Emmet County Lakeshore Association Winter 2012 Newsletter

Asian Carp

The Great Lakes are a phenomenal natural resource that contain 20 percent of all surface freshwater on the planet and comprise the world's largest freshwater ecosystem. Unfortunately, these magnificent lakes are under siege from over 185 invasive species. Asian carp are the latest threat and could be the worst invaders yet if the species establish breeding populations in the lakes.

Bighead and Silver carp are voracious filter feeders, fast-growing, and highly productive. They have the potential to radically change the way the Great Lakes ecosystem works. Bighead carp can reach up to 100 pounds and consume between 5% and 15% of their body weight per day. Silver carp can reach 20 lbs, and

their tendency to leap out of the water when startled makes them a hazard to boaters. If Asian carp establish themselves in the sensitive tributaries and water bodies that serve as the breeding grounds for the Great Lakes fishery, the annual \$7 billion dollar Great Lakes recreational and commercial fishery will be at severe risk.

Open doorway to the Great Lakes

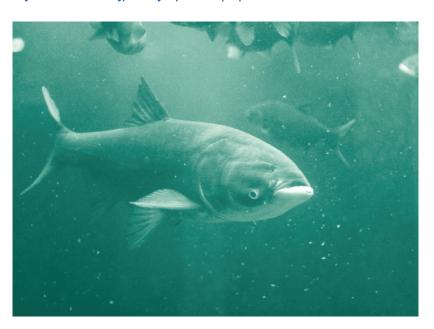
Asian carp can enter the Great Lakes in several ways:

- By passing the electrical barriers in the Chicago Area Waterway System (CAWS), a complex mix of artificial sewage and navigation channels linking the Great Lakes and Mississippi River basins
- Crossing the divide between the Wabash River and the Maumee River watersheds via floodwaters
- Inadvertent or purposeful release of live fish, such as through a bait bucket transfer or "cultural release."

Possibility of establishing in the Great Lakes

Given the present distribution of established and introduced populations around the world, bighead and silver carp could become established in much of the continental United States. Silver carp can tolerate long winters under ice cover as well as temperatures higher than 40°C (104°F). Bighead carp can survive in water temperatures as high as 38.8°C (102°F), and no lower lethal limit has ever been documented.

By Jennifer McKay, Policy Specialist, Tip of the Mitt Watershed Council



The high temperatures in the Great Lakes range from 15°C to 25°C (59°F to 77°F), and the lows are at or near freezing. In Asia, silver carp are native from 54°N southward to 21°N, and the native range of bighead carp has been reported to be 47°N southward to 24°N. The Great Lakes fall within these latitudes.

In their native ranges in Asia, and current range in the Mississippi River basin, bighead and silver carp occur in rivers, lakes, and reservoirs. Currents bring carp larvae to slow-flowing backwaters, creeks, reservoirs, or other flooded areas where the fish grow to maturity. Asian carp typically require rivers with 100 km or more of undammed flowing water for successful reproduction, although it now appears they can spawn in a great variety of places. Using statistical modeling, Kolar and Lodge (2002) identified 22 rivers flowing into Lakes Erie, Huron, Michigan, and Superior from the U.S. which could potentially serve as spawning sites for Asian carp. Among these are the Maumee, Saginaw, Grand and Nemadji Rivers. Although the traditional understanding was that Asian carp require long rivers for spawning, spawning has been documented in stagnant backwater areas. As with other invasive species, it is possible that Asian carp could gradually adapt spawning behavior to available habitat in the basin. The USGS estimated the probability of Asian carp successfully colonizing and maintaining a population in the Great Lakes Basin as very certain.

GIANT HOGWEED – Queen Anne's Lace on Steroids

By Helen Ann Jositas, R.N.

In the early summer of 2011, I was walking on Lamkin Drive near the Good Hart Beach Association in Northern Michigan, where we have been members since 1978. This is where I first saw the Giant Hogweed. I thought I would like to move a piece of this plant to our property. At that time I did not know the rest of the story.

Downstate, in Oakland Township, I received an email from the Clinton River Watershed Council (CRWC) with a large color picture of the plant I just saw on my walk - Giant Hogweed - a frightening invasive plant I was soon to learn more about. The concern was that it was on the Paint Creek Trail where many people including myself, walk, jog, bicycle, fish and ride horses. After investigation it was announced that there was not any visible Giant Hogweed on the trail. I was relieved!

However, I began seeing this plant everywhere I looked. It was next to Robinson Road, Middle Village Road and several other wet areas adjacent to Lower Shore Drive. I started to share my concern and the CRWC article, with local store owners in Good Hart, plus the Thorne Swift Nature Center, Little Traverse Watershed Council and the Little Traverse Bay Land Conversancy. I contacted The Emmet County Lakeshore Association at the Good Hart Mini Fair this past summer for assistance in disseminating this information.

I discovered that this plant is not new – that Giant Hogweed has been here for several years. I also learned that this is an invasive and very dangerous plant. It produces a skin reaction like poison ivy and has been known to cause blindness if the sap from the plant is rubbed into your eyes.

How to Identify Giant Hogweed

The Giant Hogweed (Heracleum mantigassianum) is a perennial herb. It can grow from 6 to 12 feet tall in



Michigan, with stems 2-4 inches in diameter. The leaves are lobed, deeply incised and can grow up to 5 feet across. The flowers are white clusters of compound umbel (like the spokes of an umbrella) that can be 2.5 feet wide and bloom from June to August. It has a long tap root. Seeds are dispersed by wind or carried by water, but people are responsible for seed scattering over long distances.

The Giant Hogweed is native to Eurasia, the Caucasus Mountains of Central Asia, and was first reported in Michigan in 1991 in Ingham County (Lansing, MI). In 2005 there were 30 listed sites, mostly in the western part of the Upper Peninsula of Michigan. Emmet County was not included on this list of counties in Michigan. Today, there are sixty-one sites identified.

continued on page 3

Asian Carp continued...

Cooke and Hill (2010) conclude that while it is unlikely that Asian carp would become established in the open waters of the Great Lakes due to lack of sufficient food source, they are more likely to become established in the smaller waterways, shallow bays, wetlands, streams, and rivers that either flow into the Great Lakes or hug the coastline. These areas offer ideal spawning conditions and abundant food to sustain large carp populations, and are also key habitat for a significant number of native species, such as walleye, lake trout and perch.

Finding a Permanent Solution

Not only do Asian carp pose a significant risk to outcompete Great Lakes fishes for food, they also represent a safety issue for recreational boaters. Based on their native range as well as their spawning, diet and habitat requirements, it appears Asian carp could establish a sustainable population in many tributaries, bays, and other water bodies feeding into the Great Lakes.

The only permanent and sustainable solution to this problem is separation of the Great Lakes and the Mississippi River Basins. We need a new vision for the waterways around Chicago, one that allows for the flow of goods and services that helped create a great American city, yet one that also protects one of North America's greatest natural treasures – the Great Lakes. The Asian carp crisis will only end when their watery path is cut off.



children to play near this plant. Wash effected areas immediately with soap and water if the sap gets on your skin.

It is an attractive appearing plant to gardeners and children because of its size and unique umbrella like flower. It looks like a giant Queen Anne's' lace or the Angelica which are both native to Michigan. An article by ABC News calls the Giant Hogweed "Queen Anne's lace on steroids". The Giant Hogweed is a dangerous invasive! I was very attracted to this giant plant and was thankful to have learned more about it before I tried to cut or move it.

I have called to inform the Michigan Department of Agriculture (MDA) regarding the plant's presence and would encourage anyone who notices Giant Hogweed growing near their property to call as well. MDA will visit the property and help with a management strategy.

The Giant Hogweed is listed as a noxious weed in the carrot family. It is illegal to bring it into the U.S. or to move it across state lines. It is also illegal to sell, buy or exchange these plants. In 2005 the State of Michigan included it on a list of prohibited plant species and it is identified as a public health hazard.

The Giant Hogweed likes the rich, moist soils and shade along roadside ditches, stream banks and along tree lines. The plant should not be removed physically, as contact with the sap can cause a serious skin reaction called phytophotodermatitis (plant-light-skin inflammation). This is a photo-dermatitis skin reaction from the plant that appears 24 – 48 hours after exposure to the sap and then sunlight. Contact with eyes can lead to temporary or permanent blindness. Do not touch, transplant, or handle the plant with bare hands. Don't allow

For More Information, Contact:

Michigan Department of Agriculture – Pesticide, Plant Pest Management Division, PO Box 300017, Lansing, MI 48909, www.michigan.gov/mda; www.michigan/gov/mdard/gianthogweed 1-800-292-3939, select #3 to report giant hogweed in Michigan.

US Department of Agriculture – National Invasive Species Information Center, 734-942-9005, www.invasivespeciesinfo. gov/plants/hogweed

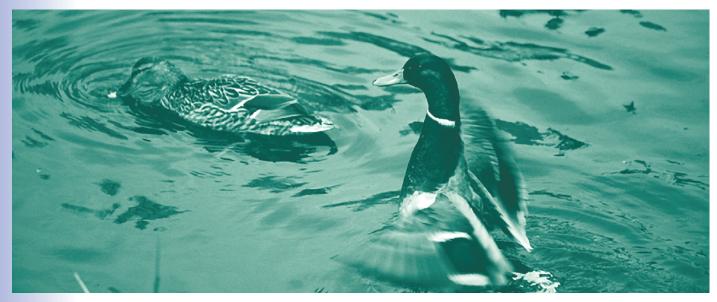
Michigan State University, MSU Diagnosis Services – 101 Center for Integrated Plant Systems, East Lansing, MI 48824-1311, 517-432-1333, www.pestid.mus.edu; www.ncpdn.org MSU Extension Bulletin E-2935





Bird Count

By Kimberly Dowd, ECLA Board Member



Where Did the Birds Go?

Did you notice that there weren't so many dead birds on our beaches this autumn? What a pleasure it was to walk our shores!

For several weeks this fall, ECLA assisted an effort led by the Tip of the Mitt Watershed Council to monitor 2011 bird die-off along Emmet County's shoreline. Volunteers monitored portions of the shoreline from Petoskey State Park to Mackinac City. For the entire 2011 season, the volunteers found only 22 fresh carcasses.

While prior-year counts are not available for Emmet County comparison, it has been noted by several property owners (yours truly included) and the Watershed Council that 2011 findings are substantially improved from 2010. A similarly significant drop in bird deaths was reported along the Sleeping Bear Dunes National Lakeshore; a volunteer group there counted 333 deaths in October, 2010 versus 47 in October, 2011.

But why did avian mortality so improve in 2011?

One explanation is a shift in migration timing. Migration studies at the Whitefish Point Bird Observatory found an increase in the overall number of migrating birds, but with noteworthy timing changes: instead of traveling in similar numbers each day as they did in 2010, the birds seemed to travel predominantly ahead of, rather than behind, storms. Thereby, it is theorized, they avoided encountering toxins* stirred up by storm. Is it possible that the birds are getting smarter?

Not so fast! While the migration seemed to be better timed in our region, a massive die-off occurred on Lake Huron, in Georgian Bay. The Huffington Post Canada estimated that over 6,000 birds were found on Georgian Bay shores in the fall of 2011, a significant increase from 2010. Studies are

underway to determine causes of death. Bird die-off has occurred sporadically in various parts of the Great Lakes over the past several decades.

One thing is clear from the above: we are still working on understanding avian mortality on the Great Lakes.

It should be noted that some reduction in avian mortality results from conscientious efforts of volunteers and property owners to properly dispose of any carcasses; proper disposal does prevent the spread of the toxin into our soil, water, and to other animals that feed on sick birds or carrion. So thank you, ECLA members, for being conscientious!

Kevin Cronk of the Tip of the Mitt Watershed Council extended his thanks to ECLA for our assistance with the 2011 count: "Volunteer efforts to document numbers, species, and locations of afflicted wildlife are essential for improving our understanding of what influences the occurrence of avian botulism outbreaks. Considering that literally thousands of dead birds have been reported during some seasons in the last five years, it is clear that bird and fish mortality was very low this year. It is uncertain as to why numbers were low this year, but it is certain that it was a good year for birds and fish along the Lake Michigan shoreline in Emmet County. Hopefully, Great Lakes wildlife biologists and other experts will be able to shed some light on why numbers were low this year and ultimately, use volunteer data to find a solution that reduces impacts of botulism E to our birds and fish. We are extremely thankful for the low number of dead birds and fish this year and for the dedicated efforts of beach rangers - we could not do this without you!"

*The theory as to why many birds die in autumn in the Great Lakes is that botulism type E, which naturally exists in lake beds, is stimulated by fall temperatures and ideal conditions to release toxins, which are then ingested by bottom-feeding fish, which are then ingested by birds.

A Letter from U.S. Senator Debbie Stabenow...

The Great Lakes are the backbone of our culture and economy. Their coastlines are home to wetlands, dunes, and endangered plants, and their beautiful beaches make them popular recreational destinations for millions of people each year. However, in their 10,000-year history, the Great Lakes have never been in so much peril as they are today. They are threatened by invasive species, low water levels, toxic sediments, and a rapidly changing ecosystem. We need to restore our waters for our children and grandchildren. This is a fight for our very identity and way of life.

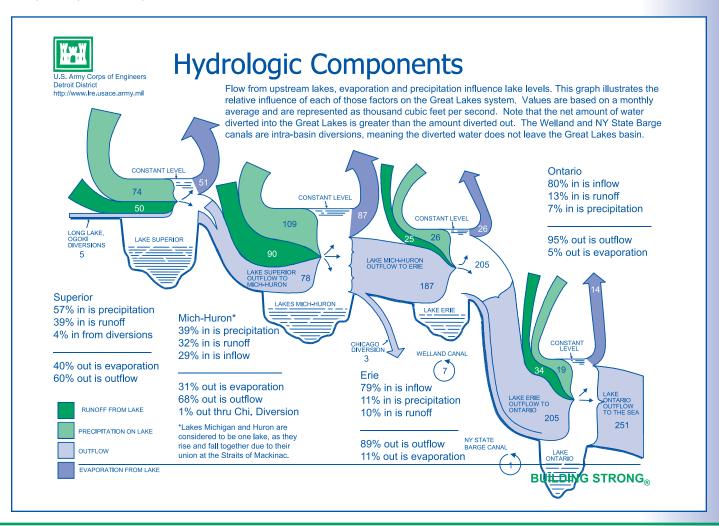
Since I came to Congress, I've been fighting to protect our Great Lakes. One of my first acts as Michigan's U.S. Senator was to pass a law that bans oil and gas drilling in the Great Lakes. This legislation was signed into law in 2001, and the ban was made permanent in 2005.

I am deeply concerned about the potential spread of Asian Carp into the Great Lakes. These fish pose a serious risk to our state – threatening our \$7 billion dollar recreational fishing industry and \$16 billion recreational boating industry, both of which support thousands of Michigan jobs. We don't have time to lose. That is why I have been leading a bipartisan effort in Washington and working with Congressman Dave Camp to stop Asian Carp from entering the Great Lakes.

Earlier this year, I introduced the Stop Asian Carp Act to require the speedy creation of an action plan to permanently separate Lake Michigan from the Chicago Area Waterway System. This is the only way to protect our Great Lakes from Asian carp and other invasive species. The Chicago locks need to be closed immediately while we work on this long-term action plan but closing the locks isn't enough to solve this problem. We need more aggressive, decisive action, and we need it right away.

I have also been working to ensure that our local communities have the tools they need to tackle some of the most difficult challenges facing the Great Lakes today. I led the effort to pass the Great Lakes Restoration Initiative, which helps communities fight against invasive species like Asian carp, clean up pollution, and restore habitats to preserve and protect our Great Lakes, wetlands, and habitats for years to come.

For me, fighting for the Great Lakes doesn't just make economic sense, it's a moral imperative. The Great Lakes are an inseparable part of our economy, history, and culture, and must be protected. Our economy and Michigan way of life depend on them.





Emmet County Lakeshore Association

Post Office Box 277 Harbor Springs MI 49740

In unity, there is strength

Board Members Contact Info:

Bob Bokram

E-mail: rhbokram@gmail.com Telephone: 231.526.5274

Rob Deane

E-mail: f.r.deane@att.net Telephone: 616.456.8463

Kimberly Dowd

E-mail: kdruns@gmail.com Telephone: 231.242.0455

*Mandi Garber-Secretarial Services

E-mail: northernsec@yahoo.com

Don Gschwind

E-mail: ldgschwind@yahoo.com Telephone: 231.526.1158 Telephone: 248.540.1428

Fred Hoffmann

E-mail: dr-fred@live.com Telephone: 231.526.6611

Lou Kasischke

E-mail: louk@gtlakes.com Telephone: 231.242.0147

Franz Neubrecht

E-mail: fneubrecht@yahoo.com Telephone: 231.526.5170

Catherine Reindel

E-mail: catherinereindel@sbcglobal.net Telephone: 231.242.0458

George Reindel

E-mail: georgereindel@sbcglobal.net

Gary Rentrop

E-mail: grentrop@rentropmorrison.com Telephone: 248.644.6970

Dick Selvala

E-mail: dickselvala@yahoo.com Telephone: 231.526.5147

Dave Shear

E-mail: dave@elswest.com Telephone: 734.665.5951 or Mobile: 734.834.0809



Great Lakes Restoration Federal Funds for Little Traverse Bay

The Watershed Council received a grant for \$883,723 to implement The Little Traverse Bay Stormwater Management Initiative. This is part of 440 million in grants awarded under the Great Lakes Restoration Initiative for 2011. This Initiative is part of the over all Lake Restoration Initiative and will look to identify and address nonpoint source pollution which poses a significant threat to water quality as well as the Great Lakes.

Green Sign Reminder

For those who have not taken advantage of the green address sign provided without charge to ECLA members please do so. Our fire department has encouraged homeowners to post the green reflective metal sign at the end of their drive so that emergency responders can find you. Members of ECLA nearly lost their home as a result of a chimney fire because the fire department could not find the home. You can obtain a green sign from ECLA Board member Bob Bokram at 231-526-5279 or rhbokram@gmail.com.



Emmet County Lakeshore Association Board of Directors

Bob Bokram, Treasurer • Rob Deane • Kimberly Dowd • Don Gschwind
Fred Hoffmann, Nominating Committee • Lou Kasischke, Vice President
Franz Neubrecht • Catherine Reindel • George Reindel
Gary Rentrop, President • Dick Selvala • Dave Shear

Association Address: ECLA • PO Box 277 • Harbor Springs, MI 49740