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Northwoods Journal

June 2006

Enjoying and Protecting Marinette County's Outdoor Life

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CAMP BIRD YOUTH CENTER OPEN HOUSE

Saturday, June 3
10 a.m. to 2 p.m.

*Archery ♦ Boating ♦ Fishing
Nature Center ♦ Furry Critters
Camp Tours*

Usually only open to groups that have rented the camp, the public is invited to come visit Camp Bird for its annual open house. Park staff will be on hand along with the Friend's of Camp Bird group. Food and refreshments will be available from 11 a.m. to 1 p.m. The Friend's of Camp Bird will be selling Camp Bird T-Shirts and bricks for the flagpole memorial. Profits go towards camp scholarships. Please call 715-732-7530 for more details.

Directions: Travel 16 miles west of Crivitz, WI, on County Hwy. W. Turn north onto Caldron Falls Road. The camp is roughly 1.5 miles on Caldron Falls Road. Watch for signs.



MAKING MEMORIES: SUMMER CAMPS



Most people who have attended some sort of summer camp in their lifetime have fond memories of it - canoeing, swimming, campfires, raiding the girl's cabin. All good stuff. Local groups and organizations continue this tradition to give people of all ages a time to slow down, get away from everyday life and just have fun in our beautiful outdoors. Here are a few camps that take place in Marinette County throughout the summer.

CAMP BIRD YOUTH CENTER

The Camp Bird Youth Center is owned by Marinette County and operated by the Marinette County Parks Department. It is located on 200 acres of Marinette County Forest land about 16 miles west of Crivitz. Nestled among large red pines and oak trees, it sits on the shore of beautiful 20-acre Sand Lake.

History

Sand Lake and the land surrounding it were owned by Isaac Stephenson, local prominent businessman and U.S. Congressman. He used the site as a private hunting and fishing camp. His hunting cabin was on the site of the present dining hall. In 1920, the land was sold to the Skidmore Land Company. In 1929 Marinette County became the owner of Sand Lake for \$82.75 in unpaid back taxes.

After the tax title matured in 1936, three people encouraged the development of a youth camp at Sand Lake. They were L. E. Ness, Chairman of Marinette County Board, Dr. Maurice Bird, County Health Officer, and Mr. Charles Drewry, County Agriculture Agent for the University of Wisconsin Extension. On May 3, 1939 a resolution was brought before the County Board and was approved to make Sand Lake into a youth camp. The final plan was developed in 1940 by John Saemann, Assistant County Extension Agent, and given to the Works Progress Administration. The construction of the camp was started by the WPA and finished by the Marinette County Forestry crew in 1942. On May 5, 1942, a

County Board resolution named the camp the Maurice D. Bird Youth Center after the doctor who was instrumental in the camp's conception.

What Camp Bird Has to Offer

Camp Bird has 42 log cabin buildings of which 24 are for sleeping. The camp can accommodate groups as small as 50 people or as large as 230 people. The camp is completely modernized with sinks, showers, flush toilets and electricity. There is a sandy swimming beach, docks, canoes, rowboats, stream and lake fishing, hiking trails, adventure course (low ropes), a well equipped nature center with small animals and a camp naturalist, a mess hall lodge, and a recreation lodge for people who are renting the camp. Groups that rent the camp must provide their own staff and programs.

For ideas to plan nature programs for your group's stay, the Marinette County Land & Water Conservation T.O.A.D. (Teaching Outdoor Awareness and Discovery) program is a place to start. They provide field equipment and a knowledgeable staff to address groups free of charge. T.O.A.D. is available to all groups and organizations in Marinette County that have an interest in learning about the natural environment. Please contact Amanda Kostner, Information & Education Specialist, at 715-732-7784. There are programs for all ages that would fit in well with the camp experience.

Using the Camp

Since Camp Bird opened in 1943, it has been used by Boy Scouts, Girl Scouts, 4-H youth,

CAMPS continued on page 2

Landscaping with Native Trees & Shrubs

By Scott Reuss, UWEX Horticulture Agent

Serviceberry (*Amelanchier*)



One of our more adaptable and useful native tree/shrubs is the *Amelanchier*. The reasons for selecting them to use in our landscapes abound. They are one of the earliest blooming shrubs or trees, with brilliant white flowers that emerge just as the leaves are emerging. The fruit they produce is very delicious, with most people describing them as a sweetened blueberry. However, you have to battle wildlife for the right to eat any of them, which gives them another great trait -- their wildlife food and cover potential. Lastly, they have brilliant crimson foliage in fall that contrasts beautifully with the silver-gray bark.

There are many types of *Amelanchier* that you can grow, and you will hear them called many other names, such as: serviceberry, juneberry, shadbush, and some others. In the Marinette County area, we have three predominant *Amelanchier* species, which range in mature height from only about 3-foot tall small shrubs to 25-foot or taller trees.

The dwarf serviceberry, *Amelanchier spicata*, is found in many spots of our area, but is most common in sandy soils that are sparsely forested, and is very commonly mixed in with blueberries. Many people actually pick them right as they are picking blueberries and don't even really realize that they are different things. On better soils, this species will probably get as tall as 4 to 4 ½ feet, but where they are commonly found, they top out at 2 ½ to 3 ½ feet.

Northwoods Journal

Volume 4, Issue 1

Northwoods Journal focuses on various outdoor recreation opportunities and local environmental topics to inform readers about natural resource use, management, and recreation in Marinette County.

Published in cooperation by:

- ▶ Marinette County Land Information Department, Land & Water Conservation Division
- ▶ Marinette County Parks & Outdoor Recreation Department
- ▶ University of Wisconsin-Extension

UW-Extension provides equal opportunities in employment and programming, including Title IX and ADA. To ensure equal access, please make requests for reasonable accommodations as soon as possible prior to the scheduled program. If you need this material in another format, please contact the UW-Extension office at 715-732-7510.

Please send comments to:

**Marinette County
Land & Water Conservation**
1926 Hall Ave
Marinette, WI 54143
(715) 732-7780
akostner@marinettecounty.com

Check us out on the web at:

www.marinettecounty.com/lw_home.htm

CAMPS continued...

schools, social service agencies, and religious organizations. Other groups such universities, environmental, and other youth organizations are invited to use the camp as well. Camp Bird is available for rentals from the middle of April through the end of September each year. For reservations, further information, or to set up an appointment to tour the camp, please contact the Marinette County Parks Office located at Room C318, 1926 Hall Avenue, Marinette, WI 54143, or call 715-732-7530.

SAND LAKE CONSERVATION CAMP

This summer a new camp will be available to the youth of Wisconsin and Michigan's Upper Peninsula, June 29-July 1. Those completing grades 7-9 are invited to take part in this session held at Camp Bird Youth Camp in Crivitz, WI. In addition, there are scholarships available for Marinette County residents to attend.

Sand Lake Conservation Camp offers a closer look and a better understanding of nature's resources and our role, as citizens, in conserving them. Camp programs cover a wide variety of information and hands-on experiences in wildlife habitat, water quality, fisheries, invasive species, forestry, orienteering, and canoeing. Natural resource, conservation, and education professionals teach the programs, serve as counselors, and give campers an inside look at different careers available in natural resources and the environment. This camp would be especially fun for kids with a special curiosity for nature and our environment.

Sand Lake Conservation Camp is sponsored by Marinette County Land & Water Conservation Division, UW-Extension, WI Department of Natural Resources, and U.S. Fish & Wildlife Service. For more details



Waterfront at Camp Bird

The downy serviceberry, *Amelanchier arborea*, is a taller shrub, usually ranging from 10 to 15 feet tall, that has light colored leaves as they emerge. This gives the shrub a whitish appearance, especially at bloom. The leaves are very hairy, but tend to lose the hairs as the leaves age through the growing season.

The tallest species is the smooth or Allegheny serviceberry, *Amelanchier laevis*. An additional trait of this species that makes them stand out in a landscape is that the immature, emerging leaves are a purple color. This contrasts with the white flowers for a very dramatic spring color effect. This is a smaller tree, with normal mature heights of the natural form being 20 to 25 feet tall, with individual specimens in great spots possibly pushing 40

and registration materials, please call 715-732-7784 or visit:

www.marinettecounty.com/lw_ed_conservcamp.htm

CAMP DANIEL

Do you like spending time with great people, good food, and getting away from the world once in a while? Looking for a challenge that's lots of fun that will have a big effect on someone else's life? If you answered yes to these questions Camp Daniel may be the place for you. Camp Daniel is a non-profit, non-denominational Christian-based group dedicated to providing the opportunity for social and spiritual growth to people with disabilities and their families. Volunteers give someone with a disability the opportunity to experience recreation in Northeast Wisconsin and friendships many of us take for granted.

Under the direction of Camp Daniel staff, people with physical and mental challenges, from age eight and up come to a camp completely dedicated to their needs. Camp Daniel includes every activity of a typical summer camping program, adapted to the person with a disability.

Camp Daniel is made possible by the men and women who volunteer to serve as counselors, offering companionship to the campers and meeting their needs for a week. Each year, lack of volunteers means that deserving people miss out on the Camp Daniel experience. Campers and counselors who have attended in the past agree that their lives have been profoundly affected by the experience.

The camps are held at scenic and secluded Lake Helen Bible Camp north of Wausaukee, WI. This year's camps are July 8 - 14, July 16 - 22, August 5 - 11, and August 13 - 19. The first day is for counselor orientation. Then after five full days of camp, the campers go home by 10:00 a.m. on the last day. There is an excellent beach and great fishing.

To learn more, check out the website at:

www.campdaniel.org
or call 715-757-3880.

feet. The majority of the types that you can purchase are either selected cultivars of this species, or more commonly are actually hybrids of two or more of the species.

If you specifically want to raise serviceberry for their fruit production, there are many cultivars selected specifically for that. They are a great homegrown blueberry alternative, as you do not need to amend the soil to have the low pH's that blueberries need to be successful. Although there are some insect and disease possibilities, they are relatively maintenance-free. The main issue you will deal with when trying to grow them is wildlife damage, as rabbits, deer, and

SERVICEBERRY continued on page 8



THE SECRET LIVES OF AQUATIC INSECTS

By Greg "The Egg" Cleereman, County Conservationist



Aquatic insects are the focus of this year's series of articles on the wildlife of Marinette County. Although we sometimes forget about them – out of site, out of mind – they are very important for several reasons. Aquatic insects do much of the breaking down of leaves and wood that fall into the water. The reason our shorelines are not choked with fallen leaves each spring is because insects have eaten most of them. Aquatic insects are a critical part of the food web, feeding fish, birds, reptiles, amphibians and other invertebrates. In fact many of our favorite fish species depend almost entirely aquatic insects at some point of their journey to adulthood. Fish species like bluegills never stop depending on aquatic insects for most of their food.

Because they spend so much of their lives in one spot and are relatively easy to catch, aquatic insects are also important to our understanding of the health of our lakes and streams. High water temperature, low dissolved oxygen levels, turbidity, and toxic chemicals often affect aquatic insects first. These small creatures can't swim away from water quality problems like fish can. Also they show the cumulative impacts of poor habitat, which may not be detected by other monitoring.

DRAGONFLIES

Dragonflies are our most visible aquatic insects. Why are they called aquatic? Although most of us only see dragonflies as they fly around us in summer, they actually spend the vast majority of their lives as nymphs on the bottom of our lakes and streams. Some of the 112 species found in Wisconsin spend up to four years underwater as nymphs and on average only about a month as winged adults. Therefore, if we want to protect dragonflies we have to worry about aquatic as well as terrestrial habitat.

Dragonflies start out life as eggs that may be simply laid on the surface of the water, attached to rocks and vegetation, or inserted into living or dead vegetation. The near microscopic eggs typically hatch in a few days. Shortly after leaving the egg as a pronymph, the almost featureless creature undergoes the first of several molts to emerge as a six-legged nymph. Like all insects, dragonflies have an external skeleton that they must shed to grow larger. The number of molts varies by species and ranges from six to thirteen.

It is hard to imagine that a dragonfly nymph will in time become the brightly colored, and sometimes almost jewel-like adult. Most nymphs are a mottled dark brown or green and extract oxygen from the water with gills hidden inside their rectal chambers. That's right, they breathe with their butt! Nymphs don't swim but walk along the bottom except in emergencies when their breathing method becomes important for another reason. When threatened the nymph can take a deep "breath" and then "exhale" hard and fast, using jet propulsion for a quick getaway. Another interesting talent resulting from rectal breathing is ballistic defecation. Some species can shoot fecal pellets at high velocities for up to twenty-three feet. No one knows why they do this, but, heck why not?!

All dragonfly nymphs are voracious predators that stalk or ambush other insects, tadpoles, and even small fish. Each nymph has a hinged lower lip, tipped with sharp hooks that can extend out like a third arm. It shoots out at lightning speed, grabs prey and pulls it in to be bitten into bite size chunks. Our largest dragonfly, the Green Darner, can even feed on bullfrog tadpoles. Some nymphs keep and defend territories while others stalk the watery bottom at will.

At some point the insect changes from a nymph to an air-breathing adult. To accomplish this feat, the nymph crawls out of the water onto a rock or plant stem. Usually the shedding of its nymphal skeleton takes place under the cover of darkness because emergence is a very dangerous time. The nymph's skin starts to split along the back. As the skin splits the emerging adult is tugging and pushing backward, first releasing the head and lastly the tip of its abdomen. When the process is complete it looks like two insects of completely different species, one on top of another. Although free of the old skeleton, the adult is by no means safe. After emergence the dragonfly quickly begins gulping air and pumping hemolymph (dragonfly "blood") into its wings. This process can take up to an hour. It takes up to an additional hour before the adult can fly. During this time the dragonfly is at great risk from wind, waves, and especially birds.

It takes up to two days for adults to gain full colors and flight capability. Once they do, dragonflies typically travel a mile or two to a new suitable body of water. Around the water, males establish breeding/feeding territories where the first order of business is to eat. Dragonflies have been described as "the perfect hunting machine." They are well equipped with compound eyes that are very large relative to body size. More than 80% of dragonfly brains are used for processing visual information. Their eyes provide an almost 360 degree view. They have compound eyes made up of ten thousand to thirty thousand subunits called ommatidia. These are perfect for detecting movement. Movement that would be a blur to people is crisp and clear to dragonflies. Also, unlike many creatures, dragonfly eyes can detect prey by its shape and color. Their eyes are better at detecting colors of light than human eyes. They can even detect ultraviolet light, which allows them to see prey while looking into the sun.

DRAGONFLIES continued on page 4

HIT THE TRAIL

Trails in Marinette County



LAKE NOQUEBAY TRAIL SYSTEM

By Erik Aleson, Marinette County Parks

In the 1980's, the Chappee Rapids Audubon Society utilized and maintained the Lake Noquebay Trails for Cross-Country Skiing. In recent years, trail maintenance wasn't continued, and the trails became overgrown. Now in 2006, as a result of a joint project, hikers and mountain bikers can now test a five-mile long series of loops in the southern part of the Marinette County Forest near the Lake Noquebay Wildlife Area.

The Marinette County Parks & Outdoor Recreation Department is lending expertise and some funding to rehabilitate the trail system. The Spokes & Folks Bicycle Club has provided the labor and has already spent hundreds of man-hours since last fall to get the trail ready to use. The Chappee Rapids Audubon Society is also involved in this project.

New signs have been erected to help mark the trails. The multi-use trail system can accommodate hikers, hunters, mountain bikers, & cross-country skiers. The use of motorized vehicles is prohibited on the trails.

Rather than clear away brush and trees to widen the trails, the volunteers are maintaining the integrity of the forest by keeping the trails single-track. At one marshy stretch last fall, volunteers installed PVC pipes to allow water to drain away from the trail. Boardwalks may be added to help trail users stay dry crossing marshy terrain.

The scenic Lake Noquebay Trails wind their way through woods, atop an esker (a ridge created by glaciers), and dip down into the edge of the area's vast marsh.

The whole trail system is approximately 5.5 miles. This is broken down into four creatively named loops & one spur: Balsam Loop, 0.8 miles; Big Hill Loop, 1.3 miles; Esker Lookout Loop, 1.3 miles; and Almost Home Loop 1.5 miles. The Marsh Spur is 0.7 miles and leads hikers to an overlook of the large marsh that encompasses the Lake Noquebay Wildlife Area managed by the Department of Natural Resources. This portion of the trail system is usually too wet for mountain biking much of the year.

To access the Lake Noquebay Trail System, take Highway 180 north from Marinette to County Highway X. Travel west on Highway X to Right of Way Road. Go south on Right of Way Road until you see the trailhead on the right.



Bike club members working on the trail



Who You Gonna Call?

Spotlighting natural resource and conservation professionals working in Marinette County so you know who to call with questions or concerns.



Stewart Cogswell

Fishery Biologist
U.S. Fish and Wildlife Service
Green Bay Fishery Resources Office
Phone: (920) 866-1763
Email: stewart_cogswell@fws.gov

What is the Fish and Wildlife Service?

The Green Bay Fishery Resource Office was founded in 1992, and its mission is to conserve, enhance, and protect aquatic ecosystems within the Lake Michigan Watershed and to help natural resource managers from state, tribal, and federal agencies, as well as concerned citizens involved in achieving this mission.

The U.S. Fish and Wildlife Service is the principal federal agency responsible for conserving, protecting and enhancing fish, wildlife and plants and their habitats for the continuing benefit of the American people. The Service manages the 95-million-acre National Wildlife Refuge System, which encompasses 544 national wildlife refuges, thousands of small wetlands and other special management areas. It also operates 69 national fish hatcheries, 64 fishery resources offices and 81 ecological services field stations. The agency enforces federal wildlife laws, administers the Endangered Species Act, manages migratory bird populations, restores nationally significant fisheries, conserves and restores wildlife habitat such as wetlands, and helps foreign and Native American tribal governments with their conservation efforts. It also oversees the Federal Assistance program, which distributes hundreds of millions of dollars in excise taxes on fishing and hunting equipment to state fish and wildlife agencies.

What things do you do as part of your job?

I work cooperatively with State and local agencies to address stream habitat restoration projects throughout the Lake Michigan watershed. This involves identifying potential projects, completing all required permits, applying to federal funding sources and organizing logistics to see projects through to completion. Additionally, I work with four Native American tribes in Northeastern

DRAGONFLIES *continued...*

The U.S. government has studied dragonflies to learn how to make better aircraft. These insects can fly at up to 35 miles per hour with the greatest agility of any flying insect. The design of the wings makes it all possible. With wings that are lightweight and flexible, yet stiff because of the veins, dragonflies can turn on dime, hover, and even fly backwards.

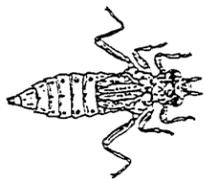
The ability to fly as they do is very important because the only things dragonflies eat are flying insects, which they generally pluck out of the air. Dragonflies are our dear friends in that they feed mainly on our enemies, deerflies, blackflies, horseflies, midges, and mosquitoes. A dragonfly normally eats about 10-15 percent of its body weight in prey each day. Some dragonflies (perchers) wait on a perch for suitable prey to fly by, which they dart out after. Other species (fliers) act like swallows and may stay airborne all day catching and eating insects on the wing. Fliers sometimes form into large multi-species groups called feeding swarms. Although we don't know why, many scientists think environmental conditions like wind may force groups of dragonflies into sheltered areas where they can feed. There is also another behavior called "hill topping" where large numbers of dragonflies gather on the tops of hills and peaks for breeding rather than feeding purposes. Experts think that hill topping helps members of small, spread out populations find mates. Think of it as a dragonfly singles hangout.

Some, but by no means all, dragonfly species defend territories both for breeding and feeding. While both males and females may defend feeding areas or perches, typically only males defend breeding territories. The classic dragonfly breeding territory consists of patch of sunny, shallow water. Depending on the species it may also require specific substrate for egg laying such as dead wood or certain plants. Territory size can range from one square yard to a whole pond. The area defended also changes with the time of day, the amount of competition for space, and the quality of the habitat. Strategies for defending a territory include signaling with their brightly colored body parts, aggressive postures, and by direct attack of intruders.

After setting up a territory, the search for a mate begins. This includes specialized courtship rituals that can be quite intricate. However, most dragonfly males dispense with all that and simply grab the first female of his species that enters his territory. The females have been off in the forest or field feeding until they are ready to breed. Males often greatly outnumber them when they arrive at the pond or stream and epic battles for breeding rights can ensue.

Dragonfly mating is unusual in several ways. Before a male can mate with a female, he must mate with himself. He must move sperm from the tip of his abdomen, where it is formed, to a storage area at the base of his abdomen. Then the male and female must form what is known as the tandem position, in which the male grabs the female around the base of her eyes with specialized claspers located on the tip of his abdomen. Finally, the act of mating requires the female to bend into a "J", bringing the tip of her abdomen into contact with the male's sperm storage area. When they do this, their bodies outline the shape of heart, in what is known as the "copulation wheel." This process can happen in as little as three seconds or as long as an hour.

Females can lay eggs immediately after mating and sometimes this is where the relationship between male and female ends. In some species the male guards the female to make sure no other male breeds with her. Guarding can take place in several ways. The male and female may stay locked in tandem, the most common method. He may also perch or hover nearby to chase off intruders while the female lays eggs.



This article merely skims the surface of what is known about the lives of these amazing and beneficial insects. It is based heavily on *Dragonflies*, by Cynthia Berger, and on Internet sources including the WI DNR website. Also useful is *A Color Guide to Common Dragonflies of Wisconsin*, by Carl and Dorothy Legler.

Wisconsin, assisting with fisheries management and habitat restoration.

What do you like most about your job?

Growing up fishing and playing in streams, it is enjoyable to be able to work outdoors and assist various agencies with stream restoration projects. I get to work with dedicated people and see a lot of streams and habitat around the Great Lakes region. It is really gratifying to be a part of a project, from start to finish, and see the positive impact it has on the environment.

Stewart's Message:

If you have question's regarding funding options for potential stream or riparian restoration projects on State, County or private land, please give me a call. I can walk you through the process and assist with proposals, permitting and implementation. I look forward to working in Marinette County, assisting with stream restoration projects.

THE OFFICIAL 2006-2007 MARINETTE COUNTY PLAT BOOK

Available July, \$20 each

Land Information Office
Marinette County Courthouse
1926 Hall Avenue, Marinette, WI

For more information call
715-732-7535

Northwoods Journal Online

Would you like to read the *Northwoods Journal* on the Web? Each issue is posted monthly on the Marinette County website at www.marinettecounty.com/lw_journal_home.htm

We can even send you an E-mail reminder when each new issue is posted, and a direct link to the site. To set it up, contact Amanda at akostner@marinettecounty.com



Invasive Species Profile: Quagga Mussel

By Kendra Axness, UWEX Basin Educator

Exotic species are plants and animals that spread into an ecosystem beyond their normal range. Exotic species can come from another watershed, state, country, or continent. Invasive species are plants and animals that, once established, take over an ecosystem because they are able to out-compete other species for habitat. Both native and exotic species can become invasive if the conditions are favorable for them.

What is a quagga mussel?

It is an exotic and invasive species of great concern for Wisconsin's lakes. This small (up to 4 cm) bottom-dwelling clam native to Europe has invaded the Great Lakes. It is closely related to another invader, the zebra mussel. The name comes from a mammal called the quagga, an extinct relative of the zebra. Quagga mussels aren't known to be in any of Wisconsin's inland lakes, but because they are highly prolific and able to thrive in silt and sand-bottomed lakes, they present a threat to inland lakes. That includes some lakes not suitable for zebra mussel establishment.

Where are they from?

Quagga mussels come from the Dneiper River drainage of Ukraine, and were first discovered in North America in Lake Erie in 1989 (though they weren't identified as a distinct species until 1991). They were most likely transported to the Great Lakes as larvae in the ballast water of ships that originated in freshwater Eurasian ports and traveled across the Atlantic Ocean to North America.

How are quagga mussels and zebra mussels different?

At first glance, they look similar since both have black stripes on tan bodies and are very small. However, there are some differences. Quagga mussels are generally twice as large as zebra mussels (though quaggas are still only as big as an adult's thumbnail). Zebra mussels generally have a triangular shape, while quaggas are more rounded. Also, zebra mussels are generally darker than quaggas.

The mussels are different in other ways as well. Zebra mussels are dormant in winter, while quagga mussels eat year-round. Zebra mussels must attach themselves to a hard



surface, while quaggas can live unattached on sandy or silty lake bottoms. Zebra mussels are limited to shallow, warm, eutrophic (nutrient-rich) waters, while quagga mussels can inhabit waters ranging from shallow, warm, eutrophic waters to deep, cold, oligotrophic (nutrient-poor) waters. Zebra mussels are rarely found at depths below 150 feet. Quagga mussels have been found in water as deep as 330 feet.

The quagga mussels appear to be able to out-compete the zebra mussels. Studies conducted by the University of Wisconsin-Milwaukee and the National Oceanic and Atmospheric Administration found that between 2000 and 2005, quaggas almost totally replaced zebra mussels in several sampling areas.

How far have they spread?

Quagga mussels are found in all the Great Lakes except for Lake Superior. They have been found in the Mississippi River near St. Louis. While they haven't been observed in Wisconsin's inland lakes yet, it is expected that quagga mussels will follow in the path of the zebra mussel.

How do they spread?

Quagga mussel reproduction is similar to zebra mussel reproduction. A mature female mussel releases eggs, as many as one million per season, into the water. The eggs are fertilized outside the mussel's body and within a few days develop into free-swimming microscopic larvae called *veligers*. These veligers develop miniature bivalve shells and are free-swimming for three to four weeks while trying to locate something suitable to which to cling. The microscopic larvae can be spread by many mechanisms including water currents, anglers' bait buckets, and boaters' bilge and live wells. Adults can be spread when they attach to boats and aquatic plants, which are then transported to other lakes.

Do quagga mussels affect water recreation?

The quagga mussels, like zebra mussels, clog water intake structures, such as pipes and underwater screens. Companies and communi-

ties pay the cost of the reduced pumping capabilities that result from the encrusted structures. Quagga mussels clog the nets of commercial and tribal anglers used to catch whitefish and chubs in Lake Michigan. Recreational use of a lake can be significantly hindered by the mussels. The shells can accumulate on beaches or in swimming areas and easily cut the skin of swimmers and beachcombers. Mussels can also be an annoyance when they attach to boat exteriors and pier pilings.

Do quagga mussels affect lake ecosystems?

Quagga mussels cause many problems for lake ecosystems. They feed by drawing water into their bodies and straining out most of the suspended microscopic plants, animals, and debris for food. Each adult mussel is capable of filtering one or more liters of water each day. The result is a depleted food supply for other mussels and fish that feed on the microorganisms. Also, the greater water clarity leads to increased aquatic plant growth due to more sunlight penetrating deeper into the water. Additionally, quagga mussels accumulate organic pollutants within their tissues to levels more than 300,000 times greater than concentrations in the environment. These pollutants can be passed up the food chain, harming wildlife.

It should also be mentioned that recent studies in Lake Michigan show the quagga mussel is out-competing the zebra mussel and replacing it as the most destructive mussel to the Lake Michigan ecosystem.

Help Prevent the Spread of Quagga (& Zebra) Mussels

After using a boat or other equipment in a waterbody, do the following:

- Remove plants and animals from boat, trailer and accessory equipment before leaving the boat landing.
- Drain live wells, bilge water and transom wells before leaving the access area.
- Empty bait buckets on land.
- Dry your boat and equipment in a sunny location for at least five days before transferring to a new lake. If drying isn't possible, wash boat, tackle, downriggers and trailers with hot water.
- Flush water through the motor's cooling system and other boat parts that get wet.
- Learn what exotic organisms look like. Report questionable species and contact your local DNR service center for identification assistance; specimens are needed to confirm sightings.

How to Identify Quagga Mussels

(*Dreissena bugensis*)

Small, bivalve mollusks, similar to zebra mussels

Zebra Mussel

- About 2 cm in size
- Triangular shaped
- Color is variable
- Usually have dark stripes
- Sits flat on ventral side
- Symmetrical midventral line (where the two shells meet)



Quagga Mussel

- Gets up to 4 cm in size
- Rounder in shape
- Light tan to almost white, with narrow stripes or blotchy lines; Usually have dark concentric rings on shell
- Paler in color near the hinge
- Will not sit flat on ventral side



TO LEARN MORE:

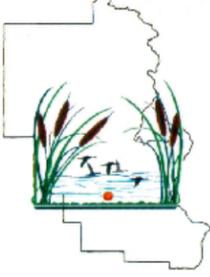
A new invasion: Quagga mussels take over lake, Milwaukee Journal Sentinel,

May 13, 2006

www.jsonline.com/story/index.aspx?id=423678

UW-Extension/DNR Aquatic Invasives Education Specialist Mandy Beall can help educate members of your lake association or community about exotic and invasive species. She can be reached by calling 608-261-1092, or by e-mail: amanda.beall@ces.uwex.edu.





Destination.... Marinette County Peshtigo River State Forest

By Chuck Druckrey,
Water Resource Specialist

At just over 12,000 acres, the Peshtigo River State Forest is one of the smallest in the state. But as the saying goes, good things come in small packages. The Peshtigo River State Forest contains four major river impoundments covering more than 3,200 acres, more than 6 miles of outstanding trout waters, 8 miles of maintained cross country ski trails, and hunting for deer, bear, turkey and all manner of birds and small game. All of this is located right next to a state park along some of the most scenic waterfront property in Wisconsin.

The Peshtigo River State Forest was officially established in 2001 when the Wisconsin DNR agreed to purchase the land from the Wisconsin Public Service Corporation for \$25 million. Just one year earlier, the State had purchased the 1,987-acre Paust Woods Lake Resort and 200 acres from the WPS to create Governor Thompson State Park. Most of the forest is located northwest of Crivitz in a narrow band bordering the Peshtigo River. Between boat landing 12, above Caldron Falls Flowage, and Sandstone Flowage, almost all of the shoreline is in public ownership. Also included in the new forest is a little more than

800 acres of land five miles west of Marinette along the shores of Bagley Flowage.

So what does the new state forest have to offer? If walleye fishing is your thing, check out High Falls, Johnson Falls or Caldron Falls Reservoirs. All contain healthy walleye populations. Local fishing clubs, working with the DNR also stock walleye in these waters to enhance natural reproduction. For the die-hard musky hunter all of these flowages hold musky but only one, Caldron Falls, receives a Class A musky water designation. Class A waters are considered to provide consistent angling action with the potential for trophy fish. All reservoirs in the Peshtigo River State Forest hold largemouth bass, smallmouth bass, northern pike, and panfish. Johnson Falls Reservoir also supports brown and rainbow trout. Access for anglers and boaters is plentiful with 12 improved boat landings on Caldron Falls and High Falls alone. Bagley Flowage has one improved landing and Johnson Falls Flowage has an improved landing that is only suitable for smaller trailered watercraft.

For the serious trout fisherman a five-mile stretch of river below Johnson Falls Dam is one of the premier big-water trout destinations in the Midwest. Known locally as the Fly-Fishing Area, special regulations permit the use of artificial lures only. Large brown and rainbow trout inhabit this portion of the river along with walleye, northern pike, and smallmouth bass. Three angler access roads provide generally good access to this area. The Seymour Rapids entrance is on the west side of the river off of Bushman Road. The Spring Rapids entrance is located on Kirby Drive off of County Highway W. Both roads are single lane natural surface roads with limited turnouts and roadside parking. On the east side of the river, the Medicine Brook entrance can be found on High Falls Road. Here you can find multiple river access points along five miles of narrow unimproved forest road. Presently the Medicine Brook access road has numerous areas of loose sand, steep slopes, and deep ruts that limit access to 4-wheel drive vehicles. Major improvements are planned for this summer that will smooth and stabilize the road and provide more vehicle turnouts.

Power boaters and canoeists alike will find plenty of opportunities on the reservoirs and river here. High Falls Reservoir in particular is

popular with water skiers and recreational power boaters. Much of the boat traffic on the other three reservoirs is fishing related. While it's expected that Johnson Falls and Bagley Flowage will continue to be fishing destinations, Caldron Falls is likely to see a substantial increase in recreational power boating when the Governor Thompson State Park opens to full capacity. Despite the increasing motorized boat traffic, both High Falls and Caldron Falls offer many small bays, islands and inlets for the canoeist or kayaker to explore and Johnson Falls with its restricted boat access is a great resource for the quiet water enthusiast. For the more adventuresome, the fly-fishing area offers a spectacular float trip with swift water and several class I and class II rapids. A multi-day trip can be taken by using the three remote canoe campsites located on Johnson Falls Reservoir and in the fly-fishing area. Overnight stays are limited to one night and users must travel by watercraft.

The recreational opportunities do not end with the summer. The Marinette County Cross-County Ski Association maintains and grooms more than 13km of cross-country ski trails here. These are part of a larger 30km trail system located on state, county and private property. Snowmobilers can also tour the state forest on more than 20 miles of designated snowmobile trails. One of the most scenic trails follows the Medicine Brook access road in the Fly-Fishing Area. Of course, no discussion of local winter recreation is complete without ice fishing. All of the flowages are popular ice fishing destinations.

Whether traveling by boat, vehicle or on foot, the Peshtigo River State Forest offers many spectacular views and abundant wildlife. Many of the boat landings include picnic facilities and short fishing trails along the water. Some of the most spectacular views can be found in the fly-fishing areas where high bluffs offer sweeping views of the river valley and surrounding forest.

While providing recreational opportunities is an important mission of the Peshtigo River State Forest, timber management is equally important. Visitors to the state forest are likely to see some major changes in the near future. Unfortunately, age, disease and the exotic gypsy moth caterpillar have severely damaged large portions of the forest. According to DNR Forest Manager Dan Mertz, thousands of acres of aspen and scrub oak in the forest are over mature and in decline. Many of these areas are being taken over by brush and red maple that is less desirable to wildlife. Over the next several years many of these areas will be clear-cut, which is the best method to regenerate the oak trees.

Visitors to the state forest have many options for food and lodging. Numerous supper clubs, bars, hotels and resorts can be found just outside the forest boundary. For campers, Marinette County operates Twin Bridge and Old Veteran's Lake Campgrounds. Twin Bridge also has a very popular beach and picnic area. Governor Thompson State Park, while only open for day use now, will eventually offer a developed campground and walk in campsites.

So you can see that despite its small size, our newest state forest offers something for everyone and activities for every season. Whether you like fishing, boating, canoeing, skiing or sight seeing you can find it all here.

More Information

For maps and more information, you can visit the Wisconsin DNR website at www.dnr.state.wi.us and click on *Find a State Park*. You can also contact them at their offices:

Peshtigo River State Forest
715-757-3965
Governor Thompson State Park
715-757-3979

N10008 Paust Lane
Crivitz, WI 54114

For information about local lodging, dining and other tourist establishments, visit the **Crivitz Recreation Association's** website at www.crivitzrecreation.com or pick up a copy of the *Marinette County Tourism Guide* available free at many businesses around the county.



Fly-Fishing Area on Johnson Falls Flowage of the Peshtigo River



Where in Marinette County?

Tell us where this picture was taken



Send us a note including your name, address and phone or go to www.marinettecounty.com/lw_home.htm to give us your answer.

Any interesting facts about the subject are also welcome.

Please respond by June 16, 2006

Correct answers will be entered into a drawing to win a Harmony Arboretum tote bag and a birdhouse built and donated by the 6th Graders from Peshtigo Middle School.

From the September 2005 contest, Jenny Staidl guessed correctly that this building is the power plant at the Chalk Hill Hydroelectric Dam on the Menominee River. It is located near the bridge on County Road K in the Town of Amberg. Constructed in 1926, it is an example of Period Revival details applied to an industrial building. Materials used include stone, brick, mosaic tile, stained glass, wrought iron, steel and bronze.



This dam is one of four on the Menominee River considered for fish passage. The River Alliance, a Wisconsin river advocate group, is working with dam operators We Energies, North American Hydro, and Alliant Energy to make this happen. The goal is to develop upstream and safe downstream fish passage (preventing fish from entering hydro turbines) at White Rapids, Chalk Hill, Menominee, and Park Mill dams. They are also working with the Wisconsin and Michigan Departments of Natural Resources and the U.S. Fish and Wildlife Service to ensure that fish, such as the ancient lake sturgeon and paddlefish can again inhabit many miles of their original spawning and foraging habitat, currently blocked by dams.



Harmony Arboretum

June 2006

Located 7 miles west of Marinette, 1/2 mile south of State Highway 64 on County E
All programs are free unless otherwise stated.

June 3 Proper Tree Planting 9:30 - 11:30 a.m.

Learn how to properly plant bare-root, potted, or ball-and-burlapped trees so that they can have a full, productive life. Presented by Scott Reuss, UW Extension Horticulture Agent. Call Linda Warren, UWEX at 715-732-7510 for more information.

June 17 Birding Hike 6:00 - 8:00 a.m.

Take a guided hike with Greg Cleereman, County Conservationist and recreational birder, through the Harmony Hardwoods to view and hear many different species of birds. Bring boots, binoculars, mosquito and tick repellent, and field guides if you wish. Call Greg at 715-732-7783 to register.

June 20 Successfully Growing Brassicas 6:30 p.m.

Cabbage, cauliflower, broccoli and many other brassica family vegetables can be productive and flavorful components of your gardens. Presented by Scott Reuss, UWEX Horticulture Agent. Call Linda Warren, UWEX at 715-732-7510 for more information.

Nature's Almanac

June 1

Lilac time signals that spring has truly arrived. This small tree (or shrub) grows in dense clumps and is seldom more than twenty feet tall. Stems not more than a few inches in diameter are covered with heart-shaped leaves about three inches long. During most of the year, the lilac appears to be just another small tree.

But in spring, the beautiful flowers that come in shades from purple to blue to white, emitting an unforgettable fragrance, make the lilac unique. These one-half-inch-long tubular four-petaled flowers grow in long clusters. They begin to bloom individually, but at the peak of lilac time, each flower is open.

We are not the only ones to notice the color and fragrance of this flower: many other critters do as well. Butterflies, moths, bees, wasps, flies, and hummingbirds all stop by to check out the lilac. Lilacs begin to bloom in late May, but it is typical for lilac time to be at its peak in early June.

June 18

A porch light left on all night in early summer may attract the large green luna moth. Its palm-sized wings are light green, outlined with purplish brown. Clear eye spots mark each wing and the hind wings are drawn out into long sweeping curved tails. The thick white body has large feathery antennae.

Luna moths are named after the moon for what appears to be two reasons: the green camouflage that allows them to sit still all day and fly at night makes them rare in the daytime;



and the curves at the edges of the extended hind wings remind some observers of waxing and waning moon phases.

Large and beautiful, the luna moth is also well designed by nature. Its body contains stored food from last summer which not only helped it survive the winter in the cocoon, but sustains it now. Having no mouth, adults do not live long. After mating, the female uses the last of her energy to deposit her eggs. Caterpillars hatch and feast on the leaves of alder, aspen, willow, and birch before forming a leafy cocoon that is concealed all winter by ground leaf litter.

June 24

Because the forest is now shady, June wildflowers grow best in open meadows and fields. A drive down side roads takes us through scenes tinted yellow, white, and orange, all blended with green.

Many different wildflowers contribute to this landscape. Daisies bloom white and buttercups yellow, but orange hawkweed dominates in June. Most of the flowers that make up this colorful meadow are aliens and are considered weeds. This realization reminds us that sometimes a weed is a wildflower that is not appreciated.

Orange hawkweed may have been brought here from Europe by herbal doctors who used it as a cure for eye diseases. The belief that orange plants were good for eyesight and that birds with good sight, such as hawks, drank the juice led to both the name and the medicinal use of orange hawkweed. It is also called Indian paintbrush or devil's paintbrush. While the former name belongs to another plant, the latter name describes rancher's disdain for this composite that, because it is avoided by cows, spreads like dandelions, taking over the pasture.

From, "Backyard Almanac," by Larry Weber
Illustrations by Judy Gibbs





Marinette, Wisconsin * Menominee, Michigan

This is a recreational club for those who love the outdoors, enjoy silent sports, and welcome the company of others in outdoor activities. This diverse group includes all kinds - the occasional nature hiker to the hardcore enthusiast.

Some of the club's favorite activities include hiking, camping, backpacking, paddling, cross-country skiing and snowshoeing. Check out some of the trips and activities already scheduled for this month. Guests are welcome.

June 5: 1st Annual Summer Cookout
Get to know your Wishigan neighbors that have something in common – the love of the outdoors!

June 9-11: Nicolet National Forest Bird Survey

June 17: Harmony Bird Hike

Visit our website for more information!
www.wishigan.com

Free Day at Marinette County Parks Saturday, June 3

All Marinette County Parks, boat landings and day use areas will have free admission. Camping fees still apply. Come and enjoy the natural scenic beauty of our county.

Twin Bridges Park (94 Acres) 62-unit campground with electricity on each site, new shower/restroom building, picnicking, boating, swimming, fishing, playground and scenic views of High Falls Flowage. Follow County Hwy X west 11 miles from US-141 at Middle Inlet, then north ½ mile on Parkway Road.

Old Veteran's Lake Park (80 Acres) Boating and fishing on Old Veteran's Lake and High Falls Flowage, camping, and swimming. 15-unit campground on Old Veteran's Lake three miles north of Twin Bridges Park on Parkway Road. Water is available at a hand pump.

Michaelis Park & Little River Boat Landing (5 Acres) View of Green Bay, swimming, picnicking, next to Little River Golf Course. The park & boat landing are located just south of the City of Marinette. From the junction of University Avenue and Shore Drive, go 2 miles south on Shore Drive.

Cox Boat Landing Boat access to the Menominee River located just north of Marinette. From the junction of State Hwy. 64 and State Hwy. 180, travel 2 miles north on Hwy. 180.

To continue visiting our beautiful parks throughout the summer, a \$3 day use fee is charged at the gate, good at any of the Marinette County parks or boat landings for the day it's purchased. Otherwise, a \$12 annual park sticker can be obtained from the Parks Department. Camping fees are additional. For more information about Marinette County Parks, please call (715) 732-7530, or visit:
www.marinettecounty.com/parks_recreation.htm

Area Events Calendar

- May 20** **Peshtigo Fire Museum**
Opening for the summer. Hours: 10am-4:30pm daily. 715-582-4987
- May 27** **Amberg Museum & Historical Complex**
Opening for the summer. Works by local artists will be on display Memorial Weekend. Summer hours: Fridays 1-4pm, Saturdays 10am-4pm. Guided tours available by appointment. Free admission. 715-759-5698 or 715-759-5281
- June 3-4** **Wisconsin Free Fishing Weekend**
All ages can fish any Wisconsin waters without license or stamps. Applies to residents and nonresidents. All fishing regulations, such as size and bag limits, are still in effect.
- June 3** **Camp Bird Open House**
Camp Bird, 14 miles west of Crivitz. Follow signs off County W. 10 a.m. to 2 p.m. *See page 1 for more details.*
- June 17** **Harmony Birding Hike**
Harmony Arboretum. 6 - 8am. Marinette County Land & Water Conservation, 715-732-7780. *See Harmony Arboretum Calendar on page 7 for more details.*
- June 24** **Wausaukee June Jubilee**
9:30am - 4:30pm. Register to win door prizes at Northwoods Traditions, The Variety Store, The Ice Cream Station, and the Coffee Mug. 715-856-5921
- June 25** **Menominee River Century Bicycle Ride – 25 Anniversary**
8am. Sponsored by Bay Area Medical Center. Preregistration required. 800-236-6681
- June 25** **Art For All**
Great Lakes Memorial Marina Park, Menominee, MI. 10am - 5pm. Juried art show and sale, live music, children's activities. 800-236-6681
- June 29 – July 1** **Sand Lake Conservation Camp**
Camp for kids grades 8-10 who love the outdoors and want to learn more about our natural resources. *See page 2 for more details.*
- July 1** **"Drunkard's Path" Quilt Raffle**
Wagner Town Hall. 10am. Hosted by the Wagner Historical Society. 715-732-6650

SERVICEBERRY *continued...*

meadow voles will all damage the bark and/or feed on twigs. When the fruit are ripe, dozens of bird and small mammal species will race you to the delectable fruit. Bird netting may be an easier alternative to other repellent techniques. Some of the better fruit production cultivars are the following: *Honeywood, Smoky, Thiessen, and Martin.*

Maintenance is most important as you establish the young trees, making sure they have enough water available to them. If you desire higher fruit production, you may also need to water them during the fruiting season. These plants may over-respond to fertilizer additions, so it is best to use composts and mulches as natural, slow-release nutrient sources, as well allowing you to easily manage weeds around them.

There are also ways that you can propagate plants from native sources. If you are interested in the specifics of seed saving or establishing cuttings of this species, you can access that information and other information about *Amelanchier* at the following website:
www.hort.net/profile/ros/amear/

Also, for this information or any other horticultural information or questions you may have, you can contact Scott or Linda at the UW-Extension office, 715-732-7510, or toll-free at 1-877-884-4408 or e-mail Scott at scott.reuss@ces.uwex.edu.

Spokes & Folks Bicycle Club

www.spokesandfolks.com



Guests are welcome, helmets are required. Lights are recommended on some rides.

June 2006 Ride Schedule

(See website for more details)

Luigi's Dinner Ride

June 15 5:30 p.m.

Riders wishing to partake in dinner at Luigi's need to make reservations with the Lata's at 715-735-5961.

Sunday Morning Breakfast Rides

May 6 – September 24

Bring your family, bring your appetite. Riders will ride to and from breakfast for a social ride great for all levels.

Wednesday Fast Rides

6:00 p.m.

This is a super fast drop ride. Anyone can join, but if you aren't keeping up, you will be left behind, or dropped.

Wednesday Easy-Pedal Rides

June 7 – August 30

The pace is easy, suitable for children, beginners and recreational riders. Rides are 12 – 16 miles long.

