



Ontario introduces a fall harvest for double-crested cormorants Province taking steps to protect fish and wildlife habitat

FENELON FALLS – The Ontario government is taking steps to protect fish stocks and natural habitat from the harmful impacts of double-crested cormorants by introducing a fall harvest for the species. The harvest will help address concerns about impacts to local ecosystems by cormorants, a bird that preys on fish, eating a pound a day, and that can damage trees in which they nest and roost.

The announcement was made late last week by John Yakabuski, Minister of Natural Resources and Forestry.

"We've heard concerns from property owners, hunters and anglers, and commercial fishers about the kind of damage cormorants have caused in their communities, so we're taking steps to help them deal with any local

issues," said Minister Yakabuski. "In large amounts, cormorant droppings can kill trees and other vegetation and destroy traditional nesting habitats for some other colonial water birds, so it's critical that we take action to strike a healthy balance in local ecosystems."

Following public consultations, the province has made changes to its initial proposal and has decided to introduce a hunting season that will run annually from September 15 to December 31, starting in 2020.

"We listened to those who provided comments about the cormorant hunting proposal, and as a result, we are introducing only a fall hunting season to avoid interfering with recreational users of waterways and nesting periods for some migratory birds," said Minister

Yakabuski. "We have also reduced the maximum number of cormorants a hunter can take to 15 a day, which is a similar limit to one for federally regulated migratory game birds such as mourning doves, Snow and Ross's Geese, Rails, coot and Gallinules."

In 2019, the ministry and partner agencies surveyed cormorant colonies across the Great Lakes and select inland lakes in Ontario. Based on nest count surveys, there are an estimated minimum of 143,000 breeding cormorants in 344 colonies across the province. Combined with historical data, trends suggest that cormorant populations are increasing in Lake Ontario, Lake Erie, and Lake Superior and are stable on the St. Lawrence River and Lake Huron.

Fall harvest for cormorants

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President Trump signs Great American Outdoors Act into law

Sportfishing industry celebrates enactment of landmark public lands bill

Alexandria, VA – The historic and bipartisan Great American Outdoors Act became law August 4 after being signed by President Trump.

"The sportfishing industry sincerely thanks President Trump and Secretary of the Interior David Bernhardt for championing this critically important effort for conservation and outdoor recreation," said American Sportfishing Association (ASA) President Glenn Hughes. "Without their leadership, the Great American Outdoors Act, which will benefit the nation's public lands for generations, could not have become law."

The Great American Outdoors Act permanently funds the highly successful Land and Water Conservation Fund which, for the past five decades, has helped provide access to recreational areas, trails and waterways throughout the nation. Importantly for the sportfishing industry, the Great American Outdoors Act ensures that \$15 million annually is dedicated to expanding public access for fishing and other forms of outdoor recreation.

It also creates the "National Parks and Public Land Legacy **Great American Outdoors Act**

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Fishing participation continues to rise

ALEXANDRIA, VA – The Recreational Boating & Fishing Foundation (RBFF) announced the findings of the [2020 Special Report on Fishing](#), noting participation is still on the rise. The Outdoor Foundation and RBFF-produced report, now in its 10th year, provides insights into demographics, the “leaky bucket,” perceptions of fishing and more.

“Thanks to the strong improvements in recruitment and reactivation, fishing participation is up again this year,” said RBFF President & CEO Frank Peterson. “Better yet, the key audience segments we feel are tantamount to the future of fishing continue to see gains in overall participation and participation rate.”

KEY FINDINGS:

- Participation is up to the **highest rate since 2007.**
 - **17% of the total U.S. population** participated in fishing in 2019.
 - That equates to a total of **50.1 million Americans ages 6+.**
 - A net increase of more than 700,000 participants.
- 3.1 million Americans tried fishing for the very first time in 2019, making up 6% of all active participants
- **Youth participation is up** over the last years.
- **Hispanic participation continues to rise** – 4.4 million participated in 2019.
 - Participation rate of 12%, the **highest ever recorded in the Special Report.**
 - Hispanics go on an average of nearly **three more trips per year** than the general population.
- **Female participation grew** to 17.9 million.
 - Third straight year of growth.
 - The gender gap is continuing to close.

• “Leaky bucket” still an issue.

- Fishing lost 9.3 million participants in 2019 – a loss of 19% of the 2018 participant base – and nearly double the 5.6 million lost participants in 2017.

Peterson continued, “Despite losing 9.3 million participants, fishing is still making gains. We are pleased with the increases among newcomers and key growth segments but are again reminded of how important effective angler retention efforts are in safeguarding the future of fishing and boating. To that end, we are continually working on ways to keep participants better engaged, including developing programs and resources for our state agency and industry partners, as well as assisting them in developing their own R3 plans.”

In addition to demographic and participation-related data, the Special Report also looked at intangibles such as perceptions of fishing and trends that can help our industry predict and shape the future of participation. Overwhelmingly, anglers look to fishing as a way to escape the day-to-day, become close with nature, and of course, catch fish. While survey respondents didn’t hold strong stereotypes of anglers, more men than women feel that fishing participants look similar to them. Prioritizing youth participation continues to be a theme in preserving the future of fishing; 91% of currently anglers first participated before the age of 12.



Famous last words

“I notice that people who claim everything is ‘predestined,’ still look before they cross the road!”



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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

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CCRKBA ID's anti-gun rights businesses and CEOs

The Citizens Committee for the Right to Keep and Bear Arms has launched a campaign alerting gun owners about businesses and their CEOs who push for increased gun control and prohibition, identifying the culprits.

The "Don't Feed the Gun Prohibitionists" project has developed a dynamic list of businesses and CEOs who have been pushing for new legislation designed to impair the rights of law-abiding firearms owners. The list may be found at www.ccrkba.org/antigunbusinesses.

"Many brand name businesses have a nefarious agenda to limit gun rights," said CCRBA Chairman Alan Gottlieb. "Their current and potential patrons should have the knowledge of what their hard earned dollars are actually funding.

"A free market dictates the right of consumers to know about the products they purchase," he continued, "and we encourage people buy products from companies they can

count on to not support efforts aimed at curtailing constitutional rights. By providing this information, we hope gun owning consumers make reasonable decisions about which businesses to patronize. This might convince some businesses to re-think their core values."

CCRKBA's list includes such names as Costco, Burger King, Delta Airlines, Dick's Sporting Goods, Hallmark, Hard Rock Café, Levi Strauss, Microsoft, Progressive Insurance, Sara Lee, Subway, Chipotle, Sonic, Panera Bread and Yelp. There are nearly 200 businesses and their bosses on the list. The roster represents companies and corporate leadership that have made donations and/or advocated on behalf of gun control organizations, including sending an open group letter to the United States senate urging additional restriction and firearms bans.

"We're not calling for a boycott of these companies," Gottlieb explained,

"but we are providing this information to gun owners so they can make informed decisions about where to spend their hard-earned money without unknowingly supporting efforts to erode our constitutional right.

"As we said earlier," he added, "Businesses and the people who own them can support whatever kind of philosophy they want, and gun owning consumers can likewise not spend any money with those firms. Let the marketplace decide. "Over 100 million American gun owners represent a sizeable consumer bloc," Gottlieb said, "and they will vote with their wallets. Businesses that work against their interests should lose the benefit of their patronage."

"Businesses that take a position of opposition to gun rights should recognize that the gun rights community will vote with their wallets." ✧

Gov. Whitmer oks \$28 million in Natural Resources Trust Fund grants

Gov. Gretchen Whitmer signed legislation creating more opportunities for outdoor recreation by authorizing \$28.7 million in Michigan grants.

"Over the past months as Michigan continues to combat COVID-19, we've seen just how important having access to public land, developed parks, trails and outdoor recreation is for all Michiganders," said. Whitmer. "In communities statewide, the Natural Resources Trust Fund grant program provides essential opportunities for people to continue to get outside and recreate safely."

Senate Bill 145 approves funding for 78 recreation projects and land purchases recommended by the board. It is now Public Act 145 of 2020.

The Trust Fund board recommends funding to both state and local agencies for development projects and land acquisitions that will increase the quality and quantity of public outdoor recreation opportunities. This round of grant funding reflects continued support of:

- Acquisitions of high-quality, unique wildlife and fishery habitat for conservation and public access.
- Trail systems, specifically those – like the Dragon Trail in Newaygo and Mecosta counties – that have broad regional and statewide impact.
- An extensive range of projects that expand opportunities across Michigan for outdoor recreation, including development of urban parks and playscapes, sports field enhancements and river access.

This year the board recommended nearly [\\$17.2 million in acquisition grants](#) and [\\$11.5 million in recreation development grants](#):

- Of the \$17.2 million recommended to fund acquisition projects, \$8.1 million will be awarded to local units of government, while the remaining \$9.1 million will be awarded to the Department of Natural Resources for diverse projects such as the May Creek Greenway Path in the city of Detroit and a new public fishing

access site on the St. Joseph River Water Trail in Berrien County.

- Of the \$11.5 million recommended to fund development grants, \$9.6 million will support 51 local government projects and \$1.9 million will support nine DNR projects, including new shooting ranges in Roscommon and Barry counties and pathway improvements on Belle Isle in Detroit.
- Collectively, the \$28.7 million of Trust Fund grants is matched with nearly \$20.7 million of additional funding for a total of nearly \$49.4 million being invested in land acquisition and development projects across the state.

"Michigan places a high value on, outdoor recreation opportunities," said DNR Director Dan Eichinger. "Trust Fund grants have leveraged additional dollars from local government partners to expand outdoor recreation throughout the state and ensure conservation of Michigan's unmatched natural resources." ✧

Huron-Michigan Predator Diet Study 2020 Instructions

Scientists working on Lake Michigan and Lake Huron need diet information from trout, salmon, and walleye. The lakes have changed dramatically in recent years, in large part because of invasive species like the quagga mussel and round goby. Anglers, scientists, and fishery managers are trying to figure out what mix of salmon and trout species would be best for our changing lakes and the people who fish here. To do that, we need more information on what predatory fish are eating in different parts of the lake throughout the year. You can help with this by collecting stomachs from your catches. Angler caught fish are great sources of information, but it is very important to follow instructions carefully to avoid biasing the study.

Instructions:

To avoid bias, it is important to collect stomachs from both empty and full stomachs. Empty stomachs are very important because a high percentage of empty stomachs means that fish are having trouble finding food. If you collect fish stomachs then take the following steps:

1. Decide if you will collect stomachs from this fishing trip.
2. Remove stomachs from ALL fish of each species that you are collecting on this trip. It is okay to collect just one species.
3. Place entire intact stomach into plastic bag with data tag.
4. Freeze or ice stomachs immediately and transfer to drop site freezer

Port fished

This will usually be the port your trip originated from. If you ran a long way and fished closer to a different major port then you should list the port you fished near. If you're fishing a well-known area that is not a port (like South Manitou Island or Washington Island) you can list this instead, but do not list local nicknames for fishing spots (like the Barrel or the Bubbler) that may not be familiar to researchers unless you also include the name of the port.

Length

Measure total length to nearest quarter inch with mouth closed and tail pinched. In large Chinook salmon, the caudal rays are stiff and the tail fin cannot be squeezed tightly together. Bend the upper lobe down to measure total length for large Chinooks.

Adipose Clip

An adipose fin clip indicates a stocked fish. If your fish does have an adipose fin, mark "NO" for the Adipose Fin Clip. If the fish is clipped and has no adipose fin, mark "YES" for the Adipose Fin Clip.

Depth

OPTIONAL. Record water depth in feet. If you know how deep the fish was caught, you can also record the lure depth. For example, if your lure was running 10 feet below the surface in 45 feet of water you could record this as 10 over 45 (see example).

VOLUNTEER DATA TAG	Date caught: 5-1-16	
	Port fished: St. Joseph	
	Species: COHO	
	Length (to ¼ in.): 19 1/4	
	Adipose Fin Clip (Yes/No): No	
	Depth of Water (feet): 10 / 45	

How You Can Help

- Get instructions, drop sites, and printable data tags: MichiganSeaGrant.org/diet
- Share a video entitled "Huron-Michigan Diet Study Instructions": <http://bit.ly/2CIEFr8>
- Help us fund student research by donating at MSU's CrowdPower site: <http://bit.ly/2ALNSJy>
- Make a donation by mailing a check payable to "Michigan State University" to:

University Advancement, Spartan Way
535 Chestnut Road, Room 300
East Lansing, MI 48824

NOTE: be sure to write "Appeal 18OOPCF1GLFISH" in the note section.

NOTE: Most freezer drop sites will be unavailable for the immediate future, so we are asking anglers to keep their stomachs frozen in personal freezers until public drop sites are reopened. ✧

August 1st Edition Surveying Owasco Lake 2020

Staff from DEC's Region 7 Fisheries Unit will be conducting multiple surveys on [Owasco Lake](#) this coming August and September.

Sampling efforts will assess:

- Current lake trout population characteristics
- Relative abundance of adult brown trout, rainbow trout and walleye
- [Wild production of juvenile salmonids in area tributaries](#)

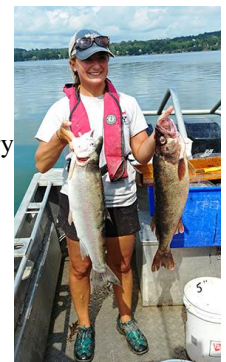
- Relative abundance of smelt and alewife in the lake (forage assessment) *new in 2020*

These surveys inform decisions about the number of lake trout to stock, as well as help gauge long-term fisheries responses in the lake after a 10-year experimental walleye stocking that ended in 2006.

More information:
[Owasco Lake fishing](#)

[Owasco Lake Monitoring and Management](#)

(2019 Owasco Lake Angler Diary report, page 5) ✧



DNR removes 18 invasive carp from Little Sioux River watershed in SW Minnesota

The Minnesota Department of Natural Resources removed 18 invasive carp from the Little Sioux River watershed near the Iowa border in southwestern Minnesota July 8 during a capture operation. The operation followed a report by an area fisheries biologist of fish schooling below a DNR-installed electric barrier.

DNR fisheries staff captured 12 bighead carp, five silver carp and one grass carp below the Illinois Lake electric barrier on a tributary of the Little Sioux River. The fish ranged in size from 17 inches to 35 inches.

Preemptive actions to install and monitor an electric barrier prevented these invasive carp from expanding into other waters. These steps protected nearby lake resources and helped maintain the boundary beyond which invasive carp have not been observed.

Invasive carp have been progressing upstream in the Missouri River watershed since escaping into the Mississippi River in Arkansas in the 1970s. These large fish compete with native species and pose a threat to rivers and lakes. No breeding

populations have been detected in Minnesota waters. This is the second capture of invasive carp in southwestern Minnesota. In December, two silver carp were captured below the Lake Bella Dam.

These recent southwestern Minnesota captures are very likely related to the prolonged high water conditions during the summer of 2019 and spring of 2020. During high water, normally shallow streams contain enough water for fish to move upstream.

The DNR continues to be actively engaged with invasive carp prevention efforts in southwestern Minnesota.

- The DNR first surveyed the Missouri River watershed in Minnesota to identify potential locations to site barriers that could help prevent expansion of invasive carp populations in southwestern Minnesota. The DNR completed eight such projects to limit expansion and protect valuable aquatic resources. The Illinois Lake electric barrier is one of these projects.

- The DNR provided financial support to the Iowa DNR to build an

electric barrier at the outlet to the Iowa “Great Lakes” Okoboji area. The outlet channel also flows into the Little Sioux and Missouri rivers. This barrier protects not only the Iowa lakes but also aquatic resources in southern Minnesota.

- The DNR also conducts a comprehensive sampling program to monitor fish population changes and impacts of management actions. This includes routine monitoring in southwestern Minnesota.

State funding sources, including the Environmental and Natural Resources Trust Fund and Outdoor Heritage Fund, have provided key funding for deterrent actions and the DNR invasive carp detection and response program.

Invasive carp captures must be reported to the DNR immediately. Take a photo and transport the carp to the nearest DNR fisheries office or make arrangements for it to be picked up by a DNR official by calling 651-587-2781 or emailing invasivecarp.dnr@state.mn.us.

More information about invasive carp is available on the [DNR website](#).
✧

Southwick releases report on the size of the 2019 hunting & shooting market

Details the Dollars and Units for many hunting and shooting products

Concurrently with tracking the unprecedented 2020 market, Southwick Associates released a report detailing the size and trends of the 2019 hunting and shooting sports market. Overall, retail revenues declined 8% in 2019 across all categories, according to a new market size report, while overall units remained in line with 2018. The overall value of the market in 2019 dropped to \$19.5 billion.

“Firearms and ammunition stabilized in mid-2019 then started showing slight gains in units sold for the remainder of the year, with handgun ammunition showing double-digit increases in both unit and dollar sales,” said Nancy Bacon, Vice President at Southwick Associates. “For the product categories tracked,

total units were flat while the average price paid pointed to significant discounting in nearly all categories.”

Firearms and ammunition experienced less discounting than other product categories and for the first time in several years presented increases in total units sold. Handguns, shotguns, and traditional rifles all saw an increase in units sold over the prior year. The largest growth was seen in firearm storage, and the largest declines were seen in optics, black powder, firearm parts, and shooting equipment.

The new “2019 Retail Market Size Report – Hunting and Shooting Equipment,” with 20-plus pages of detail, is available from Southwick Associates for \$3,500. The report includes unit and dollar sales estimates

of more than 100 products directly associated with hunting and recreational shooting. Other items such as travel-related spending, real estate and indirect equipment such as vehicles are not included. For more information on Southwick’s market size reports and to view a sample report, visit www.southwickassociates.com. To purchase a report, or to discuss any custom research needs, contact Nancy Bacon at Nancy@southwickassociates.com.

Southwick Associates continues to actively track 2020 trends for the hunting and shooting market plus the reasons driving the shifts. More will be released once available, with details to be provided in 2021. Contact Southwick Associates for assistance in understanding these trends. ✧

Lake Michigan whitefish virtual meeting **August 18**

MADISON, Wis. – In order to fully engage with everyone who has an interest in lake whitefish, the Wisconsin DNR will hold a virtual public meeting to discuss options on the best path forward for this species.

This virtual meeting will be held on Tuesday, **Aug. 18**, at 6 p.m. and conclude at 8 p.m. Members of the public can access the meeting beginning at 5:45 p.m. via [Zoom](#) or by calling 312-626-6799 and using meeting ID: 957 6595 4593.

The department will be developing new regulations for lake whitefish for the commercial industry and would like stakeholder participation from a wide variety of sources. This will be the first of several public meetings over the course of the next year.

"We have been working with commercial anglers on a variety of projects over the last 5 years," said Brad Eggold, DNR Great Lakes District Fisheries Supervisor. "This collaboration has provided valuable data and information on the population size and movement patterns of this prized Lake Michigan fish."

It's important to note that during this meeting, information will be shared using a PowerPoint presentation. While the call-in number will allow attendees to listen to the discussion, to better understand the information and see the presentation, the DNR recommends the public attend using a computer via the [Zoom](#) link.

"We look forward to discussing this information with stakeholders and gathering their comments and suggestions to help us sustain the lake whitefish fishery into the future," said Todd Kalish, Deputy Fisheries Director.

More information on [Lake Michigan commercial fishing](#) can be found on the DNR's [fisheries webpage](#). ✧

Fall harvest for cormorants

Continued from page 1

"Growing up in North Bay and spending many summers fishing on Lake Nipissing, I have seen firsthand the issues that cormorants have caused in some local areas," said Mike Harris, Parliamentary Assistant to the Minister of Natural Resources and Forestry. "A new fall hunting season will help communities manage cormorant populations where they have negatively impacted natural habitat and other water bird species."

"Cormorants have been a growing problem on Sturgeon Lake and Balsam Lake, where they have covered islands with their guano, killing trees and vegetation," said Laurie Scott, MPP for Haliburton-Kawartha Lakes-Brock. "We're listening to local residents who have voiced their concerns and asked for additional tools to address the issue."

Ontario has a healthy and sustainable cormorant population. We will continue to monitor the cormorant population status and trends to support sustainability of cormorants in the province.

Quick Facts

- Double-crested cormorants are fish-eating birds, usually eating easy-to-catch fish species. They nest on the ground or in trees on islands and peninsulas.
- In large amounts, cormorant droppings, called guano, can kill trees and other vegetation and destroy traditional nesting habitats for some other colonial water birds.
- Competition between cormorants and some colonial nesting water birds has been well documented, including the displacement of some other species by cormorants.
- Hunters are responsible for appropriately identifying their target and ensuring they are harvesting only double-crested cormorants.
- While some hunters may choose to consume cormorants, those who choose not to consume the cormorants they harvest must

Wisconsin DNR launches redesigned Website

MADISON, Wis. – The Wisconsin DNR announced the launch of its newly redesigned website developed to be faster and more user-friendly. The goal of the new website is to provide visitors an easier way to learn about the DNR's services. It will provide the public a wealth of easily accessible information. The landing page is designed so that topics are easy to find on both desktop and mobile devices. The website gives visitors better access to information on the environment, hunting, fishing, parks, forestry, licenses and climate change. It also improves web accessibility for all users and aligns with standards set by the Americans with Disabilities Act. www.wisconsin.gov ✧

See a turkey? Submit a report

HARRISBURG, PA – Each summer, Pennsylvanians help track wild turkey populations by reporting their turkey sightings to the Game Commission. And once again this year, they'll have two months instead of one to make observations and report them. The Pennsylvania Wild Turkey Sighting Survey again opened **July 1** and will run through **August 31**. The two-month window follows the current national standard used by all state wildlife agencies, providing comparable data across the wild turkey's entire range. Turkey sighting reports can be made through the Game Commission's mobile app or on the agency's website, www.pgc.pa.gov. On the website, click on "Turkey Sighting Survey" in the Quick Clicks section. The mobile app can be found by searching for "Pennsylvania Game Commission" in the Google Play Store or Apple's App Store, and selecting "Turkey Sighting Survey." ✧

retrieve the birds and dispose of them properly.

[Find out more about hunting in Ontario. Find out more about the fall cormorant hunt in Ontario.](#) ✧

Minnesota DNR awarded \$1.1 million federal grant to protect coastal resources

The Minnesota DNR will use a \$1.1 million grant from the National Oceanic and Atmospheric Administration (NOAA) to support the work of Minnesota's Lake Superior Coastal Program, fund three significant local projects and continue the program's quarterly Short Term Action Request (STAR) grants.

Project funding includes:

- **Shore Protection Structure Assessment.** The DNR will work with a contractor to complete an assessment of shore protection structures along the coast. The assessment will examine the effectiveness of structures like seawalls and breakwaters, and their performance under different lake level and storm scenarios.
- **Lake Superior Coastal Erosion Outreach.** Soil and water

conservation districts (SWCDs) in Cook and Lake counties will host a series of erosion workshops for contractors, landowners, local governments and realtors. Both SWCD offices will have four days with a coastal engineer during which they will also offer onsite visits with landowners who need advice to address erosion issues.

- **H2O: Watersheds at Work.** The Great Lakes Aquarium will create a new exhibit about key watershed concepts. The exhibit will include a working scale model of the Great Lakes basin and three water activity stations.
- **Short Term Action Request (STAR) grants.** The Coastal Program will award at least \$100,000 for small, non-construction grants. Projects must protect coastal resources or support

their sustainable use. Communities and organizations may apply for \$2,500 to \$10,000. The DNR will post application materials online in August. First round applications are due September 1.

Minnesota's Lake Superior Coastal Program is a federal-state partnership working to better the state's coast. Since its start in 1999, the program has awarded more than \$13.5 million in grants to more than 650 projects.

More information about the program, its service area and grant applications is available on the DNR website at mndnr.gov/mlscp. Direct questions about the grant process to Cynthia Poyhonen, grants specialist, at 218-834-1447 or mlscp.dnr@state.mn.us ✧

Dan Bortner named Director of Indiana DNR



Gov. Holcomb has selected Dan Bortner to serve as the director of the DNR. Bortner has served as DNR's director of Indiana State Parks since 2005 and is currently the third longest serving state parks director in the nation. As director of state parks, Bortner took the division from preparing to close facilities to consistently operating in the black with 98% saying they would recommend Indiana state parks to others. Infrastructure updated under Bortner's leadership has led to improved campgrounds that are typically full each weekend, and our state park inns have the highest occupancy rate of any state park inn system in the country. Former director Cam Clark retired in July. Bortner began his new position on August 3. ✧

Walleye angling, live bait return to Mille Lacs Lake

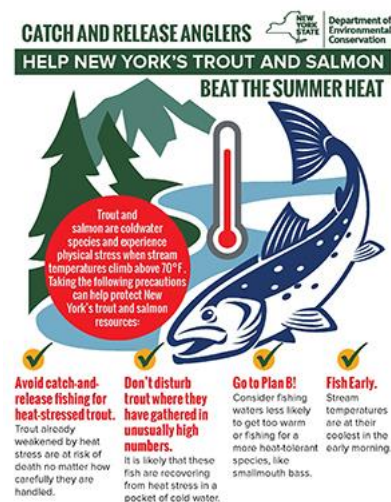
Effective August 1, anglers can fish for walleye on Mille Lacs Lake and use live bait. The past winter resulted in a harvest of almost 30,000 pounds of walleye. July was selected for the closure because it's generally the period when warm water temperatures cause the highest rates of hooking mortality. The planned July closure reduced, but does not eliminate, the likelihood of an unplanned closure later in the season. An unplanned closure would be triggered if the state reaches its share of the safe harvest amount agreed upon by the state and eight Ojibwe nations that have treaty fishing rights on Mille Lacs. Through July 15, state-licensed anglers had harvested 58,437 pounds of the state's 87,800-pound walleye allocation for the 2020 season.

Catch-and-release walleye fishing is scheduled to continue through Monday, Nov. 30. More info: mndnr.gov/millelacslake. ✧

Catch and Release Anglers – Help Trout & Salmon Beat the Heat

During the hot days of summer, it is important to remember that trout and salmon experience serious physical stress when water temperatures climb above 70°F.

For tips on protecting New York's trout and salmon resources, [visit DEC's website \(PDF\)](#). ✧



Lake Michigan Chinook salmon stick with declining alewife as their main meal

Over the past few decades, invasive species like zebra and quagga mussels have been eating up much of the base of Lake Michigan's food web, affecting organisms throughout the lake, including alewife, a staple meal for salmon and trout. As menu options shift for these top predators, their success going forward may depend on expanding their diets.

A lake-wide study of salmon and trout conducted in 2015–16 found that diet flexibility varies among salmon and trout species, but Chinook salmon, the favorite of many anglers, are basically eating only alewife.

"This study describes how salmon and trout feeding patterns respond to the ever-changing Lake Michigan food web," said [Tomas Höök](#), Illinois-Indiana Sea Grant director. "Of particular concern, as alewife have been declining in abundance, the continued reliance on alewife by Chinook salmon may not bode well for this highly prized species."

Scientists from around the region got to the bottom of what five salmon and trout species in Lake Michigan eat in a direct way—they analyzed stomach contents. To do this on a lake-wide scale, they relied on help from the USFWS and state DNRs around the lake. Agency creel survey clerks interviewed anglers and gathered data as well as fish stomachs. The Little Traverse Bay Bands of Odawa Indians also contributed from what they caught in their nets.

"It was a huge effort to accomplish something like this, so we needed help from just about everybody around the lake," said [Ben Leonhardt](#), who worked on this project as part of his Purdue University master's degree and is now with the USFWS. "The anglers were the most important contributor—they took time out of their days to provide us with what we needed."



The research team found that all five salmon and trout species ate alewife. But, unlike Chinook salmon, which almost exclusively consumed alewife, coho salmon also ate aquatic invertebrates. Lake trout and brown trout were less reliant on alewife, adding round goby to their diets, while rainbow trout also ate insects.

The story can get more complicated when factoring in location and season. "In the spring and only in the southeast portion of the lake, coho salmon were full of mysis," said Leonhardt. "Anglers have noticed this at that time of the year, but it's never been documented before." Mysis, also known as opossum shrimp, is a tiny crustacean.

Also in the spring, along the Michigan side of the lake, brown trout and lake trout ate more round goby than alewife, but on the west side it was the opposite—brown and lake trout ate more alewife than round goby. One likely explanation for that difference is terrain. The gobies are able to hide on the rocky west side, but the sandy east side offers no cover.

While alewife and round goby, both non-native species, were the prey fish of choice for salmon and trout, other fish like bloater or sculpin were also available and sometimes in greater abundance. Nonetheless, researchers rarely found these native species in the predators' diets.

One explanation for the salmon's preference for alewife could be their silvery appearance. "Salmon are really interested in shiny objects—they're really distracted by them," said [Austin Happel](#), a research biologist with Shedd Aquarium who has continued to be involved in this project since his tenure as a Univ. of Illinois doctoral student.

Most of Lake Michigan's salmon and trout species are non-native too, and they all have been stocked into the lake going back many decades. Understanding what these fish are eating and keeping predators and prey in balance is critical to maintaining a healthy fishery.

"Previous to this study, for coho salmon, brown trout and rainbow trout, resource managers have used diet compositions from the 1980s," said Happel. "Now we know those species are not only eating alewife anymore. They're also eating quite a bit of terrestrial insects and round goby. This can be included into stocking models to get a more complete prediction of how many fish—salmon and trout of different species—that the lake can handle."

This project was the first part of a larger diet study assessing salmon and trout diets using three methods that assess diets at different timescales. This piece of the study, analyzing stomach contents, indicates what fish ate the day they were caught or maybe the day before. Second is to look at fatty acids in the fish, which show a longer time frame—what the fish ate over several weeks. The final piece is analyzing stable isotope ratios in fish tissues, revealing several months of a fish's diet.

["Diet complexity of Lake Michigan Salmonines: 2015–2016"](#) is available in the Journal of Great Lakes Research online now, and in the August print edition. ✧

DEC Seeking Striped Bass Anglers

DEC is seeking volunteer recreational



striped bass anglers to help provide valuable data that is critical to track population dynamics for striped bass in our local waters. By joining the [Striped Bass Cooperative Angler \(SBCA\) Program](#), you can assist DEC by collecting and providing data about your fishing trips that help us better understand New York's dynamic striped bass population. Get involved in conservation and management through the SBCA, by emailing sbcaprogram@dec.ny.gov or calling (631) 380-3308.

A new **online logbook** is now available for SBCA volunteers. Using the Survey123 app enables anglers to log their trips directly on their phone or from a computer. You can find instructions on how to install the app and log trips and more information about the SBCA [online \(PDF\)](#). ✧

Best Practices Guide for Charter Fishing and COVID-19

This guide provides best practices for charter operators, captains, crew, and customers to minimize the risk of COVID-19 for charter fishing in southern Lake Michigan. The guide covers measures that operators and customers can take before, during, and after a fishing trip, including social distancing, cleaning, and personal protective equipment. [View publication](#) ✧

DOWNLOAD FILE

Great American Outdoors Act

Continued from page 1

Restoration Fund" to address the crumbling infrastructure on America's public lands and waters. This program will provide \$9.5 billion over five years to the National Park Service, Bureau of Land Management, USFWS and U.S. Forest Service (USFS) to improve trails, campgrounds, roads, visitor centers and other infrastructure.

The Great American Outdoors Act delivers on the promise of sustained wildlife conservation, public land hunting and recreational shooting for current and future generations of outdoorsmen and women. ✧

Tracking Fish with Telemetry

Continued from page 11

together to share equipment and information to advance knowledge of fish movement patterns. "GLATOS provides fishery managers with information concerning fish movement and behavior that traditional fishery assessments were unable to," said Dr. Chris Vandergoot, GLATOS director.

Information observed for individual fish is used to better understand how populations interact with the environment over both the short- and long-term.

"Data sharing is imperative ... because without it, individual projects wouldn't be successful," Vandergoot said. "Since fish don't recognize state or international boundaries, individual researchers are able to follow their fish even if they leave their study area."

The next time you plan a fishing trip on the Great Lakes, consider exploring information on fish movement through GLATOS or at Michigan.gov/TaggedFish. It may make you a wiser, less frustrated angler.

If you believe you have caught a tagged fish, consider taking the time to report it to the DNR. Visible tags can be reported online through the DNR's Eyes in the Field reporting system. For adipose fin-clipped fish with coded-wire tags, heads can be submitted at a local drop-off station. ✧

Learn to hunt and fish from experts

Indiana DNR hosts workshops tailored to those new to hunting and fishing through the [Learn to Fish](#) and the [Learn to Hunt, Shoot, & Trap programs](#).

Sept. 12 – [Learn to Stream Fish, Atterbury Fish & Wildlife Area](#)

Sept. 26 – [Family Learn to Fish, Cicero](#) ✧

IDNR accepting applications for Boat Access Area Development program grants

SPRINGFIELD, Ill. – The Illinois DNR announced applications are now being accepted for grants through the Boat Access Area Development grant program. The deadline to apply is **October 2, 2020**.

The Boat Access program is a state-financed grant program that provides funding assistance to local government agencies for acquisition and/or development of land for public boat and canoe access areas in Illinois. The program can provide up to 100 percent reimbursement funding assistance on approved development project costs and 90 percent reimbursement on land acquisition costs. The local agency must demonstrate and possess the ability to finance the costs of an approved project prior to receipt of grant funds. This program is funded through a percentage of the state's marine motor fuel tax and registration fees.

The program is managed in Illinois by the IDNR and applications must be submitted to the IDNR by 5:00 p.m. on October 2, 2020. The Notice of Funding Opportunity can be found at: <https://www.illinois.gov/sites/gata/Pages/default.aspx>.

Consult the IDNR website at <https://www.dnr.illinois.gov/AEG/Pages/Grant-Administration.aspx> for more information, or call the IDNR Grants main line at 217-782-7481. ✧

Hatcheries vs. Herons

DEC's nine cold water fish [hatcheries](#) collectively produce over 6.4 million fish annually.



Unfortunately, a significant number of these trout and salmon are lost to a variety of predators in search of a "free meal." One predator that causes most fish losses is the great blue heron. At the Caledonia Hatchery it's not uncommon to have upwards of 40 great blue herons surrounding the ponds during the spring.

Over the years a host of methods have been employed to deter herons from preying on hatchery fish: from sound cannons, to balloons, to dancing "tube men" and decoys - even getting a watch dog to chase them off the property. The only way to effectively prevent fish losses from predation is to



totally enclose the ponds within a building structure.

The Rome Hatchery, and just recently the Bath Hatchery, have built pole barn style buildings over some of their outdoor ponds and have greatly reduced their fish losses. Bath went from about eight percent fish losses, down to less than one percent! Besides essentially eliminating fish losses, the pond enclosures also:

- Reduce algae growth in the ponds
- Keep water temperatures down
- Keep leaves out of the ponds in the fall
- Prevent fish diseases
- Make the working environment safer for hatchery staff

The enclosed ponds benefit everyone, *except....* the great blue herons. ✧

Bad news regarding Atlantic salmon raised at Platte River State Fish Hatchery

On July 16, 2020 during a power shut down, flow was decreased to the hatchery building causing the loss of flow to six of eight tanks holding Atlantic salmon. The majority of the fish in these tanks were lost, however the crew was able to salvage a few thousand. Total losses are some 136,000 fish, while 40,000 remain on inventory. These were fish planned to be stocked in the spring of 2021.

Part of the Electrical Distribution Project, currently underway at Platte River, includes complete analysis of the current primary power system. This included testing the main lines, transformers and switchgears to create a road map for replacement. To test these components, primary power needed to be disabled for a period of time including components that feed the hatchery building. The testing began at 8:08 am.

The testing sequence caused multiple facility alarms to occur, triggering horns to notify employees. Work on daily cleaning process was discontinued during testing as staff members had no lights in the building to see their work. A walk through was conducted at 8:25am and all fish appeared normal and no issues. By 9:40 am, Atlantic salmon tanks #1 thru #6 were discovered to have no flow and dead fish while tanks #7 and #8 still had flow. The variable frequency drive (VFD) powering the pump providing water to those tanks was found faulted, in a low voltage state, not running. Within minutes, the VFD and associated pump was deenergized allowing the fault to clear and it was restarted. Full flow to tanks resumed.

It has been determined that many factors contributed to the loss. Beginning last year, our strategy was to add an additional facility, Harrietta SFH, in the Atlantic salmon rearing program. The fish there are doing well and combined with the remaining inventory at Platte, we should have adequate numbers of Atlantic salmon available at stocking in 2021. ✧

CARES Act Disaster Fishery Relief Survey

DEC is requesting New York State marine and coastal fishery stakeholders to [complete a brief survey](#) to help determine priorities and



offer input on how to best appropriate funds provided by the federal Coronavirus Aid, Relief, and Economic Security Act, also known as the [CARES Act](#).

New York has been allocated approximately \$6.7 million in CARES Act relief funding to support the recovery of commercial fishing, seafood, aquaculture, and for-hire fishing industries from the impacts of COVID-19. Eligible individuals and businesses must demonstrate a 35 percent fishery-related revenue loss during a period in 2020 as compared to the prior five-year average over the same period. Once New York's fishery relief plan is approved by NOAA Fisheries, DEC will provide application instructions based on the final fishery relief plan criteria. At that time, DEC will work cooperatively with the [Atlantic States Marine Fisheries Commission \(ASMFC\)](#) to distribute funds as quickly as possible.

For more information, visit CARES Act Marine Fisheries Relief Program on [DEC's website](#). ✧

State Fish Hatchery. Beginning last year, our strategy was to add an additional facility, Harrietta State Fish Hatchery, in the Atlantic salmon rearing program. The fish at Harrietta are doing well and combined with the remaining inventory at Platte, we should have adequate numbers of Atlantic salmon (preliminary estimate of 100-120k fish) available at stocking in 2021. ✧

Tracking Great Lakes Fish with Acoustic Telemetry

The Michigan Department of Natural Resources is using acoustic telemetry to track fish movements in the Great Lakes.

If you've ever been fishing, you know fish can be hard to locate. Many anglers have marked a high-quality fishing spot with a GPS coordinate, only to return the next day to find that all the fish have left. Fish movements can be influenced by many factors, including location of desirable habitat, water temperature and the seasons.

In addition to helping anglers target their catch, understanding fish movement can help develop more effective strategies for managing fish populations. The Michigan Department of Natural Resources employs a multitude of tools to study these movements.

One method involves marking fish by clipping off a portion of one fin on fish reared in DNR hatcheries, like salmon or trout. This fin clip indicates that an internal coded-wire tag has been inserted into the fish's head. This tag is microscopic and contains information that DNR staff can read with a microscope. When anglers catch a marked fish, they are encouraged to report information about the catch online or in person at DNR customer service centers. In some cases the DNR will reward anglers for submitting information about the catch.

This mark-and-recapture method helps generate data based on how far the fish moved from where it was last observed. The drawbacks to this method are that researchers don't know how or when the fish traveled between two points and it is dependent on catching the fish multiple times—a challenging task in a body of water the size of the Great Lakes.

To gain greater insight into fish movement, researchers have been turning to acoustic telemetry. Acoustic telemetry is the process of using sound and distance to determine approximate movements of animals. It has two main components: a transmitter and a receiver. Each transmitter emits a unique series of sound pulses that can be detected on a stationary receiver.

The receiver decodes this unique sound and logs the transmitter number, date and time of the detection.

Researchers can surgically implant a transmitter in the fish's body cavity and release the fish into a body of water where receivers have been deployed. As the fish swims, movements can be tracked from receiver to receiver, showing the amount of time a fish spends in one area. Some tags also have environmental sensors that provide clues on the fish's depth, swim speed and water temperature.

Researchers at the Lake St. Clair Fisheries Research Station use acoustic telemetry to study muskellunge movements in the St. Clair-Detroit River system to better understand spawning areas for habitat restoration and conservation.

"The ability of acoustic telemetry to provide fine-scale data across all seasons and across huge areas is a game changer, especially for species like muskellunge that are commonly low density," said Dr. Jan-Michael Hessenauer, a DNR fisheries research biologist.

Since 2016, more than 130 muskellunge have been tagged with transmitters.

One unique aspect of this project is involving muskellunge angling groups in the tagging process. *"Members of these groups have participated in special fishing events where they have collected fish for tagging and contributed funds to purchase tags and other equipment needed to sustain the project,"* Hessenauer said.

Acoustic telemetry can yield surprising results. According to Hessenauer, one male muskellunge *"has made two separate trips to the Buffalo area on the east side of Lake Erie, each time returning to the Detroit River where he was initially tagged ... But it is important to stress that he's the only fish that has moved at that scale."* The Detroit River to the

Buffalo area is roughly 500 miles roundtrip, so a muskellunge making this trip twice would have to swim about 1,000 miles.

Acoustic telemetry can have different applications for DNR staff involved in native and invasive species management. Staffers at the DNR's Waterford Fish Station in Oakland County collaborate with researchers at Michigan State University to track movements of grass carp in Lake Erie. Grass carp are an invasive species the DNR and regional partners are working to eradicate from the Great Lakes. The primary goal of their field work is to remove as many grass carp as possible.

Tagging a small number of fish with acoustic transmitters and releasing them back into Lake Erie has helped locate grass carp across the vast expanse of the lake and its tributaries. *"Having seasonal movement information for these fish helps response crews better target high-use areas for control efforts,"* said John Buszkiewicz, a grass carp biologist at the Waterford Fish Station.

One noteworthy application of this technology is the *"real-time rapid response"* project. When a tagged grass carp comes into a specific area, a real-time receiver sends out an email alerting the response crews. A team can mobilize quickly by deploying gear to capture any other grass carp in the area. This technology has revealed specific timing of spawning activity and shown seasonality of grass carp movements, which has helped improve capture rates. Telemetry continues to be a major component of grass carp eradication efforts in Lake Erie.

One special aspect of acoustic telemetry research in the Great Lakes region is that data downloaded from receivers is published on GLATOS — the Great Lakes Acoustic Telemetry Observation System. It's a great example of researchers working

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

Commission releases study on fish population, size in Great Lakes

The International Joint Commission has released a report identifying why there are reduced fish populations in four of the five Great Lakes, including Huron, citing invasive species, algal blooms, and other aspects affecting water quality.

Sand dredged from Waukegan Harbor to be used to replenish four area beaches

As sand deposits grow higher in the federal navigation channel of Waukegan Harbor, potentially imperiling shipping, the United States Army Corps of Engineers has developed a plan to use the sand recovered from dredging the port to combat erosion at area beaches.

Fall hunt set for 'damaging' cormorants in Ontario

In a bid to protect fish stocks and natural habitat in Nipissing from the harmful impacts of double-crested cormorants, the Ontario government is introducing a fall harvest for the species.

Water levels on 4 of 5 Great Lakes have now peaked says U.S. Army Corps

With the exception of Lake Superior, each of the Great Lakes has likely reached its peak water levels for the year, according to the U.S. Army Corps of Engineers

Judge extends negotiations over Great Lakes fishing rights

The state of Michigan and five Ottawa and Chippewa tribes have more time to renegotiate their expiring agreement governing fishing in the Great Lakes. The decades-old agreement, set to be renegotiated this summer, now will be extended through the end of 2020 to give the parties

Landmark Lake Erie case expected to hit new wave before Judge Carr on Friday

A court hearing for the future of western Lake Erie is being held Friday before Senior U.S. District Judge James Carr of Toledo, Ohio

US supports barriers to restrict Asian carp from Great Lakes

A member of the Great Lakes Fishery Commission (GLFC) calls the United States House panel backing an Asian carp barrier project as a major step forward to keep the invasive fish from entering the Great Lakes

COMMENTARY: Court filing could end Great Lakes fishing as we know it

The 2000 Great Lakes Consent Decree is set to expire in August, and a court proceeding filed last week by one Michigan Upper Peninsula tribe could end sportfishing as we know it in much of the Great Lakes

Multi-million dollar grant funds study of Great Lakes aquaculture

A million-dollar grant to study aquaculture aims to boost the number of fish farms in the Great Lakes region. The National Sea Grant office awarded the funds to a group that brings together scientists and educators from all eight states in the Great Lakes basin

Plastic pollution in Lake Huron: Part I of a series

Almost 4,700 kilotonnes of plastics are introduced into the Canadian market annually. Only nine percent of plastic waste is recycled and 86 percent ends up as waste in our landfills. A lot of that plastic waste ends up in our lakes and on our shorelines.

Project aimed at keeping Asian carp out of Great Lakes passes U.S. House committee

The House Transportation and Infrastructure Committee recently passed legislation authorizing the construction of a multilayered system to prevent the spread of invasive species at the Brandon Road Lock and Dam near Joliet, Illinois

Lake Huron's temp spikes to 5 C above normal

Lake Huron is five degrees warmer than average for this time of year, according to data from the National Oceanic and Atmospheric Association's (NOAA) Great Lakes Environmental Research Laboratory, suggesting consequences for fish communities as temperature fluctuations may affect

DNR removes 18 invasive carp from the Little Sioux River watershed

The Minnesota Department of Natural Resources (DNR) removed 18 invasive carp from the Little Sioux River watershed near the Iowa border in southwestern Minnesota July 8 during a capture operation; preemptive actions to install and monitor an electric barrier prevented these invasive

Mass marking and tag collection for Lake Michigan salmon and trout has been suspended

The U.S. Fish and Wildlife Service has suspended its tagging program of salmon and trout raised at state hatcheries around Lake Michigan due to the COVID-19 pandemic. As such, no fisheries personnel will be collecting tags or other information from fish caught and registered at traditional fishing tournaments.

High Great Lakes temperatures raise algal bloom concerns

As temperatures rise in the Great Lakes and conditions become more ideal for harmful algal blooms on the lakes, scientists expect to see increased bloom occurrences and greater toxicity.

End

GLSFC Ballot for 2021-2022

Please vote for all officers and the director for your state. Each club is authorized one vote.

Please submit by October 1, 2020, via email, to glafc@comcast.net

Officers

President

- ☐ Daniel N. Thomas, *incumbent*
☐ _____

Vice President

- ☐ _____

Secretary

- ☐ Michael D. Sanger, *incumbent*
☐ _____

Treasurer

- ☐ Thomas G. Couston, *incumbent*
☐ _____

For Directors, vote for your state only.

Directors

Illinois

- ☐ Robert Gaik, *incumbent*
☐ _____

Indiana

- ☐ Mike Schoonveld, *incumbent*
☐ _____

Michigan

- ☐ _____

Minnesota

- ☐ _____

New York

- ☐ Thomas Marks, *incumbent*
☐ _____

Ohio

- ☐ Rick Unger, *incumbent*
☐ _____

Ontario

- ☐ Darryl Choronzey, *incumbent*
☐ _____

Pennsylvania

- ☐ Ed Kissell, *incumbent*
☐ _____

Wisconsin

- ☐ Robert Wincek, *incumbent*