



## Gov. calls for fee increases for outdoor recreation

Minnesota's world-class natural resources and outdoor recreation opportunities would be maintained and improved under a budget being proposed by Gov. Mark Dayton.

Minnesota has great fishing, access to millions of acres of public hunting lands and a growing deer herd, and a state park and trail system currently experiencing annual double-digit growth in popularity. Minnesotans enjoy 75 state park and recreational areas; 23,800 miles of snowmobile, cross-country skiing and all-terrain vehicle trails, and nearly 2,000 public water access sites and fishing piers across the state.

Minnesotans also count on abundant clean lakes, rivers and groundwater and healthy forests for a

good quality of life and to support tourism and industry.

However, these quality of life amenities are threatened in the near future with inadequate funding. The DNR funds many of these activities through licenses and user fees—many of which are facing deficits in the next few years.

Without raising these user fees—some of which have not been increased for more than a decade—Minnesotans and visitors will see deteriorating parks and trail facilities and reduced visitor assistance. There will be declining fishing opportunity and quality, less habitat management on wildlife areas and other public lands and waters, fewer hunting opportunities, and fewer conservation officers to protect resources from poaching and misuse.

The governor's budget also seeks to make key investments from the state's General Fund to replant forests, conduct studies to help protect water resources, and upgrade the DNR's technology.

"Minnesotans have come to expect top-shelf parks, trails, fishing and hunting experiences, clean water and healthy forests. These are an essential part of our outdoors culture and key to our state's economic future," said DNR Commissioner Tom Landwehr. Landwehr said the governor's proposed DNR budget seeks to restore funding to programs that are slipping toward deficits, maintain other programs at current levels and make strategic investments for the future.

Only about 15% of the DNR's budget comes from the state's general fund, but it is a critical part of the agency's budget, Landwehr said. The vast majority of state DNR funding (85%) comes from user fees, sales of licenses and permits, and dedicated funds from the Legacy amendment and the state lottery. For more details: [Gov proposal to bolster Minnesota outdoor recreation](#).

To review elements of Dayton's DNR budget proposal: [mndnr.gov/aboutdnr/legislativeinfo](http://mndnr.gov/aboutdnr/legislativeinfo).  
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## Annual Lake Committee meetings

### March 20-24

The annual Lake Committee meetings of the Great Lakes Fishery Commission are scheduled for March 20-24 in Ypsilanti, MI, at the Ann Arbor Marriott Hotel at Eagle Crest; 1275 S Huron St.

The Lake Michigan Committee meets on Monday & Tuesday, March 20-21; Lake Huron on Tuesday, March 21; Lake Superior on Tuesday &

Wednesday, March 21-22; Lake Ontario Thursday, March 23; and Lake Erie Thursday & Friday, March 23 -24.

You are welcome to attend.

The Great Lakes Sport Fishing Council will again post summaries of the presentations given that week. ◇

# PA Trout Stocking Schedules

HARRISBURG, Pa. – The Pennsylvania Fish and Boat Commission (PFBC) announced that the 2017 adult trout stocking schedules are now available online and on the PFBC’s “FishBoatPA” mobile app.

Anglers can easily search the trout stocking schedules for locations and dates of interest. To view the list, simply go to [www.fishandboat.com](http://www.fishandboat.com), click on the link “Fish” in the upper right corner, then select Trout Stocking Schedules. From there, select a county and enter start and end dates from the calendars at the top of the page. Then press “Go.” For anglers with smartphones, an even easier way to view the schedules is through the FishBoatPA app, which is available for free from the Apple App and Google Play stores.

Included in this year’s stocking lists are the Keystone Select Stocked Trout Waters, a program where 14 waters across the state will be stocked with large 14-20” trout. Approximately 4,500 large trout will be distributed among the 14 waters at a rate of 175 to 225 per mile, which is comparable to the numbers of similarly sized fish in Pennsylvania’s best wild trout waters.

The program was launched last year with eight waters. This year six new waters are being added. Select [here](#) to see the list of waters.

The 2017 season will open **March 25** for the Mentored Youth Trout Day program in 18 southeastern counties, including: Adams, Berks, Bucks, Chester, Cumberland, Dauphin, Delaware, Franklin, Juniata, Lancaster, Lebanon, Lehigh, Montgomery, Northampton, Perry, Philadelphia, Schuylkill and York.

The following weekend—April 1—kicks off the Regional Opening Day of Trout Season in the same 18 southeastern counties.

A second Mentored Youth Day will be held on **April 8**, the Saturday before the April 15 regular opening day of trout season.

To participate in the mentored

youth program, adult anglers (16 years or older) must have a valid fishing license and trout permit and be accompanied by a youth. Youth anglers must obtain a free PFBC-issued permit, or a voluntary youth fishing license (only \$2.90 including all fees). Both are available at [www.GoneFishingPA.com](http://www.GoneFishingPA.com) or at any of the more than 900 licensing agents across the state.

For every voluntary youth license sold, the PFBC receives approximately \$5 in federal revenue from the USFWS’s Sport Fish Restoration Act program, which provides funds to states based on a formula that includes the number of licenses a state sells.

The PFBC annually stocks 3.15 million adult trout in more than 720 streams and 120 lakes open to public angling. These figures include 2 million rainbow trout; 640,000 brown trout; and 500,000 brook trout. As with past practice, the average size of the trout produced for stocking is 11 inches in length.

In addition to these fish, the PFBC plans to stock about 8,700 trophy golden rainbow trout that weigh an average of 1.5 pounds and measure at least 14 inches long. Also, PFBC cooperative nurseries run by sportsmen’s clubs across the state will add another 1 million trout to waters open to public angling.

A majority of the trout waters will be stocked in advance of the mentored youth days. But some of the waters may not be stocked in time due to weather, water conditions and scheduling logistics. Also, special regulation areas, like Catch and Release Fly-Fishing Only or Delayed Harvest Artificial Lures Only, are not included in the mentored youth program.

Changes for the 2017 season include new waters, waters restored to the stocking program, and the removal of waters from the stocking program. **2017 Adult Trout Stocking Program Changes Trout Stocking Schedules** ✧



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#### 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

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# Space still available for DNR's Hard Water School ice fishing class in Cadillac **Feb. 25**

Registration now open for upcoming steelhead, walleye and bass fishing clinics

The Carl T. Johnson Hunt and Fish Center in Cadillac, Michigan, will offer a DNR Outdoor Skills Academy's Hard Water School ice-fishing event Saturday, Feb. 25. Starting at 9 a.m., the class will cover:

- How to set up equipment.
- How and where to fish.
- When to be out on the ice.
- How to fish with electronics.
- How to stay safe on the ice and follow rules and regulations.

The class will focus on techniques for walleye, taught by pro fisherman Steve Berry from Clam Outdoors and Vexilar, along with Matt Peterson from Fish Bones Custom Lures; techniques for pan fish, taught by pro fisherman Norm Smith, the DNR's Dennis Hewitt and Dave Young from HT Enterprise; and setting polar tip-ups to target monster northern pike, taught by the DNR's Ed Shaw.

In addition, the DNR Outdoor Skills Academy pro-staff will be on hand to teach a variety of tactics on the ice.

"We will spend the first part of the day gearing up and teaching seminars, and then after lunch we will hit the ice and spend the rest of the day fishing," said Shaw. "After dark, we'll meet back up at the Carl T. Johnson Center to go over the day's catch and to review what everyone learned, and then head to dinner."

Shaw said there will be a warming hut, augers and some shanties available on a first-come, first-served basis, but participants are encouraged to bring their own equipment, if possible.

All ages are welcome, but the Hard Water School is best suited for those at least 8 years of age and older. Participants are responsible for their own dinner costs.

Sunday is available as an optional fishing day; those interested in fishing Sunday are asked to let

coordinators know at time of registration.

## Registration and lodging

The Hard Water School class costs \$30 per person and includes lunch. Clam Outdoors, Vexilar, HT Enterprises and Salmo USA have generously donated door prizes for the class. Register at [www.michigan.gov/outdoorskills](http://www.michigan.gov/outdoorskills). No refunds will be given within two weeks of the class. This allows time to back-fill seats and put together class materials.

Nearby lodging is available at Evergreen Resort, Days Inn, Holiday Inn or Pilgrims Village, to name just a few.

A [Recreation Passport](#) is required for entry into Mitchell State Park, where the Carl T. Johnson Hunt and Fish Center is located.

Info: contact Ed Shaw at 231-779-1321 or [shawe@michigan.gov](mailto:shawe@michigan.gov).

## Other upcoming fishing clinics

Registration is now open for these Outdoor Skills Academy classes:

### **Steelhead Clinic, March 25-26 (45 seats available)**

This class, taught by instructors who have more than 30 years of experience fishing steelhead in Michigan, is for both beginners and advanced anglers. Participants will spend one day in the classroom and the next day on the river.

### **Open Water Walleye Clinic, May 7 (60 seats available)**

This three- to four-hour class will give an overview of how Outdoor Skills Academy pro-staffers Steve Berry from Church Tackle and Matt Peterson from Fishbone Custom Lures spend their day chasing trophy walleye. This class will cover everything from which rod and reel to use to how to use your electronics. DNR staff members will be on hand to answer rules and regulations questions.

### **Fly Fishing Clinic, May 20 and June 17 (25 seats available in each session)**

In this clinic for beginners, Outdoor Skills Academy pro-staffers will present the basics of fly fishing, including demonstrations and instruction for various fly casts and instruction on fly selection based on target species. After the classroom session, the class will move outside to the canal for the hands-on portion.

### **Beginners Bass Fishing Clinic, May 13 (60 seats available)**

In this class for beginners, the Outdoor Skills Academy pro-staff will present various strategies and techniques for chasing northern Michigan bass. This clinic will cover a wide range of techniques for pursuing both smallmouth and largemouth bass, but will focus on the use of various plastic presentations, including Texas rigging, Carolina rigging, tube jigs, etc.

For more information or to register for any of these classes, visit [www.michigan.gov/outdoorskills](http://www.michigan.gov/outdoorskills). ✦

## DNR to stock rainbows at Spring Mill Lake

Indiana will once again stock Spring Mill Lake in Spring Mill State Park with rainbow trout. The 26-acre lake has a history of rainbow trout stockings. However, in 2006 the DNR stopped stocking Spring Mill Lake because it had become filled with sediment and public access and interest in fishing was limited. A recent dredging project removed the sediment, and park staff rededicated the lake last year. In the works are a new boat ramp, boat rentals, fishing docks and fishing education programs, according to Mark Young, property manager. Stocking will take place between March 1 and mid-April, depending on weather. ✦

## Lake Michigan Chinook Salmon proposed Stocking Numbers by site

Following recommendations by the Lake Michigan Committee, Michigan DNR will stock 330,000 Chinook salmon starting in 2017. The Lake Michigan Basin Team (LMBT), which is made up of DNR fisheries personnel developed criteria for site selection and numbers of fish per site as shown below:

### Criteria for Stocking Site Selection

1. Maintain egg take operations.
2. Not near known natural reproducing river system.
3. Known to contribute to lake-wide fishery based on tagging studies.
4. Potential for a return fall fishery to a popular port, river with good public

access or river with good connectivity (no dam or has fish ladders).

5. Important imprinting net pen partnerships.

### Criteria for Stocking Number

1. Maintain egg take operations.
2. Overcome predator threshold to increase survival.
3. Efficiency and effectiveness of net pen operation.
4. Maximize number of sites while considering the site selection criteria.

The LMBT developed options that ranged from only stocking the Little Manistee Weir for egg take operations to continuing some level of stocking at most of our existing stocking sites.

These options were presented to the Lake Michigan Citizen's Fishery Advisory Committee. Most members preferred an option that would ensure a sufficient egg take and provide the greatest opportunity for a lake and fall return fishery to popular ports and rivers. Members were asked to provide feedback. The LMBT agreed to the following stocking proposal using the site criteria and stocking a minimum of 33,000 per site to increase survival potential. The every other year stocking strategy will provide stocking to more sites while maintaining fisheries as Chinook salmon typically return between ages 2 and 4. Stocking reviews will be conducted annually.

| Port                  | 2016 Stocking  | 2017 Stocking  | 2018 Stocking  | Site Selection Criteria Number Achieved |
|-----------------------|----------------|----------------|----------------|---|
| Escanaba              | 12,000         |                |                |   |
| Manistique            | 34,000         |                | 33,334         | 2, 4, 5                                 |
| Medusa                | 72,000         | 50,000         |                |   |
| Boardman              | 60,000         |                | 50,000         | 2, 4, 5                                 |
| Manistee River        | 22,000         |                |                |   |
| Little Manistee River | 150,000        | 180,000        | 180,000        | 1, 4, 5,                                |
| Big Sable River       | 38,000         |                |                |   |
| Muskegon River        | 18,000         |                |                |   |
| Grand Haven           | 59,000         | 50,000         |                | 2, 3, 4, 5                              |
| Holland               | 15,000         |                |                |   |
| Black River           | 15,000         |                | 33,333         | 2, 3, 4, 5                              |
| Saugatuck             | 16,000         |                | 33,333         | 2, 3, 4, 5                              |
| St. Joseph            | 48,000         | 50,000         |                | 2, 3, 4, 5                              |
| <b>Total</b>          | <b>559,000</b> | <b>330,000</b> | <b>330,000</b> |   |

## Annual State of Lake Ontario Public Meetings

The dates and locations of the annual State of Lake Ontario meetings are:

**Tuesday, March 7:** 6:30 p.m. - 9:00 p.m. at the Cornell Cooperative Extension Building, 4487 Lake Avenue, Lockport, Niagara County. The meeting is co-hosted by Niagara County Cooperative Extension and the Niagara County Sportfishery Development Board.

**Thursday, March 9:** 6:30 p.m. - 9:00 p.m. at the Rochester Institute of Technology (RIT) campus (Chester F. Carlson Center for Imaging Science

building (76-1125) - Carlson Auditorium), Rochester, Monroe County. The meeting is co-hosted by RIT and the Monroe County Fishery Advisory Board.

**Monday, March 13:** 6:30 p.m. - 9:00 p.m. at the Pulaski High School auditorium, 4624 Salina Street, Pulaski, Oswego County. The meeting is co-hosted by the Eastern Lake Ontario Salmon and Trout Association. **In the event of heavy lake-effect snow, the meeting will be held at the same time and location on March 14.**

The Department has received considerable feedback over the past few months that there needs to be a better balance when considering the needs of lake and tributary fisheries. The agenda will include a presentation on the results of our most recent Lake Ontario tributary creel survey, and ample opportunity for tributary anglers to share their observations and concerns. We look forward to seeing you next month. Steve LaPan, Section Head, Great Lakes Fisheries. ✧

## Mille Lacs Lake bass limit goes from 4 to 3

### Change will protect large fish and harvest opportunity

Anglers on Mille Lacs Lake will be able to keep three bass starting Saturday, May 27, when the bass harvest season begins. Catch-and-release bass fishing opens the same day as the walleye and northern pike fishing opener on Saturday, **May 13**.

“It’s no secret that Mille Lacs is a nationwide destination for smallmouth bass fishing,” said Don Pereira, DNR fisheries chief. “Knowing that we have something special here, we’re proceeding with caution and dropping the possession limit from four to three, which is a good balance between desire to harvest fish and preserving the trophy-sized bass.”

Anglers can keep three bass in any combination of smallmouth and largemouth. All bass 17-21 inches must be immediately released, with only one bass over 21 inches allowed to be kept. Mille Lacs’ exemption to the statewide fall and winter closure of the smallmouth bass season remains, meaning that anglers may keep up to three smallmouth bass on Mille Lacs through **February 28, 2018**.

“We know some anglers are concerned with protecting bass through tight restrictions. We agree with proceeding cautiously, encouraging more catch-and-release fishing while also recognizing that some anglers may expect the occasional fish dinner,” Pereira said.

Bass in Mille Lacs grow fast relative to most populations in the state. The DNR plans an intensive tagging study this year to learn more about bass populations and how they are affected by anglers.

“We think the lake’s bass harvest is sustainable from a biological standpoint, based on our angler surveys,” Pereira said. “There is some uncertainty in the abundance of bass in Mille Lacs, and the tagging study this year will tell us more.”

Learn more about bass fishing on Mille Lacs Lake at [www.mndnr.gov/millelacslake](http://www.mndnr.gov/millelacslake). ✧

## Illinois Spring Trout Fishing opens **April 1**

### Spring Catch-and-Release Fly Fishing-Only opens **March 18** at select sites

The 2017 Illinois Spring Trout Fishing Season opens on **April 1** at 52 ponds, lakes and streams throughout the state. A new location for spring trout fishing this year is Horsetail Lake in Cook County.

The **Spring Catch-and-Release Fly Fishing-only season** will be available at nine sites beginning on **March 18**. Fly fishing anglers can use fly fishing gear to catch and release trout beginning March 18 at the nine select sites designated. No trout may be kept during the fly fishing-only period, but anglers can keep trout after the opening of the regular season beginning April 1.

The IDNR stocks more than 80,000 rainbow trout each year in bodies of water where trout fishing is permitted during the spring season, and an additional 80,000 trout for the fall season.

No trout may be taken from any of the stocked sites from March 15 until the Spring Trout Season opens at 5 a.m. on April 1. Anyone attempting to take (harvest) trout before the legal harvest season opening will be issued citations.

All anglers—including those using fly fishing gear who intend to release fish caught before April 1—must have a fishing license and an Inland Trout Stamp, unless they are under the age of 16, blind or disabled, or are an Illinois resident on leave from active duty in the Armed Forces. The daily catch limit for each angler is five trout.

For more info on trout seasons and locations: [Illinois Spring Trout Fishing opens April 1](#)

For more information about all site regulations, anglers should contact individual sites that will be stocked with catchable-size trout. Not all sites open at 5 a.m. on opening day. Anglers are reminded to check the opening time of their favorite sites prior to the opening date. [Illinois Spring Trout Fishing opens April 1](#).

✧

## Invasive aquatic weed, starry stonewort, creeps across US

An aquatic weed is creeping across the Great Lakes region that grows really fast and is very hard to kill.

Starry stonewort, which forms dense surface mats in lakes, first turned up in North America in 1978 in the St. Lawrence River in New York State. Researchers think it probably arrived in ballast water from ships entering the Great Lakes.

It wasn’t a big concern for about 30 years, but then it took off. Now it’s widespread on Michigan’s Lower Peninsula, where it has infested more than 200 inland lakes, and parts of western New York. It was found in Wisconsin in 2014 and in Minnesota in 2015. It has also reached some lakes in Indiana, Pennsylvania, Vermont and Canada.

### What is starry stonewort?

The name comes from a tiny, white six-pointed-star-shaped “bulbil” on the stems. The plant is considered beneficial and even endangered in its native Europe and Asia. But for some reason it turned aggressive in American waters.

It’s difficult to kill with herbicides because it doesn’t have a vascular system that could carry the poison to the entire plant.

### Why is it a concern?

The weed mats can be a nuisance to boaters and anglers. Scientists are also concerned about the potential harm to native plants, fish habitats and other disruptions to aquatic ecosystems.

Modeling suggests that large swaths of the U.S. could be highly suitable for the plant, including the Mid-Atlantic States, the Great Plains and much of the West.

It reproduces when plant fragments and bulbils break off, and they can hitchhike on contaminated boats and trailers.

Starry stonewort resembles other plants, and the distinctive bulbils don’t appear until late in the season, so it can go unidentified for a long time. ✧

# Lake Huron – Salmon Population History

## A Lake Huron salmon and trout fact sheet

### What caused the Chinook salmon population to crash?

Salmon were stocked in the late 1960s to eat the over-abundant invasive alewives that were littering Great Lakes beaches by the billions. Management of salmon was easy at first; as more were stocked, anglers caught more and a world-class fishery was created. This changed dramatically nearly 15 years ago, and numbers stocked did not equate to numbers caught. Over time, the alewife numbers declined first in Lake Huron hitting historic lows by 2004 followed by historic lows in Lake Michigan by 2014.

Alewives have declined because they are **losing the battle with quagga and zebra mussels** for the same nutrients in the lake (they invaded the Great Lakes in the mid-1990s). Also, high stocking rates and increases in Chinook salmon natural reproduction in the 1990s through the 2000s were responsible for very high predation on an already unstable alewife population.

The competition for nutrients by **mussels impacted Lake Huron at a much higher rate than Lake Michigan**. Unlike Lake Michigan, Lake Huron has less shoreline development, fewer nutrient-rich streams, and is less productive. These differences likely increased the rate at which mussels filtered out the nutrients for alewives in Lake Huron thereby limiting the time for effective management actions. In contrast, the nutrient gradient in Lake Michigan, especially in the southern basin of the lake, delayed the onset of the mussel disturbance allotting time for management actions (decrease stocking and increase the daily catch limits).

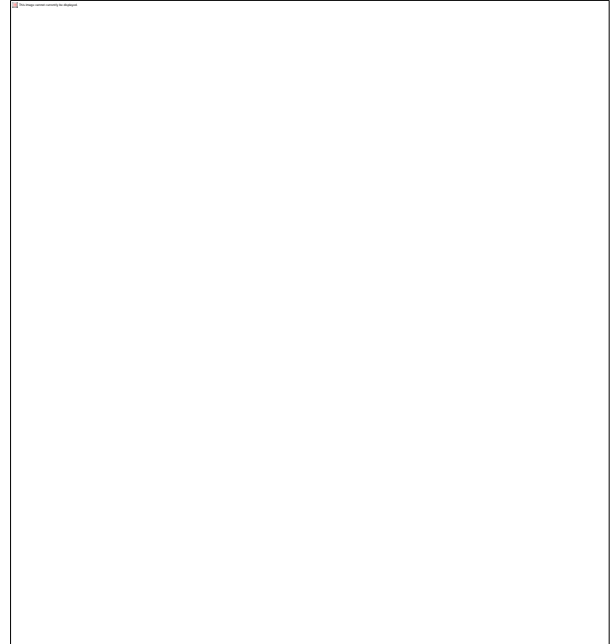
### How many wild salmon are in Lake Huron?

Natural reproduction of Chinook salmon has increased over time in Lake Huron. From 1989-1992 MDNR marked all hatchery-origin Chinook salmon to determine levels of natural reproduction. During that time approximately 15% of Chinook salmon in Lake Huron were found to be of wild origin. Concerned about increasing salmon abundance from declining growth rates and condition, Ontario and Michigan decided to repeat the reproduction study and mark all stocked Chinook salmon from 2000-2004. Nearly 85% of Chinook salmon caught from the open water of Lake Huron during spring and summer, prior to spawning migrations, were unmarked and presumably wild. From 2012 to present, a similar mass-marking program has been conducted and preliminary estimates support the finding that wild production comprises the majority of Chinook salmon in Lake Huron.

### What can be done?

#### Review Chinook salmon management goals and actions:

Done previously in lakes Huron and Michigan, a comprehensive review of our salmon management will provide a list of options and actions to better balance



*Spring phosphorus levels in lakes Huron and Michigan are a good index of nutrients available to fish production. Lake Huron was generally lower than Lake Michigan, but Lake Huron levels dropped substantially during the early 2000s from the mussel invasion whereas Lake Michigan declined gradually through time. Data courtesy of: USEPA*

Chinook salmon and other predators with prey fish production. The Department has successfully conducted these reviews with constituent groups and the angling public to manage both lakes' fisheries. Since the collapse in Lake Huron, the Department has shifted resources to rearing other fish species, namely Atlantic salmon, to contribute to the Lake Huron's overall diverse fishery. Anglers have also requested coho salmon to further diversify the predator base because coho have been observed to consume alternate prey such as round gobies.

#### Fight against invasive mussels:

Several universities and government agencies are working on methods to control quagga and zebra mussels. There is some promising research to control these mussels at a small scale. A solution for a waterbody the size of Lake Huron is currently not available, so maintaining salmon and trout levels in balance with their available food is our best option in the meantime. Also, round gobies are now extremely abundant. They can consume mussels and managers are evaluating options to better utilize the shift in prey from alewives to round gobies.

#### What is the current strategy for Lake Huron?

The Lake Huron Citizens Fisheries Advisory Committee is working hand-in-hand with the Department to evaluate the Lake Huron management strategy for Chinook salmon. The

angler representatives and Departmental staff will review the data together and evaluate stocking performance, population trends, and predator-prey levels with the goal of developing a comprehensive management strategy for all salmonines in Lake Huron.

#### What can we expect for Lake Huron salmon in the future?

The combination of increased salmon predation and the competition from quagga and zebra mussels has squeezed the alewife population from the top and bottom. Current Lake Huron salmon stocking is designed to maintain adult returns to the Swan River Weir for sport and tribal fisheries, and to maintain fall fisheries in a few select locations. However, the food web is continuing to change, so managers and anglers will need to continue to work together to better balance our critical salmon and trout fishery.

#### What indicators suggested that the Lake Huron salmon and prey stocks were out of balance?

- Zebra and Quagga mussel numbers exploded in early 2000s.
- The prey base (especially alewives) experienced a population crash in a two to three year period.

- The condition of adult Chinook salmon bottomed out by 2005.
- Stocked Chinook salmon were surviving at much lower rates and being eaten by predators because of a lack of forage fish.

#### A more manageable balance between predator and prey will occur when the following can be achieved:

- Relief of predation pressure on prey fish providing better probability of a diverse and stable prey base.
- Enhanced survival of wild and stocked fish, leading to better fishing success in upcoming years.
- Recognizing shifts in the food web, such as the shift from an alewife to round goby dominated prey base, and managing our predators accordingly and in an adaptive approach.
- Driving toward better alignment of Lake Huron's management goal of having a diverse salmonines community with salmonines (Chinook salmon, coho salmon, pink salmon, steelhead, Atlantic salmon, and brown trout) having a prominent place).

#### Where can you find additional information?

DNR "Salmon" Web Page at: [http://www.michigan.gov/dnr/0,4570,7-153-10364\\_52259-323650--,00.html](http://www.michigan.gov/dnr/0,4570,7-153-10364_52259-323650--,00.html). ✧

## Black Lake sturgeon season lasts one hour

Once again the 2017 Black Lake sturgeon season in Cheboygan County, Michigan, was a quick one, lasting just over an hour. The DNR announced the results of this year's season, with the recreational harvest limit of seven fish being attained, along with the additional harvest of one fish.

The fishing season, which includes spearing and hook-and-line fishing, was scheduled for Saturday, Feb. 4, through Wednesday, Feb. 8, or until the harvest quota had been reached.

Based on quick communications from on-ice personnel, the sturgeon fishing hotline was updated at 9:07 a.m. DNR law enforcement officials and other department personnel were embedded in the on-ice fishing communities and were able to quickly report harvested fish, as well as to quickly contact lake sturgeon anglers on the ice and close the season.

There were 332 registered anglers, up from 261 in 2016. Angler registration since 2010 has ranged from 197 to 332. Most anglers pre-

registered Friday, Feb. 3, allowing for a more streamlined process.

According to the DNR, six female and two male lake sturgeon were harvested. The females ranged in length from 55 inches to 67 inches and 33 lbs. to 79 lbs. The two males were 46 inches and 59 inches and weighed 14 pounds and 42 pounds, respectively.

Six of the eight fish had some sort of identifiable tag from previous years, providing the DNR with valuable information regarding spawning regularity and fish growth. For example, fish number three, which was 63 inches long, was initially captured by the DNR and Michigan State University researchers and tagged in the 2001 spring spawning run, at which time it was 62 inches long. This fish, a female, also was captured in the 2004 and 2015 spawning runs. The DNR keeps information like this for each fish encountered during a spawning run or in survey efforts.

The DNR uses a model that takes into account harvest from a given

year and population data to produce a harvest quota for the following year.

The DNR continues to provide an open fishery for lake sturgeon while still recovering the species to full status in the Black Lake watershed. The state's current harvest rate of 1.2 percent of the population is a safeguard against over-harvest. This is a rate that has been agreed on in the past with tribal governments. In addition, annual stocking and protection of adults in the river during spawning help to keep building the population.

Rehabilitation of lake sturgeon in the Cheboygan River watershed is a cooperative effort involving the DNR, the Black Lake Chapter of Sturgeon For Tomorrow, Michigan State University, Tower-Kleber Limited Partnership, the Bay Mills Indian Community, the Grand Traverse Band of Ottawa and Chippewa Indians, the Little River Band of Ottawa Indians, the Little Traverse Bay Band of Odawa Indians and the Sault Ste. Marie Tribe of Chippewa Indians. For more info: [Michigan.gov/sturgeon](http://www.michigan.gov/sturgeon). ✧

## Hunters in Illinois harvested 144,150 deer during 2016-17 seasons Deer hunting wrapped up on Jan. 15

SPRINGFIELD, IL – Hunters in Illinois harvested a preliminary total of 144,150 deer during all 2016-17 seasons, which concluded January 15. The total preliminary deer harvest for all seasons compares with a total harvest for all seasons of 155,229 in 2015-16.

During this year's deer seasons, hunters took 44% does and 56% males. A breakdown of Illinois deer hunting seasons is as follows:

- Archery: Archery deer hunters in Illinois took a preliminary total of 53,479 deer during the season which began on October 1, 2016 and concluded on January 15, 2017. That compares with the harvest of 56,767 during the 2015-16 archery season.
- Youth: Young deer hunters harvested 3,259 deer during the 2016 Illinois Youth Deer Season conducted on October 8-10, 2016, compared with 2,850 deer harvested during the 2015 youth hunt.

- Traditional Firearm Season: Hunters took a preliminary total of 79,429 deer during the 2016 Illinois Firearm Deer Season on November 18-20 and December 1-4, 2016, compared with 86,847 deer taken during the 2015 firearm season.
- Muzzleloader: Hunters using muzzleloading rifles harvested 3,297 deer during the 2016 Muzzleloader-Only Deer Season on December 9-11, 2016, compared with 2,403 in 2015.
- Late-Winter Seasons: The 2016-17 Late-Winter Antlerless Only and Special CWD deer seasons concluded on January 15, with a combined preliminary harvest total for both seasons of 4,686 deer, compared with a harvest of 6,362 deer taken during those seasons in 2015-16. Season dates for the Late-Winter and CWD seasons were December 29, 2016-January 1, 2017 and January 13-15, 2017.

There were 14 northern Illinois counties open to the Special CWD Season in 2016-17, the same counties that were open for the 2015-16 seasons. The Special CWD season is used to assist in slowing the spread of chronic wasting disease in the Illinois deer herd.

There were 24 counties open for the Late-Winter Antlerless Season in 2016-17. Four counties open previously for the late-winter season were closed for 2016-17 because they had reached deer population goals, while one county was added to the late-winter hunt. Counties that are at or below their individual goal for two consecutive years may be removed from the late-winter season.

The tables in this link provide a county-by-county summary of results for 2016-17 and for 2015-16. [IDNR Deer Harvest Release](#). ✧

## Free Ice Fishing Clinic **Feb. 22** at Canadarago Lake

The New York State DEC, and the NYS State Parks will co-host a free ice fishing clinic from 10 a.m. to 3 p.m. on Wednesday, **Feb. 22** at the public boat launch at Canadarago Lake just south of Richfield Springs on NYS Route 28.

DEC will supply most of the bait and tackle but experienced anglers are encouraged to bring their own fishing gear. There will be a short lesson on the basics of ice fishing and filleting your catch at the boat ramp, where a warming tent and refreshments will be available. DEC and State Parks staff will be on hand throughout the day to assist participants on the ice.

Yellow perch and chain pickerel are the main target species for ice anglers in Canadarago Lake, while sunfish, black crappie, rock bass, black bass and walleye are also present in the lake.

For more info, contact the DEC Region 4 Fisheries office at (607)

652-7366 or Rich Sheckells at Glimmerglass State Park at 607-547-8662. Pre-registration is appreciated. Participants can pre-register by calling Rich Sheckells at 607-547-8662.

While a DEC fishing license is not required for this event, all other statewide and special regulations for Otsego Lake remain in effect. Normally, anyone age 16 or older is required to obtain a fishing license to fish or assist with fishing in fresh waters of New York State.

In addition to this free fishing clinic, Governor Cuomo has designated **February 18-19, 2017**, as a free fishing weekend, during which the requirements for a fishing license will be suspended. Residents and visitors age 16 and older will be able to fish the fresh or marine waters of New York State without a license, providing a great opportunity for

people to learn about this popular sport.

Anglers are reminded that four inches of ice is usually safe for accessing ice on foot. Double that thickness for traveling on white ice. Ice thickness can vary on every body of water or even within the same body of water. Anglers should be particularly wary of areas of moving water and around boat docks and houses where bubblers may be installed to reduce ice buildup. The presence of snowmobile tracks or footprints on the ice should not be taken as evidence of safe ice conditions. Individuals are strongly encouraged to check ice conditions and avoid situations that appear to present even a remote risk. Testing the thickness if ice can easily be done with an auger or ice spud at various spots. ✧



# Opportunities for Turkey Hunting on Private Property

Youth hunters apply by **February 23<sup>rd</sup>** for Youth Season

**Adult and Youth Hunters Apply by March 10<sup>th</sup> for Seasons 3 and 4**

SPRINGFIELD, IL – IDNR’s Illinois Recreational Access Program (IRAP), has added adult turkey hunting to its growing list of activities on private land in Illinois. Adult turkey hunting for third and fourth season is available in Christian, Clark, Fayette, Greene, Macoupin, McDonough, Sangamon and Schuyler counties to any registered hunter. In addition, first-time adult turkey hunters, an individual that hasn’t hunted turkey in the past 5 years, can apply for Brown and Fulton counties in addition to those counties listed above.

Youth turkey hunters, under the age of 18, can apply to hunt on private property for youth turkey season and season 3 and 4 in at least 35 counties across Illinois. And more good news ... youth season is now expanded to two weekends, March 25<sup>th</sup> and 26<sup>th</sup> and April 1<sup>st</sup> and 2<sup>nd</sup> throughout the entire state.

To apply for an IRAP spring turkey hunting site, the hunter must go to IRAP’s website and download an application and liability waiver, complete and sign and mail to IDNR. Deadlines for applications are February 23<sup>rd</sup> for youth season and March 10<sup>th</sup> for seasons 3 and 4. In order to apply for seasons three and four, the applicant must first apply for a turkey permit through IDNR’s lottery system.

“The Illinois Recreational Access Program is a wonderful opportunity for us to partner with private landowners to provide for much-needed access for hunting and other outdoor activities,” said IDNR Director Wayne Rosenthal. “Landowners allow public access to their property in exchange for a minimal lease payment and a habitat management plan, but just as important, the landowner also receives assistance with habitat restoration of their property. It is an

ideal public/private partnership that delivers positive results for everyone.”

Applicants applying for IRAP Turkey Hunting sites will need to download an application at: <https://www.dnr.illinois.gov/conservation/IRAP/Pages/First-time-Adult-turkey-hunting.aspx> and download an application and liability waiver. All applications must be returned to IDNR 30 days prior to hunting season. Successful applicants will be notified by mail where their hunting site is located, be given a map, and an IRAP site permit allowing them to hunt on their assigned turkey hunting site. For youth season, hunters will also need to purchase an over-the-counter IDNR youth turkey permit *after* they have received their IRAP site permit packet.

Youth and adult hunters applying for an IRAP site for spring turkey seasons 3 or 4 will need to apply online for an IDNR turkey permit as soon as possible. Successful applicants receiving his or her turkey tag for their choice county in season 3 or 4 will then need to send in an IRAP turkey application. Sites for seasons 3 and 4 are awarded on a first-come, first-served basis.

Turkey hunting on IRAP leased property is available during three spring turkey seasons:

Youth Season: **March 25-26** (statewide) **April 1-2** (statewide)  
 Third Season: **April 14-19** (south zone) **April 21-26** (north zone)  
 Fourth Season: **April 20-26** (south zone) **April 27-May 3** (north zone)

To apply for your turkey permit through the IDNR lottery, visit <https://www.dnr.illinois.gov/hunting/turkey/Pages/TurkeySeasonsDeadlines/AvailablePermits.aspx>

The IRAP program is funded through a grant from the U.S. Department of Agriculture’s Natural Resources Conservation Service. To date, IRAP has leased nearly 16,000 acres in 38 counties to provide for various public access opportunities, such as: Spring youth turkey hunting for youth season and seasons three and four; First-time adult turkey hunting for seasons three and four; Pond and riverbank fishing; Boat access on public waterways; Hiking, birding and outdoor photography; Archery deer hunting; Small game hunting; Waterfowl hunting.

For more info: <http://www.dnr.illinois.gov/conservation/IRAP/Pages/default.aspx> or contact Tammy Miller at 217-524-1266 or e-mail [Tammy.Miller@illinois.gov](mailto:Tammy.Miller@illinois.gov). ✧

## Register for beginner fly-fishing weekend for youth-adult pairs

Registration is open for an event that teaches the basics of fly fishing to pairs of youths and adults, from evening on Friday, **June 2**, to afternoon on Sunday, June 4, near Lanesboro, MN. To participate, youth must be 11 to 17 years old as of June 2, and each youth-adult pair must have less than 10 hours of fly-fishing experience between them. The registration fee is \$130 per pair and includes meals, lodging, guiding services, equipment and additional materials. Sponsorships to offset registration fees may be available from angling and conservation organizations. This event is limited to 20 youth-adult pairs.

[Apply online](#). For more info: Deb Groebner, 507-359-6049 or [deborah.groebner@state.mn.us](mailto:deborah.groebner@state.mn.us). ✧

## A monograph on ciscoes of the Great Lakes and Lake Nipigon

Following a nearly four-year team effort at analysis and writing, the Commission announces publication of Ciscoes (Coregonus, subgenus Leucichthys) of the Great Lakes and Lake Nipigon. This report, styled as a monograph, is available [online now](#) and will soon be printed for field use.

Ciscoes historically were the dominant consumers of zooplankton throughout the Great Lakes. Comprising eight main forms, this complex provided critical links in food webs between invertebrates and top predators like lake trout and walleye. Ciscoes also supported wide-ranging commercial fisheries. One form of cisco inhabited upper waters and was predominant. The other seven forms all inhabited deep water and were marketed as chubs.

The new monograph represents an update of a study by Walter Koelz, published in 1929. He was the first to systematically describe the forms and document their life history. His field studies, conducted aboard commercial fishing boats, lasted from 1917 to 1924, and encompassed 14,000 specimens—a colossal undertaking. Many of his specimens are archived at the U of Michigan Museum of Zoology, where he once worked.

The diversity of ciscoes documented by Koelz did not persist long after the completion of his studies. In fact, the two largest forms in Lake Michigan were approaching extirpation even while he collected. The cause was intensive fishing with gillnets that selectively removed the largest forms, allowing the smaller forms to proliferate. This situation worsened when the sea lamprey invaded the Great Lakes and preferentially preyed on the largest forms, compounding the problem [[Lamprey Nativeness Claims Annulled by Commission's Eshenroder](#)].

The sea lamprey also decimated the lake trout, which had been counteracting somewhat the effect of the chub fishery by feeding on the

smallest forms, in particular the smallest, the bloater. The bloater turned out to be a pest species as regards its relationship to its larger-bodied sister forms. Freed from predation by lake trout, the bloater proliferated and displaced or hybridized with the remaining forms of deepwater ciscoes in Lakes Michigan, Huron, and Ontario. Now, only Lakes Superior and Nipigon contain their original complement of ciscoes (four each), Michigan and Huron have but two (each had eight), Erie has none (had two), and Ontario has one (had four).

Owing to these profound changes in diversity, suspected changes in body morphology within surviving populations, and known instances of hybridization, Koelz's work was long overdue for an update. The new monograph responds to this need. Its focus, like that of Koelz's work, is on morphology and identification. Both pen and ink and color illustrations accompany updated descriptions of each form in each lake. The morphology of extant forms is compared to Koelz's descriptions of the same forms in each lake, allowing for detection of morphological changes that occurred over almost a 100-year period. Sketches of the ecology of each form in each lake provide for a quick study of important literature.

The research associated with producing the new monograph resulted in several surprises of which three follow. First, the sole remaining deepwater form in Lake Huron turned out not to be the bloater as had been presumed for over 50 years, but appears instead to be the result of hybridization and introgression among five forms of deepwater ciscoes whose last reported occurrence was 1956. Such assemblages are known as hybrid swarms. Two, the form that once supported the largest freshwater fishery in the world, that of Lake Erie, has gone missing. Three, the form of

cisco that dominated the fisheries of Lakes Michigan and Huron appears to be extirpated from those lakes and is now abundant only in Lake Superior.

The new cisco monograph is published just as field biologists in four of the Great Lakes (all but Superior) are gearing up to assess the remaining cisco populations (ciscoes have been a priority in Superior for decades). This effort owes to an emerging interest in reintroduction and to an understanding that, in Lakes Michigan and Huron, fishes that feed on zooplankton and provide prey for trout and salmon in offshore pelagic waters are vanishing. This convergence of science and enthusiasm is fortuitous and presents an opportunity to build upon the recent, long-awaited successes in rehabilitating lake trout populations.

Ciscoes of the Great Lakes and Lake Nipigon:

[www.Ciscoes\\_of\\_the\\_Laurentian\\_Great\\_Lakes\\_and\\_Lake\\_Nipigon.pdf](http://www.Ciscoes_of_the_Laurentian_Great_Lakes_and_Lake_Nipigon.pdf). ✧

### Michigan AG: Great Lakes net-pen fish farming not allowed

LANSING (AP) – Michigan Attorney General Bill Schuette says state law doesn't allow for net-like commercial fishing enclosures in the Great Lakes. In an opinion released January 17, Schuette said net-pen aquaculture operators would have to register with the state, and laws related to aquaculture don't permit registration of such facilities in Michigan's Great Lakes waters. Schuette says raising fish for commercial purposes is permitted in private waters, but the Great Lakes are part of the "public trust." State agencies last year recommended against net-pen aquaculture, saying it would pose risks to the environment, recreation and tourism. Michigan has received aquaculture proposals. There are no net-pen fish farms in U.S. Great Lakes waters. ✧

## Searching for young lake sturgeon near Detroit-area spawning reefs

Construction crews recently deposited 25,000 tons of limestone blocks on the bottom of the Detroit River in the latest phase of a decade-plus effort to lure lake sturgeon to rock spawning reefs and help restore severely depleted populations of the once-common Great Lakes giants.

The latest reef project, completed last month, added 4 acres of high-quality spawning habitat just upstream of Belle Isle, bringing the total to 16.6 acres at six locations in the Detroit and St. Clair rivers.

Researchers know the reefs work because they've collected sturgeon eggs there and have underwater video showing the huge fish spawning. But where do the baby fish go after they hatch and leave the shelter of the rock reefs? Researchers have spent years searching for those youngsters, without much to show for their efforts.

Now a study of the St. Clair River by two University of Michigan scientists suggests the experts may have been looking in the wrong place all along. The U-M researchers show that despite river-current speeds of more than 3 feet per second, some recently hatched lake sturgeon manage to remain in the St. Clair's North Channel, a surprising finding with implications for the siting of future spawning reefs.

"Our work showed that these very young sturgeon stay in the channel instead of going downstream into the river delta or to Lake St. Clair, as people had assumed," said U-M doctoral candidate Joseph Krieger, first author of a paper published online December 1 in the *Canadian Journal of Fisheries and Aquatic Sciences*.

The St. Clair River is about 40 miles long and drains waters from Lake Huron into Lake St. Clair. The Detroit River drains Lake St. Clair into Lake Erie. Beginning in the early 1900s, both rivers were straightened, widened and deepened to create shipping canals for large freighters. The construction stripped away much of the rocky habitat that sturgeon and other native fish used for spawning.

Today, the St. Clair River averages 43 to 49 feet in depth and moves more than 175,000 cubic feet of water per second—more than the Missouri, Arkansas and Illinois rivers combined.

The fieldwork involved placing drift nets on the bottom of the river channels, at various distances downstream from artificial spawning reefs, and looking for sturgeon larvae. That work was done with researchers from the U.S. Geological Survey. Additional fieldwork was done in collaboration with the U.S. Fish and Wildlife Service and the Michigan Department of Natural Resources.

A big part of the project by Krieger and Diana involved creating computer models to evaluate the amount, quality and spatial distribution of different habitat types used by young lake sturgeon in the St. Clair and Detroit rivers. The researchers then tested their habitat suitability model by comparing its predictions to field observations.

In the St. Clair River, 91 percent of the 283 larval sturgeon netted by Krieger were clustered at three North Channel locations no more than 1.2 miles downstream from Maslinka Reef, a known sturgeon-spawning site formed in the early 1900s when steamships dumped coal cinders into the river. Most of the larvae were taken in areas designated as high-quality habitat by the computer model. No larvae were found exiting the North Channel into Lake St. Clair.

The three North Channel clusters were at river bends where the bottom is a mix of sand and silt and contains moderate densities of the larval insects that baby sturgeon eat. The current speeds in these sections of the river are highly variable, and water depths typically exceed 30 feet.

Larval sturgeon were collected at these locations up to four weeks after the eggs hatched on Maslinka Reef, meaning the baby fish were not swept downstream into Lake St. Clair as soon as they hatched—as the experts had long believed. Instead, they remained in the swiftly moving channel.

"We had thought that these little fish couldn't fight the current and within a day they'd be out in Lake St. Clair," said Diana, who is a professor at U-M's School of Natural Resources and Environment and director of Michigan Sea Grant, a federally funded collaboration between U-M and Michigan State University. "But it looks like they can manage to stay in place against the current by burrowing into the bottom, and that was a surprise. For a little fish that's an inch long at most, in a current that's a meter per second, that was unexpected."

The population of adult lake sturgeon in Lake St. Clair and the St. Clair River is estimated at around 10,000, according to Diana.

The U.S. government has provided about \$10 million for a series of reef projects in the St. Clair and Detroit rivers, much of it through the Great Lakes Restoration Initiative, with additional support from cooperating agencies and private sector partners. The Detroit-area restoration effort began in 2004 with completion of 0.28 acres of reefs in the Detroit River near Belle Isle. The approaches and techniques for siting and reef construction are updated as new information comes in, Read said.

Females take 20 to 25 years to reach reproductive age, while males take 15 years. Because it takes so long for lake sturgeon to reach sexual maturity, it will also take years to know whether the reef-building project is significantly boosting the sturgeon population, said Gregory Kennedy, a fishery biologist with the U.S. Geological Survey.

"We're restoring a wild fish population inside the city of Detroit, and it's going to take some time," U-M's Read said during the Detroit River tour. "The destruction of this habitat took several decades, and so will the restoration."

[Canadian Journal of Fisheries and Aquatic Sciences paper by Krieger and Diana](#)

[More about fish habitat restoration projects on the St. Clair and Detroit rivers](#) ✧

## **Other Breaking News Items:**

(Click on title or URL to read full article)

### **[Ritchie and 1000 Islands MPs join forces to ease Canada boater check-ins](#)**

A New York state senator joined leaders from the Canadian side of the Thousand Islands to testify in Parliament in support of a bill that would iron out Canada's confusing reporting requirement for boaters on the St. Lawrence River.

### **[State of Lake Ontario fisheries subject of upcoming public meetings](#)**

The New York Department of Environmental Conservation will update the public on Lake Ontario's fisheries in meetings in Rochester and Pulaski in March.

### **[The best walleye fishing ever? Why 2017 could be a banner year on Lake Erie](#)**

This could be a banner year for walleye on Lake Erie. Walleye numbers are increasing, and that should improve fishing on what is already considered the greatest walleye fishery in the world.

### **[Great Lakes water level forecasts for this summer](#)**

The lake level forecast for the Great Lakes this summer generally shows most of the Great Lakes are expected to be a few inches lower than last year's peak water level.

### **[Walleye run could start earlier than normal; now is time to prepare](#)**

The warm winter and lack of ice could mean the annual walleye run in the Lake Erie tributaries could start a little earlier this year.

### **[Conservation groups urge increases in license fees](#)**

Fourteen conservation organizations support raising Wisconsin fishing and hunting license fees to help close a Department of Natural Resources budget shortfall.

### **[Isle Royale out of balance: The wolf-moose dilemma](#)**

On Isle Royale, the wolf population is not large enough to check the moose population, which is doubling every three or four years and degrading plant life and habitat as a result.

### **[Crews dump limestone into Detroit River for sturgeon habitat](#)**

Crews have dumped 25,000 tons of limestone blocks into the Detroit River as part of a mission to restore lake sturgeon. The limestone deposit adds 4 acres of spawning reef areas for sturgeon near Detroit's Belle Isle

### **[Study says grass carp have invaded three of the Great Lakes](#)**

Invasive grass carp have reached three of the Great Lakes and pose a significant environmental risk there, but time remains to prevent them from getting out of hand, according to a scientific analysis

### **['Hundreds' of rotting fish pulled from Lake Superior nets](#)**

In Ontario, conservation officers found "hundreds" of rotting fish in abandoned gill nets on Lake Superior.

### **[The Bermuda Triangle of the Great Lakes: The Lake Michigan Triangle](#)**

The Lake Michigan Triangle has accounted for numerous mysterious events beginning in 1891.

### **[Pharmaceutical pollution takes toll on crayfish and other species](#)**

Drugs seeping into groundwater threaten crayfish and have a domino effect of environmental impacts that harm fish and other species, according to new research.

End