## **ater, Water Everywhere** Examining Your Lake's Readiness for High Water

Like the snows of the winter past, record breaking rain pummeled the southern half of Wisconsin this spring. A slow-moving weather system in early June brought torrential rain to sections of southern Wisconsin, as thunderstorms developed across the region. Rainfall totals over the weekend ranged between two and ten inches with some counties setting records of over 12 inches for the month of June. The recent rain caused some rivers to reach record crests, resulting in flooding and mudslides. Several dams broke because of the rise in water levels in the reservoirs behind the dams.

The severe storms and flooding spurred the governor to declare a state of emergency in thirty Wisconsin counties. In these counties, and through other portions of the Midwest, people are coping with relief efforts, road closures, damaged and lost property, and a flooded landscape. Some will spend years rebuilding and restoring their communities.

Lake Delton, near the Wisconsin Dells, is one of the areas that was incredibly hard hit by this current flooding. A 267-acre impounded lake in this resort town overflowed last month after a highway embankment failed due to high water. According to Thomas Diehl, a Lake Delton village trustee and area businessman, the breach was between 300-400 feet wide. Officials said that the rushing water wasn't caused by the dam's failure, but rather the fact that it was a low-lying area that was inundated by torrential rains. The community is currently working on plans to restore the breached zone, enhance the emergency spillway, and bolster the new fishery in the restored lake.

High water ravaged other southern counties including Jefferson, Vernon, and Waukesha. The Wisconsin State Journal reported dam failures along the embankment spillway of the Wyocena Dam in Columbia County and the Upper Spring Dam on Spring Lake in Jefferson County.

Wisconsin lake

newsletter for people interested in

The state has approximately 3,800 dams and about half are privately owned. The rest are owned by municipalities, state and federal agencies, utilities, and lake associations and districts.



This photo, taken in Jefferson County, shows the devastation from the heavy downpours experienced in southern Wisconsin.

(Continued on page 2)

### Volume 33, No. 3 Summer 2008 Wisconsin Lakes Partnership

### <u>What can lake groups do</u> <u>to help minimize flood damage?</u>

- Coordinate public outreach and information strategies to educate people about dam safety, maintenance and care, and give them the necessary tools to help minimize their personal loss.
- Maintain and enhance wetlands and buffers within the entire watershed to reduce surface water runoff and sedimentation. Sediments that reach reservoirs lessen the ability of these water bodies to take on flood waters.
- Allow extra room to react to rising water by leaving additional space in your lake. More often than not water levels are being maintained closer to the authorized maximum level. If kept closer to the authorized minimum level, lakes would have more room for flood waters.

Routine maintenance and care for a dam in an anticipatory manner can pay dividends when high water arrives on your lake.

- Meg Galloway, DNR

Mon's Welen Cios

According to Meg Galloway, Chief of the Dams and Floodplain Section of the Wisconsin Department of Natural Resources (DNR), high water tends to acerbate problems with dams. "That's why it is important to keep a dam in good condition; routine maintenance and care for a dam in an anticipatory manner can pay dividends when high water arrives on your lake," she said. It can be a good idea to have an expert consultant come in to help with a dam maintenance schedule. "A directory of consultants and contractors for dam safety and floodplain management is available on the DNR Web site," said Galloway. (<u>http://www.dnr.state.wi.us/org/</u> water/wm/dsfm/dams/documents/consultants. pdf)

### Water Quality Issues

High water levels may be receding in parts of southern Wisconsin, but questions about water quality issues are on the rise. The health and safety dangers from recent floods are still a concern, and pollutant levels are elevated in some waterways from runoff and overflows of wastewater treatment systems.

The record rainfalls allowed sizeable amounts of stormwater and runoff to be carried into lakes and rivers, bringing along pollutants from urban streets, farm fields and construction sites. Wastewater treatment systems were overwhelmed in many communities, forcing overflows of sanitary sewers and resulting in partially treated and/ or untreated sewage being released into state waters.

According to Tom Gilbert, a DNR wastewater expert, the overflows typically contain wastewater that is substantially diluted by the rain or flood waters. The organic component of the wastewater should degrade quickly, but the overflows also contain pathogenic microorganisms that are a potential public health concern.

### **Drinking Water Safety**

"Despite virtually unprecedented flooding in most of southern Wisconsin, there still have not been any impacts that resulted in closing municipal drinking water systems (as of June 24<sup>th</sup>). That reflects 30 years of work by state and local governments to move wells to high ground," says Lee Boushon, who leads the DNR's public water supply section.

> Residents in flooded areas who rely on private wells for drinking water should suspect that their wells may have been contaminated. If there is any change in taste, color or sediment in water, residents should immediately stop drinking it and

follow instructions on the DNR Web site for testing a well (<u>http://dnr.wi.gov/org/water/</u><u>dwg/flood.htm</u>).

### **Swimming**

Public health officials advise people against swimming or bathing in flooded areas for several reasons including contaminated water, floating and submerged debris, dangerous currents and fragile shorelines that can give way. The current conditions of water quality on lakes and streams vary greatly across southern Wisconsin. People should check with local authorities for their status. Updated water quality reports for 118 beaches along Lakes Michigan and Superior and at more than 100 inland beaches can be found online at <u>http://www.wibeaches.us</u>. Whenever you swim in a lake or river, follow these simple precautions to stay safe:

- Do not swim, allow children to play, or animals to drink/swim in areas of lakes and ponds where there are visible bluegreen algae.
- Shower after swimming.
- Wash your hands before eating.
- Pay attention to advisory signs.

### **Boating**

Before boating in waters that have endured a flood, check with local authorities for slowno-wake restrictions or any health advisories. Boaters need to consider that there is a lot of floating and submerged debris in all bodies of water affected by flooding. "The lower units of boats can snag or hit wood debris in high water; boats can get damaged or capsize," according to Barbara Wolf, the DNR's regional conservation warden for south central Wisconsin. "As always, wear your life jacket," she says.

It may be tempting to go canoeing and kayaking in high water, but there is much variation in rivers and flooded lakes during high water. It's worth taking some time to consider the potential dangers.

### Fish kills

Heavy rains and flooding can add organic material to waterways making conditions suitable for fish kills caused by a bacterial disease called Columnaris.



*The breach of Lake Delton (Sauk County) was estimated to be between 300-400 feet wide through County Highway A.* 

Columnaris fish kills generally occur throughout the state during May and June each year and should not be confused with the viral hemorrhagic septicemia (VHS) virus. Both diseases only infect fish species and are not a health risk to humans, however, you should not eat fish killed by Columnaris or VHS. Wash your hands when handling infected fish because other bacteria that may be harmful to humans start feeding on the dead carcasses.

"The Columnaris bacterium is most prevalent in our lakes after water temperatures reach 65-70 degrees, from late May to late June," says Larry Damman, DNR fisheries biologist. The bacteria levels increase after major rainfalls into area lakes; this runoff supplies additional nutrients for the bacteria to thrive. "VHS fish kills tend to occur at temperatures less than 60 degrees," said Damman.

Bluegill, crappies, yellow perch and bullheads, already stressed from seasonal spawning activities, are the fish most affected by Columnaris. The bacteria erode their skin, causing leakage of bodily fluids and a fairly rapid death.

Although Columnaris can appear to produce significant fish losses in a matter of several days, it usually does not have a catastrophic Officials said that the rushing water wasn't caused by the dam's failure, but rather the fact that it was a low-lying area that was inundated by torrential rains.



## **Prepare for High Water**

There are other things you can do to get yourself and your lake prepared for high water. In any emergency, always listen to the instructions given by local emergency management officials.

- Get an Emergency Supply Kit together, which includes items like non-perishable food, water, a battery-powered or hand-crank radio, extra flashlights and batteries, important documents, records and medical data. You may want to prepare a portable kit and keep it in your car. Make a Family Emergency Plan for you and your family as well.
- Keep yourself informed. Familiarize yourself with, and learn about, the emergency plans that have been established in your area by state and local governments.
- Get involved with supporting sound zoning policies for your lake and its watershed.
- If your lake has a dam, team up with the owner and get it inspected routinely by a consultant in cooperation with the DNR and other officials.

impact on overall populations, according to fisheries biologists. Columnaris was recently found in bluegills, crappies, and other panfish in Dane and Kewaunee counties. As waters warm, more fish kills may be expected.

If anglers or landowners have additional questions or see large numbers of dead fish, especially non-panfish species like carp, largemouth bass, muskie and walleye, they should contact their local DNR fisheries biologist to investigate the problem.

More information on coping with flooding can be found on the DNR's web site at <u>http://dnr.wi.gov/emergency/current\_flood.</u> <u>html</u>.

### **For More Information:**

Drinking water: Lee Boushon (608) 266-0857

**Boating safety:** Barbara Wolf (608) 273-6277; Roy Zellmer (608) 264-8970

**Beach water quality:** Shaunna Chase (608) 266-2554

**Columnaris fish disease and fish kills:** Andy Fayram (608) 266-5250

### Wisconsin donations:

http://www.aidmatrixnetwork.org/fema/

Disaster Assistance: http://www.fema.gov/

Photo provided by Audrey Green, Lake Specialist, Walworth Co.







## WI Wetlands Strategy: Reversing the Loss

Sixteen conservation organizations and governmental agencies came together in 2008 to create a collective vision for Wisconsin wetlands. "Reversing the Loss -A Strategy to Protect, Restore and Explore Wisconsin Wetlands" charts a course these Wisconsin Wetland Team members will follow to achieve that collective vision. They invite other groups and citizens who want to help protect and restore these valuable natural resources to join them. View the PDF online at <u>http://dnr.wi.gov/</u> wetlands/strategy.html.





Q: Where is the best place to store lake district records?

## A: There are typically three different ways a lake district goes about storing

their records. One way is for the records to be stored by the Secretary, the district officer tasked with keeping minutes of all meetings. Sometimes this method can lead to the loss of the records as communication can break down when officers/commissioners change over time. A second method is to arrange with your municipal clerk to maintain a filing cabinet in a municipal building. Perhaps the town clerk would make space available for storage in the town hall or the county We often get phone calls and emails from Lake Tides readers with a variety of questions about lake districts. Do you have a question about lake districts that you would like to see answered in Lake Tides? Send it to <u>uwexlakes@uwsp.edu</u> so we can include it in a future issue.

clerk at the county courthouse. Last, your district's Secretary can work with the local library to create an archive where copies of the minutes and other district records can be stored. They might also make records available to the public through their site.

For more information on lake districts, see *People of the Lakes: A Guide for Wisconsin Lake Organizations*, <u>www.uwsp.edu/cnr/</u><u>uwexlakes/districts</u>.

This piece was inspired by Jeff Thornton, Southeastern Wisconsin Regional Planning Commission.



# <u>AN Volumtee</u>

This year has brought many improvements to the Citizen Lake Monitoring Network (CLMN). We have finished our second year of Quality Assurance/Quality Control refresher workshops for volunteers. These Lake gatherings allowed us to relay minor changes to the CLMN volunteers, and also helped us ensure that the data collected is top notch. 1986 These workshops covered items ranging onitoring Net from online data entry to secchi refreshers and chemistry training.

### **Online Data Entry**

1.3:51

Annual reports were available online starting in 2007. Volunteers are getting more comfortable with online data entry and their efforts are paying off. We have an all-time record of over 856 stations monitored in 2007, with over 962 volunteers participating. Reports can be viewed at http://dnr.wi.gov/lakes/clmn. Additionally, over 75% of lakes currently monitored by volunteers have been monitored for 5 years or more, with 53% having been monitored over 10 years. A complete summary of the 2007 season can be found at http://dnr. wi.gov/lakes/CLMN/ayearinreview/.

Online data entry options for volunteers were expanded beyond just secchi, temperature and



## Secchi Trivia

Q1: "How do you determine if the water appearance is clear or murky?"

O2:"What is the water color?"

Answers are at the bottom of this page.

dissolved oxygen. As of April 2008, volunteers can enter aquatic invasives, ice cover and loon data online. Field forms for aquatic invasives and ice cover were revised this year and are available at http://dnr.wi.gov/lakes/forms/.

Aquatic invasive species (AIS) monitoring has been popular this year with over 120 new volunteers trained this season and more training sessions are planned. Our goal is to train 200 new AIS volunteers in 2008, and we are well on our way. Our monitoring efforts are expanding, and we are now working on adding new species to the monitoring protocols. This year we added hydrilla monitoring for the northeast part of the state. We also added native water-milfoil weevil monitoring. This insect normally lives on native water-milfoils, but on some lakes it can help keep Eurasian water-milfoil in check as well. We are still in the stages of figuring out why the weevil works on some lakes and not others, so this is an excellent opportunity for volunteers to get involved. For more information on these training sessions contact your local DNR Citizen Lake Monitoring Network Coordinator.

We will continue to improve and expand our network. Please keep up-to-date on activities by visiting our Web site at http://www.uwsp. edu/cnr/uwexlakes/CLMN.



## VHS Update Virus Verified in Round Gobies and Yellow Perch from Lake Michigan

On May 28, the DNR received confirmation that the fish disease viral hemorrhagic septicemia (VHS) was isolated in several fish collected from the thousands of round gobies that washed onshore on a Milwaukee beach earlier that month. A week after VHS was ruled the cause of the large round goby fish kill in Lake Michigan, the same virus was detected in yellow perch collected about three miles from the fish kill site.

Fisheries Director Mike Staggs said that the news was not a surprise, given that the virus was previously found in Lake Michigan. While round gobies are among the species most susceptible to the virus, based on fish kills caused by VHS in Lake Ontario and the St. Lawrence River, yellow perch do not yet seem to be part of a fish kill situation. "The good news is that despite all the testing we've done this year and last year for VHS, we haven't found the virus beyond the Lake Michigan and Lake Winnebago systems," Staggs says. "And that the steps that boaters, anglers and wild bait harvesters have been taking are working to contain the disease." Staggs says the discovery of VHS in Lake Michigan gobies highlights the fact that "VHS continues to be a serious threat to Wisconsin fish and everyone needs to continue following the rules to prevent the spread of this disease." For the latest information on VHS, visit <u>http://</u> dnr.wi.gov/fish/vhs/.

To view a distribution map of VHS testing in Wisconsin, as of June 2008, go to <u>http://dnr.wi.gov/fish/documents/vhs\_widistribution2008.pdf</u>.

### 31<sup>st</sup> Wisconsin Lakes Convention March 18-20, 2009 (Wednesday - Friday)

Each year we survey convention attendees. We strive every year to improve your convention by focusing on current issues and presenting the information you ask for and need. Aquatic invasive species (AIS), shoreland landscaping and lake science topped the charts. The 2009 Wisconsin Lakes Convention will focus on an event that pulls together local, state and national experts to discuss all aspects of AIS issues.

#### **Topics featured**:

- AIS species profiles
- Vectors for AIS hitchhikers
- Methods of control
- State experiences with AIS
- Research
- Legislation, monitoring, & education



We see this as an educational opportunity for the people of Wisconsin and surrounding states, as well as the researchers, educators and managers of the Great Lakes States who are working on these issues.

Please join us at the next Wisconsin Lakes Convention in March 2009 to help learn how to guide our lakes "back to balance." Learn more about AIS, the research being done to control AIS and what each one of us can do to help stop the spread of aquatic invasive species.



## Fying the Road to Recovery Eagles and Osprey Making a Comeback

Back on June 25, 1977, a young eaglet was banded by Sergej Postupalsky in the Sylvania Wilderness Area of the Ottawa National

Forest on the Wisconsin-Michigan border. The carcass of this same eagle was found recently near Sayner in Vilas County.

"It is very rare to

encounter an eagle

years," said Eckstein.

documented to be this old," says

Ron Eckstein, a wildlife biologist with the Wisconsin Department of Natural Resources (DNR). "Eagles can live long lives and banding studies in Wisconsin and Michigan have documented a very small number of eagles living 25 to 30

Over this bird's lifespan, some 31 years, eagles and their close family relatives,

ospreys, have been moving from a rocky

the road to recovery. A recent report by

the DNR, entitled "Wisconsin Bald Eagle

and Osprey Surveys 2007," documents the

Check it out at http://dnr.wi.gov/org/land/

rebounding of these water birds in our state.

wildlife/harvest/reports/eagleospreysurv07.pdf.

footing toward a smoother path along

Ospreys are smaller than eagles. It is our only bird of prey that plunges into the water to capture fish. They are reasonably large birds, black-brown on top and white

> below. The osprey's long, narrow wings are angled back at the wrist when it flies, and a black wrist patch contrasts with white underwings.

### Eagle Length: female 34-43 inches male 30-35 inches Wingspan: 7 feet Weight: 8-14 pounds

Eagles can live long lives and banding studies in Wisconsin and Michigan have documented a very small number of eagles living 25 to 30 years.

-Ron Eckstein



### **Description**

Bald eagles are well-known as our national symbol. An adult bald eagle's white head and tail contrast strikingly with its dark-brown body. Its large bill, feet and eyes are yellow.

Immature bald eagles are harder to identify. They are dark-brown with only a spattering of white on the underwings and tail. Head and tail feathers do not turn white until the birds are four or five years old. Immature eagles' feet are yellow, but unlike the adults, their bills and eyes are brown. Thus, it is easy to confuse immature bald eagles with large hawks or golden eagles.

### What do they eat?

Bald eagles feed primarily on fish, such as suckers, northern pike, muskellunge and bullheads. Eagles also scavenge dead fish along shorelines and capture live ones with their feet. Their talons are strong and sharp, good for grasping prey. Occasionally, eagles eat water birds or mammals. Often they eat carrion such as road-killed deer.

Wisconsin's ospreys feed primarily on panfish. They search for fish while flying 30-100 feet above the water. If they spot prey, they hover, and then plummet down, plunging into the water feet first. Strong, curved talons and specialized spines on the bottoms of their feet help them hold onto the slippery fish. After the catch, ospreys will quickly take off, juggling the prey in their powerful feet until the fish's head is facing forward into the wind. The raptors will then ascend to a perch to feast. Ospreys can't swim and have been known to drown, especially if they get their talons stuck in dinner that is much too large for their wing strength.

### **Biology Notes**

Although both these birds like to be near lakes, they seldom overlap each other. Eagles habituate inland open water, forested ridges and swales, bottomland residents in Wisconsin. They return to the state from southerly wintering grounds in mid-April.

Both birds build large stick nests. Eagles often line the interior of their nest with flexible conifer branches; ospreys line their nest with grasses and pond weeds. Females of each bird lay two to three eggs in a clutch. According to Eckstein, the number one cause of nest failure is raccoons eating either the eggs or young. Thus, it is recommended not to feed raccoons in the vicinity of these nesting birds.

### <u>History in Wisconsin</u>

When the bald eagle was adopted as our national emblem, there were an estimated 100,000 eagles in the continental United States. Ospreys never were numerous in Wisconsin, but they did nest in suitable habitat throughout the state. Populations of each species in Wisconsin and across the U.S. began to

began to decline

in the 1950s,

hardwoods, and forested areas adjacent to large bodies of water. Ospreys utilize inland open water too, but they often stay away from eagles, using habitat along right-of-ways, large reservoirs and riverine systems, or within wetland complexes associated with lakes.

Bald eagles are sexually mature when four or five years old, ospreys at three to four years. Both species establish and defend territories from other birds. In February or March, Wisconsin bald eagles begin building a

nest or repairing one they built a previous year. Ospreys are summer largely due to the adverse impacts on their reproduction from pesticides like DDT. These pollutants caused females to lay eggs with thin shells that broke under the weight of an incubating adult. Chick survival was poor and populations fell sharply.

By 1963, because of pesticides, poaching and other factors, eagles were down to 417 nesting pairs nationally, and were placed on the federal government's endangered species list.

### **Current Distribution**

Wisconsin had 1134 breeding pairs of eagles in 2007. This is up significantly from the 82 pairs first counted in a 1970 survey. Ospreys hit a low of 82 active territories in 1974; 480 osprey nest territories were occupied by breeding adults in 2007. In 2006, Ozaukee County had their first eagle nest in 100 years. Lafayette and Waukesha Counties followed this trend in 2007. That same year, ospreys nested in 49 of the state's 72 counties.

[Ospreys are] our only bird of prey that plunges into the water to capture fish.

Osprey Length: 23 inches Wingspan: 5 feet Weight: 3-3.5 pounds



## If Plants Could Talk - Part Deux EWM and Boats...the Early Years

Remember that (re)tired biologist who discovered a Eurasian water-milfoil (EWM) plant that could talk last August? Well, he happened across that plant again and it turns out there is more to the story. Today the spry plant reveals how boats changed its underwater world and enhanced its ability to grow, divide, and spread.

### **Childhood Crazes**

When I was a teensy weensy node, barely bigger than a pebble, I despised boats. Hated them! Boats would roar across the lake: their bows tilted toward the sun, their sterns spraying water into the air behind them. Back and forth they went, shattering the peace and quiet of our lake. Most of these speedsters stayed far offshore, over deep water and away from our clan. But now and then, one of the

> monsters would make a sharp turn and head straight into our shallow bay. The next thing I knew, my friends and cousins—their leaves and stems, their roots and rhizomes were floating everywhere.

When the boats left for the day, our shallow bay was a mess. The water was so brown from suspended mud we could hardly breathe, much less photosynthesize. Where my family once stood, a channel had formed. Where Cousin Jody once

10

grew, bare mud was left. Even the narrow beach, where some of my friends were growing from a creeping stem, had become a line of stranded debris. It was horrible.

The boats hurt not only us exotic milfoils but also our neighbors: the coontails, wild celeries, native milfoils, and various pondweeds. Like us, they too lost stems and leaves. And with the plants went the algae that grew on the stems, the water fleas that crawled over the leaves, the milfoil beetles that burrowed into the shoots. Gone, too, were the juvenile bass and blunt-nosed minnows that ate the milfoil beetles. Those young fishes were eaten by northern pike and bigger bass, which used the boat channels through the plant beds as fish cruising lanes. Our shallow bay-an underwater world of plants and animals, of microscopic and macroscopic life-was in shambles.

### **Shooting for the Sun**

Somehow, I survived. As the mud settled, my tiny roots tunneled the lake bed for such nutrients as nitrogen and phosphorus. As the water cleared, my thin shoots and feathery leaves could photosynthesize: capture sunlight, release oxygen, and form sugars. I began to grow and divide. Before long, I had formed not just upright stems with leaves but also creeping stems with nodes that would soon sprout. Why, I was no longer a child!

Then a strange thing happened. Do you remember my Cousin Jody? Well, Jody had been missing for weeks, a victim of those

motor monsters called speed boats. Yet, somehow, Jody too had survived. Reduced to a shoot fragment, bearing one or two leaf nodes, my cousin drifted for days across the open water. Drifting and drifting, Jody kept searching for a spot to land, a

When the boats left for the day, our shallow bay was a mess. place to take root. Sure enough, my cousin drifted over a boat channel, one near the opposite shore from home. Here Jody settled to the bottom, sprouted roots, pushed up stems. Before long, Jody grew tall and hardy. My cousin even began to divide and spread into areas where the coontails and native milfoils grew, before boats tore into the lake bed.

Cousin Jody was a happy camper, but yearned to go home—to return to that shallow bay where we both were born. Then, one day, a storm hit the far-off bay where Jody was growing. The waves churned the bottom and, once again, Jody was reduced to a shoot fragment drifting across the lake. By chance, my cousin landed back home.

### **Boasting of Boating**

From Cousin Jody, as well as from other cousins and friends, I realized that boats weren't so bad after all. Sure, their hauls and propellers would sometimes rip us to pieces and rut the lake bed beneath us. And, yes, the water would turn brown from suspended mud and later turn green from algae living off nutrients stirred up with the mud.

But what the boats really did was to open areas for us exotic milfoils to spread and take root. The boats destroyed many of our neighbors, especially the native milfoils and pondweeds. It was the native plants, working together—in a kind of collective dominance—that kept us Eurasians down. Working together, those natives had prevented us aliens from finding sites to take root and send forth shoots. But now, shredded and uprooted by passing boats, the native foliage could no longer work together to rob us of sunlight, steal our nutrients, or crowd our roots.

We were free! From winter-hardy tissue hidden in the lake bed, we could send up stems, open our peacock leaves, and perhaps form tiny flowers and fruits. From the same plant base, we could send down roots to absorb nutrients in the mud and spread rhizomes to produce progeny—milfoil munchkins—that were genetically like us adults. Being able to recover quickly from boats storming our bays, each exotic milfoil clan now had a "stem-up" on those native competitor plants. Thanks to speed boats, the collective dominance of those natives was destroyed. Eurasian water-milfoil was now the master.

And, so, day by day—with each passing boat and each surging wake—our shallow bays turned from complex underwater worlds filled with diverse plants to ones dominated by Eurasian water-milfoil plants. And

once we gained control, those coontails, wild celeries, and pondweeds—not to mention the native milfoils—could barely struggle to survive, much less regain control of our lake shallows.

And, to think, I once hated boats. Why, now I love them. And so I say to all you two-legged creatures: keep the speed boats coming; the shallow bays in shambles; the native plants torn to shreds. We may no longer have peace and quiet; the water in our lake may no longer stay clear. But with the natives down, we exotics can grow, divide, and spread. For all of this, and much more, I raise my stem to you and offer a hardy thanks!

Retold by that (re)tired biologist, Sandy Engel



But what the boats really did was to open areas for us exotic milfoils to spread and take root.



#### Flying the Road to Recovery continued

Last year, it was estimated that there were almost 10,000 nesting pairs of eagles in the continental U.S. On August 8, 2007, the bald eagle was taken off the Endangered Species List, although 43 states still call them "endangered." In Wisconsin, eagles were taken off the Endangered and Threatened Species list for the state, but they remain protected by state law as a species of Special Concern. Ospreys are currently listed as a Threatened species in Wisconsin.

### **Population Concerns**

Nest blow-downs, habitat destruction and disturbance (e.g. waterfront development; boating; shooting) and predation influence the reproductive success of eagles and ospreys in Wisconsin.

"Wisconsin citizens can help the DNR in its efforts to increase the population of bald eagles and ospreys in our state," says Eckstein. We encourage citizens to become informed about Wisconsin's bald eagles and ospreys and get involved in recovery work:

- Report active nest locations to the DNR.
- Avoid bald eagle nests and osprey platforms during the breeding season (February 15-August 1).
- Volunteer to participate in the winter bald eagle survey.
- Discourage illegal and unethical shooting of eagles or ospreys.

Ron Eckstein has experienced some neat encounters and stories over the last two decades of monitoring these birds. Finding the body of what is likely the oldest documented American bald eagle in the upper Midwest ranks high on his list of memories working with wildlife. "It was an interesting story to unravel and document," said Eckstein.

It is even more special in that this eagle's lifetime spans the road to recovery for both eagles and ospreys in Wisconsin.

### For more information:

Great Wisconsin Birding & Nature Trail http://www.dnr.state.wi.us/org/land/er/birds/ trail.htm

WDNR Endangered Resources fact sheets http://www.dnr.state.wi.us/org/land/er/ factsheets/birds.htm

Adopting an Eagle Nest <u>http://www.dnr.state.</u> wi.us/org/land/er/support/aen.htm

Wisconsin Bird Conservation Initiative Get the lead out! Program <u>http://www.</u> wisconsinbirds.org/leadpoisoning.htm

## Wisconsin Association of Lakes Hires New Director

The Wisconsin Association of Lakes (WAL) is very pleased to announce the hiring of Karen von Huene as Executive Director. Karen was recently the Deputy Director of Operations for the Coalition of Wisconsin Aging Groups in Madison. She brings her proven leadership, management and organizational development skills to our statewide lake organization.

You can contact Karen at the WAL office by calling (608) 661-4313 or (800) 542-5253, faxing (608)661-4314, emailing <u>karenvh@tds.net</u>, or writing 4513 Vernon Blvd., Suite 101, Madison, WI 53705.



On August 8, 2007, the bald eagle was taken off the Endangered Species List, although 43 states still call them "endangered."



# Meet Wisconsin's AIS Staff

Learn more about the people working on aquatic invasive species (AIS) issues across the state, and find out what challenges people are facing and what is being done to protect our lakes. Watch for these short articles in future issues of Lake Tides.

Audrey has been the Lake Specialist for Walworth County Land Use and Resource Management since 2001, providing education about lake related best management practices, such as native shoreline buffers and shoreline stabilization methods. In



Walworth County

Audrey Greene AIS Coordinator

January, Audrey's job focus changed, and she is currently concentrating her efforts to implement the Walworth County AIS Control and Prevention Program. So, let's get to know Audrey Greene!

### What's new with invasive species in Walworth County?

There has been Eurasian water-milfoil, curlyleaf pondweed, zebra mussels, rusty crayfish and purple loosestrife in some of our lakes for several years. And, while there have been a few groups involved in AIS prevention efforts, there has never been a countywide effort until now. Lake protection is multi-faceted, and we were able to provide a lot of great education during the last seven years. Now, we intend to focus our efforts on education and assistance to protect our lakes from AIS, which we feel is extremely important.

## In your opinion, what is currently the most prominent AIS issue in Walworth County?

The two issues that come to mind immediately are not confined to Walworth County. I have had many people ask me why we are worried about AIS since Walworth County already has all the invasive species that we can ever get. If the public does not realize there is a risk, they will not be motivated to take protective measures. I believe that the county's AIS program will help resolve this issue through more education and outreach.

I am also very troubled by the many AIS that are available through nurseries, many outof-state, but easily accessible through the Internet. The DNR and the Wisconsin Council on Invasive Species have been working hard on a rule that would classify and regulate invasive species, which is great, but until everything is in place, it is still possible to purchase many harmful species that could find their way into our waterways.

### Why is AIS prevention important to you?

There are so many great people that work very hard to protect and preserve our lakes here in Walworth County. I think that this is a great (and much needed) way to help them.

# How do you think preventing the introduction and spread of AIS should be addressed?

Education must always be a large component of AIS prevention. Most people will be interested and willing to follow prevention procedures once they learn about the problem. I believe that there must also be some rules in place that will prohibit some species from being brought into the state. And in the eventuality that an AIS is found, we should also have a plan in place to deal with it.

### What is your favorite part of being an AIS Coordinator?

Working with the people that are so committed to protecting our lakes, and knowing that the work I am doing is important.

To learn more about AIS in Walworth County, and how can get involved, contact Audrey at 262-741-7902, agreen@co.walworth.wi.us. To find out who is working on AIS issues in your area, see <u>www.</u> <u>uwsp.edu/cnr/uwexlakes/CBCW/AIScontacts.</u> pdf. •



There are so many great people that work very hard to protect and preserve our lakes here in Walworth County.



## Wisconsin's Water Guards

### A message for boaters, anglers, and anyone who enjoys the beauty and excitement that Wisconsin's waters have to offer.

My name is Chris Hamerla, and I am one of nine enthusiastic people in the DNR's new Water Guard program. Wisconsin's Water Guards help teach boaters and anglers about aquatic invasive species and also enforce the laws dealing with them.



Chris Hamerla conducts watercraft inspections and AIS outreach out of Green Bay. He is one of two Water Guards located in the DNR's Northeast Region.

If you like fishing one or more of Wisconsin's many tournaments, there is a chance you'll gain some important information about how to prevent the spread of AIS from a Water Guard presentation at the pretournament meeting. The nine Water Guards are stationed throughout the state, and we talk with the variety folks that utilize boat launches as we work at the landings. You may see one of us at your lake association meeting or at a boater safety course as we coordinate our efforts with many volunteers and other structured groups such as lake association groups, Clean Boats, Clean Waters and Sea Grant. If you like fishing one or more of

Wisconsin's many tournaments, there is a chance you'll gain some important information about how to prevent the spread of AIS from a Water Guard presentation at the pretournament meeting. What kind of important information? Here are the main points for people to remember:

- No aquatic invasive species may be transported. This means that before traveling anywhere you need to make sure your boat, trailer, and equipment are clean of any aquatic invasive species.
- 2. No boat or equipment may go into the water if there are aquatic plants or zebra mussels attached. This is similar to number 1 above, but pertains directly to launching your boat. Give your equipment the once over and remove any vegetation or mussels that may have gotten attached before actually backing into the water.
- All water must be drained from the boat and your equipment before leaving the landing. This is to stop the spread of the fish disease, VHS (viral hemorrhagic septicemia), to any other waters. Draining all water means just that – from live wells,

bilges, ballast compartments, and water within the motor of a boat. Any fish being taken home must be "dead" for purposes of transport. A fish out of water is considered dead, and ice can be used to keep the fish fresh.

4. Bait can be used on different bodies of water only if the bait was bought from a licensed bait dealer, and no lake or river water was added to the container. A maximum of two gallons of water can be transported for this purpose. If lake or river water is in the bait container, the bait can only be used on that same body of water.

Why is it important to stop invasive species? Well, for starters non-native invasive species don't have natural predators or other controls. They can outcompete native species and can take over the areas in which they're present. This change affects the rest of the lake ecosystem. Here's an example: Zebra mussels can take over a body of water because there is nothing to keep their population in check. They filter micro-organisms out of the water, taking food away from bait fish. The bait fish population goes down due to low amounts of needed food.



In addition to environmental costs, there are also financial costs involved with invasive species. These include the cost to control them, cleaning up the problems they cause, restoring the areas invasives have conquered, and loss of natural beauty in areas that used to draw in tourism. Who wants to boat in a lake so choked with Eurasian milfoil that the motor continually binds up? Who wants zebra mussels attaching to the hull and motor of their prized boat?

So, in a nutshell, what can we do to stop the spread of invasives and keep our waters clean? The simplest way I can think of is to "leave it where it's at." Leave all the water at that body of water. Leave the weeds. Clean the boat, trailer, and equipment of all plants. If we all take a few minutes to clean before leaving, we'll be able to save and pass on the beauty of Wisconsin's natural resources to our children and grandchildren. Safe boating, and we'll see you out there! •

#### *By Chris Hamerla, Water Guard Wisconsin Department of Natural Resources*

To find out who the Water Guards are in your area, look under the 'Water Guards' section on our AIS Staff List at <u>www.uwsp.edu/cnr/</u><u>uwexlakes/CBCW/AIScontacts.pdf</u>.



#### August 14, 15, 19, 20, 26, 2008 - DNR Hearings

The Wisconsin Department of Natural Resources will hold a series of public hearings around the state in August on proposed rules relating to the identification, classification and control of invasive species. For more information: <u>http://dnr.wi.gov/invasives/classification/</u>

**Thursday, August 14** - Gathering Waters/Glacier's Edge conference room, DNR South Central Region Hdqrs., 3911 Fish Hatchery Road, Fitchburg at 10:00 a.m.

**Thursday, August 14** - Room 141, DNR Southeast Region Hdqrs., 2300 N R. Martin Luther King Jr. Drive, Milwaukee at 3:00 p.m.

**Friday, August 15** - Lake Michigan room, DNR Northeast Region Hdqrs., 2984 Shawano Ave., Green Bay at 1:00 p.m.

**Tuesday, August 19** - Room B19 & B20, State Office Building, 3550 Mormon Coulee Road, La Crosse at 1:00 p.m.

Wednesday, August 20 - Large conference room, DNR Northern Region Hdqrs, 810 W. Maple Street, Spooner at 2:30 p.m.

**Tuesday, August 26** - Council Chambers, Wausau City Hall, 407 Grant Street, Wausau at 1:00 p.m.

September 20, 2008 – Ocean Conservancy's International Coastal Cleanup The International Coastal Cleanup (ICC), a worldwide event since 1986, is coordinated each September by the Ocean Conservancy and has been happening in Wisconsin since 1989. Each year the ICC gathers data from the debris collected on waterways around the world. For more information: <u>www.coastalcleanup.org</u>.

October 24-25, 2008 – 5<sup>th</sup> Annual Citizen-Based Monitoring Conference Stoney Creek Inn, La Crosse. For more information: <u>http://wiatri.net/cbm/</u> <u>conference/</u>.

#### November 11-14, 2008 – NALMS 2008 Symposium

The North American Lake Management Society invites you to join them in Lake Louise, Alberta this November for their annual symposium. The theme this year is "Lake Management in a Changing Environment." For more information: www.nalms.org/Conferences/2008LakeLouise/



### Lake Tides -- 905032

College of Natural Resources University of Wisconsin 800 Reserve Street Stevens Point, WI 54481

Volume 33, No. 3 Summer 2008



ш	Water, Water Everywhere1-4
	Wisconsin Wetlands Strategy5
	Lake District Q&A5
	CLMN Volunteer Update6
<u> </u>	VHS Update7
	Save the Date-WI Lakes Convention7
S	Flying the Road to Recovery8-9, 12
<b>-</b>	If Plants Could Talk - Part Deux10-11
<u> </u>	WAL Hires New Director12
	Meet Wisconsin's AIS Staff13
7	Wisconsin's Water Guard14-15
	Calendar15

#### **Wisconsin Lakes Partnership**

Published Quarterly

Internet: <u>www.uwsp.edu/cnr/uwexlakes</u> E-mail: uwexlakes@uwsp.edu Phone: 715-346-2116 Editor: Amy Kowalski Design & Layout: Amy Kowalski Regular Contributing Writers: Patrick Goggin, UWEX & Carroll Schaal, WDNR Contributing Editors: Robert Korth & Erin Henegar, UWEX Photos by: Robert Korth (unless otherwise noted) Illustrations by: Carol Watkins, Chris Whalen

The contents of *Lake Tides* do not necessarily reflect the views and policies of UW-Extension, UWSP-CNR, the Wisconsin DNR or the Wisconsin Association of Lakes. Mention of trade names, commercial products, private businesses or publicly financed programs does not constitute endorsement. *Lake Tides* welcomes articles, letters or other news items for publication. Articles in *Lake Tides* may be reprinted or reproduced for further distribution with acknowledgment to the Wisconsin Lakes Partnership. If you need this material in an alternative format, please contact our office. NON-PROFIT ORG U.S. POSTAGE PAID PERMIT NO. 19 STEVENS POINT, WI

Printed on recycled paper with vegetable-based ink.

### **Reflections**

No important change in human conduct is ever accomplished without an internal change in our intellectual emphases, our loyalties, our affections, and our convictions. ~ Aldo Leopold

The Ecological Conscience (1947)