are seeking an opportunity to improve their outdoor skills in a relaxed, noncompetitive atmosphere.

“Becoming an Outdoors Woman is a program where each individual is encouraged to learn at her own pace,” said Michelle Douglas, BOW program coordinator. “The emphasis is on the enjoyment, fun and camaraderie of outdoor activities and sharing in the success of one another.”

The summer BOW program is sponsored by the DNR and offers instruction in more than two dozen different types of activities, including

kayaking, basic land navigation, lake fishing, mountain biking, shooting sports, boating and boating safety, birding, outdoor photography and backpacking.

“Volunteer BOW instructors provide basic and advanced teaching that is tailored to each participant's individual ability, helping participants learn the basics in a short amount of time,” Douglas said.

BOW participants stay and take their classes at the Bay Cliff Health Camp, a universally accessible facility overlooking Lake Superior, which is situated about 30 miles north of Marquette at Big Bay.

Participants will be housed in a dorm-style facility with amenities including a sauna, hiking and biking trails, along

with easy access to northern hardwood forests and Lake Superior.

“The summer program typically fills quickly, so early registration is encouraged,” Douglas said. “We do maintain a waiting list.”

The \$300 registration fee includes all food and lodging, as well as most equipment and supplies.

Class information and registration materials are available online at [Michigan.gov/BOW](https://Michigan.gov/BOW). Registrations must be mailed, with payment, to the Marquette Customer Service Center stated on the form.

For more information on the BOW program, contact Michelle Douglas at the DNR Incident Coordination Center in Harvey at 906-235-2076, or by email at [DNRBOW@Michigan.gov](mailto:DNRBOW@Michigan.gov).

✧

## Apply now to join Ohio's Conservation Teen Advisory Council

**COLUMBUS, Ohio** – The Ohio DNR is calling on teenage conservationists to join a team of high school leaders for the Conservation Teen Advisory Council (ConTAC). Highly motivated students who are interested in natural resource conservation, outdoor outreach, wildlife, or simply making a positive impact in their state would make the perfect applicants for ConTAC.

ODNR has spent the last 75 years creating a legacy of conservation,” ODNR Director Mary Mertz said. “ConTAC is a way for teenagers to build upon that legacy and become future leaders who address issues that face our great outdoors.”

ConTAC gives students a chance to meet new peers from across the state with similar interests. Through monthly meetings and project work,

members will develop and implement innovative and practical ideas that empower young people to protect and preserve Ohio's natural resources. They will also provide feedback and



make recommendations to enhance outdoor outreach. Council members also get the chance to explore careers in the natural resources sector and develop valuable networking and leadership skills.

Students must be entering grades 9–12 for the 2024–2025 school year to apply. Selections of the 2024–2025 ConTAC class will be made early summer 2024.

Learn more about the program at:

[ConTAC webpage](#).

Additional questions can be directed to William Armbruster at

[william.armbruster@dnr.ohio.gov](mailto:william.armbruster@dnr.ohio.gov).

To apply, fill out the [ConTAC Membership Application](#). The deadline to apply is June 5, 2024. ✧



## More summer Beyond BOW events

The Michigan DNR Becoming an Outdoors-Woman program will offer four Beyond BOW events this summer at various venues in Washtenaw, Roscommon and Marquette counties.

The BOW program gives



women, 18 and older, an opportunity to improve their outdoors skills in a relaxed, noncompetitive atmosphere. In addition to being fun to participate in, the BOW and Beyond BOW classes offer important instruction on numerous outdoor skills, safety and appropriate outdoor clothing attire.

"These smaller, Beyond BOW events provide great opportunities to experience learning in a small group environment," said Michelle Douglas, BOW coordinator. "We are very pleased to be offering these Beyond BOW events across Michigan."

Here is information on each of the events:

### ► **Friday, June 21, 5-8 p.m. EDT, Beyond BOW Outdoor Gear Swap, Ypsilanti**

**Description:** Join local outdoorswomen for a social evening. Go home filled up with friendship, dinner, and new-to-you gear for the seasons ahead.

**No Firearms or other "weapons" at this gear swap.** The intention is to "swap" items, if the sale of high-value items occurs it will be exclusively a transaction directly between individuals and **not** BOW, the Michigan DNR or its affiliates.

**Location:** Ypsilanti Township, MI  
**Required Items:** Bring a dish to pass (nothing fancy, please list ingredients) and all the gently used outdoor gear that you have that never fit, or you no longer need, etc. Label your items with your last name to ensure you can swap effectively and take home what remains at the end of the evening.

### ► **Sunday, July 7, 2024, 10 – 4 p.m. EDT Self Confidence, Negaunee, MI**

**Description:** Do you enjoy hiking, hunting or recreating in remote or out-of-the-way destinations, but have felt apprehensive in doing so by yourself? This class is designed to give you the knowledge and skills that will boost your self-confidence when recreating outdoors by yourself by learning some defensive techniques. We will talk through some basic information (handouts will be provided) then move on to learn some physical defense techniques.

**Activity Level:** Easy/Moderate. Each person can adjust their activity level to their comfort/physical abilities. No specific skills, experience and/or equipment needed.  
**Required Items:** **Packed lunch, comfortable clothes, gym shoes, water bottle and a learning mindset.**

### ► **Sunday, July 14, 2024, 7-9 a.m. EDT, Coffee Six Ways from Sunday, Chelsea, MI**

**Description:** Join a group of local, coffee-loving, outdoorswomen to learn more than six ways to make coffee outdoors. Sample a variety of coffees and methods and take a hike in the park.

**Location:** Washtenaw County Park.

**Required Items:** Please be sure to wear closed-toed, hiking shoes or boots, and bring along plenty of water and personal snacks if needed. Insect repellent and sun protection are also good ideas.

### ► **Saturday, Aug. 17, 2024, 10 – 4 p.m. EDT Self Confidence, Roscommon, MI**

**Description:** Do you enjoy hiking, hunting, or recreating in remote or out-of-the-way destinations, but have felt apprehensive to do so by yourself? This class is designed to give you the knowledge and skills that will boost your self-confidence when recreating outdoors by yourself by learning some defensive techniques. We will talk through some basic information (handouts will be provided) then move on to



learn some physical defense techniques.

**Activity Level:** Easy/Moderate. Each person can adjust their activity level to their comfort/physical abilities. No specific skills, experience, and/or equipment needed.

**Required Items:** Packed lunch, comfortable clothes, gym shoes, water bottle, and a learning mindset!

Registration materials for the Beyond BOW workshops are available at [Michigan.gov/BOW](https://Michigan.gov/BOW).

### ► **The traditional BOW weekend workshop will be held at the Bay Cliff Health Camp in Big Bay, May 31- June 2, 2024.**

Registration materials for the summer event are on the website. To keep up with the latest on BOW, sign up for email notifications at [Michigan.gov/BOW](https://Michigan.gov/BOW). You can also follow [BOW on Facebook](#) or [Instagram](#).

**For questions, contact BOW coordinator at [DNRBOW@Michigan.gov](mailto:DNRBOW@Michigan.gov).** ✨



## New ballast water findings lead to new questions on the Great Lakes

It's estimated that nearly two-thirds of aquatic invasive species currently in the Great Lakes hitched a ride in the ballast water of cargo ships crossing the ocean. That's because ships take in ballast water at one port, often to help with stability, then discharge that water (and the organisms in it) at another port. Species like zebra mussels, Quagga mussels and round gobies all made their way here in ballast water from ocean freighters, also known as "salties."

Salties' ballast water is now regulated, with freighters required to rinse their ballast before entering the Great Lakes system. The move has helped dramatically slow the introduction of new invasive species to the lakes.

But the same isn't true of lakers, or ships that move exclusively within the Great Lakes. While the ballast water of these ships isn't introducing new species, there's a good chance it's spreading invasive species throughout the lakes. For example, one 2017 study sampled ballast water being discharged from lakers in ports on western Lake Superior. Scientists found five aquatic invasive species that hadn't previously been reported in Superior.

But laker ballast water remains largely unregulated for logistical and financial reasons.

But treating ballast from lakers faces different challenges than ocean freighters. For one, treatment can't rely on the naturally sterilizing properties of saltwater. Plus, the cost of treatment is also a hurdle, especially considering how small the laker fleet is (only around 50 ships).

So developing technology to treat ballast water on lakers has been slow compared to ocean-going vessels. And [recent findings](#) from the Lake Superior Research Institute at the University of Wisconsin-Superior

could add another hiccup. Research has mostly focused on larger, more active organisms being moved around in ballast water—fully-fledged zooplankton like invasive spiny water fleas.

"But nobody's really addressed the reproductive stages," said Matt TenEyck, director of the Lake Superior Research Institute. "[These organisms] all produce eggs of some sort, or some sort of resting stage. [Those], as well, could be taken up into the water and then moved around."

Their study, which was published earlier this year in the *Journal of Great Lakes Research*, confirmed those suspicions. "I think it's tens of thousands ... that we found," TenEyck said. Samples from the ballast water of lakers on Lakes Michigan, Huron and Erie scooped up lots of eggs and other more dormant, inactive life stages of these organisms.

Most of them were native species, or non-native and invasive species that are already well-established. But TenEyck says they're good models for potential new invasive organisms, who have similar eggs and resting stages. "So the point behind that paper was to say, 'Yep, they're being moved. Now what?'" he said. Now, scientists need to figure out if those tens of thousands of eggs and resting-stage animals are actually surviving the trip in ballast water. And when they arrive, are they able to hatch and live in their new environment?

"We think it'll cause some risk to the receiving environment," TenEyck said. "But we just, at this point, don't know what that risk is." Determining that risk matters. It could help us better understand how microscopic invasives are being moved around by lakers. But it would also give researchers more insight into what makes a ballast water treatment effective.

"By the time we're done here now, in about four years, we hope to have a really good understanding of treatment technologies able to work in Great Lakes water," TenEyck said. "And then maybe from there, a solution can be created." But it'll be up to regulators to determine if those solutions are actually required. ✧



## DNR to host meeting on Lake Michigan lake whitefish trawl rule

**MADISON, Wis.** – The Wisconsin DNR and the [Lake Michigan Fisheries Forum](#) will host a public meeting at 6 p.m. May 29, at Lakeshore Technical College to discuss current and future rules governing the trawling for lake whitefish in Lake Michigan.

Attendees can [join virtually or in person](#) to learn about the DNR's onboard camera monitoring efforts over the past four years. The public will also be able to discuss and comment on the current rules and proposed changes being considered for the start of the 2026 fishing season.

The current rule allows commercial fishers to harvest lake whitefish by trawl in designated areas in Lake Michigan, provided they have an onboard camera system, use a specific trawl and fish during certain times of the year. Other provisions will be discussed at the meeting.

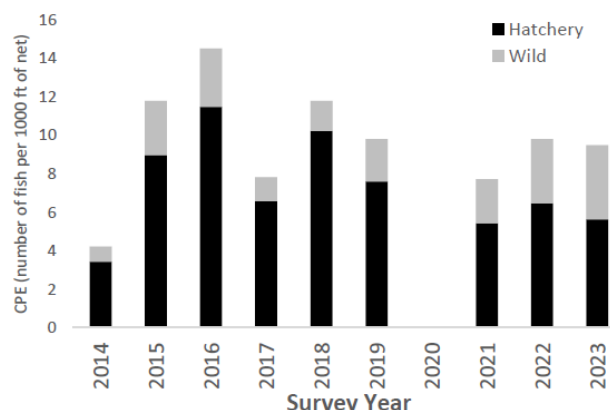
The DNR's [Lake Michigan Fisheries Forum webpage](#) has an agenda and more information for this meeting, as well as agendas and topics from previous meetings. All members of the public and forum are invited to attend.

The forum focuses on raising awareness of Lake Michigan fisheries issues and provides an opportunity for discussion, feedback and comment on topics of interest. ✧

## IL Lake Michigan 2023 field sampling activities

*Continued from page 1*

### ► 2023 Fish Stocking Totals and Changes in Stocking Plans for 2024 - continued from page 1



**Fig 1 Spring assessment net catches of hatchery-reared and wild lake trout, 2014-2023**

Due to poor survival of eggs and fry from the 2023 Lake Michigan egg take, there will be substantial reductions in the number of Chinook and Coho Salmon fingerlings available for stocking in Illinois waters this spring. To maintain the total allocated salmonid stocking quota for Illinois, LMP staff have been working with Jake Wolf Hatchery and FWS staff to obtain, raise and mark additional Skamania-strain steelhead and Arlee-strain Rainbow Trout for release in 2024. The current stocking targets are shown alongside stocking plan changes for 2024.

No changes in the number of Lake Trout (120,000) or Brown Trout (110,000) are anticipated in 2024.

Species	Original Targets	New 2024 Targets
Coho Salmon	300,000	85,000
Chinook Salmon	210,000	150,000
Skamania Steelhead	75,000	150,000
Arlee Rainbow	60,000	305,000

### ► Wild Lake Trout Abundance Continues to Increase

Catches of Lake Trout in spring assessment nets were consistent with recent years and showed increases in naturally reproduced fish that continued to offset declines in the abundance of hatchery-reared fish. Fall assessment net catches remain inconsistent due to warm bottom temperatures that delay the arrival of Lake Trout to their spawning grounds at deep offshore reefs.

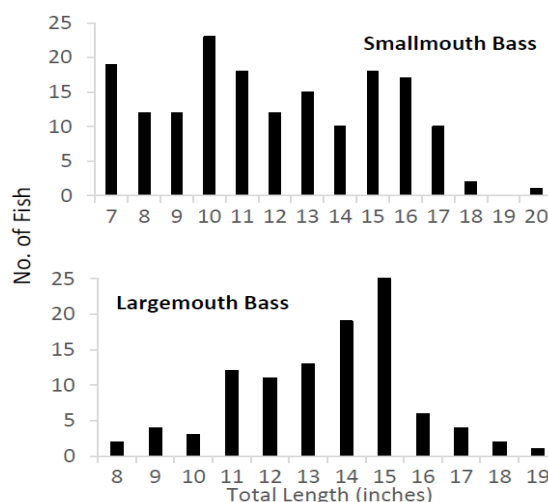
### ► Alewife Biomass Increases in Lakewide Prey Fish Surveys

Forage assessments from the USGS Great Lakes Science Center and agency partners showed an increase in yearling and older Alewife in both the acoustic and fall bottom trawl surveys, although the trawl estimate remained low compared to earlier years in the time series (1973-2014). Large numbers of young-of-year (YOY) Alewife were collected, suggesting a strong 2023 Alewife year class. While the age structure of sampled Alewife was still dominated by younger age groups (ages 0-3), Alewives up to age 7 were sampled this past year.

### ► The Illinois Nearshore Bass Fishery Continues to Thrive

The estimated 16,604 Smallmouth Bass and 1,296 Largemouth Bass released by anglers during the 2022 INHS creel survey illustrates a strong catch-and-release fishery continues to exist in Illinois waters of Lake Michigan. Based on 2023 LMP electrofishing assessments, adult Smallmouth Bass abundance increased at North Point Marina and Waukegan South Harbor.

Although catch rate along the shoreline at Calumet Harbor decreased slightly last year, it was still the second highest catch-per-effort reported since 2006. Largemouth Bass abundance also increased at North Point Marina but declined at Jackson Inner Harbor, which is the sampled harbor typically having the highest Largemouth Bass catch rates. The length distribution of Smallmouth Bass was excellent with 61% of fish  $\geq 11$  inches, 37%  $\geq 14$  inches, 9%  $\geq 17$  inches, and 1%  $\geq 20$  inches. Largemouth Bass were also of good size with 82% of fish  $\geq 12$  inches and 43%  $\geq 15$  inches.



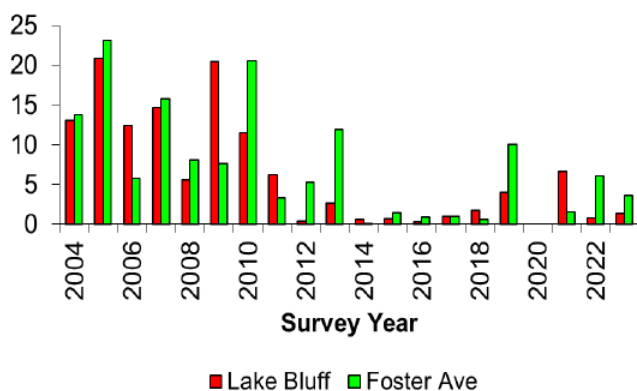
**Fig 2 Length Distribution of Bass in Illinois Waters of Lake Michigan during 2023**

### ► **Yellow Perch Catches Remain Low in Assessment Surveys; Young Perch Show Good Growth**

Perch catches in graded mesh assessment nets remained low in 2023, showing a slight decrease from 2022. Recent catches were higher off Chicago than at more northerly Lake Bluff stations. Sport catches of Yellow Perch also remain low with harvest in the winter being higher than in the summer.

Perch catches in graded mesh assessment nets remained low in 2023, showing a slight decrease from 2022. Recent catches were higher off Chicago than at more northerly Lake Bluff stations. Sport catches of Yellow Perch also remain low with harvest in the winter being higher than in the summer.

Recruitment of young perch remains inconsistent from year to year, resulting in low numbers of fish entering the adult population. However, growth rates for Yellow Perch remain high, as fish are reaching catchable size in just a few years. Faster perch growth may be related to the high abundance of Round Goby in Southern Lake Michigan. Aging of the 2023 assessment catch shows that the population is currently made up of mostly younger fish (ages 1-3).



**Fig 3 Yellow Perch CPEs for Lake Bluff and Foster Ave, 2004-2023.**

### ► **New In-Lake Shoreline Protection Structures at Illinois Beach State Park**



A series of stone breakwaters are being installed off Illinois Beach State Park to reduce ongoing shoreline erosion. The breakwaters are designed to retain the large volumes of sand that are being added to the beaches inshore of the breakwaters to preserve valuable public beach access on the Illinois Lake Michigan shoreline. The Illinois DNR Coastal Management Program has coordinated for the inclusion of fish habitat elements into the construction of the breakwaters. The Illinois Natural History Survey is conducting research into the use of these types of structures by fish and other aquatic organisms, while the Illinois State Geological Survey is studying their effects on sand movement and hydrologic processes.

### ► **LMP Welcomes new Team Member**

William Stacy-Duffy joined the Lake Michigan Program in March as a new project specialist focusing on Lake Trout. Will has been collaborating with IDNR biologists for the past 5 years through his position as an aquatic ecologist with the Illinois Natural History Survey. His research focused on spawning habitat at Lake Michigan's offshore reefs and developing an aging protocol for sampled Lake Trout. Welcome aboard Will!

Many of our LMP fishery reports can be found on the Lake Michigan pages of the [www.ifishillinois.org](http://www.ifishillinois.org) website along with specific information on stocking sites and numbers. Sport fish creel and other Lake Michigan research reports from the Illinois Natural History Survey (INHS) are available on UIUC's [Ideals.illinois.edu](http://Ideals.illinois.edu) website. Any comments or questions can be emailed to [Vic.Santucci@illinois.gov](mailto:Vic.Santucci@illinois.gov) or directed to the Lake Michigan Program office at or 847-294-4134. ✧

## In Flanders Fields

In Flanders Fields, the poppies blow  
(grow)

Between the crosses, row on row,  
That mark our place; and in the sky  
The larks, still bravely singing, fly  
Scarce heard amid the guns below.

We are the dead. Short days ago  
We lived, felt dawn, saw sunset glow,

Loved and were loved, and now we  
lie,  
In Flanders fields

Take up our quarrel with the foe:  
To you from failing hands we throw  
The torch; be yours to hold it high.

If ye break faith with us who die  
We shall not sleep, though poppies  
grow

In Flanders fields.





## Tips for a safe boating season

Fishing season is open and summer is right around the corner. In other words, it's boating season! To make the most of your time on the water, be sure to check all of your boat's equipment and review basic safety tips before your next trip to the launch.

Check that your boat and trailer lights and safety equipment are in working order to save time and frustration at the boat launch. A full checklist of required equipment is available on the last page of the [Wisconsin Boating Laws and Responsibilities Handbook](#).

It's also important to inspect your life jackets for wear and tear. Most inflatable jackets should be checked for leaks every six months, and the cartridge should be checked before each use. The jacket manufacturer's website should have instructions on how to check your life jacket status.

Follow the safety tips below and enjoy Wisconsin's great lakes and rivers with family and friends.

[Sign up now to take an online boater education course.](#)

- Always wear a properly fitted and fastened life jacket when you're on or near the water. A life jacket will keep you on top of the water if you walk off an unexpected drop-off, a wave or current

overpower you or you fall out of a boat.

- Enjoy the waters sober and know your limits. Alcohol blurs a person's judgment, reaction time and abilities.
- River shorelines and sandbars pose unseen dangers. Higher, fast-moving water can tax an individual's boating, and swimming skills.
- Keep an eye on the weather and always tell someone where you are going.
- Be ready for the unexpected, and always wear your life jacket.

[Learn more boating safety tips on the DNR's Boat Safety webpage.](#) ✧

## **Other Breaking News Items:** **(Click on title or URL to read full article)**

### [Bipartisan bill extends Great Lakes Restoration Initiative, increases funding](#)

U.S. Senators Debbie Stabenow, co-chair of the U.S. Senate Great Lakes Task Force, and Gary Peters applauded the Senate Committee on Environment and Public Works passage of its bipartisan Great Lakes Restoration Initiative Act of 2024. The legislation would extend the program for another five years through 2031 and increase annual funding authorization from \$475 million to \$500 million.

### [Pennsylvania beach selected as site to test renewable energy tech](#)

A renewable energy company announced it will use the shores of Lake Erie in Harborcreek Township, Pennsylvania, as the spot to test how wave energy converters hold up to different marine conditions while also focusing on sustainability, energy efficiency and potential impacts on local ecosystems.

### [Sea lamprey control planned for Lake Michigan tributary](#)

U.S. Fish and Wildlife Service personnel will apply lampricides to the Cedar River in Michigan to kill sea lamprey larvae burrowed in the stream bottom. Applications will be conducted between May 21-30 in accordance with State of Michigan permits

### [After 15 years of the Great Lakes Compact, report urges state action to address shortcomings](#)

More than 15 years after the Great Lakes Compact was signed, For Love of Water (FLOW), a Great Lakes advocacy organization, has reevaluated the compact and its goal of protecting lake water from being diverted by canals, aqueducts, pipelines, vessels, tunnels or tanker trucks.

### [Great Lakes Indian Fish and Wildlife Commission requests support for Buffalo Reef stamp sand removal](#)

The Great Lakes Indian Fish and Wildlife Commission is looking for support on a proposed Buffalo Reef stamp sand removal plan. Mining stamp sands are encroaching on the 22,000-foot reef on Lake Superior near Houghton, Michigan. The reef serves as spawning grounds for whitefish and trout.

### [Robotic beach cleaner deployed to tackle Great Lakes plastic pollution](#)

A robotic beach cleaning device has been procured to remove plastic waste along Lake Michigan beaches and inland lake beaches in Michigan. Currently, 26 beaches are slated to benefit from the robot's services.

End

