



FEDNAV leads the way with Innovative Ballast Water Solution on Great Lakes

MONTREAL – Fednav Limited, the largest Canadian operator of international ships in the Great Lakes-St. Lawrence Seaway system, recently announced an order for 12 ballast water treatment systems to equip its ships currently under construction. This makes Fednav the first shipping company in Canada and the Great Lakes to announce the installation of ballast water treatment systems, well before the regulatory requirement.

"Our company is committed to stimulating trade and enhancing Canada's economy while protecting the Great Lakes against the introduction and spread of aquatic invasive species," said Paul Pathy, President and Co-CEO of Fednav Limited. "After extensive analysis and testing, we are confident that the technology we are choosing is an

affordable and effective means to ensure that Canada meets its ballast water requirements. We are proud to be leading the way, along with government and industry partners, in establishing a level playing field for the Canadian, U.S., and international fleets to operate together in the Great Lakes region."

Developed by JFE Engineering Corporation, Japan, the BallastAce system will be installed on Fednav's new lakers and will be effective in both fresh and salt water. BallastAce operates through a sophisticated filter and sodium hypochlorite injection mechanism in the ship's ballast system.

Fednav chose this solution after years of testing. From the *Federal Yukon* (copper ions) to the *Federal Welland* (electrodialytic disinfectant) to the *Federal Venture* (chlorination),

the company has spent millions of dollars over many years to find a reliable, effective, and economical solution to the environmental problems caused by aquatic invasive species.

The contract with JFE commits Fednav to install BallastAce systems in its 12 lakers under construction at Oshima shipyard in Japan. JFE will install its first system in the *Federal Biscay*, delivering in October 2015. Consequently, Fednav may well be able to introduce BallastAce to the Great Lakes at the opening of the Saint Lawrence Seaway in 2016. With Fednav's encouragement, AMS-approved BallastAce is now pursuing full U.S. Coast Guard type approval for freshwater and saltwater certification at the GSI and MERC test facilities in Superior, WI, and Baltimore, MD. ✧

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Asian carp would have adequate food to survive in Lake Erie

If invasive bighead carp and silver carp spread into Lake Erie, there would be enough food available for these species of Asian carp to survive, according to a new study by the U.S. Geological Survey.

This information is critical in helping resource managers mitigate effects of an Asian carp invasion. If bighead and silver carp were to populate Lake Erie, they have the potential to damage native fish populations and the Great Lakes economy.

USGS scientists used satellite imagery of Lake Erie showing algae on the surface to determine how much food would be available for Asian carp. Green algae and blue-green algae, specifically floating algal blooms that can be seen on the surface, are a preferred food source for Asian carp. The water temperatures and algal concentrations

detected in Lake Erie from 2002-2011 show that the bighead and silver carps could not only live in this environment, but could continue to grow. The full report is available [online](#).

"Remote sensing imagery shows that Lake Erie has huge areas of available food that are often several times more concentrated than necessary for Asian carp growth, particularly in the western basin," said USGS scientist Karl Anderson.

Food availability and water temperature are the greatest sources of uncertainty for predicting fish growth potential. Water temperature is a big factor in determining how much bighead and silver carps need to eat. Models developed by USGS scientists helped determine how much algae those carps need to survive.

Carp could survive in Lake Erie

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Chinook salmon in Lake Superior

A fin-clipping program is helping Michigan DNR fisheries managers evaluate the success of Chinook salmon stocking in Lake Superior. The numbers of clipped and unclipped Chinook salmon in anglers' catches indicated that about 4.5% of the 2-year-old Chinook salmon in the lake were of hatchery origin.

Besides getting rough return rate estimates of stocked Chinook salmon, managers and anglers alike are interested in seeing where these fish are being caught. According to 2014 data, from 0-8% of the 2-year-old Chinook salmon examined by creel clerks at seven different survey sites were clipped, with Keweenaw Bay and Munising being the ports where the highest numbers and percentages were recorded. Turning these figures around, the data show that wild, naturally reproducing Chinook salmon made up 92-100% of catches at all ports.

The initiative to clip adipose fins to mark Chinook salmon stocked in Lake Superior started in 2012 as part of the U.S. Fish & Wildlife Service's mass marking program. To date, slightly more than 1.1 million clipped Chinook salmon have been released at Black River Harbor and from sites near the Ontonagon, Dead and Carp rivers. These fish are marked only by their fin clip and do not have coded wire tags in their snouts.

Anglers are expected to see an increased proportion of adipose-clipped Chinook salmon in their catches in 2015, due to additional marked hatchery Chinook salmon from multiple year classes being out in Lake Superior.

"We look forward to learning more about these dynamic fisheries as more angler catch information comes in," said Phil Schneeberger, Lake Superior Basin coordinator. "We appreciate angler cooperation with creel clerks who are collecting these key data." For more information: michigan.gov/taggedfish. ✧

New coastal striped bass limits on season opening day

New York DEC reminded anglers of the new striped bass limits, which comply with the Atlantic States Marine Fishery Commission's mandated 25% harvest reduction.

The recreational limits for all anglers in coastal waters (all New York marine waters of Long Island, Westchester County and New York City south of the George Washington Bridge) are:

► 1 fish, 28 inches or larger, during the Apr. 15 – Dec. 15 season.

DEC also established new limits for the Hudson and Delaware rivers and commercial fishing in coastal waters as follows:

► **Hudson River** (all tributaries north of George Washington Bridge and all inland waters): 1 fish, 18-28 inches OR 1 fish larger than 40 inches during the Apr. 1 – Nov. 30 season

► **Delaware River:** 1 fish, 28 inches or larger (no closed season)

► **Commercial:** The commercial quota is reduced by 25%. A slot limit of 28-38 inches during the Jun. 1 – Dec. 15 season is the new limit.

New York also recommends the use of "non-offset circle-hooks" while fishing for stripers since this reduces the mortality of released fish. A circle hook is a hook designed and manufactured with the point of the hook turned back toward the shank of the hook to form a circular or oval shape.

NOTE: Anadromous river herring regulations remain the same for the Hudson River. The possession ban remains only for the Marine and Coastal District and all other waters in New York State.

Anglers are reminded to enroll in the annual no-fee recreational marine fishing registry before going fishing in the marine and coastal district waters or when fishing in the Hudson River and its tributaries for "migratory fish of the sea" (e.g. striped bass). Enroll at www.dec.ny.gov/permits/54950.html, www.dec.ny.gov/outdoor/7894.html.

✧



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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.

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Publisher

Dan Thomas, 630/941-1351

Editor

Jeanette Thomas

Webmaster

Joe Nutt, nuttcajbn@sbcglobal.net

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Dynamic Dead Zones alter Fish Catches in Lake Erie

Scientists with the U.S. Geological Survey, the Illinois-Indiana Sea Grant and partners recently found that dead zones caused by [hypoxia](#), the depletion of oxygen in water, are unexpectedly variable in Lake Erie, sometimes disappearing and reemerging elsewhere in the matter of hours. New research shows that Lake Erie's dead zones are actually quite active, greatly affecting fish distributions, catch rates and the effectiveness of fishing gear.

They also found that fish like yellow perch cluster at the edges of these areas. The discovery of erratic dead zones can help commercial fishers and scientists determine where and how to effectively catch and study fish.

[The study](#), conducted near Fairport Harbor, Ohio, during August and September of 2011-2013, was recently published in the *Canadian Journal of Fisheries and Aquatic Sciences*.

"We were amazed by how quickly hypoxic areas moved during our study," said Richard Kraus, a USGS scientist and the lead author. "These findings can help managers sustain valuable fish populations in Lake Erie, which is one of the world's largest commercial fisheries."

Hypoxia at the bottom of Lake Erie occurs during the summer as a result of biological activity in the colder bottom layer that consumes dissolved oxygen in the water. The warmer surface layer floats on top, preventing oxygen from mixing down to the bottom. The researchers used sensors to measure oxygen levels and lakebed temperatures, and found that dead zones are frequently moving as a result of internal waves in the lake.

Although bottom waters might be a refuge for cool-water fish species, hypoxia can force fish to seek less suitable habitats. Acoustic surveys during the study revealed that when fish shift because of seasonal hypoxia, they cluster at the edges of

dead zones rather than avoiding hypoxic areas entirely. Using fishing gear like trawls and nets, the scientists caught fish at the highest rates along dead zone boundaries.

"Our study shows that Lake Erie contains a patchwork of low and high-density fish populations," said Paris Collingsworth, a Great Lakes Ecosystem Specialist with Sea Grant. "This understanding of fish distributions can inform policy decisions, such as how many walleye, yellow perch and others can be fished from the lake."

The USGS and [Illinois-Indiana Sea Grant](#) partnered with the Ohio Department of Natural Resources, the Ohio State University and the Environmental Protection Agency on the new study.

For more information, please visit the Department of the Interior's [Northeast Climate Science Center](#) and the [Upper Midwest and Great Lakes Landscape Conservation Cooperative](#) websites. ✧

How to introduce a kid to fishing

Taking a kid fishing can be rewarding, but less so if that kid is cold, hungry, insect-bitten, bored, frustrated, or beholden to an adult who can't put down their own fishing rod.

"Fun and safety are the most important considerations while bringing kids fishing," said Jeff Ledermann, angler recruitment, retention and education supervisor with the Minnesota DNR. "Kids love to fish. But when kids start out, adults need to be patient as they teach how to free tangled lines, tie-on and bait hooks, and take fish off the line."

To keep kids interested, use live bait to catch smaller fish like bluegills that tend to bite frequently. Smaller hooks and lighter line that match the size of the fish will increase the odds of catching something. Remember to congratulate kids on catching any fish, no matter the size, and take photos to capture the moment.

"A lifelong interest in fishing can be ignited or extinguished in a few introductory fishing trips," Ledermann said. "And let's face it, kids have plenty of competing ways to spend their time these days. That's why it's so important to have a game plan before heading out."

Shore fishing can be a good way to start because if a kid gets bored, it's easier to take breaks. When considering a location, choose one that is comfortable and safe. Look for restrooms, playground equipment, safe access and a public fishing pier.

"Invite a friend or neighbor kids for even more fun. If they lose interest or the weather or fishing is poor, wrap up the outing before it becomes a negative experience and try again another day," Ledermann said.

Fishing reels, rods and other gear should be simple, appropriately sized and in working order. Consider giving

a child their own fishing rod that is easy to handle. Anyone 16 or older who is fishing will need a fishing license.

"Fishing doesn't need to be complicated or expensive. Nonetheless, be prepared by packing snacks, sunscreen, insect repellent and first-aid basics," Ledermann said. "With a little planning, you're more likely to discover one of the best-kept secrets about fishing—that in the end it's all about the lessons learned and the time spent together outdoors."

Adults who want to learn more before taking a kid fishing can find answers to common fishing questions, download a beginner's guide to fishing, and find a place to fish at www.mndnr.gov/fishmn. For information about hands-on programs that teach the basics of fishing, see www.mndnr.gov/takeakidfishing or www.mndnr.gov/bow. ✧

Wis. and Michigan project brings benefits for Brule area anglers

A cooperative project by Wisconsin and Michigan managers aims to collect data on an important native strain of walleye while providing fingerlings uniquely suited for a regional stocking effort.

Mike Vogelsang, north district supervisor for the Wisconsin DNR, said the research is taking place on the Brule River, which is home to a relatively pure strain of Lake Michigan walleye. The river meanders to separate Wisconsin's Florence and Forest counties from Michigan's Iron County before it eventually reaches the Menominee River and flows into Lake Michigan.

The river features more than 27 miles of cold class I trout waters and its impoundment areas serve as the perfect home to a strain of Lake Michigan walleye that has been largely unaffected by the hybridization seen in other waters.

Walleye captured in the nets will be measured and weighed and a scale sample will be taken to determine age. Fish that are ready to spawn will contribute eggs and milt with a goal of harvesting some 1.7 million eggs.

In addition to assessing the overall health of the walleye population, the research effort also will involve northern pike, bass and panfish—other popular targets of recreational anglers in the region.

Vogelsang said the walleye egg collection effort is expected to produce approximately 30,000 fish for stocking in Forest and Florence counties as part of the Wisconsin Walleye Initiative. The fish will be reared at the Oehmcke facility in Woodruff and will be stocked as 5 to 6 inch extended growth fingerlings in September.

To learn more about walleye stocking efforts, visit dnr.wi.gov and search "[Wisconsin Walleye Initiative](#)." More information about Michigan's fisheries management efforts can be found by visiting Michigan.gov/dnr and searching for "[Walleye Better Fishing Waters](#)." ✧

NY DEC proposes Regulations for Black Sea Bass Harvest

New York is accepting public comments on proposed changes to regulations governing the recreational harvest of black sea bass through June 29. The proposed changes will ensure New York's fishery population is consistent with the coast-wide fisheries management plan for summer flounder, scup and black sea bass.

Black sea bass are very popular with marine anglers, but under the current federal catch limits New York's recreational landings must be further restricted. These proposed regulations are designed to achieve the 33-percent harvest reduction required by the Atlantic States Marine Fisheries Commission.

The proposed changes include a one-inch increase in the minimum size, from 13.0 to 14.0 inches, and an increase in the possession limit during the months of November and December only, from 8 fish to 10 fish. The current eight fish possession limit will be retained from July 15 through October 31. The open fishing season will remain July 15 through December 31 with a minimum size limit of 14.0 inches during the entire open season.

Weaknesses in the current stock assessment caused federal scientists to exercise extreme caution when recommending annual harvest limits. A new stock assessment by the ASMFC in 2016 will be more robust and provide the basis for relief in 2017.

Interested parties are encouraged to provide input on the proposed rule and public comments will be accepted through June 29, 2015. Comments on the rule can be emailed to FW.Marine@dec.ny.gov or mailed to: Stephen W. Heins, NYSDEC, 205 North Belle Mead Road, Suite 1, East Setauket, NY 11733

For more information on the proposed rule: www.dec.ny.gov/regulations/propregulations.html. ✧

Commercial fishing up more than 5% from previous year

The Michigan DNR released data from its 2014 state-licensed commercial fishing season. Combined, the state-licensed commercial fishery caught nearly 3,414,000 lbs. of fish with an estimated wholesale dockside value of more than \$5.8 million prior to processing, marketing and retail sales.

While the state's total harvest was about 200,000 lbs. less than in 2013, the fishery's dockside value was up \$300,000 (more than 5%). The increase in the fishery's value is almost exclusively attributed to a more-than-15% increase in the wholesale price of Lake Whitefish. This species' value has gone up more than 50% in the past two years.

"Whitefish is by far the most important commercial fish species in the Great Lakes, and a delicious option consumers find at their favorite Michigan restaurant or retailer," said Tom Goniea, DNR commercial biologist. "The price of whitefish has been on the rise since 2010, but the increase in demand has accelerated in the past couple of years."

Lake whitefish accounted for more than 67% of the state-licensed harvest by pounds and 84% of the gross value during the last decade.

Participation in the fishery in 2014 remained constant from the previous year. Of the 51 state licenses issued, 31 were actively fished by 20 separate businesses. Eleven of these businesses fished in Lake Huron, five in Lake Michigan, three in Lake Superior and one in Lake Erie. Together, these businesses added an estimated \$25 million to the state's economy and approximately 300 fishing and fishing-related jobs.

Also available are an [in-depth description of Michigan's commercial fishery](#), photos of the fishers in action and maps of the Great Lakes with recent commercial fishing activity, as well as links to recipes and locations where Michigan fish can be purchased. ✧

Walleye fishing classes at 3 Michigan state parks

Ready to learn some tips on reeling in one of Michigan's most popular species? The Michigan DNR and Fishmas Charters have teamed up to offer walleye fishing classes at several state parks this summer—free of charge to all participants.

The two-hour “Rec 202: Walleye Fishing” classes emerged out of the DNR’s popular [Recreation 101 program](#) and will include discussion of the seasonal habits of the elusive walleye, proven techniques for finding fish, and a question-and-answer session. Classes will run 6-8 p.m. at the following parks (counties): [Newaygo State Park](#) (Newaygo): Friday, June 26
[Ludington State Park](#) (Mason): Monday, August 3
[Burt Lake State Park](#) (Cheboygan): Friday, August 28

Walleye enthusiasts of all skill levels are invited to take part in these free classes. Participants will learn how to have a successful walleye outing and about the behind-the-scenes effort that goes into managing Michigan’s freshwater fisheries.

Captain Ken Clark of Fishmas Charters in Whitehall, Michigan, who will teach the classes, stressed the value of the time, effort and money that goes into preserving and promoting fishing in Michigan. “If not for the joint efforts of the DNR and local fishing clubs, there would be no walleye to catch,” said Clark, a self-professed “walleye snob” and a 20-year charter boat captain.

At the end of each class, two lucky participants will randomly be chosen to accompany Ken for an hour of fishing directly after the program. Winners must have valid fishing licenses to participate in the fishing excursion. Participants 17 and younger must be accompanied by a parent or guardian. Classes may be canceled in the event of severe weather. For more information or to sign up for a class, please contact Elissa Buck at 989-313-0000 or email buckel@michigan.gov. For more information about Fishmas Charters, please visit www.FishmasCharters.com.

The Recreation 101 program is a

series of introductory classes taught by DNR staff or expert volunteers. These volunteers offer their time and knowledge at no charge to the DNR or class participants. The program began with several state parks in 2011. It is now offered statewide in Michigan state parks and many community recreation agencies through a collaboration with the Michigan Recreation and Park Association. “Rec 101” offers nearly every recreational pursuit, from archery to ziplining. Rec 202 classes generally are for people who have some experience with a recreation activity and want to expand their skills. www.michigan.gov/rec101.

[Inside Michigan’s Great Outdoors](#) subscribers are always the first to know about reservation opportunities, state park events and other outdoor happenings. Visit www.michigan.gov/dnr to subscribe now. There is no charge to participate in the Fishing 202 classes, but a Recreation Passport is required for vehicle entry to any of these participating Michigan state parks ✧

Comment sought on proposals for Saginaw Bay waters

The Michigan DNR is accepting feedback on two fishing regulation proposals for Saginaw Bay waters. These regulations would go into effect beginning April 1, 2016.

Over the last several years, data has shown there is a very high population of adult walleye in Saginaw Bay. With the collapse of alewife in Lake Huron in 2003, this species has been naturally reproducing there since 2004 and is now considered fully recovered.

With these population numbers and the declining abundance of prey fish in Saginaw Bay, managers recommend more liberal fishing regulations to allow anglers to harvest more walleye. The DNR is proposing to modify walleye fishing regulations for certain portions of Saginaw Bay, with two options being considered.

1) Minimum size limit of 13 inches, daily bag limit of eight walleye

2) Minimum size limit of 13 inches, daily bag limit of 10 walleye

“We believe both options are biologically sound, and it is anticipated the high walleye population will be able to safely sustain the increased harvest,” said DNR biologist Dave Fielder.

A similar walleye management style has been used for some time on Lake Erie, where walleye regulations are adjusted periodically to match allowable harvest to the abundance of fish. These changes would institute a similar process for Saginaw Bay.

Managers also are proposing a change to yellow perch fishing regulations. Yellow perch populations have been extremely low in Saginaw Bay. This is believed to be due to a very high mortality rate of juvenile perch, owing to high predation rates by predator species in the bay. The goal of fisheries managers is to return

yellow perch to a higher abundance and reinvigorate fishing opportunities for this species in the Saginaw Bay area, as downward trends in fishing activity over the past two decades coincide with a loss of yellow perch.

The proposed change to yellow perch regulations is to reduce the daily possession limit from the current 50 fish to 25 fish. This regulation would apply only to Great Lakes waters contained within the boundaries of MH-4 and to the Saginaw River from the mouth upstream to Center Road Bridge.

Comments will be accepted through July 1. Anglers who wish to comment on the regulation changes should send an email to DNR-SaginawBayFishRegs@michigan.gov. A final proposal is expected to be presented to the Natural Resources Commission in October 2015. ✧

MI anglers and bait dealers reminded of minnow use regulations

The Michigan DNR reminds anglers and minnow dealers of the baitfish regulations that need to be followed in Michigan. Although the requirement for state licensed bait retailers to provide customers with receipts upon purchasing live minnows no longer exists, all other regulations continue to be enforced.

Baitfish regulations were enacted in 2006 to reduce the potential for baitfish to move fish diseases as the state saw multiple fish die-offs in lakes Erie and Huron from VHSv.

“While fish kills from VHSv have become less common, we do not want this pathogen to spread,” said Tom Gonica, DNR biologist. “Our regulations are designed to prevent this from occurring.”

The following are some of the key requirements anglers and retail bait dealers should be aware of when selling and using live minnows:

1. Fathead minnows and golden shiners are the most common minnows sold in Michigan and are not on the VHS susceptible species list so the VHS regulations do not apply to these species.
2. Spottail shiners (blues), emerald

shiner (greys), and white suckers (sucker or pike minnows) are the most common minnows sold in Michigan that are susceptible to VHS and the baitfish regulations apply to these species. They are commonly harvested from Michigan waters.

3. Bait retailers must verbally inform their customers where they can use the bait.

1. Minnows not on the VHSv susceptible species list as well as those that have been certified as “disease free” can be used anywhere in the state.

2. Uncertified minnows harvested in Michigan from VHSv free-waters can be used anywhere. Waters classified as VHS-free include Lake Superior and its tributaries and all Lake Michigan tributary streams above the first fish barrier and all inland lakes in the Michigan and Superior basins.

3. Uncertified minnows harvested in Michigan from VHSv surveillance waters can only be used in waters designated as surveillance or positive. Water classified as VHS surveillance waters include Lake Michigan and

its tributaries up to the first fish barrier and all Lake Huron, St.

4. Clair and Erie streams (including the St. Mary’s, St. Clair and Detroit rivers) above the first fish barrier. All inland lakes in the Huron and Erie basins.

5. Uncertified minnows harvested in Michigan from VHSv positive waters can only be used in waters designated as positive. VHSv positive waters include lakes Huron, St. Clair and Erie and their streams (including the St. Mary’s, St. Clair and Detroit rivers) to the first fish barrier.

4. Certified disease free minnows can be used for up to 14 days after purchase.

5. Uncertified minnows can be used for up to three days after purchase.

6. Anglers can catch their own minnows but must follow the same use restrictions that are outlined in point #3 above and can use them for up to three days after harvest.

It is very important that anglers and bait dealers remain vigilant in their efforts to follow the regulations involving bait use in order to prevent the spread of VHSv. ✧

Tests confirm rare cancer in Susquehanna River smallmouth

The Pennsylvania Fish and Boat Commission announced that two laboratory tests have confirmed a malignant, or cancerous, tumor on a single smallmouth bass caught in the middle Susquehanna River late last year and provided to the PFBC. The announcement was made during the PFBC’s quarterly business meeting.

Cancerous growths and tumors on fish are extremely rare in Pennsylvania and throughout the U.S., but they do occur. This is the only documented case of this type of tumor being found on SMB in PA. The finding was confirmed by the USFWS and the Aquatic Animal Health Lab at Michigan State U.

Although the finding represents only one individual fish from the overall population, it provides additional evidence that the health of

the fish community residing in the river is being compromised.

As managers continue to study the river, they find young-of-year and now adult bass with sores, lesions and more recently a cancerous tumor, all of which continue to negatively impact population levels and recreational fishing.

Since 2005, PFBC biologists have observed more than 22,000 adult SMB as part of routine surveys in the Susquehanna River basin and have not documented any fish with obvious signs of tumors. However, PFBC biologists continue to find sores and lesions on young-of-year bass during late spring and early summer surveys at alarming rates.

Dr. Karen Murphy, acting Secretary of the Pennsylvania Department of Health, said “There is

no evidence that carcinomas in fish present any health hazard to humans. However, people should avoid consuming fish that have visible signs of sores and lesions.”

Anglers must make personal decisions on whether or not to consume fish. Catch-and-release regulations for SMB are already in place on 98 miles of the middle portion of the Susquehanna River where the symptomatic fish was captured and on the lower 31.7 miles of the Juniata River from Port Royal to the mouth.

PFBC staff continue to work with DEP, USGS, USFWS, USEPA and other partners to focus efforts on better understanding factors impacting SMB inhabiting affected rivers. ✧

Biologists sample Tennessee River Basin for invasive Asian carp

Fisheries biologists recently sampled water from eight locations in the Tennessee River Basin to determine the presence or absence of genetic material from two invasive Asian carp species, bighead and silver carp, within reaches of the river system. The project was conducted by the USFWS, with assistance from Alabama, Mississippi and Tennessee.

Three Asian carp species, grass, bighead and silver carp, have become established in the Mississippi River Basin and have severely impacted native fish populations, disturbed aquatic food webs and altered aquatic habitats in many locations in the Midwestern United States. Additionally, their relatively large size and the habit of silver carp to jump high above the surface of the water when disturbed by passing watercraft pose a serious safety concern for boaters. Populations of these nuisance fish have steadily expanded up many tributary streams of the Mississippi River and now threaten to invade and impact the Ohio and Tennessee Rivers and their tributaries.

Collected water samples will be processed and analyzed by the USFWS's Whitney Genetics Lab in La Crosse, Wisconsin, for the presence of environmental DNA, or eDNA, unique to bighead and silver carps.

EDNA can be left in the environment in the form of scales, cells, feces or mucus. At present, eDNA evidence cannot verify whether live Asian carp are present, whether the DNA may have come from a dead fish, or whether water containing Asian carp DNA may have been transported from other sources such as bilge water, storm sewers or fish-eating birds. Once processed, eDNA sampling results in the Tennessee River Basin will be made available at:

www.fws.gov/midwest/fisheries/eDNA.html. ✧

DNR to collect muskie eggs from Detroit River this spring

The Michigan DNR will again collect eggs from Great Lakes muskie in the Detroit River this spring, to be reared at the Wolf Lake State Fish Hatchery in Mattawan and stocked in Michigan waters this fall.

Collecting Great Lakes muskie eggs began in 2011 in an effort to rear a type of muskellunge that is native to most Michigan waters. In 2014, approximately 430,000 eggs were collected from the Detroit River. Those eggs produced more than 36,000 fish that were stocked in 21 inland lakes and rivers, two of which will serve as broodstock lakes for egg collections in the future.

"The DNR's goal this year is to collect 500,000 eggs to meet our target of 40,000 fall fingerlings for stocking our state's waters," said Ed Eisch, fish production manager for the DNR Fisheries Division.

To collect the eggs, mature muskie are captured with electrofishing gear in the Detroit River during early to mid-May. Collecting Great Lakes muskie eggs is difficult in these areas because of the physical conditions associated with open water, especially during the springtime. If weather or other conditions limit the success of collecting Great Lakes muskellunge eggs, northern muskies will be requested from other states to fulfill needed muskellunge to meet fisheries managers' needs for Michigan waters.

As a safety issue and a precaution, the DNR asks boaters to avoid coming close to the electrofishing boat during nighttime shocking work.

"When the generator is running and the boat's lights are on we are collecting fish using electricity near the boat and we want to make sure the public stays clear of the electric field for safety," said Jim Francis, DNR Fisheries Division's Lake Erie Basin coordinator. ✧

Fish stocking creates numerous fishing opportunities throughout Michigan

The Michigan DNR announced it is in the middle of its new fish-stocking season. This spring, people are likely to find DNR fish-stocking trucks releasing their prized cargo at hundreds of lakes and streams throughout the state.

Over the course of a typical year the DNR will stock roughly 20 million to 25 million fish weighing nearly 400 tons, including eight species of trout and salmon and four cool-water species such as walleye and muskellunge. DNR fish-stocking vehicles will travel nearly 140,000 miles to stock between 700 and 1,100 locations.

Visit the DNR's fish-stocking website at michigandnr.com/fishstock/ for information on local fish stocking locations. ✧

Multiple openers kick Michigan fishing season into high gear

The Michigan DNR is reminding anglers to dust off their fishing gear and get ready for the Michigan fishing season. The statewide trout season and the Lower Peninsula inland walleye, northern pike and muskellunge seasons all opened April 25.

Anglers also are reminded that in Upper Peninsula waters, the walleye, northern pike and muskellunge seasons opened Friday, May 15. And due to recent regulation changes the catch-and-immediate-release season for largemouth and smallmouth bass is now open all year on all waters (unless otherwise closed to fishing). The possession season for bass opens statewide May 23, except for Lake St. Clair, the St. Clair River and the Detroit River, which open June 20.

The 2015 Michigan Fishing Guide & maps are available online. Go to: michigan.gov/fishingguide. ✧

DEC Seeks Volunteers to Conduct Stream & River Monitoring

The NY Wave Program provides hands-on experience for monitors to identify whether streams are healthy

New Yorkers will have a unique opportunity to help monitor and protect water quality in the state by participating in the Water Assessments by Volunteer Evaluators (WAVE) Project. DEC is recruiting people to conduct water quality sampling in streams and rivers during the 2015 WAVE summer sampling season. Training sessions will be held in May and June.

WAVE data is used to augment the work of the DEC Stream Biomonitoring Unit, which samples streams and rivers across the state to create an inventory of stream water quality. Citizen monitors provide valuable information to assist in identifying healthy stream sites and flagging sites that potentially have water quality concerns. This data may be included in federal and state water quality reports and will help target professional assessments and local restoration or conservation efforts in areas where they are most needed.

“People who enjoy recreation on local streams or the beauty and serenity of streams have a chance to help monitor and protect these waterways,” DEC Commissioner Joe Martens said. “I encourage individuals to volunteer as a WAVE monitor, where they can play an active, hands-on role in protecting our environment.”

Citizen monitors will visit stream sites once per year, between July and September, to collect macro invertebrates—insects and other small organisms—from the rocks and rubble on the stream bottom. If six or more of the “Most Wanted” organisms are found, a stream segment is assessed as fully supporting aquatic life. If sampling primarily finds “Least Wanted” organisms, the stream segment will be flagged for a potential investigation by DEC professional monitoring staff. Citizens can participate in the following ways:

▶ Serve as local coordinators who coach and coordinate their own team of WAVE participants. Local coordinator training sessions are one full day and include presentations and hands-on, in-stream demonstrations;

▶ Sample independently. This requires half-day training sessions that are completed entirely in the stream; or

▶ Join a local team led by a WAVE local coordinator. Training for this option is conducted by the local coordinator or group.

WAVE training sessions are being offered in Tompkins County (May 22), Jamestown, Chautauqua County (May 28), Syracuse, Onondaga County (June 5), Salamanca, Cattaraugus County (June 11), Waterloo, Seneca County (June 19), Ballston Spa, Saratoga County (June 26). For more information or to register for a training session, contact WAVE Coordinator Alene Onion by email: wave@dec.ny.gov. ✧

PFBC Commissioners actions

Commissioners adopted a final rulemaking order to remove the Bluebreast darter, Gilt darter, Spotted darter and Tippecanoe darter from the state’s list of threatened species. The change will take effect upon publication in the *Pennsylvania Bulletin*.

In other action:

- Commissioners added one stream section in Carbon County to the list of Class A wild trout streams. The list can be found on the [PFBC website](#).
- Commissioners approved the publication of a notice of proposed rulemaking which would eliminate the restriction for personal watercraft (PWC) to tow no more than one skier. The total number of persons being towed, in addition to the operator, observer and any other passengers, may not exceed the maximum passenger capacity of the boat.

- In Beaver County, Commissioners approved the publication of a notice of proposed rulemaking which would limit boats on Little Beaver Creek to slow, no wake speed from the mouth upstream to the state line. If adopted on final rulemaking, the amendments will go into effect on Jan. 1, 2016.
- In Bucks County, Commissioners approved the publication of a notice of proposed rulemaking which would limit boats on Neshaminy Creek to slow, no wake speed on the entire creek from its headwaters to its confluence with the Delaware River. If adopted on final rulemaking, the amendment will go into effect on Jan. 1, 2016.
- In Cumberland County, Commissioners approved the publication of a notice of proposed rulemaking which would eliminate the water skiing zone on the Conodoguinet Creek in the vicinity

of the Power Company Dam at Cave Hill. If adopted on final rulemaking, the amendment will go into effect on Jan. 1, 2016.

- In Delaware County, Commissioners approved the publication of a notice of proposed rulemaking which would limit boats on Darby Creek to slow, no wake speed on the entire creek from its headwaters to its confluence with the Delaware River. If adopted on final rulemaking, the amendment will go into effect on Jan. 1, 2016.
- In Lehigh County, Commissioners approved the publication of a notice of proposed rulemaking which would allow water skiing on the Lehigh River at the Allentown Pool, between the Tilghman Street Bridge and the Hamilton Street Dam in Allentown. If adopted on final rulemaking, the amendment will go into effect on Jan. 1, 2016. ✧

Trail Creek, Little Cal closed fishing season lifted

The annual closed fishing season on sections of Trail Creek and the East Branch of the Little Calumet River has been lifted under an emergency rule. Portions of each stream were previously closed each year from April 1-June 15 to protect recently stocked trout and salmon.

Lifting the closure will allow more fishing opportunities for Hoosiers to pursue steelhead, bass, walleye and panfish, without harming the stocking program on Lake Michigan and its Indiana tributaries, according to the Indiana DNR. When the closed season was enacted decades ago, it protected spring yearlings stocked at 7 inches in length, which also was the minimum size limit for inland trout at the time.

The state's trout and salmon stocking program on Lake Michigan and its tributaries was newly developed back then. Some anglers were unaware that the size limit for trout caught on inland streams and trout caught in Lake Michigan or its tributaries was different. The closure prevented any confusion from resulting in illegal harvesting of recently stocked fish.

The minimum size limit for trout and salmon in Lake Michigan and its Indiana tributaries is now 14 inches.

With the Lake Michigan stocking program well developed, most anglers in the area know the special trout regulations for those streams. Additionally, stocking locations have been moved farther upstream to spread out fish and avoid concentrating stocked fish in areas where they are vulnerable to anglers.

Relaxing the regulation puts those streams in line with other Lake Michigan fisheries agencies and Indiana's St. Joseph River trout and salmon stocking program, which has no spring closure. Tributary restrictions to fishing above and below dams will, however, remain in effect for public safety reasons. ✧

Michigan state parks honor veterans with Fourth of July celebrations

Veterans invited to enjoy a quieter Independence Day

This Independence Day weekend (July 3-5), several Michigan state parks will offer Fireworks-Free Fourth of July celebrations. Located farther away from urban areas that often host large local firework displays, these participating parks are ideal camping locations for veterans and others who prefer a quieter holiday celebration.

The idea for the Fireworks-Free Fourth was the result of a conversation with a veteran, who mentioned how fireworks and other loud noises could bring up distressing memories from military experiences. Fireworks-Free Fourth of July celebrations are made possible by a partnership between the Michigan Veterans Affairs Agency and the Michigan Department of Natural Resources.

One in five veterans of the Iraq and Afghanistan wars has been diagnosed with post-traumatic stress injury. Sometimes known as post-traumatic stress disorder, PTSD is a condition that can occur after a person has been through a traumatic event. Even when removed from the stressful situation, similar sounds or experiences can trigger intense feelings of fear, stress, anger or sadness.

"Everyone has their own Fourth of July traditions, and we're excited to partner with Michigan state parks to offer veterans and their families a way to enjoy the holiday without worry or stress," MVAA Director Jeff Barnes said. "PTSD is a normal reaction to abnormal circumstances and it can affect anyone, and an event like the Fireworks-Free Fourth is a great alternative when celebrating our nation's freedom." For more info about services for Michigan veterans at MichiganVeterans.com or 800-642-4838. ✧

\$1.5 million Hudson River Estuary Grants

Hudson River Valley communities can now apply for \$1.55 million in the Hudson River estuary watershed protection. The grants can be used for projects to increase resiliency to cope with flood events, protect water quality, conserve natural resources and restore aquatic habitat. These grants will improve water quality, increase flood resiliency and conserve natural resources.

The funding is provided through two Requests for Applications (RFAs) from DEC's 2015 Hudson River Estuary Grants Program: 'Tributary Restoration and Resiliency' and 'Local Stewardship Planning.' The Tributary Restoration and Resiliency grants will help Hudson communities replace bridges or culverts to restore aquatic habitat in tributary streams of the estuary; improve stream flow; and reduce local flood-damage to protect homes and businesses. The Local Stewardship Planning grants will fund planning projects to help communities improve infrastructure, protect water resources and conserve natural resources in the watershed.

Tributary Restoration and Resiliency RFA, \$750,000

To be eligible for this funding, projects must conserve and restore aquatic habitat connectivity for Species of Greatest Conservation Need (SGCN) found in the tributary streams of the estuary watershed, especially river herring and American eel.

Local Stewardship Planning RFA, \$800,000

The local stewardship planning grants will fund local projects and programs to help communities achieve the targets of the Estuary Action Agenda.

General questions about the Hudson River Estuary Grants application process may be directed to Becky Thomas, NYSDEC Hudson River Estuary Program, 625 Broadway, Albany, NY 12233-3506; becky.thomas@dec.ny.gov.

Pennsylvania Bulletin. ✧

IL Free Fishing Days for 2015

Mark your calendars for the 2015 Illinois Free Fishing Days promotion on June 5-8. ✧

MI map of 2014 burned areas to give folks a hand in the hunt for morels

The Michigan DNR has produced an [interactive map](#) that highlights the state's 2014 wildfires and prescribed burns—each more than 10 acres in size—to help mushroom hunters in their quest for morels. "Morel mushrooms are often found in locations where large fires occurred the previous year," explained Paul Kollmeyer, resource protection manager for the DNR Forest Resources Division. "We've created this map to give our customers the information they are looking for in a mobile-friendly, easily accessible package."

The information and data is here: [DNR Open Data portal](#). ✧

Mike Vogelsang named DNR north district fisheries supervisor

Mike Vogelsang has been named north district fisheries supervisor for the Wisconsin DNR.

A Watertown native, Vogelsang brings some 24 years of fisheries management experience with DNR to his new role. Vogelsang has served as leader of the headwaters fish team based in Woodruff since 2001, developing working partnerships with angling groups, tribal fisheries managers and community leaders while supervising fisheries biologists, technicians and overseeing development of management plans. Mike Vogelsang, DNR northern fisheries supervisor, 715-356-5211 Ext. 239, Michael.Vogelsang@wisconsin.gov.

✧

MI Free Fishing Weekend June 13-14

All fishing license fees are waived for two days! Residents and out-of-state visitors are allowed to fish on both inland and Great Lakes' waters for all species of fish during their respective open seasons, without having to purchase a fishing license. All other regulations will still apply during this time. The 2015 Summer Free Fishing Weekend will be held Saturday, June 13 and Sunday, June 14.

Simply visit michigan.gov/freefishing and look through the Free Fishing Weekend Event Planning e-Toolkit. For additional Free Fishing Weekend information, please contact Elyse Walter at waltere@michigan.gov or 517-284-5839. ✧

5 Suggestions for Savvier Safer Boating

Last year 14 people, all male, died in Minnesota while boating. In four cases, the men drowned after their canoes or kayaks capsized. Of the 36 non-fatal boating accidents reported by the Minnesota DNR, capsizing, collisions and water skiing-like activities dominated the incident list. Stay safe out there with these five suggestions:

1. Wear a life jacket.
2. Stay sober.
3. Stay alert.
4. Keep an eye on the weather.
5. Maintain your boat. ✧

Carp could survive in Lake Erie

Continued from page 1

For the past 10 years, algal blooms in Lake Erie have been increasing. Remote sensing images showed that the amount of algae doubled, and in some places quadrupled, from 2002-2011. Throughout the lake, algal blooms encompass several hundred to several thousand square kilometers. Specifically, the western part of Lake Erie has algal concentrations that are several times greater than what is needed for bighead or silver carp to survive. ✧

Pennsylvania adds 45 streams to wild trout list

The Pennsylvania Fish and Boat Commission (PFBC) added 45 new waters to its list of wild trout streams; approved a lease of its Somerset Lake property; approved a plan to reestablish the fishery at Huntingdon County's Lake Perez; and removed several species from the state's [Threatened Species](#) list.

The Commissioners approved adding the wild trout listings, which include waters in Cameron, Carbon, Centre, Clarion, Clearfield, Clinton, Fayette, Forest, Huntingdon, Indiana, Jefferson, Lancaster, Luzerne, Lycoming, Monroe, Northampton, Somerset, Sullivan, Union and York counties. The list can be found on the PFBC [website](#).

Commissioners also approved a 25-year agreement with Somerset County to lease the PFBC's Somerset Lake property in order to enhance the property's public recreational use and operation. The lease requires the county to be responsible for routine maintenance of the leased property, excluding the dam area and the PFBC's Southwest Regional Office. Also, the county must seek PFBC approval before making any new recreational improvements.

In Huntingdon County, Commissioners approved a plan to reestablish the fishery at Lake Perez in Barree Township. The lake, owned by the Pennsylvania State University, was drained in 2009 in order to rebuild the dam. Construction was completed in summer 2014 and the lake has been refilled. Under the regulations adopted today, anglers will be allowed to harvest trout but will be restricted to catch and release rules for all other species until the fishery is reestablished. The change will take effect upon publication in the *Pennsylvania Bulletin*. ✧

Apply for Mich. elk and bear licenses now

Michigan elk and bear hunting licenses are available now through June 1. There will be 100 elk licenses and 6,951 bear licenses available for the 2015 hunting seasons.

Only Michigan residents are eligible to apply for an elk license. Bear licenses are available for both residents and nonresidents; however, no more than 2% of licenses in any bear management unit will be issued to nonresidents. Hunters can [apply online](http://www.michigan.gov/huntdrawings) at www.michigan.gov/huntdrawings, at any authorized license agent or at a [DNR Customer Service Center](http://www.michigan.gov/huntdrawings). A nonrefundable \$5 fee is charged at the time of application. Hunters may purchase just one bear and one elk application.

Applicants may call 517-284-9453 by June 1 for assistance with their application and may check their drawing results online at www.michigan.gov/huntdrawings beginning June 29 for both species. Applicants are responsible for submitting a valid application with the correct customer ID and application type. Make sure to check the receipt for accuracy, and call the DNR Wildlife Division immediately if there are any mistakes. Also, see the 2015 Michigan Elk Hunting Digest and 2015 Michigan Bear Hunting Digest for more details about the application processes. All hunting digests can be found at www.michigan.gov/dnrdigests.

Hunters who want another chance at a bear or elk license can increase their odds by applying for the Pure Michigan Hunt. Applications are \$5 and are available at any license agent or online at www.mdnr-elicence.com. Hunters may buy as many applications as they want. Three lucky winners will get prize packages that include elk (Michigan residents only), bear, deer and turkey licenses; first pick at a managed waterfowl hunt area; plus firearms, crossbows and much more—a prize package worth over \$4,000. For more information, visit www.michigan.gov/puremichiganhunt. ✧

Apply now to hunt elk in Minnesota

Hunters have until June 12, to apply for one of seven elk licenses offered this year by the Minnesota DNR.

Hunters interested in applying for a license can find maps of the two hunting zones and other pertinent information on the DNR website at www.mndnr.gov/hunting/elk. Elk licenses will be available in Kittson County's central and northeast zones, while the Grygla area will be closed to enable that area's elk population to rebuild to goal levels.

Apply at any DNR license agent, www.mndnr.gov/buyalicense or by telephone at 888-665-4236. Hunters may apply individually or in parties of two. There is a non-refundable application fee of \$4 per hunter. License cost is \$287.

As a result of lower elk numbers, fewer licenses will be offered and this year's hunt will be restricted to one season. The 2015 elk season runs from Saturday, September 12, to Sunday, September 20. Five bulls-only licenses will be available in the Kittson County central zone (zone 20) and two bulls-only licenses will be available in the Kittson County northeast zone (zone 30). One landowner license will be available in the Kittson County central elk zone.

Aerial surveys conducted this winter in the Grygla area (zone 10) identified 18 elk, which is the lowest count in years and is below the pre-calving goal range of 30 to 38 animals. This is the third year in a row that the herd has been below goal and a season has not been held.

The aerial survey conducted in the Kittson County central zone (zone 20) also indicated a population decline, with 34 elk observed this year. While the herd has declined in size, it is still above the established population goal of 20 to 30 animals. Elk within the Kittson County northeast zone spend a portion of the year in Manitoba, Canada. A short-term population goal of 150 to 200 elk has been collaboratively established for this international herd, which consists of approximately 100 elk. ✧

Do .22 ammo challenges translate into more airgun use?

Today's airguns are more powerful, more reliable and more accurate than the lever-action toys common to many of our childhoods. They are used in everything from precision shooting competitions and weekend plinking sessions to hunting small and even large game, with the majority of modern air rifles most similarly matching the close-range shooting performance of another target-time favorite—the .22-caliber rimfire rifle.

But have limited supplies of .22 ammunition recently caused more sportsmen to make the switch to shooting airguns? Pellets are readily available and cheaper, air rifles and air handguns can be safely fired in a backyard, and with the improvements in technology, it would seem to be a natural switch from .22 to airgun.

Of more than 4,500 shooters surveyed on ShooterSurvey.com, 40% reported shooting an air rifle in the past 12 months. In that same time span, 33% of those same sportsmen would have purchased more ammo had it been available and 17% said they were not able to buy all of the .22 ammo they wanted. So did those shooters stymied by the shortage opt to shoot air rifles more as a substitute for their rimfire rifles?

Interestingly, a sizable 75% said the limitation had zero impact on how much they shot air rifles. They would've shot air rifles the same amount. Eighteen percent, however, reported they would've shot air rifles less had they been able to buy more .22 ammo, while only 5% were moved to join the air rifle ranks noting they probably wouldn't have shot air rifles at all had they been able to buy the rimfire loads they wanted.

"It would appear the recent shortage of .22-caliber ammunition has some impact on increased air rifle use, but maybe not as much as some people would expect. Airguns, it seems, are popular among a portion of today's shooters on their own merits," says Rob Southwick, president of Southwick Associates. ✧

DNR collects walleye eggs for hatchery program

As many anglers know, much of Michigan's inland-waters walleye fishery is supported by hatchery-raised fish. What many don't know is that the source of those fish—the Muskegon River, below Croton Dam—is supported by hatchery-raised fish, too.

"There's not a lot of natural reproduction in the system," said Rich O'Neal, the Department of Natural Resources fisheries biologist who oversees the Muskegon River watershed. "We're getting very low production in the river. We're not sure why, but we think water velocity or water temperature could have something to do with it. We know we get good natural reproduction further upstream.

"There are 3 to 4 billion eggs laid here when they're spawning, but we're just not getting fry production."

It took a stocking effort to rebuild the Muskegon River population after it collapsed in the 1960s. O'Neal said sea lamprey predation—the preying of one animal on another—on adult walleyes was part of the problem, but alewife predation on juveniles also was a factor. "We saw that all over the Great Lakes," he said.

O'Neal estimates the population of the Muskegon River spawning run at 40,000 fish, about 18,000 females. Most are migrants.

"There's about two fish per acre that remain in the river," he said. "The rest move down to Muskegon Lake or out into Lake Michigan, as far north as Bay de Noc and down to Indiana. It's been that way since the earliest tagging studies in the 1950s."

Muskegon River walleyes spawn over a period of three weeks to a month with most of the activity taking place in a 12- to 14-day period, O'Neal said.

"Water temperature is the key," he said. "They start at 37 to 38 degrees, by 40 they're really starting to move, and around 45 degrees is peak spawning."

It took a three-man electro-fishing crew, led by Ed Pearce, the fisheries technician supervisor out of

the DNR's Plainwell office, a total of five trips to the river to capture the necessary brood stock. The first attempt, in late March, turned up too many fish that weren't ready to go. But by the end of the month, the fish had ripened and the crew spent four days spread over a period of about a week to collect the eggs.

It was challenging, Pearce said.

"Last year the river was at flood level, but this year we're bumping bottom," said Pearce, who led the crew in a 17-and-a-half-foot johnboat with a 115-horsepower jet drive outboard that can run in mere inches of water. "We couldn't fill the live well with water, so we couldn't haul as many fish as we'd like."

The crew runs a generator that creates direct current sent between the booms on the front of the boat, stunning the fish, which are netted by DNR fisheries personnel standing on the bow.

"It makes the fish twitch," Pearce said. "It draws them to it. We can shock down to about 6 feet within a 10-foot radius of the booms."

How the fish react varies, Pearce said. "Some will be completely knocked out for 10 minutes. Others are just tickled and they take off."

When a tub of fish is collected, the boat crew brings them to the bank, where a five-person crew from the Wolf Lake State Fish Hatchery takes over.

Fisheries biologist Matt Hughes leads the operation. The fish are divided by sex, and then paired off for spawning.

Two workers strip the females' eggs into pans by pushing on the fish's bellies, while another massages the male to get it to release milt. The milt is collected in a bottle of water, is circulated, and is dumped into the pan of eggs. Fertilization is almost instantaneous.

Males and females are matched one-to-one in order to promote maximum genetic diversity, Hughes said.

After the eggs are fertilized, they're transferred into a 5-gallon

bucket—along with other fertilized eggs—that is filled with river water and a fine clay particulate to keep the naturally adhesive eggs from clumping together. Every five pans, the bucket is dumped into a fine-mesh holding pen in the river to allow the eggs to harden. After 60 to 90 minutes, the eggs are put into the transport trailer—which is filled with water from the hatchery—and they're disinfected with iodine to make sure contaminants aren't introduced into the hatchery.

"The goal this year was 50 million eggs," Hughes said. "We go through about 250 pairs of walleyes to collect them. We go until we get our target. We can usually get them in four days, but you don't want all the fish coming at the same time. We don't have enough room in the hatchery to take them all at once. We can only hold around 10 million fry at one time."

Some of the fertilized eggs are sent directly to the Platte River State Fishery, where they'll be hatched out and sent to northern Michigan rearing ponds. Others go to a tribal facility. The rest go to Wolf Lake, where they'll be hatched and reared. Some will be directly stocked into bodies of water while the majority will go to rearing ponds where they'll grow to fingerling size before they're stocked.

"We typically get around 70 to 80 percent fertilization," Hughes said. "Our goal is to produce 12 million fry for rearing ponds and direct plants. Eggs take 17 to 21 days to hatch. Fry are held one to five days. We start putting fry out to ponds by the third week of April, and we're finished by the second week of May."

The fish are stocked in lakes and streams in the southern two-thirds of Michigan. (Walleyes for northern Michigan stocking projects come from similar egg-takes at Little Bay de Noc.) Among the waters stocked is the Muskegon River, where, after a few years, those walleyes will be collected to serve as brood stock for that year's egg-take. ✧

Indiana Governor signs pro-gun legislation into law

Indiana [Senate Bill 98](#) was signed into law by Governor Mike Pence. SB 98 modifies the current law that prohibits reckless lawsuits against a firearms manufacturer for the unlawful misuse of their products by third parties by preventing a person from bringing or maintaining certain actions against a firearms manufacturer, ammunition manufacturer, trade association, or seller.

Additionally, the new law benefits Indiana by attracting manufacturing companies to the state that bring new employment opportunities for Hoosiers. This law provides the protection that many manufacturers are looking for in development and expansion areas for their businesses. ✧

2015 Family Fishing Festivals

The PFBC is holding three Family Fishing Festivals to learn fishing skills and enjoy fishing. These events lead up to the two statewide Fish-for-Free Days—the Sunday before Memorial Day, May 24, and Independence Day, July 4.

PFBC Family Fishing Festivals will be held at these locations:

- June 6, NC Region: Bald Eagle State Park - Pavilion #7, 4 p.m. - 8 p.m.
- June 20, NW Region: Moraine State Park - Pleasant Valley Day Use Area, Butler County, 9 a.m. - 1 p.m.
- June 27, NE Region: Francis Slocum State Park - Day Use Boat Launch Area, Luzerne County, 9 a.m. - 1 p.m.

The PFBC is waiving the fishing license requirement during the program for registered participants 16 and older. The program is open to all ages, including children ages 5 and older. Equipment, bait, and tackle is provided. Staff will be present to teach skills and assist those who fish.

Preregistration is required. Visit www.GoneFishingPa.com. ✧

Indiana trout releases for northern Indiana streams

Indiana will extend trout fishing opportunities at five northern Indiana streams with additional trout stockings: Pigeon River in Steuben and LaGrange counties, Turkey Creek in LaGrange County, Little Elkhart River in Elkhart County, Little Kankakee River in LaPorte County and Potato Creek in St. Joseph County.

Pigeon River, Turkey Creek and Little Elkhart River will be stocked for the weekend of May 9-10 and May 23-24, which is Memorial Day weekend. The Little Kankakee River and Potato Creek will only be stocked for Memorial Day weekend.

Although these stream sites are the only areas to receive additional trout in May, fish from the initial releases in late April are still available in most of northern Indiana's trout streams. ✧

Other Breaking News Items:

(Click on title or URL to read full article)

[New Michigan fishing regs allow year round catch and release of bass](#)

There are changes to Michigan's fishing regulations for the 2015-2016 season. The most significant change allows the catch and immediate release of bass all year long.

[Study: Lake Erie algae has made it more vulnerable to Asian carp](#)

Algal blooms are a preferred food for bighead and silver carp, the voracious filter feeders that have moved up the Mississippi River and many

[Return of a healthy smelt run has Lake Superior anglers buzzing](#)

The smelt population began showing up in Lake Superior in the 1930s, first seen in the eastern part of the lake near Whitefish Bay and then moving to the western edge; in the last century, smelt populations surged and ebbed.

[Scaling back: Fish stocking listens to lakes](#)

This year, the Michigan Dept. of Natural Resources stocked 18 million fish — 395 tons — to Michigan lakes and streams during a two-month window, according to a recently released report.

[Plummeting alewife population threatens salmon, Great Lakes](#)

Lake Michigan's salmon population could be on the verge of a cataclysmic collapse because the largest bioengineering experiment in the history of the Great Lakes has run wildly out of control, biologists say.

[Stricter Huron County \(Mich.\) wind energy rules nearly complete](#)

The new regulations would extend wind turbine setbacks from residences that don't participate in wind projects by more than a football field. Another would add a three-mile setback from the Saginaw Bay and Lake Huron shorelines

[Michigan's Huron County pushes stop button on wind development](#)

Huron County has 328 wind turbines, more than all of the other Michigan counties combined. But it has just enacted a moratorium on any additional ones until stricter regulations for industrial wind turbines can be put in place

End