

## Indiana is being INVADED!

What would you do if you caught a piranha during a fishing trip to your favorite Indiana lake? Would you be surprised to see a four-foot caiman (an alligator relative) crawl out of a local pond? How would you feel if your favorite lake became overrun with thick mats of aquatic plants? Unfortunately, Hoosiers have faced these experiences in recent years because a wide variety of exotic and/or invasive aquatic species have invaded Indiana.

The term *aquatic nuisance species* (ANS) is a broad term used to describe plants and animals that have been introduced into aquatic habitats where they are not native and don't belong. ANS include exotic species from other countries as well as native U.S. species that are introduced into new parts of this country. Exotic species often have attributes that give them a competitive advantage over our native species. They are usually aggressive and prolific species that mature quickly. Such species cause havoc in their new habitat because the checks and balances that naturally control the species are not present in the new habitat.

In a 1993 report, the U.S. Office of Technology Assessment estimated that more than 250 foreign plant and animal species have arrived in the U.S. since 1980.

Control of ANS is very expensive. Exotic species on land and water cost the U.S. \$138 billion annually! In northern Indiana, attempts to control Eurasian watermilfoil, just one ANS plant species, cost \$800,000 per year.

### How do ANS get to Indiana?

Surprisingly, humans are responsible for the introduction of most ANS. For example, anglers who dump their leftover live bait (minnows, crayfish, etc.) into the lake they are fishing on may be introducing ANS. The rusty crayfish is one species likely spread because of its use as bait. Some anglers catch gamefish from one waterbody and place them into a different one in

an ill-advised attempt to improve fisheries. To the contrary, these activities thwart the fish management activities of the professional fisheries biologists in DNR and will likely create an imbalance in the fishery.

Piranha, pacu, red swamp crayfish, Chinese mystery snails, and other exotic aquatic organisms likely are introduced into Indiana waters when they grow too large for the aquarium they are

*ANS information sign on Oliver Lake, LaGrange County.*





What do you do with leftover live bait? Photo credit: Wisconsin DNR.

kept in or when the aquarist moves and doesn't take the fish along.

ANS also move from lake-to-lake via bilge water in recreational and commercial vessels. This is how many of the ANS (zebra mussels, round goby, spiny water flea, and others) are believed to have reached the Great Lakes. Zebra mussels originally may have been introduced into Lake Wawasee by recreational boats returning from Lake Erie.

Many aquatic plants are ANS as well. More than 75% of the plant ANS in northeastern U.S. escaped from cultivation. Purple loosestrife, water hyacinth, and other aquatic nuisances were sold by plant

### Common ANS Pathways

1. **Anglers/Boaters**  
—intentional introduction of gamefish  
—release of bait  
—plants caught on trailers can spread to next waterbody
2. **Aquarium and bait fish industry**  
—shipping and handling releases
3. **Biocontrol agents**  
—unlawful use of grass carp and other organisms
4. **Pet owners**  
—disposal of unwanted aquatic pets
5. **Landscaped ponds**  
—plants and fish escape into natural waters
6. **Artificial canals**  
—allow spread of organisms in water and on boats

nurseries and greenhouses for many years. ANS plants are further spread by getting entangled onto boat trailers. When the boat is launched into a different lake, even a week later, the plant fragments can fall off and grow in the new lake.

### What Can You Do?

You can help stop the spread of aquatic nuisance species by becoming better

informed about them. Then, tell others about the dangers of ANS. *Spread the word, not the exotics!* Education is key. The best outlets for aquatic exotics information are TV, radio, newspapers, public service announcements, water access signs, fact sheets, cards, regulations booklets, watercraft inspections, regulations prohibiting spread, and billboards.

Here are some things you can do personally:

1. Inspect your boat and trailer each time you leave a lake. Pull off and discard all attached plant fragments.
2. Drain bilges and live wells before leaving the lake.
3. Never dispose of live bait in a waterbody. It is better to destroy the bait than to 'set it free.'
4. Never intentionally transfer fish from one lake to another. Leave fish management to the professionals.
5. Always purchase plants and fish that are certified as non-nuisance.

In Indiana, universities, industries, non-governmental organizations, and citizens interested in aquatic nuisance species control are urged to contribute ideas toward development of a statewide long-term "Aquatic Nuisance Species Management Plan." Once finalized, the plan will be used as a road map for guiding nuisance control efforts and enable Indiana to apply for federal funding of around \$100,000 per year to support nuisance aquatic species control projects. If you are interested in participating, contact plan facilitator Phil Seng at (574) 258-0100. You may review the draft Indiana plan at: <http://www.in.gov/dnr/invasivespecies/>

### For More Information:

Review state management plans from Illinois, Michigan, Ohio, and other states: <http://www.anstaskforce.gov/mgtplans.htm>

Zebra mussels in Indiana: <http://www.in.gov/dnr/fishwild/fish/fishng/zebra.htm>

Great Lakes Panel on Aquatic Nuisance Species: <http://www.glc.org/ans/>

ANS are often spread when boats with bilges move between waterbodies. Photo credit: Wisconsin DNR



The Great Lakes Sea Grant Network has prepared a CD filled with 22 publications, seven slide shows, and even a movie about ANS. Available from Illinois-Indiana Sea Grant for \$2.50, which includes shipping costs. To order, contact Pat Charlebois at (847) 872-8677 or e-mail [charlebo@uiuc.edu](mailto:charlebo@uiuc.edu).

## **Bass Tournaments Monitored by DFW**

Bass fishing tournaments held on northern Indiana's natural lakes may not be as troublesome as some opponents claim, based on results of a recent study conducted by the Division of Fish and Wildlife (DFW).

Most tournaments are organized by local bass fishing clubs and are relatively small events with fewer than 30 participants. The average number of bass brought to tournament weigh-in sites is only one fish per angler and nearly all of the fish are eventually released alive.

According to Jed Pearson, DFW fisheries biologist, the study was designed to look at tournament fishing efforts and catches at several of the region's largest natural lakes. As many as 20 tournaments were monitored by DFW biologists at 16 lakes in 2001 and 2002.

The monitored events included 13 small local club tournaments; five "money" tournaments open to the public, a private tournament conducted by police officers, and a major event organized by the Indiana Bass Federation.

"Bass tournaments have become more and more controversial in recent years, so we wanted to take a first-hand look at them," says Pearson. "Before the study, we didn't have a good handle on the number of events or the number of participants in tournaments, how many bass are caught, their size, or any information on short-term survival of tournament-caught bass."

Pearson says the study should also form the basis of a long-term program that will enable biologists to track fluctuations in bass numbers and sizes in natural lakes.

"Bass tournaments offer a good, simple and inexpensive way to detect changes in bass populations," he says. "The data can supplement other, more intensive ongoing bass surveys."

The number of anglers who fished in monitored tournaments ranged from 11 to 168. Eight of the 20 events had fewer than 20 participants and six had 23 to 29 participants. On a per-acre basis, the density of tournament anglers averaged only one per 45 acres of water. They spent an average of only 14 minutes of fishing per acre.

Anglers brought in a total of 762 legal-size, 14-inch or longer, largemouth bass to the weigh-ins. The average number of bass brought to tournament weigh-ins was 38. Only 11 bass were either dead or sufficiently stressed that they could not be released back into the lakes.

Tournament anglers brought fish to the weigh-in at a rate of only one fish per seven hours of fishing. Catch rates were slightly higher in June and July than May.

Winona Lake in Warsaw produced the highest catch rate at one legal-size bass per 2.5 hours of fishing.

## **Improvements Set for Noble County Boat Ramps**

Public boat ramps at four Noble County lakes are scheduled for major renovations next year, according to the Division of Fish and Wildlife (DFW). Meanwhile, additional improvements are already completed or planned at seven other lake access sites in the county.

Existing concrete ramps have already been replaced at Big, Diamond, Eagle, Engle, Knapp, Sacarider, and Sparta lakes. Ramps at Crane, Crooked, Skinner, and

Smalley lakes will be rebuilt next year.

"Most of our boat ramps are more than 20 years old and need to be replaced," says Paul Stork, manager of the DFW's public access program in northern Indiana. "Several are crumbling, broken, and falling apart. Most of them also need to be brought up to current construction and design standards."

Stork says some ramps are too narrow and don't have the proper slope for launching boats. Nearly all of the older access sites do not meet requirements for individuals with disabilities.

Since the DFW receives federal dollars to help pay the cost of ramp renovations, the state must comply with standards set forth by the Americans with Disabilities Act (ADA). The ADA is intended to provide equal access to public recreational facilities and services. "Whenever we replace or upgrade a boat ramp, we want to bring it into ADA compliance," says Stork.

The DFW must meet three basic conditions to make public access sites ADA-compliant, including a parking location, a sidewalk leading to the water's edge, and a structure, platform, or pier to assist loading and unloading disabled users. All must be safe and functional.

Stork says platforms work better for all boaters since they can bring boats up to its edge. However, loading platforms cannot be installed at some locations.

"We try to follow the same rules that regulate shoreline construction projects that all lakefront property owners must follow," says Stork. "All of our work must be approved by the Division of Water. In certain sensitive areas, our only option is to install temporary piers."

Stork says temporary piers will be installed at Big, Crooked, Eagle, and Skinner lakes next year and loading platforms will be placed at Crane, Diamond, and Smalley lakes.





*The Garrison at Fort Benjamin Harrison State Park was a fine setting for the 2003 Indiana Lake Management Conference.*



*The 2<sup>nd</sup> Annual Brat Fry was a popular event Friday noon.*

## 2003 Indiana Lakes Management Conference: “Celebrating Indiana Lakes”

April 4 and 5, 2003, marked the 15th Annual Indiana Lakes Management Conference held at Fort Harrison, Indianapolis, IN. Keynote Speaker Lori Kaplan, IDEM Commissioner, kicked off the conference with a talk that examined a brief history of Indiana lakes and their management. Other conference topics included: Aquatic Nuisance Species, Law Enforcement Issues, Largemouth

*Life is a ‘bowl of cherries’ for George Edwards, who enjoys the Friday afternoon break and ice cream sundae bar.*



Bass Monitoring in Indiana, and the Current Status of Wetland Legislative Actions. These and other talks were presented by Indiana’s leaders in lake management. An ‘Ask It Basket’

session closed out Friday’s program. A group of state lake experts answered questions previously submitted by conference attendees in this lively session.

Friday night was capped off with a dinner, ILMS annual meeting, and silent auction. Dinner entertainment for the evening was a video highlighting “before and after” footage of statewide lake management projects.

During the annual meeting, elections were held to elect ILMS officers and board. They are as follows:

President – Tina Hissong  
 President-Elect – Mark Mongin  
 Past President – Joe Roach  
 Secretary – Sherry Shuler  
 Treasurer – Brian Waldman  
 Director – George Edwards  
 Director – Jill Hoffman  
 Director – Scott Banfield  
 Director – Bob Madden

The 2004 conference will be held at the Potawatomi Inn in Pokagon State Park, Angola, Indiana, April 2 and 3, 2004.

## EVENTS

**September 7-10, 2003. Dam Safety 2003.** Association of State Dam Safety Officials, Hyatt Regency, Minneapolis, MN. Contacts: phone: (859) 257-5140; fax: (859) 323-1958; e-mail: [infi@damsafety.org](mailto:infi@damsafety.org); Web Page: [www.damsafety.org](http://www.damsafety.org).

**October 20-23, 2003. 3rd National Conference: Nonpoint Source Pollution Information & Education Programs,** Congress Plaza Hotel, Chicago, Illinois. Contact: Bob Kirschner, Chicago Botanic Garden, 1000 Lake Cook Rd., Glencoe, IL 60022, e-mail: [bkirschn@chicagobotanic.org](mailto:bkirschn@chicagobotanic.org).

**November 2-4, 2003. American Water Resources Association Annual Conference,** Hilton San Diego Resort, San Diego, CA. Web page: [www.awra.org](http://www.awra.org).

**November 4-8, 2003. NALMS 2003: 23rd International Symposium of the North American Lake Management Society,** Foxwoods Resort, Mashantucket, CT. Contact: phone: (608) 233-2836; fax: (608) 233-3186; e-mail: [nalms@nalms.org](mailto:nalms@nalms.org).

## Feds Pump Out \$179,000 for IDEM's Boat Sewage Pumpout Program to Keep Hoosier Waters Cleaner

Many Hoosiers will kick off their summer reverie with a trip to their favorite recreational Indiana



**KEEP OUR WATER CLEAN—USE PUMPOUTS**

waterbody. If that river or lake excursion includes cruising in a watercraft with an on-board restroom facility, the Indiana

Department of Environmental Management (IDEM) encourages boaters to be environmentally conscious by emptying their waste holding tanks into one of the state's 35 marina pumpout stations.

IDEM will receive \$179,715 to develop additional boat sewage pumpout facilities on several inland lakes and two marinas along the Ohio River. The grant is the last installment of the five-year federal Clean Vessel Act pumpout grant program administered by the U.S. Fish and Wildlife Service. It is unknown whether the grant program will be continued by the federal government next year. At marine pumpout stations wastes are pumped from a boat's holding tank to a commercial waste hauler or directly into the city sewer system. Pumpout stations are located at most public marinas throughout the state and are equipped with universal boat fittings.

As the number of recreational boaters increases, the threat of polluting Indiana's waters with raw human sewage increases as well. Raw or poorly treated sewage dumped in ditches, creeks, streams,

rivers, and lakes can spread disease, increase *E. coli* bacteria levels, and lower oxygen levels in water, creating a human health hazard as well as an aquatic health hazard for fish and other animals.

Congress passed the Clean Vessel Act in 1992 to help reduce pollution from vessel sewage discharges. Since then, more than \$90 million in pumpout grants has been administered for use by individual states. IDEM awards the grant funding for Indiana's pumpout program, which reimburses up to 75 percent of total pumpout construction costs for public-access marinas. The program is also available to repair existing units and to install dumping stations.

Additional information and a map with Indiana's 35 marina pumpout locations are available on IDEM's Web site at <http://www.in.gov/idem/water/fasb/operssect/cva/index.html>.

## Volunteer Monitoring News

The start of the summer water sampling season marked the retirement of 11 of our volunteer lake monitors. The retirees have a total of 76 years of lake monitoring experience among them. They will all be missed and we wish them the very best in their "retirement." We send out thanks from the Indiana Clean Lakes Program and the citizens of Indiana for their years of voluntary service. We also wish to welcome their replacements and three new volunteers to our program.

### Retiring Volunteers and Their Replacements

Neal Carlson (Center Lake, Kosciusko Co., 14 years) – replaced by Troy Turley  
Herman Miller (Big Chapman Lake, Kosciusko Co. 13 years) – replaced by Gene Topulski  
Emily Greenland (Tippecanoe, James, and Oswego lakes,

Kosciusko County, 8 years) – replaced by Holly LaSalle  
Mike Gross (Cedar Lake, Lake Co., 7 years) – replaced by Frank Brongeil  
Tom Patterson (Dallas Lake, LaGrange Co., 6 years) – replaced by Julie & Jerry Rohm  
Robert Myers (Lake Wawasee, Kosciusko Co., 6 years) – replaced by Ray O. Deahl  
Nolt Wilcken (Shriner Lake, Whitley Co., 6 years) – replaced by Dave Byers  
Leslie Cunningham & Everett Lienhart (Heaton Lake, Elkhart Co., 6 years) – replaced by Dave Simmons  
Richard Craig (Lake Gage, Steuben Co., 5 years) – replaced by Allen LeFevre  
William Young (McClish Lake, Steuben Co., 3 years) – replaced by Paul Marki  
Melissa Cary (Griffy Lake, Monroe Co., 2 years) – replaced by Marlo Gil

### New Volunteers

Jean Cook (Little Long Lake, Noble Co.)  
Marcus Shoda (Blue Lake, Whitley Co.)  
Don Mitchem (Eagle Creek Reservoir, Marion Co.)

## WATER COLUMN

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William W. Jones, Editor

Address all correspondence to:  
SPEA 347  
1315 E. Tenth Street  
Indiana University  
Bloomington, IN 47405-1701

E-mail: [joneswi@indiana.edu](mailto:joneswi@indiana.edu)  
Phone: (812) 855-4556  
FAX: (812) 855-7802

*Scenes from the lakes . . .*



*Horse-drawn Amish buggies pulling boat trailers are a common site in LaGrange County. This is on Pigeon Lake.*

# Perspectives

“Water is a very good servant,  
but it is a cruel master.”

—C.G.D. Roberts  
*Adrift in America*, 1891

*(Given the recent flooding that Indiana  
has suffered, this is a particularly  
relevant quote—Ed.)*

**Got a question about your lake? Or lakes in  
general? Or about something you've read?  
Write to us at the Water Column and we  
will do our best to answer it.**

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School of Public and Environmental Affairs  
Room 347  
1315 E. Tenth Street  
Indiana University  
Bloomington, IN 47405-1701

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