

Inland Seas Angler GREAT LAKES BASIN REPORT

A Publication of the Great Lakes Sport Fishing Council http://www.great-lakes.org

April 2014 Vol. 25, No. 4

Private & tribal Wisconsin hatcheries get grants to increase walleye production

MADISON – Six private and three tribal fish hatcheries will get a total of \$2 million in one-time grants for projects that will increase their capacity to produce larger walleye for stocking in Wisconsin by 470,000 fish per year, state fisheries officials say. The hatcheries are receiving grants from the DNR through the <u>Wisconsin Walleye Initiative</u>.

Grant recipients are required to stock walleye produced in their new facilities into Wisconsin waters, and DNR has received \$500,000 through the initiative to buy 1 million of these larger fish. Almost 200,000 of these should be available for stocking this fall from grant recipients whose projects will be completed this year, with the rest coming as projects are completed through 2018.

The grant awards are an important part of Wisconsin's plan to

In this issue...

boost walleye fishing by stocking more of the larger walleye in lakes where natural reproduction isn't sufficient. The plan, known as the Wisconsin Walleye Initiative, is a \$12 million funding package developed by Gov. Scott Walker and DNR to boost walleye stocking statewide of the larger fish known as "extended growth" walleye.

Such fish, which are 6-8" long, have been shown to survive at significantly higher rates in some settings than the 1.5 to 2-inch fish typically stocked. DNR's stocking strategy is to stock these larger walleye in some walleye waters with the hope of restoring naturally reproducing populations, and in others to increase walleye numbers in lakes that will continue to rely on stocking to provide fishing opportunities.

The initiative was funded by the Legislature for two years and provides increased operating funds to DNR to grow the larger, more expensive fish; allows for \$8 million in upgrades at state hatcheries; invests in expanding capacity at private and tribal hatcheries; and provides money for DNR to purchase larger walleye for stocking from private and tribal hatcheries.

Already, the extra funding the initiative provided in 2013 enabled state hatcheries to produce more than four times the typical number of larger walleye for stocking in fall 2013.

The competitive grant program for private and tribal hatcheries required applicants to submit proposals including the number of **Hatchery grants for walleyes**

Continued on page 10

Legislation would add Asian carp barrier below Great Lakes

U.S. Rep. Candice Miller, R-Mich., chairwoman of the Congressional Boating Caucus, recently introduced the "Defending Against Aquatic Invasive Species Act of 2014."

<u>The legislation</u> would authorize the Secretary of the Army to address the issue of aquatic invasive species, particularly Asian carp. The bill was introduced in February and has been referred to the Subcommittee on Water Resources and Environment.

It seeks to design and construct a barrier to prevent Asian carp from invading the Great Lakes. It also would "authorize the Secretary of the Army to carry out certain activities to prevent the inter-basin transfer of aquatic invasive species between the Great Lakes and Mississippi River, and for other purposes." The separation of the two watersheds carries an estimated price tag of at least \$15 billion and a 25-year timetable for completion.

If it is enacted, Miller's bill would require the Army Corps of Engineers to begin designing a separation project within 180 days. When the design is finished, the agency would then have 180 days to begin construction.

The bill is co-sponsored by Michigan U.S. Reps. Dan Benishek, R-Iron River; John Conyers Jr., D-Detroit; Marcy Kaptur, D-Toledo; and Mike Rogers, R-Brighton. Although the Michigan House of Representatives approved two resolutions that are part of Miller's

Carp barrier below Great Lakes Continued on page 5

Nominations open for GLSFC officers, directors

Nominations are open for all officer and director positions of the Great Lakes Sport Fishing Council for the '15-'16 term. Nominations will be accepted via e-mail through August 31.

Interested in getting involved? Want to participate in the advocacy process of building and supporting our recreational fishery – and at the same time work more closely with government agencies? Get involved – get nominated.

The Great Lakes Sport Fishing Council is on the cutting edge of issues and information. We need your help to help us generate that timesensitive information to our members, potential members and the general public. Our award-winning Web site gets over 34 million hits annually, and we need to continue feeding hungry anglers with sound information. You can help us by volunteering to serve.

Nominations are open for all offices including:

- Officers President Vice President Secretary Treasurer
- All State Directors (and Ontario) Illinois Indiana Michigan Minnesota New York Ohio Ontario Pennsylvania

🖙 THINK ABOUT IT 🖘

Congressmen should wear uniforms, like NASCAR drivers, so we could identify their corporate sponsors \diamond

New MI fishing regs in effect

For the coming 2014-2015 angling year, which started April 1, the Michigan DNR wants anglers to be aware of the following new fishing regulations:

- Crayfish Possession and Use Non-native crayfish species, including but not limited to red swamp crayfish and rusty crayfish, may not be possessed or used for bait, whether dead or alive, on any public or private waters of Michigan.
- Muskellunge Size Limits Larger size limits for muskellunge are now in effect for Gun Lake in Barry County (46 inches) and Big Bear Lake in Otsego County (50 inches).
- Hook-and-Line Restrictions It is now unlawful to fish with artificial bait or minnows in the Clinton River cut-off channel in Macomb County from the spillway weir to the Harper Road Bridge from March 16 until the Friday before the last Saturday in April.
- Walleye Size Limits A minimum size limit of 15 inches for walleye is now in effect for Craig Lake State Park waters in Baraga County.
- Special Regulations Removed The special regulations and permit requirement to fish at Jewett Lake in Ogemaw County have been removed. General statewide regulations now apply.

In addition, anglers are reminded that the Betsie River spawning closure is still in effect. The lower portion of the Betsie River from the Betsie Valley Trail Bridge west to a line in Betsie Bay between the westernmost dock of the Northstar Marina and the westernmost dock of the Eastshore Marina remains closed to fishing until further notice.

Detailed information on these regulation changes and more can be found in the 2014 Michigan Fishing Guide, now available at all major retailers and on the DNR website at www.michigan.gov/fishing. ◆



Established 1972 •

President Daniel N. Thomas, Illinois Vice President Open Secretary Michael D. Sanger, Wisconsin Treasurer Thomas G. Couston, Illinois

DIRECTORS

Illinois – Robert Gaik Indiana – Mike Schoonveld Michigan – Tom Hamilton Minnesota - Dave Koneczny New York – Thomas Marks Ohio – Rick Unger Ontario – Darryl Choronzey Pennsylvania - Ed Kissell Wisconsin – Robert Wincek

Position Statement

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

Inland Seas Angler GREAT LAKES BASIN REPORT

Publisher Dan Thomas, 630/941-1351 Editor Jeanette Thomas Webmaster Robert James, webmaster@great-lakes.org

© Copyright 2014 by Great Lakes Basin Publications, the INLAND SEAS ANGLERS-GREAT LAKES BASIN REPORT is the newsletter of the Great Lakes Sport Fishing Council, a federally recognized not-for-profit 501(c)(3) organization, and recognized for tax-deductible giving by the federal government.

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

Address Change:

Send six weeks in advance with old mailing label to GREAT LAKES BASIN REPORT, P.O. Box 297, Elmhurst, IL 60126, (630) 941-1351

NY DEC reminds saltwater anglers to sign up for no-fee marine registry

Saltwater fishing anglers are required to register for the free recreational marine fish registry prior to fishing the marine waters of New York State to ensure federal and multi-state regulations are fair to New York's anglers.

"The no-fee recreational marine fish registry is a vital tool that helps DEC better manage New York's fisheries," said Commissioner Martens. "It is imperative that all anglers sign up for the registry to help ensure fishing regulations put in place at the national and regional levels are fair, effective and based on sound science."

The no-fee registry was established in 2011 in response the National Oceanic and Atmospheric Administration's (NOAA) mandate that all recreational anglers fishing in coastal waters complete a National Saltwater Angler Registry. Under Governor Cuomo's NY Open for Fishing and Hunting Initiative, the free marine fishing registration was made permanent in 2013.

Information from New York's marine registry is incorporated into

the National Marine Fisheries Service database of recreational marine anglers. The database helps to efficiently obtain fishing activity information, vital information for setting quotas, size and bag limits, and fishing seasons each year.

Saltwater anglers can register at https://aca.dec.accela. online **com/dec/**, by phone (888-933-2257) or at a license issuing agent location. All anglers 16 years old and above are required to register if they plan to fish for saltwater fish species in the marine and coastal district or fish for migratory fish of the sea within tidal waters of the Hudson River and its tributaries, or waters of Delaware River or Mohawk River. Further information can be found on DEC's website at http://www.dec.ny.gov/ permits/54950.html.

Registration is valid for one full year (365 days) from the date registered. There is no lifetime registration. Anglers found without a registration may be ticketed up to \$250 per violation.

In support of this initiative, this year's budget includes \$6 million in

NY Works funding to support creating 50 new land and water access projects to connect hunters, anglers, bird watchers and others who enjoy the outdoors to more than 380,000 acres of existing state and easement lands that have gone largely untapped until now. These 50 new access projects include building new boat launches, installing new hunting blinds and building new trails and parking areas. In addition, the 2014-15 budget includes \$4 million to repair the state's fish hatcheries; and renews and allows expanded use of crossbows for hunting in New York State.

This year's budget also reduces short-term fishing licenses fees; increases the number of authorized statewide free fishing days to eight from two; authorizes DEC to offer 10 days of promotional prices for hunting, fishing and trapping licenses; and authorizes free Adventure Plates for new lifetime license holders, discounted Adventure Plates for existing lifetime license holders and regular fee Adventure Plates for annual license holders. ♦

MI DNR says fish kills may be common following winter's extreme conditions

The Michigan DNR recently issued a statement that after the heavy ice and snow cover melts on Michigan's lakes in early spring, it may be common to discover dead fish or other aquatic creatures. This year's severe winter, with heavy snow and ice cover, will create conditions that cause fish and other creatures such as turtles, frogs, toads and crayfish to die.

"Winterkill is the most common type of fish kill," said Gary Whelan, DNR fish production manager. "Given the harsh conditions this winter with thick ice and deep snow cover, it will be particularly common in shallow lakes and streams and ponds. These kills are localized and typically do not affect the overall health of the fish populations or fishing quality."

Winterkill occurs during especially long, harsh winters—similar to the one experienced this year. Shallow lakes with excess aquatic vegetation and soft bottoms are particularly prone to this problem. Fish and other aquatic life typically die in late winter, but may not be noticed until a month after the ice leaves the lake because the dead fish and other aquatic life are temporarily preserved by the cold water.

"Winterkill begins with distressed fish gasping for air at holes in the ice and often ends with large numbers of dead fish that bloat as the water warms in early spring," Whelan explained. "Dead fish and other aquatic life may appear fuzzy because of secondary infection by fungus, but the fungus was not the cause of death. The fish actually suffocated from a lack of dissolved oxygen from decaying plants and other dead aquatic animals under the ice."

Dissolved oxygen is required by fish and all other forms of aquatic life. Once the daylight is greatly reduced by thick ice and deep snow cover, aquatic plants stop producing oxygen and many die. The bacteria that decompose organic materials on the bottom of the lake use the remaining oxygen in the water. Once the oxygen is reduced other aquatic animals die and start decomposing, the rate that oxygen is used for decomposition is additionally increased and dissolved oxygen levels in the water decrease even more leading to increasing winterkill.

For more info on fish kills visit: <u>www.michigan.gov/fishing</u>. If you suspect a fish kill is caused by nonnatural causes, please call the nearest DNR office or Michigan's Pollution Emergency Alert System at 1-800-292-4706. \Rightarrow

4

Great Lakes ice melt a danger to anglers

As warmer temperatures roll across the Great Lakes, this year's nearrecord ice coverage will soon be only a memory. After a series of rescues conducted by the U.S. Coast Guard and local authorities, officials are warning ice fishermen and other outdoor enthusiasts to be careful as lake ice melts. "Ice conditions are rapidly changing," said Karl Willis, with the Coast Guard 9th District Command Center in Cleveland. "Warming temperatures and wind significantly affect ice strength and can lead to extremely hazardous conditions with a high probability for drifting pack ice."

According to the <u>Great Lakes</u> <u>Environmental Research Lab</u>, the current ice cover for the Great Lakes stands at 54.3%. While it is an impressive number this late into the year, it is a dramatic drop from last month's <u>92 % ice coverage</u>. Many parts of the Lakes are already ice-free, although Lake Superior is a notable standout and still boasts ice coverage well above 70%. \diamondsuit

MI DNR to discuss Lake Michigan lake trout regs

On April 23, at 5 p.m., Frankfort City Hall, 412 Main St., Michigan DNR fisheries staff will present information and take comments on possible changes to lake trout size and daily catch limits for northern Lake Michigan lake trout management zones MM-3, 4 and 5. Comments received will inform potential lake trout regulation changes in 2015. ♦

IL Boating & Hunter Safety Education

1 in 5 MN boaters still breaking the law

With another boating season upon us, Minnesota boaters and anglers need to continue to take steps to prevent the spread of aquatic invasive species (AIS). While the rate of AIS violations dropped in 2013, one in five boaters is still breaking the law, according to a newly published annual report from the DNR.

The invasive species violation rate dropped to 20% last year from 31% in 2012. The rate is the proportion of people who were issued citations at roadside check stations set up by DNR conservation officers. Boaters and anglers are legally required to clean boats and equipment and drain all water to prevent the spread of aquatic invasive species.

This year, the DNR will increase efforts to ensure boaters follow the AIS laws.

Activities highlighted in the 2013 invasive species of Minnesota report:

- DNR watercraft inspectors, who inspect boats and equipment at water accesses, conducted 123,000 inspections—an increase of nearly 62 percent since 2011.
- More than 1,000 lake service providers have received AIS training and permits.
- During the first full year of its operation, the AIS Advisory Committee began conversations with boat manufacturers on design modifications to ensure boats drain water more effectively.
- Initiated risk assessments on the potential for transporting veligers in residual water of recreational watercraft.
- Collaborated with the Iowa DNR to install an electric barrier on Lower Gar Lake in Iowa to help prevent the migration of Asian carp into southwestern Minnesota.

Also last year, nearly 8,000 boats arrived at Minnesota water accesses with drain plugs in; more than 1,200 had vegetation attached and 134 had

MI DNR again stocks steelhead in Red Cedar River Will enhance fishing on MSU campus

The Michigan DNR says 3,200 steelhead were recently stocked in the Red Cedar River at Michigan State U. In 2013, an ordinance was changed by the MSU board of trustees to allow hook-and-line fishing on campus grounds between the western edge of Complex Brody and what's sometimes referred to as the Sparty bridge connecting West Circle Drive to Chestnut Road. Prior to that, anglers had not been allowed to fish from the Red Cedar's shores since the 1960s.

Fishing from the designated area, on the north bank of the river only, is part of a three-year test period. Good angling opportunities will include steelhead and sucker fishing in the spring, smallmouth bass in the summer, salmon in the fall, and a host of other native species throughout the open season. ♦

zebra mussels attached. These were all violations of AIS laws. Fortunately, DNR-trained watercraft inspectors were onsite to stop the owners and remove the invasive species before launching.

"The public is our first line of defense against AIS," said Ann Pierce, DNR section manager. "It only takes a few minutes to make sure your boat and equipment are cleaned, all water is drained and drain plugs are removed before leaving the water access. This truly is an example of an ounce of prevention being worth a pound of cure."

Enforcement and watercraft inspection together represent the largest segment (43 percent) of the program's annual 2013 budget of about \$8.5 million. The budget also covers management and control of invasive aquatic plant species such as Eurasian watermilfoil and curly-leaf pondweed and education. For more info: www.mndnr.gov/AIS. ◆

Lake Erie 2014 Yellow Perch and Walleye Catch Levels

WINDSOR, ON - The Lake Erie Committee, composed of senior fishery managers from Michigan, New York, Ohio, Ontario, and Pennsylvania, met in Windsor Ontario recently and recommended a 2014 total allowable catch (TAC) of 11.081 million pounds of yellow perch and walleye. 4.027 million These recommended harvest levels represent a modest decrease in allowable yellow perch harvest and a modest increase in walleye harvest for 2014.

TAC recommendations are developed after thorough lakewide biological assessments, analysis, discussions, and consultations with stakeholders. The Lake Erie which Committee, operates by consensus, also supports the Lake Erie Percid Management Advisory Group, or LEPMAG, as a mechanism to consider the status of walleve and yellow perch and to discuss harvest strategies with affected stakeholders, such as commercial and recreational fishers. This structured stakeholder engagement reflects the committee's interest in involving the fishing community in actions related to management of Lake Erie's percid fisheries.

Erie Committee The Lake recommends TACs that are consistent with the status of Lake Erie's fish population while maintaining stable harvest levels, as informed through the LEPMAG process. The individual provincial and state governments adhere to and implement the TAC recommendations consistent with their respective regulations and management objectives.

YELLOW PERCH

The Lake Erie Committee recommended a 2014 binational TAC of 11.081 million lbs. of yellow perch, a 9% decrease from last year's allocation of 12.237 million lbs. The proposed harvest level is based on biological assessments, conducted and analyzed by biologists that showed a moderate decline in yellow perch biomass in the lake. Committee members concluded that the harvestable stocks of yellow perch will be lower in 2014 than last year, necessitating a reduced TAC. The proposed TAC, after deliberations with stakeholders through the LEPMAG process, reflects the committee's interest in maintaining stability in harvest while ensuring yellow perch sustainability.

Under the 2014 TAC recommendation, Ontario will receive 5.409 million lbs., Ohio 4.418 million lbs., Michigan 0.145 million lbs., New York 0.259 million lbs., and Pennsylvania 0.850 million lbs. Scientists and field biologists from all jurisdictions meet annually and on an ongoing basis to analyze fisheries and agency data in order to estimate population levels and recommend the annual TAC.

WALLEYE

Informed by a harvest policy recently developed in consultation with LEPMAG members, and on a new population assessment model developed in conjunction with stakeholders and Michigan State University, the Lake Erie Committee set a 2014 walleye TAC of 4.027 million fish, compared to the TAC of 3.356 million fish in 2013. The increased TAC recommendation for 2014 reflects the committee's goal to manage the lakewide fish stocks sustainably while integrating stakeholder input into the process. Walleye hatches have been generally poor in recent years, though some year classes, particularly those in 2010 and 2003 have been moderate to exceptional, contributing to the stability of the walleye fishery and allowing for an increased TAC over last year.

Ontario, Ohio and Michigan share the TAC based on a formula of walleye habitat within each jurisdiction in the western and central basins of the lake. Under a 2014 TAC of 4.027 million fish, Ohio will be entitled to 2.058 million fish, Ontario 1.734 million fish, and Michigan 0.235 million fish. Because the majority of harvest comes from the western portion of Lake Erie, jurisdictions in the eastern end of the lake are outside the TAC area. Harvest limits in the eastern basin are established separately by Ontario, PA, and NY and remain consistent with lakewide conditions and objectives.

Meeting as the Walleye Task Group, scientists and biologists share data and reach consensus on biological conditions. The task group's walleye abundance estimates, which incorporate suggestions from LEPMAG, serve as the foundation for Lake the Erie Committee's discussions and TAC recommendations. Like yellow perch, each Lake Erie jurisdiction is responsible for implementing their portion of the TAC.

(Yellow perch are allocated in pounds; walleye are allocated by number of fish) For more information: <u>www.glfc.org/lec</u>. ◆

2014 Illinois licenses reminder

The new license year has begun for most states. Outdoor licenses are available from DNR license and permit vendors, online. For Illinois, go to: <u>www.dnr.illinois.gov/online/</u> <u>Pages/default.aspx</u>, or call 888-673-7648. For other states go to: <u>http://www.great-</u> <u>lakes.org/licenses.html</u>. ◆

Carp barrier below Great Lakes

Continued from page 1

congressional bill, she understands the difficulty of receiving federal approval. The state of Illinois has resisted calls to change the canal and erect physical barriers to separate Lake Michigan from Chicago's waterways, stressing that the legislation is too expensive and harmful to commercial shipping.

Miller said six of eight states bordering the Great Lakes favor some form of action on the Asian carp problem. ♦

6

DNR proposes to allow fish net pens in Wis.

The Wisconsin DNR is proposing to allow nonprofit groups to place net pens in Lake Michigan, Lake Superior and their tributaries to increase the fish population there for recreational anglers.

A new law passed last year allows nonprofit organizations to raise fish themselves, and the department is seeking public comment on a general permit to allow them to do so. Michigan and New York are the only other states to allow such pens.

The permit is intended for local sport clubs and fishing organizations. No group would be allowed to raise fish for food or commercial purposes. The purpose of the permits is to provide more fish for anglers.

Prior to the legislation, the law did not allow new fish farms, and the DNR allowed groups to keep fish only for up to two days without feeding them. If the fish were fed or kept longer, the pen would be considered an illegal farm. The new permits will allow organizations to legally keep fish in a pen for a longer period of time and to feed them.

Fish would be transported to a net pen the same way as fish are taken to the DNR's hatcheries. The fish would be carried by truck to a pen and piped into the water. The fish would be kept in the net pens for one to three weeks, which would give them more time to acclimate to their environment while avoiding predators. "The fish will be fed the same amount as fish in our own hatcheries," said Geihtbrock.

Water level, temperature and pH would be measured to ensure the water remains safe for fish.

Mainly trout and salmon would be raised in the pens. Trout and salmon imprint on the chemical signatures of the tributaries they live in., and the pens would allow more time for the fish to imprint and adapt to the lakes. Net pens also help generate more public interest in fishing organizations. \diamond

NY DEC proposal to amend Jay Mountain Wilderness Mgmt Plan

The New York State DEC submitted a proposed amendment to the 2010 Jay Mountain Wilderness Unit Management Plan (UMP) to the Adirondack Park Agency (APA) to ensure the UMP is consistent with the constitutional amendment approved by voters in November 2013 that permits exploratory sampling on the state-owned parcel in the Town of Essex County, Lewis, DEC Commissioner Joe Martens announced.

The constitutional amendment authorizes NYCO Materials, Inc. to conduct sampling on the 200-acre parcel, known as Lot 8, to determine the quantity and quality of wollastonite on the site, which is adjacent to the company's longstanding mine. The exploratory sampling will also provide information that DEC will use to accurately appraise the value of Lot 8 for a potential land exchange if NYCO decides to expand its mining operations.

"This is an important step in the process to evaluate the site for a potential land exchange between the State and NYCO that would expand public access and recreation opportunities in the Adirondacks, while also supporting the regional economy," Commissioner Martens said.

The current Jay Mountain Wilderness Area includes Lot 8, which is part of the State Forest Preserve and is governed by Article XIV, Section 1 of the State Constitution (Article XIV). The property is also subject to the provisions of the Adirondack Park State Land Master Plan (APSLMP) as outlined in the 2010 Unit Management Plan for the Jay Mountain Wilderness area.

If Lot 8 is ultimately conveyed to NYCO, an amendment to the APSLMP's area description of the Jay Mountain Wilderness Area will recognize that Lot 8 will no longer be contained in the Wilderness Area. ◆

MI DNR asks anglers to be on the lookout for tagged walleye

To improve its knowledge of walleye populations in Lake Huron and Saginaw Bay, the DNR is set to tag nearly 3,000 walleye in Saginaw Bay tributary rivers over the next two weeks. A total of 1,000 walleye will be tagged in the Tittabawassee River and the remaining 2,000 in other tributary streams. To get the most information from these efforts, anglers are asked to collect data on tagged fish they catch and report it to the DNR.

Collected info can be mailed to the address on the tag or reported on the DNR website at: www.michigandnr.com/taggedfish.

Since 1981, more than 100,000 walleye in the Saginaw Bay area have been tagged. Jaw-tagging is part of an assessment project to monitor survival and exploitation rates of this key walleye population. The program depends on anglers to report when and where a tagged walleye is caught as well as the fish's length, weight (if known) and tag identification number. Both released and harvested walleye can be reported. Anglers then will receive a letter from the DNR, detailing the background of their fish.

"Survival rate is the rate at which walleye are surviving from one year to the next and exploitation rate is the percentage of walleye being harvested from the population," Dave Fielder, DNR fish biologist, said. "These two measurements are essential for gauging the health of the population and fishery."

The annual tagging operation is spearheaded by the DNR's Southern Lake Huron Management Unit. Electrofishing boats are used to temporarily stun the fish so they can be netted and measured and a small metal tag can be affixed to the jaw of each fish.

Learn more about marked and tagged fish at www.michigan.gov/taggedfish \diamond

Great Lakes scientists use acoustic telemetry to reveal secret lives of fish

If you have ever gone fishing, you know that fish do not stay in one location for too long. That hot fishing spot where you caught so many fish yesterday may be vacant today. A puzzle for anglers and scientists alike is figuring out where fish move and when they will be back. Fish move throughout water bodies for a variety of reasons, such as following prey, finding mates, or seeking summering and wintering grounds. In the Great Lakes, fish have a lot of room to roam. Many Great Lakes fishes can move across huge expanses within a lake and possibly even move between Great Lakes. For biologists that study the movement of fish, that's a lot of ground to cover.

Through support from the Great Lakes Restoration Initiative, the Great Lakes Fishery Commission is using innovative acoustic telemetry technology to unravel the mysteries of fish behavior. Using acoustic telemetry, scientists can track the movements of fish with remarkable precision. This detailed information allows scientists discover to previously unknown aspects of the lives of fishes in the Great Lakes, such as where certain fish spawn (a difficult job given the vastness of the Great Lakes), when fish move to and from spawning or overwintering areas, and how much mixing occurs among fish stocks. Ultimately, this information is highly valuable for improving Great Lakes fishery management.

In the past, scientists had to deduce fish movements using less precise methods such as inferring fish behavior based on capture locations. Although these methods are useful for telling scientists when a fish is present in a particular location, they do not tell scientists how the fish got there, how long the fish stayed, how many times the fish visited, and where the fish would have gone next. "When law enforcement agents are tracking criminals, they don't just wait for the criminals to commit a traffic violation or pop up in an airport-they look into criminals' phone and credit card records to get a better idea of where they have been and where they might go next," said biologist Chris Holbrook. "In a similar way, acoustic telemetry provides a record of activity that we can use to understand the habits of important fish species and to predict their next move."

How acoustic telemetry works

Acoustic telemetry works like electronic toll collection systems such as the I-Pass or E-ZPass: an internally-tagged fish swims through a network of receivers, like a car passing through a toll-booth. The tag inside the fish—technically an telemetry acoustic transmitter-continuously "pings" a unique ID number. The receivers, small, data-logging computers also called hydrophones, listen for pings and record the date, time, and ID number for every tagged fish that swims nearby. The receivers are anchored in strategic locations: such as along migration routes, near spawning areas, and in other places of interest to scientists. In some cases, receivers are positioned in sequential lines, which allow scientists to determine fish presence/absence and movement through a constrained environment, such as a river. In other cases, receivers are positioned in an array that allows scientists to pinpoint the exact location of a fish in three dimensions, such as in an open lake. Scientists determine the location of tagged fish in receiver arrays by synchronizing information from multiple receivers (through triangulation and other methods).

The acoustic telemetry network in the Great Lakes, called the Great Lakes Acoustic Telemetry Observation System (GLATOS). consists of more than 400 receivers and thousands of tagged fish. In just three short years, scientists have already recorded more than 54 million movement records for more than ten species of fish! With each record, researchers learn more about fish movements, migration patterns, habitat use, and survival, which provide valuable insight to improve monitoring, control, restoration, and management efforts in the Great Lakes.

Acoustic telemetry discoveries in the Great Lakes

Recent advancements using acoustic telemetry in the Great Lakes include discovery of new spawning grounds for lake trout, a native Great Lakes fish that once supported a valuable fishing industry. Fine-scale acoustic telemetry tracking on a reef complex in Lake Huron revealed six specific locations-some only the size of a small bedroom-where lake trout lay their eggs. "This information is being used to determine which spawning habitats are best for incubating eggs, identify unprotected critical to habitats, and to improve artificial spawning reefs," said Dr. Tom Binder, the lead researcher on the lake trout project.

Acoustic telemetry is being used to improve our understanding of another native Great Lakes fish-the lake sturgeon which is listed as threatened or endangered in multiple areas of the region. Scientists are studying movement patterns of lake sturgeon to aid restoration in the water bodies connecting Lakes Huron and Erie. One surprising result: scientists discovered that Lake St. Clair, a hotspot of contamination and habitat degradation, serves as an overwintering area and feeding ground for these ancient fish.

Scientists are also using acoustic telemetry to improve management of walleye, one of the Great Lakes most desirable species. Extensive tracking of walleye in Lake Huron has revealed that walleye are capable of making long migrations throughout the lake. Dr. Todd Hayden, lead researcher on the Lake Huron walleye study, explained the value of acoustic telemetry to the Great Lakes walleye information fishery: "Movement allows managers to understand how production in one area affects harvest in another. This information is being used to fine-tune and develop new management strategies that promote a Acoustic telemetry *cont*'d next page

Acoustic telemetry *continued* healthy and productive walleye fishery in Lake Huron."

Acoustic telemetry is also being used to combat sea lamprey, one of the most notorious invasive species in the Great Lakes. The St. Marys River, which connects Lake Superior to Lake Huron, is a major contributor to sea lamprey populations in the Great Lakes. Scientists use traps in the river to measure sea lamprey abundance. To provide accurate counts, traps must be placed in appropriate locations to intercept migrating sea lampreys, but currently all traps are located at barriers, which are the "end of the line" for a migrating sea lamprey. Using acoustic telemetry. Holbrook revealed that traditional assessments underestimate the true sizes of some sea lamprey populations because many lampreys get off the train early. "Telemetry has shown us that we need to place traps in new locations and has given us the behavioral information that we need to begin designing and placing those traps," said Holbrook.

Learn more about acoustic telemetry and contribute to the projects!

If you are interested in learning more about how acoustic telemetry is being used to protect and improve Great Lakes fisheries, visit the GLATOS website: <u>www.data.glos.us/glatos</u>. Website visitors can explore a map of receiver locations and read more about current acoustic telemetry projects.

Anglers can also contribute to the acoustic telemetry effort by returning tags implanted in walleye and lake trout. When fishing for these species, look for fish marked with orange "spaghetti" tags on their backs or fish that contain an acoustic telemetry tag inside their body cavity. If you call the phone number listed on the tags, you will be guided through a process to return the telemetry tag and receive a \$100 reward for your effort! The returned telemetry tags can then be implanted into new fish, allowing Great Lakes scientists to solve even more mysteries of Great Lakes fish behavior. ♦

\$1.1 billion to state agencies from excise taxes on anglers, hunters, and boaters Distributions are \$238.4 million higher than last year

WASHINGTON –The USFWS will distribute nearly \$1.1 billion in excise tax revenues paid by sportsmen to state and territorial fish and wildlife agencies to fund fish and wildlife conservation and recreation projects across the nation.

The Service apportions the funds to all 50 states and territories through the Pittman-Robertson Wildlife Restoration and Dingell-Johnson Sport Fish Restoration programs. Revenues come from excise taxes generated by the sale of sporting ammunition, archery firearms, equipment, fishing equipment and tackle, and electric outboard motors. Recreational boaters also contribute to the program through fuel taxes on motorboats and small engines.

"Anyone who enjoys our nation's outdoor heritage should thank hunters, anglers, recreational boaters and target shooters," said Dan Ashe, director of the Service. "Through the Wildlife and Sport Fish Restoration Program, these individuals have created a 75-year legacy for conservation of critical wildlife habitat and improved access to the outdoors for everyone."

The total distributions this year are \$238.4 million higher than last year because of the inclusion of funds that were not distributed last year because of the government sequester and an increase in excise tax receipts from sales of firearms and ammunition in Wildlife the Restoration Trust Fund.

The Pittman-Robertson Wildlife Restoration Program apportionment for 2014 totals a record \$760.9 million, which includes \$20 million that was sequestered from FY 2013 but subsequently returned to the Wildlife Restoration Trust Fund.

The Dingell-Johnson Sport Fish Restoration Program apportionment for 2014 totals \$325.7 million, which includes \$18.5 million that was sequestered from FY 2013 but subsequently returned to the Sport Fish Restoration Trust Fund. The FY 2014 Sport Fish Restoration apportionment is \$34.1 million lower than FY 2013 due to lower domestic fishing equipment excise tax receipts.

The Service's Wildlife and Sport Fish Restoration Program reimburses up to 75 percent of the cost of each eligible project, while state fish and wildlife agencies contribute a minimum of 25 percent, generally using hunting and fishing license revenues as the required non-federal match.

Funding is paid by manufacturers, producers and importers and is distributed by the Service's Wildlife and Sport Fish Restoration Program to each state and territory.

The Wildlife and Sport Fish Restoration Programs have generated a total of more than \$15 billion since their inception-in 1937 in the case of the Pittman-Robertson Wildlife Restoration Program and 1950 for the Dingell-Johnson Sport Fish Restoration Program-to conserve fish and wildlife resources. The recipient fish and wildlife agencies have matched these program funds with more than \$5 billion. This funding is critical to sustaining healthy fish and wildlife populations and providing opportunities for all to connect with nature.

U.S. Fish and Wildlife Service Final Apportionment of Wildlife Restoration Funds and Sport Fish Restoration Funds for Fiscal Year 2014 for Great Lakes States are:

ILLINOIS	\$22,676,138
INDIANA	\$17,301,752
MICHIGAN	\$35,244,512
MINNESOTA	\$35,296,856
NEW YORK	\$28,467,902
OHIO	\$22,464,377
PENNSYLVANIA	\$35,731,360
WISCONSIN	\$34,208,337 ∻

Lake Huron Citizens Fishery Committee Summary

Lake Huron 2013 Forage Update and overview of predator diet study – Ed Roseman, USGS

2013 Lake Huron forage fish surveys

The 2013 forage bottom trawl results for Lake Huron showed a small increase in newly hatched alewife and rainbow smelt with low numbers of adults. Overall their numbers remain low especially for alewife. There are many young bloaters with another good hatch, however, there was a decrease in the number of larger bloaters. In addition, there was a decrease in the other forage species including sculpin, stickleback and trout perch. There was a decrease in the round goby abundance compared to the high levels in 2012. Forage fish biomass is still dominated by bloaters and the total forage fish biomass was down 50% from 2012. This is the first decrease in prey biomass in the past three years which is 13% of the long term maximum.

<u>2009-2011 Lake Huron Predator</u> <u>Diet Study</u>

Since the alewife crashed in 2003 most predators like trout, salmon and walleye have altered their diet to eat more insects and smaller fish. Chinook salmon appeared to be the only species not able to switch to a more varied diet. The following is a summary:

Chinook continued to pursue mid water smelt and the rare alewife.

Lake trout ate primarily round goby and smelt.

Rainbow trout (steelhead) diet consisted of 56% invertebrates which were mainly terrestrial insects along with a variety of forage fish.

Atlantic salmon and coho consumed smaller numbers of invertebrates but they ate a variety of smaller forage fish including significant numbers of emerald shiner and sticklebacks.

Walleye consumed mainly yellow perch. This is a switch from the 1980s when walleye ate mainly alewives, shad and shiners. Since the alewife crashed, forage fish over 6 inches in length have become rare resulting in young trout and salmon being about the only larger food items available

for the larger predators. Because of this, it should be beneficial for fishery managers to concentrate on stocking species that are better able to avoid being eaten immediately after being planted. Recently, the brown trout program has been terminated in Lake Huron because the stocked fish spent many months near shore where they were very vulnerable and a switch in emphasis has been placed on Atlantic salmon and steelhead that smolt before and during stocking and quickly move off shore into safer waters.

Cormorants in Saginaw Bay

In 2003, authority was granted to the State to identify problem areas for treatment. USDA and tribal organizations were also recognized as cormorant agencies to manage control. Much work has been conducted in Northern Lake Huron and at various locations in Lake Michigan but control was not started in Saginaw Bay.

Little Charity Island and Spoils Island are the only two islands with breeding populations of cormorants within Saginaw Bay. Currently, it is estimated that there are over 2,500 pairs and because of increasing complaints about the expanding population in the Bay a diet study was started last April and extended through September. During each month 25 stomach samples were collected from the birds on each island for a total of 303 samples.

The stomachs taken from Little *Island* contained Charity high amounts by weight of yellow perch in April with a lesser spike in August. Yellow perch were found during the other months but in much smaller amounts. High numbers of goby were present in stomachs during May, June, July with smaller amounts in August and September. Significant amounts of walleye were present in May and September. The diets were the most varied in August and September with other species appearing in the stomachs throughout the entire sampling period including emerald shiners, freshwater drum, gizzard shad, pumpkinseed, white perch, white sucker and others.

The stomachs taken from Spoils Island contained a more diverse diet and were dominated with fresh water drum in April, white perch in May, walleye in June, and goby in July, August and September. Yellow perch were present in each month but the amounts were relatively small.

The main concern with having a large population of cormorants is the sport fishery will be negatively impacted. The annual trawl for age 0 walleye has shown considerable strong year classes since the alewife crashed in 2003. That translated into excellent adult walleye abundance, which is an enormous success story! Therefore, the goals have been reached and stocking has been discontinued.

In addition, trawl catches for age 0 yellow perch increased after the alewife declined. Numbers have declined since 2003, but overall numbers of juvenile age 0 yellow perch are very strong. These high numbers however, are not translating to adult abundance. Yellow perch reproduce very well, but are not surviving indicating a mortality problem on young perch in Saginaw Bay.

A walleye Diet Study has shown that in 2005 yellow perch became a dominant part of the walleye diet. With the first year of the Cormorant Diet Study complete, the challenge is to put those numbers into context and determine if the birds are also significantly reducing recovery of yellow perch in the Bay.

In 2011, cormorant total consumption in Saginaw Bay was estimated at 1,755,143 pounds of fish annually. By comparison, walleye consumption from age 2+ individuals is estimated to be around 3,122,959 pounds of fish/year, therefore cormorants are consuming 56% as

much as walleye. By comparison walleyes consume 498,553 pounds of yellow perch in Saginaw Bay during 2011 while cormorants consumed 257,094 pounds.

Would management of the cormorants make a difference in yellow perch survival? Cormorants are eating a variety of prey and nongame species are the larger majority but the consumption of yellow perch is not negligible. Even if the number of yellow perch consumed by the birds is a smaller percentage, the impact could be large. More analysis is needed to fully evaluate the cormorant's significance so a second year of collection is planned. \diamond

BLM hiding behind Toothless Tortoise

A 1990 study, called <u>The Desert</u> <u>Toiroise in Relation to Cattle</u> <u>Grazing</u> should prove once and for all the incredible stupidity of the bumbling bureaucrats with the Bureau of Land Management. The tortoise can't process bulky forage to meet its nutritional requirements. They solved this problem long ago—they allow other animals to do it for them. Desert tortoises feed primarily on dung – cow pies.

"A crust forms on cow-pies which retards evaporation; the interior dries out very slowly. Cows can, therefore, supply water to tortoises for several weeks after they leave the range."

As environmentalists BLM agents make good cow-pies.

Their 'Save the Environment' twaddle notwithstanding, BLM's invasion of Cliven Bundy's ranch is not all about the tortoise.

Tortoise fed and watered by grazing cattle don't need 200 snipers, helicopters, SUVs and tasers to save them.

Until Vernon Bostick's U of Arizona paper was unearthed, the Desert Tortoise was the perfect excuse for marauding BLM agents to drive land owners and ranchers off land confiscated for Big Government. (Click on blue title above for full study.)∻

Ohio approves 2014-2015 hunting regulations

COLUMBUS, OH – Ohio has approved new white-tailed deer hunting regulations, according to the Ohio DNR. Among new regulations are decreased deer bag limits in many counties, and hunters may use straight-walled cartridge rifles during the 2014 deer-gun week. The council also voted to remove bobcats from Ohio's list of threatened species.

The 2014-2015 deer hunting season dates will remain largely consistent with previous years. One change in season dates included adjusting deer-muzzleloader season to begin on Friday, Jan. 2, 2015, and end on Monday, Jan. 5, compared to last year when the season began on a Saturday and concluded on a Tuesday. The October antlerless deermuzzleloader weekend will be held for the second year.

Deer hunting seasons for 2014-2015:

• Deer archery: Sept. 27, 2014 - Feb. 1, 2015.

• Antlerless deer muzzleloader: Oct. 11-12, 2014.

- Youth deer gun: Nov. 22-23, 2014.
- Deer gun: Dec. 1-7, 2014.

• Deer muzzleloader: Jan. 2-5, 2015.

The Ohio Wildlife Council also approved changes to Ohio's list of endangered and threatened species. The bobcat, previously threatened, was removed from the list. Bobcats are still considered a protected species in Ohio with no hunting or trapping season. The snowshoe hare was changed to a species of concern, Bewick's wren was changed to extirpated and smooth greensnakes were changed to endangered.

Small-game hunting and furbearer trapping season dates were also passed. Season dates and bag limits for migratory birds, including mourning dove, Canada goose, rail, moorhen, snipe, woodcock and waterfowl will be set in August in compliance with the U.S. Fish and Wildlife Service's framework. The hunting and trapping season dates can found www.bit.ly/ be at 1415Ohiohuntingseason.

Legal deer hunting rifles are chambered for the following calibers: .357 Magnum, .357 Maximum, .38 Special, .375 Super Magnum, .375 Winchester, .38-55, .41 Long Colt, .41 Magnum, .44 Special, .44 Magnum, .444 Marlin, .45 ACP, .45 Colt, .45 Long Colt, .45 Winchester Magnum, .45 Smith & Wesson, .454 Casull, .460 Smith & Wesson, .45-70, .45-90, .45-110, .475 Linebaugh, .50-70, .50-90, .50-100, .50-110 and .500 Smith & Wesson.

A new regulation states shotguns and straight-walled cartridge rifles used for deer hunting be loaded with no more than three shells in the magazine and chamber combined. The current hunting regulation states a shotgun must be plugged if it is capable of holding more than three shells.

New next year, youth hunters can harvest up to two wild turkeys during the 2015 two-day youth season (one per day). Checking two wild turkeys would fill the youth hunter's bag limit for the remaining 2015 spring wild turkey season. This change does not take effect until 2015. The bag limit remains one wild turkey for the twoday 2014 youth wild turkey hunting season. \diamondsuit

Hatchery grants for walleyes

Continued from page 1

fish they will produce and the price, and to commit to stocking those within Wisconsin for at least three years.

The 13 applications DNR received for the hatchery capacity grants were reviewed by a technical review panel that included DNR staff with expertise in walleye and cool-water species hatchery production and management, a U.S. Fish and Wildlife Service fisheries expert and a University of Wisconsin – Extension fisheries expert.

Applicants were ranked based on criteria including their experience in raising walleye or other cool-water fish, cost effectiveness, and having a shovel-ready project that would significantly increase their production of walleye. ♦

White-nose syndrome confirmed in bats in Michigan

The Michigan DNR announced the fungus known to cause significant rates of illness and death in North American bats has been detected for the first time in Michigan. White-nose syndrome (WNS) has been found in three Michigan counties: Alpena, Dickinson and Mackinac.

Five little brown bats showing disease characteristics were collected recently during routine WNS surveillance by Dr. Allen Kurta and Steve Smith, researchers from Eastern Michigan University. White-nose diagnosed syndrome was bv Michigan State U's Diagnostic Center for Population and Animal Health (DCPAH).

The diagnosis was then confirmed by the U.S. Geological Survey's National Wildlife Health Center in Madison, Wis. The bats tested positive for *Pseudogymnoascus destructans*, the fungus known to be the causative agent of skin lesions observed in WNS-affected bats. The disease was first documented in 2006 in a cave in upstate New York. Eleven species of bat have been infected and over 6 million have died.

A diet high in protein, particularly animal protein, may help elderly individuals maintain a higher level of physical, psychological, and social function according to a study published in the <u>Journal of the</u> <u>American Geriatrics Society.</u>

Due to increasing life expectancies in many countries, increasing numbers of elderly people are living with functional decline, such as declines in cognitive ability and activities of daily living. This can have profound effects on the health and well-being of older adults and their caregivers, as well as on health care resources.

Research suggests that as people age, their ability to absorb or process protein may decline. To compensate for this loss, protein requirements may increase with age. Megumi Tsubota-Utsugi, PhD, MPH, RD, of In 2010, the DNR, along with the agency's partners, developed the state's WNS Response Plan. The plan outlined two main pillars: 1) prevent the arrival and spread of WNS as long as possible by mitigating the human-assisted movement of the fungus that causes the disease; and 2) conserve whatever bat populations remain after the disease has arrived by preserving abandoned mines and caves.

In northeastern states, where the disease has been present the longest, summer populations are down by 70-80%, and winter die-offs in some caves have been greater than 90%.

While there is no connection between WNS and rabies, the DNR Department and Michigan of Community Health caution the public to avoid handling bats because of the risk for exposure to rabies. Bats in Michigan can carry rabies, a virus that infects the central nervous system of mammals, including people, and causes death in almost all cases. Rabies is most commonly spread by the bite of an infected animal. There are no known harmful effects to humans from WNS.

Right now, there is no treatment for WNS and no way to deliver the treatment to millions of affected bats even if treatment existed. Rehabilitation of bats is prohibited in Michigan because of the potential for the exposure of humans to rabies. The best thing the public can do when they find a dying or dead bat is to leave it alone and keep children, livestock and pets away from it.

Bat die-offs can be reported through an <u>observation report</u> on the DNR website at <u>www.michigan.</u> <u>gov/wildlife</u> or by calling the DNR at 517-336-5030. The USFWS requests that cavers refrain from caving in all WNS-affected states and adjoining states. Cavers also should refrain from caving anywhere during the hibernation period (September – May) to minimize disturbance and mortality to bats.

The loss of bats due to WNS could be economically significant for agriculture and commercial forestry. A reduction in the bat population could lead to an increase in pests harmful to crops and trees. For more info: www.michigan.gov/wns. ♦

Diets high in animal protein may help prevent functional decline in elderly

the National Institute of Health and Nutrition in Japan, and her colleagues in Tohoku University and Teikyo University, Japan, wondered whether protein intake might affect the functional capabilities of older adults. They designed a study to investigate the relationship between protein intake and future decline in higherlevel functional capacity in older community-dwelling adults in Japan.

Their analysis included 1,007 individuals with an average age of 67.4 years who completed food questionnaires at the start of the study and seven years later. Participants were divided into four groups (quartiles) according to their intake levels of total, animal, and plant protein. Tests of higher-level functional capacity included social and intellectual aspects as well as measures related to activities of daily living.

Men in the highest quartile of animal protein intake had a 39 percent decreased chance of experiencing higher-level functional decline than those in the lowest quartile. These associations were not seen in women. No consistent association was observed between plant protein intake and future higher-level functional decline in either sex.

"Identifying nutritional factors that contribute to maintaining higherlevel functional capacity is important for prevention of future deterioration of activities of daily living," said Dr. Tsubota-Utsugi. "Along with other modifiable health behaviors, a diet rich in protein may help older adults maintain their functional capacity." \diamond

Other Breaking News Items:

(Click on title or URL to read full article)

New plan needed for Lake Ontario and St. Lawrence River; water levels likely to be higher this summer

A new plan — one that regulates the water levels for Lake Ontario and the St. Lawrence River — is needed soon because of the recent rise in water levels.

Come spring: The walleyes move out of Saginaw Bay

Researchers have been following the walleye's whereabouts for a few years and are still puzzled by the reasons behind the fish's long journey out of Saginaw Bay.

Mixed catch: Spending up, but even state's fishing industry needs a business plan

Michigan's fishing industry is analogous to some of its most sought-after catch, but in order to keep the industry up, there needs to be some marketing changes.

Despite winter's might, ash borer treatment urged

Although this winter was one of the harshest the Midwest has seen in years, it wasn't harsh enough to prevent the ash borer from invading the ash trees.

Lake levels hold steady as cold hangs on

Water levels in Lake Michigan held steady compared to last month, but are above last year and expected to rise as more snowpack melts with the warmer spring weather.

Ohio's walleye, yellow perch populations stable; bag limits to remain the same in 2014

There will be no changes in the Ohio bag limits for Lake Erie walleye or yellow perch for 2014 — walleye population is healthier than expected, while schools of yellow perch are in a mild slump

Durbin criticizes Free Enterprise "Created Unfairness and Injustice"

Sen. Dick Durbin said free enterprise isn't always best. Government must step in. "The free enterprise system is a strong system," he said, but it "created unfairness and injustice when it came to health care, which we are addressing with this Affordable Care Act."

Minnesota may rename Asian carp to less offensive invasive carp

The troublesome fish currently known as Asian carp might get a new name in Minnesota, over concern that the current one casts people from Asian cultures in a negative light. Proposals advancing in the Legislature would require the DNR to refer to the fish as

Volunteers help Illinois fish for fish data

Members of Salmon Unlimited travel every March to the Jake Wolf fish hatchery to assist in the annual clipping of designated fins — the left pectoral and right ventral this year — from small rainbow trout that will be stocked in Lake Michigan when they have grown

Brutal winter should lead to rise in lake levels

As the record-breaking 93.29% ice cover that peaked on Lake Michigan this month breaks, and as the snowpack around the Michigan Basin that was 30% higher this year than any time in the past decade melts, water levels will undergo a stronger than usual seasonal

Alewife Numbers remain low in Lake Michigan/

Lake Michigan alewife populations continue to be at low ebb and may dip further before this year is over. Surveys conducted last August by state and federal agencies found little change from 2012, when prey fish numbers were reported at all-time lows.

Changing Lake Erie, invasive white perch threaten popular yellow perch in Western Lake Erie

White perch could be a major reason for a decline of Lake Erie's yellow perch, the darling of Ohio sport and commercial anglers. "Predation on yellow perch by white perch is something none of us had really considered in the past," said Jeff Tyson, the new Lake

BP says it spilled more oil than initially thought

Company estimates now indicate as many as 39 barrels — or 1,638 gallons — of crude oil may have been released Monday afternoon when the BP Whiting refinery experienced a malfunction in its oil processing unit, officials said Thursday.

Idaho Governor oks legislation nullifying all future federal gun laws

A new Idaho law effectively nullifies future federal gun laws, by prohibiting state enforcement of any future federal act relating to personal firearms, a firearm accessories or ammunition. Alaska and Kansas have also passed similar laws. We may soon see a wave

Deep freeze means rare rise in Great Lakes water levels

Thanks to the deep freeze this winter, there is an expected 13-15 inch rise in water levels in the Great Lakes.

Wisconsin lawmaker rips tribes spearfishing goals-

Great Lakes Basin Report

Chippewa bands want to spear too many walleyes again this spring and risk re-igniting tensions if state officials adopt tight bag limits for non-tribal anglers, the state Assembly's tourism chairman warned. The tribes have declared they want to harvest a record 63,488

Corps to study possibility of limiting flow of St. Clair River

The U.S. Army Corps of Engineers is going to spend about \$50,000 to figure out if it's possible to slow the flow of water exiting Lake Huron through the St. Clair River.

Fish stocking program boosting Lake Ontario's viability

Lake Ontario is boasting some of the best sport fishing among the Great Lakes, thanks to a successful stocking program by New York State's environmental management agency.

Record-Breaking Lake Trout confiscated by Canadian authorities

Scott's fish bested the previous world record for lake trout caught on a tip-up by nearly 24 lbs. It seemed that the only thing remaining was the requisite paperwork. But authorities contacted Scott and let him know he'd broken the law. And then they confiscated the fish

End