



The AIS Current

Michigan's Aquatic Invasive Species Newsletter:
The current wave of AIS information.

Michigan's AIS Program is cooperatively implemented by the AIS Core Team that is composed of the Quality of Life Departments of Environmental Quality, Agriculture and Rural Development, and Natural Resources.

Asian Carp Exercises

The Michigan Department of Natural Resources (DNR) has taken a strong stance on supporting measures to prevent the spread of Asian carp into the Great Lakes. However, without a separation between the Mississippi River and Great Lakes basins the risk of spread of these species and other AIS persists. Given this risk, if – or when – Asian carp make their way into Great Lakes waters; will the DNR be ready to deal with them? We certainly intend to be – so much so, that our Fisheries Division staged a two-day exercise on the St. Joseph River this past September to test our field skills and prepare the agency for action in the event silver or bighead carp show up. The St. Joseph River was selected for the state's exercise since it is the first major waterway up the Lake Michigan coastline from the Chicago Area Waterway System (CAWS). The St. Joseph River has optimal habitat for Asian carp to spawn and potentially establish a population. The two-day exercise involved 27

fisheries technicians and a handful of biologists. Using 14 boats our crews roped off a two-mile stretch of river several miles below the dam at Berrien Springs and strung nets across it to prevent fish from heading up or downstream during the exercise.

Field crews began the exercise by electro-fishing, collecting common carp, tagging them, and returning them to the water as part of a mark-and-recapture study to see how effective various techniques are at catching the fish. During this exercise common carp served as surrogates for silver and bighead carp as they're roughly the same size and body shape and use similar habitats of the river. That gave us a known quantity of fish in that closed section of the river.

After the carp were tagged, the field crew deployed various configurations of large-mesh gillnets through the river to determine if electro-fishing efforts would chase silver and

bighead carp into vertical walls of gillnet. On the second day of the exercise, we attempted to recapture those fish with only electro-fishing and then compared how effective the various techniques were at capturing the fish.

Overall the exercise went smoothly. As a result, the Michigan DNR has confidence our strategies and field crews are ready to address the real deal -- live silver or bighead carp – if they show up in a Michigan stream. For more information, contact Seth Herbst, Fisheries Biologist, at 517-284-5841 or herbsts1@michigan.gov.

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Upcoming Events:

Landing Blitz- **June 6-7**

AIS Awareness Week- **June 7-15**



2013 field crew who participated in the Asian Carp Exercise.

Parrot Feather Response

The DNR Wildlife Division recently confirmed the first occurrence of parrot feather in Michigan. Parrot feather is a prohibited species and on Michigan's AIS Watch List. Utilizing protocols from Michigan's Quality of Life (QOL) Response Plan for Aquatic Invasive Species, the DNR was able to quickly assess and respond to the report. The infestation appeared to be confined to a small detention pond.

Working cooperatively with the local homeowners' association, Aqua-Weed Control, Inc. (the original reporters) and the DEQ, the DNR obtained permissions and permits for a late-season herbicide application. Treatment was conducted in early November 2013 and monitoring of the control efforts will be on-going.

When established, parrot feather can cause negative impacts to the

surrounding environment. It forms dense mats and competes with native aquatic plants. Parrot feather also provides habitat for mosquito larvae and can impede lake recreation.

Finding and eradicating any new occurrences of "AIS Watch List" species before they become established or spread is the key principle behind the DNR's Early Detection and Response (EDR) program. Proactive EDR is typically more cost-effective and can provide a greater chance of success in management of aquatic invasive species.

For further information on the parrot feather response, please contact: Sue Tangora, Invasive Species Coordinator, DNR Wildlife Division at 517-284-6223 or tangoras@michigan.gov.



Parrot feather infestation in southeast Michigan.

European Frog-bit Response

In the Fall of 2013, the DNR Wildlife Division led response efforts to control European frog-bit, another species on Michigan's AIS Watch List. Until recently, this free-floating plant had only been reported in a few localized sites in the southeastern Lower Peninsula. Recent statewide monitoring efforts resulted in additional populations detected in Saginaw Bay, Alpena and Munuscong Bay. Similar to the parrot feather response, the DNR utilized protocols from Michigan's Quality of Life (QOL) Response Plan for Aquatic Invasive Species, and was able to quickly verify the reports,

complete on-site assessments and formulate a response plan.

A total of 500 pounds was removed from Munuscong Bay and nearly 1,000 pounds was removed from the Alpena location. Plans are underway this year to partner with Michigan United Conservation Clubs and Huron Pines for a large scale volunteer removal effort in Alpena on July 12. For further information, please contact: Sue Tangora, Invasive Species Coordinator, DNR Wildlife Division at 517-284-6223 or tangoras@michigan.gov.



European Frog-bit near Saginaw Bay, Michigan.



Michigan's Inaugural Landing Blitz

Recreational boating can be a significant pathway for the spread of AIS between bodies of water. Led by the Michigan Department of Environmental Quality's Water Resources Division (MDEQ WRD), the AIS Landing Blitz is designed to increase public awareness about AIS and assist boaters in taking preventative steps to avoid spreading AIS.

Michigan's AIS Landing Blitz is a collaborative outreach event that presents an opportunity for the Quality of Life agencies (MDEQ, MDNR and MDARD) to work with local partners from June 6-7, 2014, in an on-the-ground effort. The inaugural AIS Landing Blitz, modeled after a similar effort in Wisconsin, will serve as a small-scale pilot event to test effectiveness, participation, and logistics. State Agency staff will work with local partners at selected boating access sites across the state to convey consistent messaging about

preventing the introduction and spread of AIS from the movement of watercraft and equipment between water bodies.

Specifically, AIS Landing Blitz staff and partners will:

- Demonstrate how to visually check boats and recreational equipment for aquatic invasive species;
- Demonstrate how to decontaminate boats and recreational equipment;
- Raise awareness for Michigan's laws and regulations focused on preventing the spread of AIS; and
- Distribute handouts with AIS prevention messaging such as key chain floats, winch post stickers, can cozies, towels and watch cards.

For more information, contact Kevin Walters, Aquatic Biologist, MDEQ at 517-284-5473 or waltersk3@michigan.gov.

Monitoring Our Lakes & Rivers

AIS monitoring is used to delineate the extent of established AIS and find early infestations of new species. The MDEQ WRD is adding AIS surveillance to its existing biological monitoring activities. 2012 & 2013 statewide efforts include:

- 50 lakes and 26 wadeable streams; and
- 5 targeted lake surveys for aquatic invasive plants.

Although these surveys did not result in any early detections of AIS, the WRD is building capacity for expanded AIS monitoring and is beginning to regularly document AIS observed during routine surveys. Results are available at the Midwest Invasive

Species Information Network's website (www.misin.msu.edu) and in detailed staff reports. WRD efforts for 2014 include:

- 16 targeted lakes testing new snorkeling and shoreline survey methods to detect invasive species;
- 21 non-wadeable rivers; and
- All routine wadeable stream surveys.

Results from these surveys and lessons learned from testing new methods will be used to further develop Michigan's AIS monitoring program. For more information on these efforts, please contact Jennifer Johnson, Aquatic Biologist, MDEQ at 517-284-5474 or johnsonj17@michigan.gov.



The Inaugural Landing Blitz will partner the AIS Core Team with local groups to kick off Michigan's Annual AIS Awareness Week!



Michigan's AIS Program Partner Spotlight: Midwest Invasive Species Information Network

The Midwest Invasive Species Information Network (MISIN) is a regional effort to develop and provide an early detection and rapid response resource for invasive species.

MISIN assists both experts and citizen scientists in the identification, reporting, and mapping of invasive species.

This effort is being led by researchers with Michigan State University's Applied Spatial Ecology and Technical Services Laboratory in conjunction with a growing number of supporting partners.

MISIN provides numerous services to the invasive species management community and has been integral in the management of AIS in Michigan.

Services include:

- Observation reporting
- True geo-spatial data storage
- Direct GIS data access
- E-mail alerts of new observations
- Map-based data browsing
- Species fact sheets
- E-Learning ID Modules
- Smartphone applications
- Data query and download

For more information on MISIN, contact Amos Ziegler at 517-355-0204 or ziegler2@msu.edu or visit www.misin.msu.edu.



The MISIN smartphone app brings reporting, species guides and mapping to your phone.

Best Control Practice Guides

In cooperation with Michigan Natural Features Inventory, the DNR is producing a series of "Best Control Practice Guides" for invasive species in Michigan. These guides provide information on identification, habitat, similar species, reproduction, and dispersal of a particular invasive species. In order to properly manage an invasive, it is crucial to understand its biology and how it impacts the surrounding environment. The guides also provide information on all of the current control options— chemical, mechanical, and biological. To view the current guides, please visit:

www.michigan.gov/invasivespecies

Additional Resources

Learn how to identify a juvenile Asian carp!

www.michigan.gov/asiancarp

Check out Michigan's response plan for AIS!

www.michigan.gov/invasives then click "AIS Detection & Monitoring"

Learn the differences between common and glossy buckthorn!

<http://www.misin.msu.edu/training/>

Missed out on an AIS of the Week? Get caught up!

www.michigan.gov/invasives

Check out the Shedd Aquarium's Great Lakes Program!

www.sheddaquarium.org/greatlakes

For more information on Michigan's Aquatic Invasive Species program, please contact: Sarah LeSage, AIS program coordinator at 517-284-5472 or lesages@michigan.gov. You can also visit the Michigan Department of Environmental Quality's AIS Web site at www.michigan.gov/aquaticinvasives or the Michigan Department of Natural Resources' Invasive Species Web site: www.michigan.gov/invasivespecies.