

Northwoods Journal - July 2014

A Free Publication about Enjoying and Protecting Marinette County's Outdoor Life

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Fish - and the People Who Catch Them - Should Care About Impervious Surfaces

By Greg Cleereman, County Conservationist

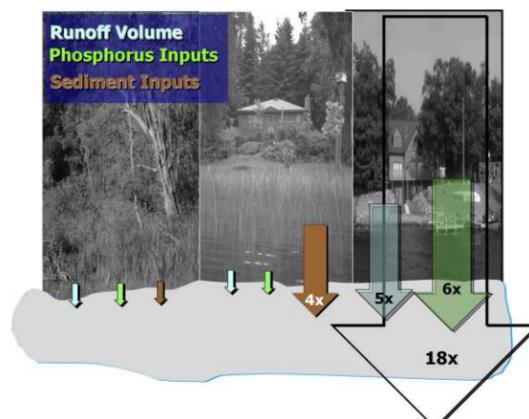
It is not commonly recognized, but what happens on the land has a profound effect on nearby lakes and streams. Habitat fragmentation or loss, erosion and sedimentation, water temperature, and dissolved oxygen changes are just a few of the impacts of improper land management. Decades ago the Wisconsin Legislature recognized this and enacted laws to protect the quality of life, the fish and wildlife, and the natural scenic beauty that draws people to Marinette County.



Currently, State of Wisconsin is finalizing changes to Administrative Code Chapter NR115. Per Wisconsin State Statutes, the NR 115 code regulates shoreland activities to "further the maintenance of safe and healthful conditions; prevent and control water pollution; protect spawning grounds, fish and aquatic life; control building sites, placement of structure and land uses and reserve shore cover and natural beauty."

One of the changes to NR115 is due to recent studies showing the impacts of "**Impervious Surfaces**" on water quality and wildlife habitat. *An impervious surface releases as runoff all or a majority of the precipitation that falls on it (water can't drain through the surface).* Impervious surfaces include rooftops, sidewalks, driveways, parking lots, and streets unless specifically designed, constructed, and maintained to be pervious. On gravel roads and driveways, water can seep through.

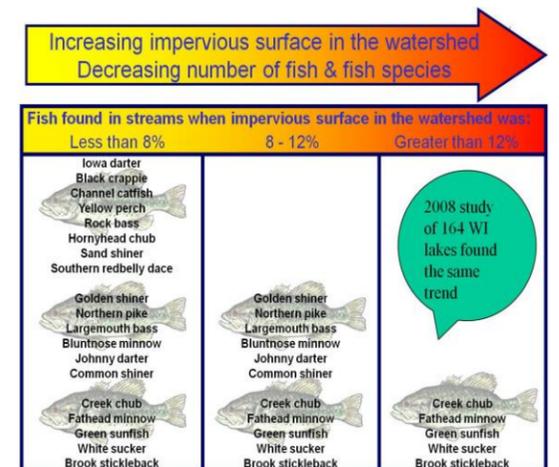
A 2012 publication by the UW-Center for Land Use Education, *Impervious Surfaces: How They Impact Fish, Wildlife, and Waterfront Property Values*, is the basis for this article and provides a summation of nineteen water quality and habitat studies. Impervious surfaces can affect water and habitat quality several ways. The figure below shows how runoff changes as the percentage of impervious surfaces increases. A shoreline lot that has 20% impervious surface results (on average) with five times more **runoff volume**, six times more **phosphorus** inputs, and eighteen times more **sediment** input than a completely undeveloped lot. Meanwhile, a lot that is only 8% impervious results in no increase in runoff volume or Phosphorus input, and produces only four times higher sediment input.



Runoff volume is important because it increases erosion. The runoff is often moving faster too. Water can then carry larger particle sizes for longer distances. The resulting sediment can bury rocky and woody habitat, smother fish spawning and rearing areas, and reduce visibility under water. Sediment also creates a "clean slate" on a lake or river bed that aquatic invasive species can readily colonize.

Phosphorus is a "limiting factor" in Wisconsin lakes and streams. Each additional pound of phosphorus reaching surface waters can result in 500 pounds of additional plants. If enough phosphorus is present, rooted aquatic plants (especially exotic species), can form stands so dense they can't be navigated. Even worse, algae could dominate the system. In any case, excessive plant growth can result in lower fish populations and even fish kills.

Numerous studies on stream watersheds have shown fish populations decline as impervious surfaces increase. A study of 47 southeastern Wisconsin streams found when impervious surfaces covered 8-12% of the land draining to the stream the number of fish species dropped. Where imperviousness exceeded 12%, researchers found the number of fish species plummeted. The graphic below shows which species disappeared.



Streams that flow through highly impervious watersheds tend to be "flashy." These streams can be raging torrents right after a rain, but quickly become a mere trickle during dry periods. This is because there is minimal "base flow," precipitation that soaked into the soil and organic matter. Base flow slowly releases to the stream, keeping water levels up during dry periods.



In addition to be flashy, streams in impervious watersheds tend to be much warmer than in undisturbed watersheds. Rooftops, black top, concrete, etc. all transfer heat to runoff passing over it. Temperature changes alone are some-

Continued next page

Astronomy Night at the Harmony Arboretum



Have you ever wanted to know more about the night sky? Anne Bartels of Marinette County Land & Water Conservation Division will give a free stargazing tour of the summer night sky and share general astronomy information from 9:00-10:00p.m. on Thursday, July 17, at the Harmony Arboretum, located 7 miles west of Marinette & 1/2 mile south of State Highway 64 on County Road E.

Learn about constellations, look for satellites and meteors, and enjoy an evening under the stars! Viewing equipment will be available but please feel free to bring your own. Dress for the weather. Hot beverages will be provided. For more information, call 715-732-7784.

Harmony Arboretum & Demonstration Gardens is a 460-acre county farm that has been developed into a conservation and horticulture education and demonstration area. The arboretum holds a majestic hardwood forest, winding walking trails, a restored prairie, and demonstration vegetable and flower gardens complete with a windmill for water. It is always open to the public, free of charge.

Impervious Surfaces, continued

times enough to eliminate trout from a stream. Trout need high levels of dissolved oxygen, and warm water does not hold dissolved oxygen nearly as well as cold water. For example, water near freezing can hold almost twice as much dissolved oxygen as water at 80°F.

Impervious surfaces affect some of our favorite fish. Below are a couple of examples.

Trout

Brook trout and brown trout are found in many Wisconsin streams and require cold, clean water to survive. Both species are sensitive to pollution and low oxygen conditions. A study conducted on 33 coldwater streams in Wisconsin and Minnesota found that when impervious surfaces covered more than 11% of a watershed, trout were eliminated from those streams.



The brook trout (above) is the only trout species native to Wisconsin. Part of their diet consists of aquatic insects and small fish, whose populations are negatively impacted by increased runoff and sedimentation.

Walleye

Impervious surfaces can reduce walleye reproduction by causing soil erosion, which leads to sedimentation. Although impervious surfaces are not the only cause of sedimentation, when sediment covers spawning grounds, spaces between rocks and gravel become buried. This can quickly cause walleye eggs to die because of inadequate water flow and oxygen deprivation. Adults may be able to cope with these conditions, but harming eggs and embryos survival puts a healthy walleye population at risk.



Walleye typically spawn in mid-April and early May when spring runoff is highest. They prefer rock and gravel-covered bottoms due to the requirements of their sensitive eggs.

The connection between land use and water quality is very strong. However, if we remain mindful of this connection while making land stewardship decisions, we can get most of what we want while retaining most of what our lakes and streams need. The reward is clean water, more recreational fun, and higher quality of life. The fish will thank us and so will future generations.

To view online the full *Impervious Surfaces* publication this article is based on, including a list of references, visit: <http://learningstore.uwex.edu/>. Enter "impervious" in the SEARCH box, then click "GWQ061" and look for the yellow "View PDF" button. Copies of this publication are also available at the Marinette County Courthouse in the Land Information Office.

For a video about Impervious Surfaces, go to: <https://www.youtube.com/watch?v=fJ2JQQ9pVqY>.

**Focus on Local Conservation Groups - Marinette County****Chapter of Trout Unlimited**

By Doug Erdmann, Chapter President

The Marinette County Chapter of Trout Unlimited was started in 1983. Our mission is conserve, protect, and restore our coldwater fisheries and their watersheds.



Pike River

Trout Unlimited was formed in 1959 on the banks of the Au Sable River near Grayling, Michigan. The first members were guided by the principle, "take care of the fish and the fishing will take care of itself." Since then, Trout Unlimited has grown to over 150,000 members and 400 chapters from Alaska to Maine.

In Wisconsin, there are 21 Trout Unlimited chapters. Since 1983, the Marinette County Chapter of Trout Unlimited has raised over \$306,000. Nearly all of the money raised is used on Northeast Wisconsin projects. Some of the money raised included:

- 🐟 \$14,075 for kids fishing day
- 🐟 \$20,985 for education
- 🐟 \$25,170 for stream surveys
- 🐟 \$51,279 for land purchases
- 🐟 \$79,822 for beaver control
- 🐟 \$94,864 for stream improvement projects



Beaver dam removal on the First South Branch of the Oconto

Our chapter works in partnership with other Northeast Wisconsin Trout Unlimited chapters along with the Wisconsin DNR, U.S. Forest Service, and many other organizations. Chapter meetings are held from October through April at the Dome Lanes in Marinette. Our annual fund raiser is held each April. Proceeds help fund projects and education programs. A trout fishing program is held each winter which includes fish biology, equipment, fly tying and fly casting. Every year we also sponsor kids' fishing days.



Work crew on the North Branch of Beaver Creek



Marinette County is blessed with 626 miles of trout waters, more than any other Wisconsin county. There are 423 miles of Class 1 trout waters that are high quality trout habitats and have sufficient reproduction to sustain populations of wild trout at or near carrying capacity. Some of the better Class 1 streams are:

- 🐟 North Branch Beaver Creek
- 🐟 Middle Inlet Creek
- 🐟 South Branch Pemebonwon River
- 🐟 North Branch Pike River
- 🐟 Wausaukee River



12" brook trout

Marinette County has 158 miles of Class 2 trout waters. Streams in this classification may have some natural reproduction, but not enough to utilize the available food and space. Therefore, stocking is required to maintain a desirable sport fishery. These streams have good carryover of adult trout and often produce fish larger than average size fish. Some of the better Class 2 streams are:

- 🐟 North Branch Pemebonwon
- 🐟 Peshtigo River
- 🐟 Pike River

Trout Unlimited is not a fishing club, but many of our members do trout fish. At Trout Unlimited we do not care if you fly fish, spin fish, or bait fish. We do not care if you catch and release your trout or take them home to eat. We do want you to get out and enjoy the beautiful places wild trout live.

For more information check out our website: <http://marinettecounty.tu.org> or check out the Trout Unlimited national website at www.tu.org.

**Northwoods Journal Online**

Would you like to read current issues of the *Northwoods Journal* online? Go to www.marinettecounty.com and click "Northwoods Journal" in the Quick Links menu at the right of the page. We can send an e-mail reminder when each new issue is posted online. Contact Anne Bartels, LWCD Information & Education Specialist: abartels@marinettecounty.com or call 715-732-7784 for more information.

Outdoors Alliance for Kids (OAK) Supports Healthy Kids Outdoors Act to Reconnect Kids with Nature

From <http://outdoorsallianceforkids.org>

On May 21, 2014 Congressman Ron Kind (D-WI) and Senator Mark Udall (D-CO) introduced legislation aimed at connecting children, youth and families with the outdoors. Supported by the Outdoors Alliance for Kids (OAK), the **Healthy Kids Outdoors Act would support state, local and federal strategies to reconnect Americans with nature, improve children's health, and support future economic growth and conservation efforts.**

This legislation will encourage kids and families to be active outdoors through unstructured play; outdoor recreation such as camping, hiking, hunting and fishing; public health initiatives; outdoor learning centers; service learning and other programs.



photo © the Nature Conservancy

"Coloradans know our mountains, parks and open spaces are essential to our special way of life. But as study after study shows childhood obesity rates are increasing, we must do more to connect our kids with opportunities for outdoor adventure," Senator Mark Udall said. "The Healthy Kids Outdoors Act supports local initiatives across the United States to ensure our kids everywhere have access to outdoor recreational opportunities and they can reap the numerous benefits of an active lifestyle."

"Young people today spend less time engaged in outdoor activity than any other generation in history, which takes a serious physical and mental toll on them at a critical time in their development," said Congressman Ron Kind. "This bill provides tools for our state and local leaders to find new opportunities to promote active, healthy outdoor lifestyles to our kids. And by starting early in life, young people are more likely to care for their health and their natural surroundings as adults who will then pass those values on to future generations."

Studies indicate that outdoor play increases fitness levels and improves physical, mental and social health and well-being. The Healthy Kids Outdoors Act would:

- ✦ provide incentives for states to develop dynamic five-year strategies to reconnect children & families to the great outdoors
- ✦ compel the President to involve federal agencies & national partners to create a similar plan at the national level
- ✦ support further research documenting the health, conservation & other benefits of active time spent outdoors in the natural world

"Our nation's kids are out of shape, tuned out and stressed out, because they're missing something essential to their health and development – a connection to the natural world," said Kevin Coyle, vice president for education and training for National Wildlife Federation. "We applaud Congressman Kind and Senator Mark Udall for introducing legislation to reverse this trend by getting kids and families outside on a regular basis."



"By supporting strategies that will result in more kids spending more time outside, the Healthy Kids Outdoor Act promotes the health and development of our nation's children," said YMCA of the USA president and CEO Neil Nicoll. "Outdoor play improves children's physical, social and emotional health. It engages their senses, develops curiosity and creativity, reduces stress, and fosters a lifelong sense of connection to and concern for the environment. The Y is excited to work with Congressman Kind and Senator Udall on this important effort to enrich the health and well-being of children across the country."

"As the father of three young children, I know just how important it is for them to get outdoors and connect with nature," said Michael Brune, executive director of the Sierra Club. "I also know that nature is not in everyone's backyard, which is why Sierra Club supports the Healthy Kids Outdoors Act to make the outdoors more accessible to kids and families everywhere."

"A life-long passion for conservation, hunting and fishing, and active outdoor recreation begins at a young age," said Scott Kovarovics, executive director of the Izaak Walton League of America. "The Healthy Kids Outdoors Act will help children and families to get outside and experience the natural world around them."

About the Outdoors Alliance for Kids (OAK)

OAK is a national strategic partnership of diverse organizations with a common interest in connecting children, youth and families to the outdoors. Members of OAK believe that wellness of current and future generations, the health of our planet and communities, and the economy of the future all depend on humans having a personal, direct and life-long relationship with nature and the outdoors.

OAK brings together more than seventy businesses and organizations including the American Heart Association, Children & Nature Network, Izaak Walton League of America, National Association of State Park Directors, National Recreation and Park Association, National Wildlife Federation, The North Face, the Outdoor Foundation, Public Lands Service Coalition (a program of The Corps Network), REI, Sierra Club, the Wilderness Society and the YMCA of the USA to address the growing divide between children, youth and the natural world.

For more information:

<http://outdoorsallianceforkids.org>



Meet the Land Information Department Summer Intern!

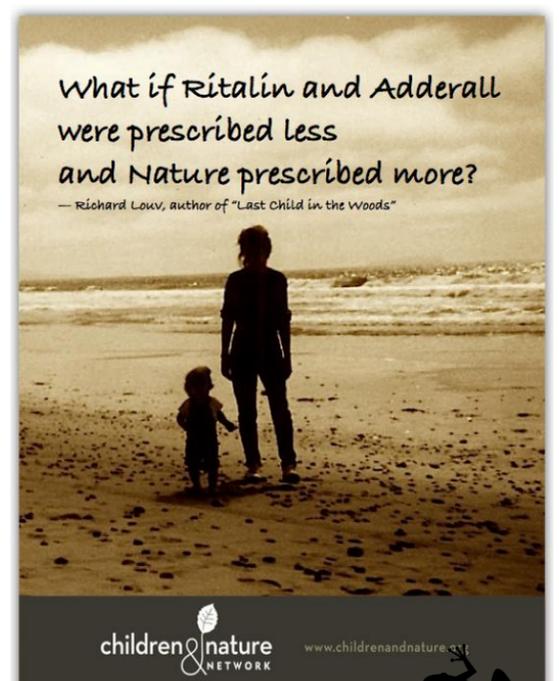


Hello, my name is Danielle Budish. I am a 2008 graduate from Peshtigo High School, and am currently pursuing a Natural Science degree from the University of Wisconsin-Stevens Point. I have minors in biology, earth science and psychology and will be graduating in the fall of 2014.

In Stevens Point, I am currently a site supervisor for the YMCA's Great Escape Program, where I teach a physical education and Y-core value based curriculum to children ages 5-12, both before and after school. Last summer I worked for Marinette County as a watercraft inspector with Clean Boats Clean Waters. I got the opportunity to talk with many individuals about invasive species, proper cleaning techniques and travel to places I've never been to. And at Marinette County's Sand Lake Conservation Camp, I get to share and enjoy the outdoors with all sorts of kids.

My family has had a huge influence on my life and is a major contributor in my decision to choose a degree in Natural Science. My two passions are the outdoors and children, and with my Natural Science degree I get to do both! I have taken a wide variety of courses that have expanded my knowledge greatly. Some of these courses include: plant/animal biology, geology, ecology, geography, human/canine psychology and ichthyology.

Outside of class, I take every opportunity I can to get outdoors. I love hiking, camping, traveling, reading, fishing, drawing, and kayaking. I am very much looking forward to the challenge of being the intern for the Land Information Department this summer, and I know that I will learn much from the staff here.



On the Lookout for Garlic Mustard in Marinette County

By Danielle Budish, Land Information Department

It's that time again to get outside and enjoy the great outdoors! But it is also the time to keep a watchful eye out for invasive plants hiding in your own backyard.



Adult garlic mustard plant

Garlic mustard was brought to the United States from Europe as a culinary herb (as the name suggests, it is a mustard plant that tastes like garlic). A single plant can produce roughly 8,000 seeds a year. Seeds are viable for about 7 years. Garlic mustard is able to take over forest understories, cover the forest floor, and drive out native plants by releasing chemicals that inhibit native seedling growth. Like most invasives, garlic mustard spreads readily since it has no natural predators or diseases. Garlic mustard is wreaking havoc on natural areas across the state.

Spring and summer are the best time to identify garlic mustard. Garlic mustard plants first appear as small rosettes with leaves that are mostly round with scalloped edges (see photo below) and smell like garlic when crushed. In late spring, second year plants send up a stalk with alternate triangular leaves. Adult garlic mustard has numerous small, white flowers that rapidly turn into seedpods just before the plant dies.



Young garlic mustard plant – note scalloped leaf edges

You can help stop the spread of garlic mustard and other invasive hitchhikers! The simplest step is to brush off any residue from your shoes, tires, etc. before you leave a natural area. Pets and clothes are also great at catching seeds trying to 'hitch a ride.' You can physically pull out the plant, but use caution because you *must* get the whole root system. Otherwise the plant will regrow. If you aren't comfortable pulling the plant, report invasive plant locations and/or send in pictures of potentially invasive plants to the staff at the Marinette County Land & water Conservation Division (LWCD) or the UW-Extension office (both in the Marinette County Courthouse).

For more information, or to report an invasive location, contact Greg Cleereman at gcleereman@marinettecounty.com, or call the LWCD office at 715-732-7780. For larger infestations, the **Wild Rivers Invasive Species Coalition (WRISC)** is available to identify unknown plants and assist in control efforts.



Wild Rivers Invasive Species Coalition (WRISC)

The Wild Rivers Invasive Species Coalition (WRISC) is a partnership of local, state and federal government agencies, land managers, utility companies, civic organizations, businesses, and individuals interested in implementing a comprehensive plan to manage the invasive species found in northeastern Wisconsin and Upper Michigan.

The coalition is led by a Board of Directors focused on reducing the spread of invasive plants and animals. These non-native species can have devastating ecological and economic impacts to communities. Healthy forestry and agricultural production, native fish and wildlife habitat, and recreational activities and properties are all at risk to these growing invasive populations.

Because some species are widely dispersed across the landscape and jurisdictional boundaries, this coalition is combining multi-agency resources and expertise to coordinate public education, workgroup activities, control methods and promote best management practices that will help slow the spread of these invaders.

Landowners in Forest, Florence and Marinette counties may qualify for the Private Forest Land Invasive Control Project conducted by the Wild Rivers Invasive Species Coalition (WRISC). This is a two year (2014-2015) grant funded project by the WDNR aimed at helping private land owners manage invasive species. WRISC will create 5-year invasive management plans for selected properties. In order to qualify, properties must be private non-industrial forested land of 500 acres or less. There is no fee to participate in this opportunity, but space is limited.

Boat Wash

Invasive species affect not only land, but rivers and lakes too. Do you know of an event on a lake or river near you? If so, request a boat wash station and operator to educate the public on aquatic invasive species and proper cleaning techniques so these lakes and river may be protected for future use. Funded by WE Energies Mitigation and Enhancement Fund, Great Lakes Restoration Initiative and the US Forest Service, **WRISC is accepting boat wash requests to the 5 counties of Dickinson, Menominee, Forest, Florence and Marinette.**



This opportunity is free, but donations are accepted for increased boat wash activities. Requests are not guaranteed, due to limited summer staff hours and other conflicts. For more information on WRISC, receive an application or

Harmony Hardwoods Memorial Forest Map Updated!



Newly updated with an illustrated map and numbered trail guide, the **Harmony Hardwoods Memorial Forest** is sure to have something for everyone to enjoy. Located in the Harmony Arboretum, this area offers a one-of-a-kind experience through some of Marinette County's untouched landscape. Whether you're a bird watcher, wildflower lover or an overall nature enthusiast, the Harmony Hardwoods is the destination for you.



Trillium and Violets (below) are two of the many spring wildflowers found in the Harmony Hardwoods Forest

The Harmony Arboretum and Hardwoods Memorial Forest is always open and is free to the public. Maps are available at the Marinette County Courthouse in the Land Information Department and in the UW-Extension office. For more information about the Harmony Arboretum, call 715-732-7510 (UWEX) or 715-732-7780 (Land Information). See page 8 for upcoming events at Harmony, and stop on by this summer for a visit.



to report an invasive location or boat wash request, feel free to contact Emily Anderson at wildriverscwma@gmail.com, or call 906-774-1550, extension 104.

For more information about invasive species:

- ✓ <http://www.misin.msu.edu> - Midwest Invasive Species Network
- ✓ <http://www.mipn.org> - Midwest Invasive Plant Network
- ✓ <http://www.ipaw.org> - Invasive Plants Association of Wisconsin
- ✓ <http://dnr.wi.gov/topic/Invasives> - WI Department of Natural Resources
- ✓ <http://www.northwoodscwma.org> - Northwoods Cooperative Weed Management Area
- ✓ <http://invasivespecies.wi.gov> - WI Invasive Species Council



Wisconsin's Wolves

By Aleta DiRienzo, Land & Water Conservation Division



The gray wolf story is one of the most compelling American wildlife tales. At one time, wolves were commonly found throughout North America. During the last century and a half, this species was hunted primarily due to conflicts with human interests and westward expansion, and was extirpated throughout most of its range. Today, the wolf is making a comeback in some of its former habitat, where it plays a vital role in the health and proper functioning of ecosystems. This animal is one of the world's best-known and well-researched animals, with more books written about it than any other wildlife species.



The wolf has a long association with humans in areas of the world where they live, not only as a part of natural ecosystems but also as a competitor for food and space. Many cultures have stories and mythology surrounding the wolf, its place as a predator, and its relationship to humans. Due mostly to resource competition and fear of attacks on humans, deliberate human persecution has reduced the species' range to about one third. Today, the wolf is found mostly in wilderness and remote areas, particularly in Canada, Alaska and the northern latitudes of the USA.

Competition with people for livestock and game species, the perceived danger by wolves to people, and habitat fragmentation are continued threats to the species. Recently, wolves were taken off the endangered species list by the U.S. Fish and Wildlife Service. After federal protection was removed, hunting of wolves during specified seasons and in certain areas became legal in the Northern Rockies and Great Lakes States. An immediate hunting season on a species losing their protected status was unprecedented in the history of the Endangered Species Act.

Wolves' Way of Life

The wolf is a social animal, whose basic social unit consists of a mated pair and the pair's adult offspring. The average pack consists of a family of 5-11 animals, (1-2 adults, 3-6 juveniles and 1-3 yearlings) or in some instances, two or three such families. In perfect conditions, the mated pair produces pups every year, with offspring typically staying in the pack for 10-54 months before dispersing. Pups are born in the spring with the litter consisting of 5 to 6 pups. Like dogs, they are born blind and deaf and are covered in soft grayish brown fur. Their eyes open after approximately 9 to 12 days. The pups will venture out of the den after 3 weeks. The mother wolf won't leave the den for the first few weeks. The entire pack will provide food for both the mother and the pups for the time being. At 3 to 4 weeks the pups begin to eat solid food. By autumn, pups are mature



enough to hunt with the adults for large prey. 40 to 60 percent of wolf pups die each year due to starvation, other predators, and diseases such as distemper and canine parvovirus.

-  Legal status in U.S.: Federally delisted since January 27, 2012
-  2014 Numbers in Wisconsin: 650
-  Length: 5.0-5.5 feet long (including 15-19 inch tail)
-  Height: 2.5 feet high
-  Weight: 50-100 pounds - average for adult males is 75 pounds; for adult females, 60 pounds

Wolves are territorial and establish territories far larger than needed to survive in order to assure steady stream of prey. Territory size depends on two things: how mature the pups are and the availability of prey. Wolf packs constantly search for prey, covering about nine percent of their territory per day. Prey density tends to be higher at the territory boundaries, but wolves don't like to hunt at the fringes due to possible fights leading to fatalities with other packs. Packs typically keep to the same area and usually only leave their territory during severe food shortages. A new pack is usually founded by an unrelated dispersed male and female traveling together in search of an area without hostile packs. Dispersing wolves have been known to travel hundreds of miles from their home territory to find a mate.



A traveling pack in Yellowstone National Park

Wolves defend their territory by scent marking, attacks and howling. The alpha pair will leave scent markings regularly throughout their territory. Such markings persist 2 to 3 weeks and are typically placed near rocks, boulders, trees or the skeletons of large animals. Fights are the principle factor in wolf mortality. One study showed 14-65% of wolf deaths in Minnesota and Denali National Park were due to other wolves attacking a trespassing wolf pack in their territory. Gray wolves are generally monogamous, and mated pairs usually remain together for life. Upon the death of one mated wolf, pairs are quickly re-established. Males are the dominant sex in wolf populations, and unpaired females are rare.

Wolf Identification

The following wolf characteristics were designed to help non-biologists determine if an animal is a wolf, dog, or hybrid (a hybrid is either a wolf/dog or wolf/coyote result from mating a dog and a wolf or a coyote and wolf). Following are measurements taken from 24 adult wolves. Certain characteristics vary with age and health status, such as canine wear and fur conditions.

-  Head is relatively large, with broad cheeks ~ 5.75 inches (~15 cm) across, below the eyes.
-  Face markings are well blended, lacking distinguishable borders.
-  Well furred erect ears rounded at tip ~ 4.75 inches (~12.1 cm.) long.
-  Light colored slanted eyes, ranging from amber to yellow.
-  Normal coloration is rusty brown (cinnamon) with black tipped guard hair, winter coat has thick under fur and guard hair.
-  Elongated snout (non-dished) with black nose and large ~ 1.0 inch (~23 mm) inward curved canine teeth.

Continued next page

County Landfill & Area Recycling Information

MAR-OCO County Landfill

(Marinette and Oconto Counties)
N7785 Shaffer Road, 5 miles west of Crivitz off
of County Rd. A
(715) 854-7530

2014 Hours

Monday-Friday, 8 a.m. – 3:30 p.m.
2nd & 4th Saturdays, May – October
8 a.m. – 12 p.m.

Closed all other Saturdays, Sundays & holidays

Yard waste, liquid/septic waste, automobile parts, fuel tanks, electronics, & recyclables are not accepted. Disposal fees apply. For more information, visit online at www.marinettecounty.com.



Recycling Centers

Town of Stephenson

Twin Bridge site, County X (next to Stephenson
Town Hall)

Tuesday & Saturday, 9 a.m. – 4 p.m.
Sunday, 9 a.m. – 1p.m.

Crivitz site, August Street
Wednesday and Saturday
9 a.m. – 4 p.m.

Examples of acceptable materials & hoe to prepare: bundled newspaper & cardboard in 6-8" stacks, magazines, glass bottles and jars, rinsed tin cans, aluminum, plastic containers (1 & 2), used motor oil, car batteries, scrap metal & yard waste accepted. For a more complete list and a printable recycling guide, visit online at <http://www.stephensonwisc.com/>.

Town of Peshtigo

W1945 Old Peshtigo Road
2nd, 4th, 5th Saturdays each month
8:30 a.m. – 12:30 p.m.
1st, 3rd, 5th Wednesdays each month
12:30 p.m. – 4:30 p.m.

For residents only - users will be required to provide proof of residency. We accept tires, appliances and air conditioners with Freon, stoves, microwaves, washers, dryers, any kind of metal (no motor vehicles), televisions, automotive oil (no cooking oil or antifreeze), paper, cardboard, plastic, glass, aluminum, tin, batteries, bagged garbage and yard waste. No paint or hazardous materials. Some fees may apply. Visit <http://townofpeshtigo.org> for more information.

Township of Athelstane

(715) 856-6428
Wednesday, 12:00 – 4p.m.
Saturday, 12:00 – 4p.m.
Sunday, 8a.m. – 4p.m.

Cans, cardboard, brown & clear glass, magazines, paper, plastic #1 & #2, and drain oil accepted. Materials not accepted include building materials, paint, computers, TVs, microwaves, light bulbs, syringes, & hot ashes. Some yard waste accepted. Fees may apply. For more information visit: <http://athelstanewi.com/recycle.htm>.



Wolves, continued

- 🐾 Narrow keeled chest and hips, front feet slightly toed out, shoulder height ~ 28 inches (~73 cm).
- 🐾 Ruff of fur around neck and shoulder area resembling four layer cape appearance. Chest girth ~ 24 inches (~ 60.5 cm)
- 🐾 Straight bushy tail with black tip, black spot on top of tails base. Tail bone length ~ 17.5 inches (43.5 cm)

If an animal has at least 8 of these characteristics, there is a high likelihood it is at least part or mostly wolf. In some cases DNA testing may be needed to confirm its status.

**Negative Human-Wolf Interactions**

In the past 100 years, there have been two recorded wolf-human incidents in North America. The first was in Saskatchewan, Canada in 2005 and the second in Alaska in 2010 where wolves allegedly killed a human being. Since 1990, in North America, bears (black and grizzly) killed 59 people and mountain lions killed 11. In the U.S. domestic dogs kill about 20 to 30 people annually. This isn't to say that you shouldn't be careful when in wolf country - like other large wildlife species such as bears and cougars, wolves are instinctive wild predators and are better observed at a respectful distance.

Rules regarding wolves to keep them from being habituated to humans:

- **Don't feed wild wolves—ever.** As in dealing with bears, don't leave food outdoors, including pet food. Don't offer food to wildlife from a vehicle or a residence.



- **Do everything you can to avoid habituating wolves to humans.** Don't let wolves get close to you; don't let them become comfortable in human-inhabited areas. Habituating wolves is similar to feeding any wild species. Baiting deer also baits the predators that follow and hunt deer.
- If feeding bird suet - hang the feeders at least 7 feet above the ground or snow. Putting out birdseed may attract birds, but it also attracts mice, snakes, foxes, coyotes, wolves and bears. Feeding animals creates an unnatural species, and when humans are added to the mix, conflicts are bound to occur.
- Dispose all food and garbage in cans with secure lids.
- Don't leave pets unattended outside: dogs and cats are easy targets for wolves. If pets must be left unattended in the yard, keep them in a kennel with a secure top.
- Install motion sensor lights, as they may help keep wolves away.
- If a wolf approaches (or other large predator), try to scare it off by making loud noises and using your coat or other objects to appear larger.

Viewing Wolves & Wildlife

If you want to view wildlife, do it on their terms, not yours. Watch from a respectful distance and use binoculars or a spotting scope if necessary. Learn about wildlife behavior. Your actions should not in any way change an animal's natural behavior. While seeing a wolf is a memorable experience, like with any other wild animal, you should use caution when they are close. Keep the following things in mind while you are viewing them:

- 🐾 Do not approach wolves.
- 🐾 Leave room for a wolf to escape.
- 🐾 Do not allow a wolf to approach any closer than 300 feet.
- 🐾 Make your observation brief and move on.

Here is an example of how NOT to view wildlife...



In closing, here is an excerpt from the *Wild Sentry's Newsletter #31*, Spring Issue by Bruce Weide.

For many people, the wolf is a construct of their imagination. Those who fear the wolf have conjured up a beast of death and desolation, a villain that should be killed before it kills us. This perception hasn't served wolves well. But the naïve perception of the wolf as a noble shepherd who eats only sick, weak mice doesn't serve wolves well either. When something is elevated upon a pedestal, there is only one way it can go from there - down. The portrayal of wolves as noble, beneficent animals places an unfair expectation on them, an expectation they can only fail to live up to. Many a saint has become a martyr at the hands of those who once adored him...

With that said, bear in mind that the threat of wolves to humans is so nominal, it shouldn't even be a bleep on your radar screen. But your relative safety in the presence of wolves doesn't mean they like us. Wolves don't care if they're your totem animal. They don't care - much less know - about their bad-guy portrayal in Little Red Riding Hood. The perception of wolves as rapacious villains or a golden race reveals more about the beholder than it does about the creature of flesh and blood.

Wolves are intelligent, social, adaptive, wild animals with character traits that vary from individual to individual. Have our lives grown so complacent, sterile and safe that we're compelled to conjure demons and saints instead of baring our senses to what stands before us? True mystery and wonder is revealed to those who open their eyes - it is comprised of earth's elements, not the vaporous, phantasmagoric whirling of imagination.

References

- 🐾 Living with Wolves, National Geographic website: <http://www.livingwithwolves.org/index2.html>
- 🐾 International Wolf Center website: www.wolf.org
- 🐾 Wikipedia – Wolf attacks on Humans website: http://en.wikipedia.org/wiki/Wolf_attacks_on_humans
- 🐾 Wild Sentry's Newsletter #31, Spring 2001 by Bruce Weide

**Area Farmers' & Flea Markets****Crivitz Flea & Farmers' Market**

'Downtown' across from Village Hall & St. Mary's Church on Thursdays (May 22 - August 28) & on Friday, July 4. Handmade Arts & Crafts, Antiques & Collectables, Wood products, Vegetables, Clothes, Jewelry, Canned items, Plants and so much more! Come check out the assorted vendor items, visit local businesses and chat with our vendors. For vendor information, please call Barb Uhl at (715) 854-2030.

Marinette Main Street Farmers Market

Open each Tuesday & Friday, June through the end of September (except on days when the island is reserved/events). Tuesdays from 2-6 pm and Fridays from 9am-1pm on Stephenson Island in Marinette. Call Sarah Monahan at Marinette City Hall 715-732-5139 for more information.

Marinette & Menominee Community Flea Market

Marinette and Menominee flea markets will be held the 2nd Saturday of each month at the M&M Plaza in Menominee from 7am- 2pm. Vendor space is free but is first come - first served. Vendors are asked to set up near the old car lot south of Mikolas Jewelry store. (No rain dates). All vendors are asked not to sell fruit, food or baked goods. Have questions call 906-863-4808 or hbayerl@hotmail.com.

Menominee Historic Downtown Farmers Market

– June through beginning of October. Saturday from 9am-1pm, and Wednesday from 3-7pm. The Farmers' Market is located at 818 1st Street (near the bandshell) in Menominee, MI. For more information, contact Lucy Pier at 906-863-8718.

Wausaukee Area Farmers Market

First Saturday each month, from 9am-2pm, at 641 Main Street in the Bank North parking lot. Crafts and farm products for sale, vendors wishing to set up booths call 715-856-5341.

**Northwoods Journal**

Volume 12, Issue 2

The *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 Co. Land & Water Conservation
- Marinette Co. Parks & Outdoor Recreation
- Marinette Co. UW-Extension

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Please send comments to:
Marinette County LWCD
1926 Hall Ave, Marinette, WI 54143
abartels@marinettecounty.com



Invader Alert! Emerald Ash Borer Found in Door County

From: <http://datcpservices.wisconsin.gov/eab/index.jsp> and <http://dnr.wi.gov>

Emerald Ash Borer (*Agrilus planipennis*) is an invasive, wood boring beetle. It kills ash trees (*Fraxinus* species) by eating tissues under the bark. This metallic green beetle is native to East Asia. It was brought to the United States accidentally in the wood of shipping crates from China.

EAB kills ash trees - and Wisconsin has a lot of ash trees. Wisconsin forests contain more than 770 million ash trees, nearly 7 percent of the tree population. In urban areas, we estimate that, on average, 20 percent of trees are ash. EAB is not a threat to human health, but it kills our native ash trees of any size, any age, healthy or unhealthy (according to research conducted by Michigan State University and the US Forest Service).



EAB was first discovered in North America near Detroit, Michigan in 2002. Since then, the beetle has spread to Canada and more than a dozen states, including Wisconsin (see map below). It was found for the first time in Wisconsin in August 2008 near the community of Newburg, several miles northeast of West Bend.



Since then, emerald ash borer has been confirmed in **Brown, Crawford, Dane, Dodge, Door, Douglas, Fond du Lac, Jefferson, Kenosha, La Crosse, Milwaukee, Ozaukee, Racine, Rock, Sauk, Trempealeau, Vernon, Walworth, Washington, Waukesha and Winnebago counties.** These counties are under quarantine. Sheboygan County is under quarantine because of its proximity to infestations in neighboring counties. We have not confirmed the presence of EAB there, however.

Emerald Ash Borer Quarantined Counties



Quarantined Counties as of June 12, 2014

The larva (the immature stage of EAB) spends its life inside ash trees, feeding on the inner bark where we cannot see it. This feeding disrupts the trees' ability to move water and nutrients back and forth from the roots to the rest of the tree. Eventually, the tree starves and inevitably dies. A tree that has been attacked by EAB can die within 2-4 years. **It is estimated that more than 50 million ash trees are dead or dying in the Midwest because of this invasive insect.**

EAB moves far by hitching rides. On its own, the beetle will only fly a few miles. However, it is easily and quickly moved to new areas when people accidentally move emerald ash borer larvae inside of infested firewood, ash nursery stock, and other ash items.

EAB looks different in each of its four life stages.

Adults - Emerald ash borer adults are very small, metallic green beetles. They are about the size of a

cooked grain of rice: only 3/8 - 1/2 inch long and 1/16 inch wide. Adults emerge from beneath the bark of ash trees late May through mid-July. They create a D-shaped exit hole as they chew their way out of the tree.

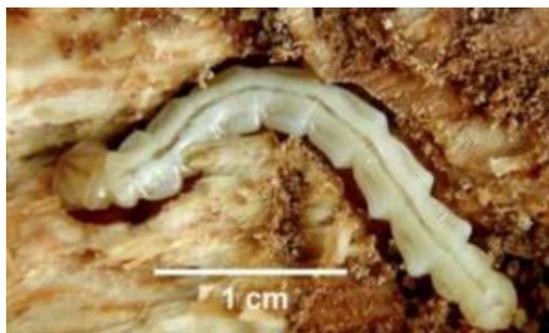
The beetles are most active during warm and sunny days. They never wander far from where they exit a tree (less than one mile) in search of a mate. Once they find a mate, the female will lay 60 - 90 eggs, one at a time, in the crevices of ash tree bark. They feed lightly on ash tree leaves (but do not cause much harm) and live a total of three to six weeks. See photo above for picture of the adult & size comparison to a penny.



When EAB adults exit the ash tree they leave behind tiny D-shaped holes (about 1/8 inch).

Egg - Emerald ash borer eggs are very small (1 mm), difficult to find and rarely seen. Female beetles deposit eggs in bark crevices and as larvae hatch they immediately chew their way into the tree.

Larva - Emerald ash borer larvae are white and slightly flattened, with a pair of brown pincher-like appendages on the last segment (see photo below). Their size varies as they feed and grow under the ash tree's bark. Full-grown larvae average 1.5 inches in length. They wind back and forth as they feed, creating S-shaped patterns called "galleries" under the bark. Larvae will feed under the bark for one or two years and can survive in green wood - such as firewood - as long as the bark is still attached.



Pupa - In autumn, after one or two years of feeding under the bark, larvae will create a chamber for themselves in the tree's sapwood. They stay in this chamber over winter and pupate in the spring, turning into adults. The beetles emerge from the tree, completing the life cycle. The pupae, like the larvae, cannot be seen unless bark is pulled away from the tree.

EAB Look-alikes. Many common metallic green insects are often mistaken for EAB. For more information on these look-alikes, please visit the University of Wisconsin - Madison's emerald ash borer webpage: <http://labs.russell.wisc.edu/eab/identifying-eab-and-potential-look-alikes/>.

EAB and firewood restrictions. State and federal laws forbid moving hardwood firewood out of emerald ash borer quarantined areas. Currently, this means hardwood firewood stored, purchased, or harvested in the following areas may not be moved out of these areas: Brown, Crawford, Dane, Dodge, Door, Douglas, Fond du Lac, Jefferson, Kenosha, La Crosse, Milwaukee, Ozaukee, Racine, Rock, Sauk, Sheboygan, Trempealeau, Vernon, Walworth, Washington, Waukesha and Winnebago counties. A federal quarantine also prohibits the movement of hardwood firewood out of all or parts of more than a dozen other states and parts of Canada.

Firewood Restrictions on all WI DNR Properties. To protect our parks and forests from firewood hitchhikers, the Wisconsin DNR created a permanent rule which prohibits bringing firewood onto any DNR properties from more than 10 miles away or from outside of Wisconsin. **The one exception is Wisconsin certified firewood.** Firewood from a vendor that is certified by the Wisconsin Department of Agriculture, Trade and Consumer Protection (DATCP) has been processed to remove or destroy hitchhiking pests. The certification program is available to firewood manufacturers. Visit <http://datcp.wi.gov> for more information about firewood certification & vendors.

Update - Children's Learning Garden at Harmony Arboretum

This summer, the hard-working members of the Northern Lights Master Gardeners and UWEX staff will be busy at the Children's Learning Garden (CLG) with various projects. Some tasks include working on the interior of the Chipmunk's tunnel, the Pioneer & Native American Gardens, and the bird habitat directly behind the hedge maze. There are plenty of things to do, see & touch at Harmony, and it's a great place for a picnic or a quiet afternoon, too! Come pay a visit to the CLG this summer and check it out.



Underground critters (mouse, mole) and roots in the Chipmunk's Tunnel



A badger mount for the Chipmunk's Tunnel



The new Pioneer Garden cabin



Bird Habitat, located behind the CLG



Area Events Calendar



- July –August BANDS AT BADGER PARK – PESHTIGO.** At Badger Park in Peshtigo. Free musical entertainment 6:30 - 8:30pm. Concerts held Wednesday evenings with concessions available at 5:30PM. Scheduled dates: July 9, July 23, August 13 and August 27. Call 715-582-0327 for more information.
- July – August CONCERTS IN THE PARK – MARINETTE.** Stephenson Island. July 13, July 14, July 29 and August 12. More information please call 715-735-6681.
- July –August CONCERTS IN THE PARK – MENOMINEE, MI.** Great Lakes Memorial Marina in Menominee. 7-9pm – July 17 and August 21. The event is free of charge. For more information or a listing of the bands, please call the Marinette/Menominee Chamber of Commerce (MMCC) at 715-735-6681.
- July –August CONCERTS IN THE PARK – WAUSAUKEE.** Evergreen Park, Wausaukee. Refreshments available, bring your own seating. July 13, July 20, July 27, August 3, August 10, and August 17. 2pm show. More information, call 715-856-5341.
- July – August SUMMER CONCERTS FORGOTTEN FIRE WINERY.** Saturdays July thru August for a summer concert series. From 1 pm to 4 pm. For more information visit www.forgottenfirewinery.com.
- July – August OUTDOOR MOVIE SERIES – Marinette** at Stephenson Island. Fun, free family event. Bring your blankets and chairs and enjoy the show. Friday, July 11 at 9:00 pm “Frozen” Friday, July 25 at 8:45 pm “Iron Man 3” and Friday, August 15 at 8:45 pm “Smurfs 2”.
- July 4 CRIVITZ 4TH OF JULY EVENTS.** American Legion Parade at 11am, flea market downtown all day, after parade at Community Veterans Park food by VFW, beverages by American Legion, bouncy houses and Littleland Park is open. Fireworks at 9:30 pm and shot from Spur Street. Snacks & refreshments served at John Shaffer Pavilion by Historical Society during fireworks. For more information, visit www.villageofcrivitz.com.
- July 4 FORGOTTEN FIRE WINERY ~ SPECIAL FRIDAY CONCERT.** Sunny and the Heat live on the 4th. Music starts 1 p.m. For more information go to www.forgottenfirewinery.com.
- July FAMILY WATER BASH.** Marinette Recreation Department is sponsoring water bashes at the Civic Center Pool from 6:15-8:15pm (regular admission rates apply). A different theme each week. July 11 (Luau) July 19 (Circus) July 25 (Fiesta). Call 715-732-5222 for more information.
- July SUMMER NATURE SERIES FOR CHILDREN.** Free educational classes held at the open pavilion on Stephenson Island. Pre-register at the Civic Center. *July 9 at 1 pm Nature's Art* (Grades 1-6) After a brief discussion about how humans use natural resources for art, we'll take a short walk to collect natural materials for a take-home art project. *July 30, 1 pm Birding Basics* (Grades PreK-6) We'll discuss different bird shapes, sizes, colors and habitats and see and hear different kinds of birds. We'll even use binoculars and field guides to help identify birds!
- July 8-29 COLLEGE 4 KIDS SUMMER PROGRAM - MOVIN' TO THE BEAT** Learn about rhythm through fun, interactive activities such as movement, action songs and games. Make your own instrument to take home. Class held at UW-Marquette for ages 4-6, 5:30-6:30pm and ages 7-10 6:30-7:30pm and cost is \$36. For more information or to register call Office of Continuing Education at 715-735-4300 ext. 4342 or email mnt-ce@uwc.edu.
- July 11 & 12 5th ANNUAL PESHTIGO RUMMAGE ON THE RIVER.** Peshtigo Community-Wide Rummage Sale and sponsored by the Peshtigo Chamber of Commerce. For questions call the chamber at 715-582-0327 or peshtigochamber@centurytel.net.
- July 12 - 13 HERITAGE FESTIVAL – MARINETTE – STEPHENSON ISLAND.** Both days there will be plenty of activities for children and adults, inflatable jumpers--free to the public, on-site concessions, crafters, and plenty of music to entertain festival participants. But that's not all! Follow this website for upcoming updates. www.marinetteloggingandheritagefestival.com. For participation in this event please contact Chairperson, Judy Alwin, at the Marinette Welcome Center 715-732-4333 or committee member Sarah Monahan at Marinette City Hall 715-732-5139.
- July 12 M&M COMMUNITY FLEA MARKETS.** Marinette and Menominee flea markets will be held the 2nd Saturday of each month at the M&M Plaza in Menominee from 7am – 2pm. Vendor space is free but first come – first serve. Vendors are asked to set up near the old car lot south of Mikolas Jewelry store. (No rain dates). All vendors are asked not to sell fruit, food or baked goods. Have questions call 906-863-4808 or hbayerl@hotmail.com.
- July 17 COLLEGE 4 KIDS SUMMER PROGRAM SHOW STOPPERS THEATRE CAMP - UW-Marquette** will bring Children's program on site at Marinette Middle School. Students will be both center stage and back stage as they learn a musical production number, create characters and design costumes and props. Camp is at Marinette Middle School from 12:30-3pm. Cost is early bird \$118 or \$143 after 5/20. Camp is open to students entering 2nd – 8th grade. For more information call 715-735-4300 ext. 4342 or mnt-ce@uwc.edu.
- July 18 - 20 12TH ANNUAL CRUISIN OLDIES FESTIVAL.** Festival with car show/July 20, motorcycle & tractor show/July 21 and camping at Green Acres Campground, 6 miles west of Marinette (just off Hwy 64). Check out www.porterfieldscruisinoldies.com for more information.
- July 19 & 20 34TH ANNUAL BROWN TROUT DERBY.** July 27/4:30am-7pm and July 28/4:30am-3pm. Cost is \$20 and eligible waters are bay of Green Bay and Menominee River up to the bridge. Headquarters is Menominee Marina (Derby Center) and sponsored by M&M Great Lakes Sportsman Club. For additional information call Tom Lawson at 715-735-5619.
- July 21 - 25 COLLEGE 4 KIDS SUMMER PROGRAM. ART CAMP.** Students will learn new techniques, work with a variety of mediums and have fun socializing. Camp is held at UW-Marquette for 1st – 3rd grade & 4-6th grade. Full day early bird \$118, after 5/20 \$143 and half day early day \$64, after 5/20 \$74. For more information or to register call 715-735-4300 ext 4342 or email mnt-ce@uwc.edu.
- July 26 MENEKAUNEE OLD TIMERS PICNIC.** Picnic held noon at Red Arrow Park for anyone age 50 plus with ties to Menekaunee. Bring your own lawn chairs and beverage. Cost/\$10 paid by July 21 or \$15 if paid later. Checks should be made payable and sent to Menekaunee Old Timers, 160 W Bay Shore Street, Marinette, WI 54143. Call Sharon at 715-735-5577 with questions.
- August 2 PEMBINE COMMUNITY RUN/WALK.** All proceeds go to Pembine-Goodman High School Cross Country. Each participant receives a t-shirt, Commemorative key chain and ribbon! Pembine American Legion Park, Minnie & Willis St. Pembine, WI. 5k Race - Start time at 8:00 a.m. Kiddies race after 5k. Print online and send in or call 715-324-5182, online: pembinerunwalk2014.webs.com. \$20.00 per participant for registration before July 25, \$25.00 per participant after July 25, 2013.

Harmony Arboretum Schedule of Events



Located seven miles west of the City of Marinette off of Highway 64, then ½ mile south on County E. All programs are free and at Harmony Arboretum unless otherwise stated. For more information, call UW-Extension at 715-732-7510 or Land & Water Conservation at 715-732-7780.

July 10: Enabling the Gardener, 6:30-8:00pm.

If you or a family member are no longer able to garden because of an inability to get down to ground level, come to Harmony and see the Enabling Garden and learn how to stay involved in growing your own food and flowers with raised beds and wheelchair-accessible gardens.

July 17: Astronomy at the Arboretum, 9-10:15pm.

Spend an evening under the stars! Introduction to stars, constellations, star lore, and other space-related topics - includes a stargazing tour. Dress for the weather, hot beverages will be provided; if inclement weather, event will be cancelled. Call 715-732-7780 for more information.

July 19: Annual Garden Walk, 9am-3:00pm.

Take a walk through some spectacular local gardens. Northern Lights Master Gardeners host the 5th Annual Garden Walk showcasing a wide variety of gardens styles, plants, and garden art. For more details call the UW-Extension office for a brochure. Donation requested \$10 per person in advance, \$12 on the day. (Check nearer the date for details.)

July 22: Late Season Fruit Pests, 6:30-8:00pm.

The fruit are set and growing, but pest management has not been completed for the year! We'll discuss later season pest identification and management, concentrating on tree fruits, but showing key small fruit pests, as well.

July 31: Early Potatoes & In-season Management, 6:30-8:00pm.

Take the chance to experience some of the early potatoes, review harvest procedures, and review mid-season management of both potatoes and sweet potatoes to maximize their yield potential.

**PROTECT
THE TREES**
where you live,
play or camp.

Get FIREWOOD
where you use it.

Insects and diseases that
kill trees can hide and
hitchhike in firewood.

**DON'T GIVE THEM
A FREE RIDE.**

**DON'T MOVE
FIREWOOD.**

