WISCONSIN NATURAL RESOURCES

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Passion for PANFISH

Sandbar camping

Protect the places where you play

Transformation on the prairie

Making memories on Lake Michigan

A father and son salmon excursion that stands out.

Tyler Zacho

I see myself as one of the luckiest people around. I can travel 80 miles from home and find one of the best salmon fisheries in the world, the Sheboygan Harbor on Lake Michigan.

Few people who live in my small town of Cambria — or in other towns in my area — take advantage of this awesome nearby opportunity to catch Chinook, also known as "King" salmon.

I have my dad to thank for my good fortune. About two years ago, my dad decided that we should start salmon fishing. He had fished Lake Michigan a lot in the 1980s and enjoyed it. But then he got too busy for it.

More recently though, he decided we should buy a boat and get back into it.

I had fished a lot for walleye and other freshwater fish but had never fished on Lake Michigan or fished for salmon. I couldn't wait to get out and start trolling! My dad found a used boat in Minnesota that looked like a winner so with my mom he went to check it out. They returned with a 26-foot Sea Ray™.

"It's going to be expensive but it'll be worth it in a year when we're reeling in 20-pounders one after another on the big pond," my father said. That got me amped to start working on the boat and make it the best salmon fishing machine that it could be.

And that's when the real work began. We had a lot of work to do and a year to do it in. We also had a lot to buy if we were going to take salmon fishing seriously: downriggers, downrigger balls, poles, reels, line, spoons, J-Plugs™, flies, flashers and more. But it was an investment we were willing to make to catch fish and have a lot of fun.

About a year later we had our Great Lakes fishing boat perfected and we couldn't wait to get out on the water and be rewarded for all of our hard work. The boat was set up with four new cannon downriggers and poles with Daiwa reels.

The boat would be housed in the Sheboygan Harbor for the summer and we spent the first night on the boat so that we could wake up early the next morning and get fishing. I remember my dad tapping me on the shoulder and waking me up at 4:30 a.m. asking, "You ready to catch some fish?"

"Definitely," I said jumping out of bed. As I climbed the stairs to the deck I could smell gas from the engine that was already fired up and running even though we were still tied to the dock. Ready to get the show on the road, I hopped over the edge onto the dock and untied the boat so that we could start putting around the breakwall on our way onto the lake.

Once we got passed the breakwall we let it rip and headed to deeper and colder water in search of salmon.

It was a great start to the salmon season. We caught a lot of fish that day as a family. But nothing compares to the day later that season when my dad and I went out salmon fishing alone.

It was a little bit before sunset but we could barely see the breakwall or any other boats because of thick fog. It was eerie. All we could hear was the boat motor running and the waves crashing against the side.

We made our way out to colder water but traveled much slower than usual because of the fog. I had a good feeling even before we started fishing.

Right off the bat my dad was letting the first line — a spoon on a downrigger — when he thought the release let loose, but it was a fish! We couldn't believe it. We'd only had one line in the water for about 20 seconds and we had already hooked a fish. My dad reeled the fish up to

Continued on page 29 ⟶

PHOTOS SUBMITTED BY TYLER ZACHO

Catching the "King."

Visit dnr.wi.gov/topic/fishing/lakemichigan/ for information on fishing Lake Michigan.

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ALEX SHEPPARD

DON BLEGEN

GREGORY SCOTT

FRONT COVER: Bluegills are great fighters, offer excellent sport on light tackle and are highly respected as a food fish.

© Eric Engbretson Underwater Photography/Eric Engbretson

BACK COVER: The state-threatened fairy slipper orchid, *Calypso bulbosa*, is one of more than 100 protected plant species found in Wisconsin's system of State Natural Areas. INSET: Town Corner Cedars State Natural Area in Marinette County. For more information, or to order a guidebook to State Natural Areas for $18.00 (postage paid), contact the State Natural Areas Program, Bureau of Endangered Resources, DNR, P.O. Box 7921, Madison, WI 53707 or visit dnr.wi.gov and search "SNA."

Thomas Meyer, WDNR

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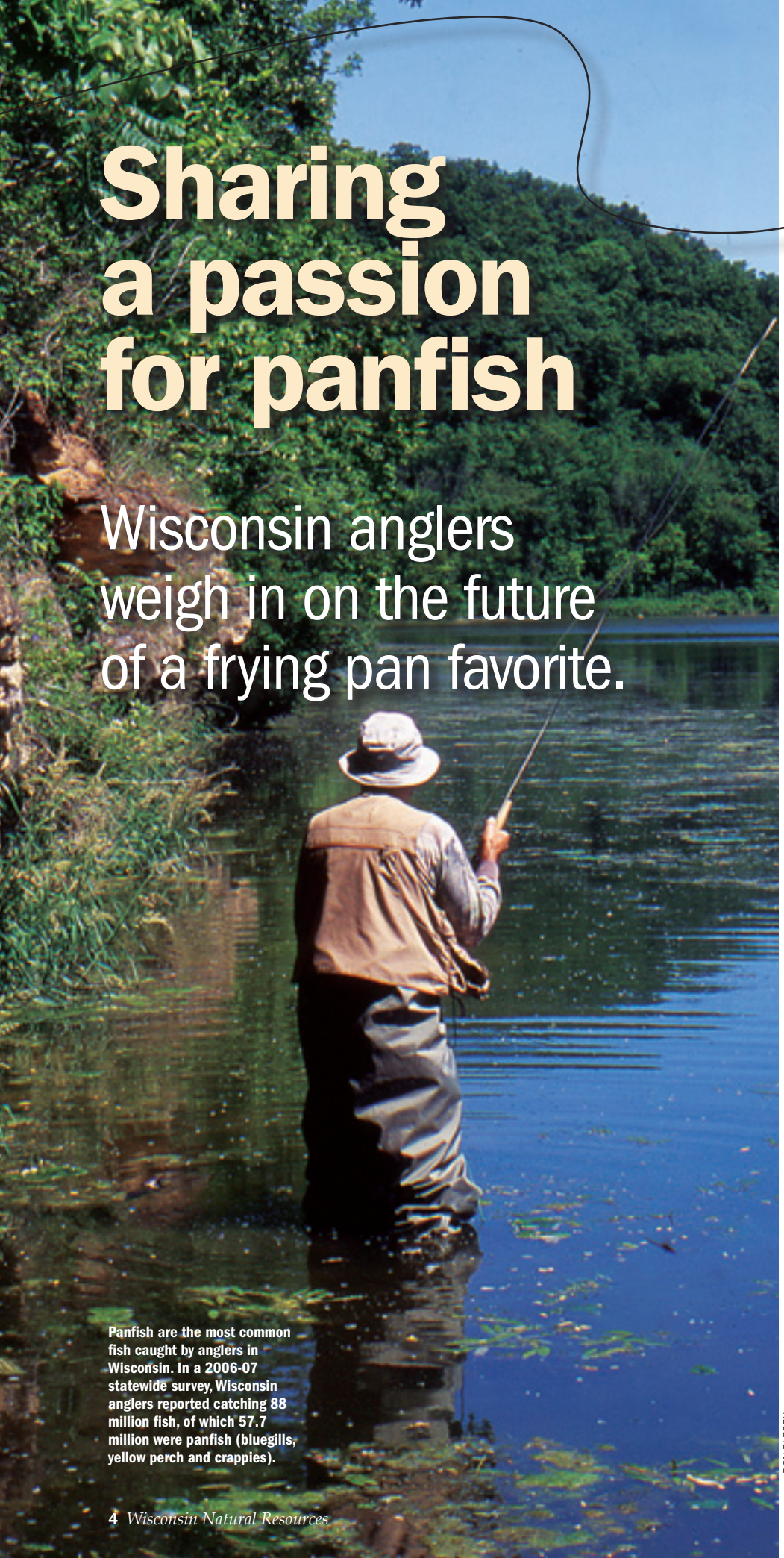
Sharing a passion for panfish

Wisconsin anglers weigh in on the future of a frying pan favorite.



Panfish are the most common fish caught by anglers in Wisconsin. In a 2006-07 statewide survey, Wisconsin anglers reported catching 88 million fish, of which 57.7 million were panfish (bluegills, yellow perch and crappies).

DON BLEGEN

Sylvia Lim

Most anglers can recall their first fish. For members of the Wisconsin Fishing Team, a University of Wisconsin-Madison student organization, it was panfish that stirred their passion for fishing.

"I started fishing when I was 4 years old," recalls Scott Jorgenson, a zoology and criminal justice major from Superior. "I probably started fishing for sunfish and then learned crappie techniques. My dad and grandpa taught me."

Team member Brenden Johnson, a civil engineer major from Sheboygan, recalls honing his fishing skills at a cabin in northern Wisconsin during summers with his family.

"My first fish was probably a bluegill that I caught right off the pier," he says.

"I've been fishing for panfish since I could walk and carry a Fisher Price™ pole," recalls Hanna Downes, a psychology major from Eau Claire.

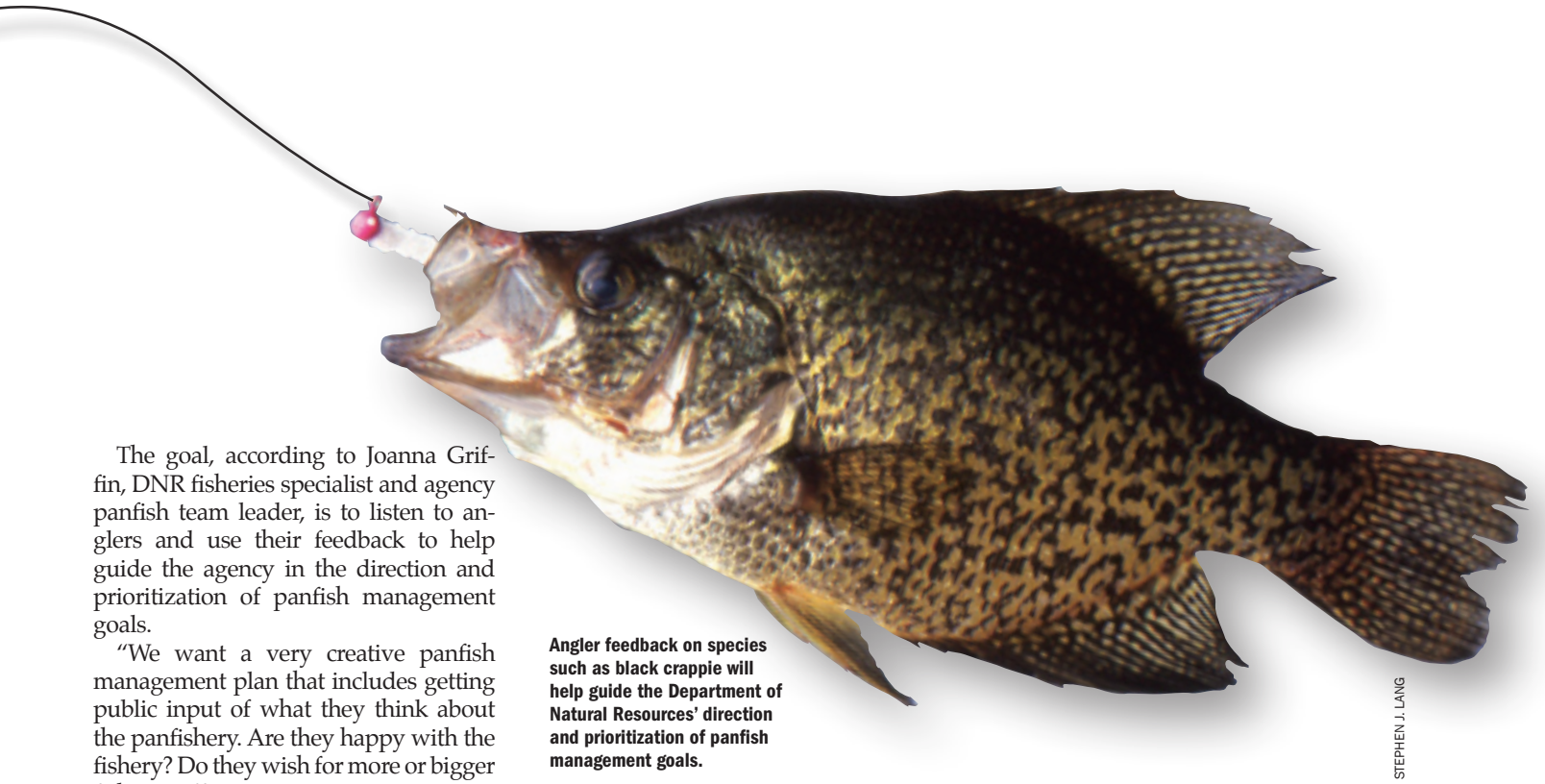
Panfish are scrappy fighters and worthy opponents for any age angler. Panfish are the most common fish caught by anglers in Wisconsin. In a 2006-07 statewide survey, Wisconsin anglers reported catching 88 million fish, of which 57.7 million were panfish (bluegills, yellow perch, pumpkinseed, sunfish and crappies). About 25.7 million of those panfish were kept.

Steve Avelallemant, DNR northern region fishery supervisor in Rhinelander, says that for decades, panfish in Wisconsin have been treated like a "forgotten middle child."

But now, the Department of Natural Resources is giving that middle child the attention it deserves. The reason? Public concern regarding panfish is increasing.

A panfish management plan is in the works. Unlike popular predator fish such as walleye and northern pike, panfish have not had a statewide management plan.

To change that, the Department of Natural Resources reached out to anglers. Panfish public meetings have been held across the state since mid-February.



Angler feedback on species such as black crappie will help guide the Department of Natural Resources' direction and prioritization of panfish management goals.

STEPHEN J. LANG

The goal, according to Joanna Griffin, DNR fisheries specialist and agency panfish team leader, is to listen to anglers and use their feedback to help guide the agency in the direction and prioritization of panfish management goals.

"We want a very creative panfish management plan that includes getting public input of what they think about the panfishery. Are they happy with the fishery? Do they wish for more or bigger fish?" Griffin says.

The agency is asking anglers to share their panfishing experience and to tell the department what changes, if any, they would like to see, Griffin says. Anglers are asked to share their thoughts through a survey.

The agency has been joined in its efforts by the Conservation Congress (a long-standing DNR advisory organization), which for years has proposed reducing the 25-panfish bag limit on select lakes.

Changes could include revising panfish bag limits (currently 25 per day on most lakes). The last change in panfish bag limits came in 1998 when the bag limit was lowered from 50 to 25. On some Wisconsin lakes the limit is 10 fish.

Panfish size is a concern. For years, Griffin says, anglers have been reporting smaller panfish.

What we know

Analysis of many years of fisheries surveys is starting to provide insights into the status of panfish in the state.

Panfish surveys taken by the Department of Natural Resources since the 1940s have shown a decline in the size of bluegills, crappies and perch with yellow perch showing the greatest reduction, says DNR research fisheries ecologist Andrew Rypel.

Rypel, like most anglers, grew up fishing for panfish and his passion has followed him into his career.

Rypel says the term "panfish" is sometimes confusing because it consists of a variety of fishes. Typically in Wisconsin, when people talk about panfish, they talk about bluegills, yellow perch and (black) crappies.

"But they are all different," Rypel explains. "They all have different life cycles. They spawn differently. They have different habitat types."

Bluegills for example, spawn in large colonies in the spring. Males come into shallows, sweeping a shallow depression with their tail fins. They circle these nests, displaying in order to attract females. The females come to the nests and deposit their eggs, which the males guard until the fry emerge.

"So if you're a Wisconsin angler, you probably know about this. A lot of anglers go out in this period and they target bluegills because they are very easy to see. You can find them near their nest. So it's very popular to fish bluegills. However, this life-history also makes them so vulnerable to angling that they can get fished down in terms of numbers and size really fast," Rypel says.

Another difference in panfish is how long it takes them to mature and grow to an adult size.

"Bluegill can mature in two to three years but to grow to a quality size that anglers typically want to harvest can take five to eight years or even several years more," Rypel says.

To better understand angler concerns over panfish size, Rypel has been analyzing size trends in Wisconsin panfish over time. He says his research confirms what anglers have been reporting — a statewide decline in the maximum sizes of panfish over time.

A centerpiece

For many, panfish are at the centerpiece of culture in Wisconsin. The Friday fish fry tradition lives and breathes in Wisconsin supper clubs and taverns. Pan-

SYLVIA LIM

Wisconsin Fishing Team members from the University of Wisconsin-Madison: Hanna Downes, Scott Jorgenson and Brenden Johnson.

DNR fisheries biologist Kurt Welke invites an angler to take the panfish survey during the Madison Fishing Expo this spring.

SYLVIA LIM

SYLVIA LIM

Watch for the results of the panfish survey.

fish are a staple in the frying pan when fishing and camping with family and friends.

Kurt Welke, a fisheries biologist in the DNR's South Central Region office in Fitchburg, agrees with Avelallemant's assessment of the historical treatment of panfish.

"For very popular fish like walleye, we protect them at certain times of the year," Welke says. "Bass, muskellunge and northern pike are very popular fish. These fishes are protected when they spawn. We leave them alone. We also have very high limits on their size and very low number for personal bag limits. But with panfish, people generally think that they can take as many as they like, whatever size they want and whenever they want them. So, we treat them differently. It's like comparing apples to oranges."

PHOTO SUBMITTED BY JUSTIN PAWLEY

Michael and Justin Pawley have great luck fishing Lake Monona and Lake Waubesa.

"But now people are saying, 'Hey, wait a minute. These fish are valuable too. Let's see if we can do better.' And the department staff — people like me — said, 'Tell me what they mean to you. You tell me what *better* means to panfish.' That's what we want to get with this survey that we are conducting around the state."

Welke notes that panfish are an affordable, high quality food source – high in protein and low in fat — that is readily accessible. They play an important role in the fisheries food chain. Bluegills even help control undesirable fish like carp by eating their eggs.

Wisconsin has many lakes, which creates an additional challenge in building a panfish management plan.

"One size does not fit all," says Welke. "You can't wear my shoe. Will a statewide rule work in every lake? Maybe not. Maybe that lake does not have the population of fish. Maybe that one does not have water quality and fertility. It might not have the habitat."

Another challenge is taking into account Wisconsin's changing climate and the growing season when people can get to the fish.

"There are many places in Wisconsin that once we get ice, the fish are safe. People cannot find them or the ice conditions are poor and dangerous. The Mississippi River is a great example. There are many, many bluegills out there but anglers can't get to them because of flow and current conditions and the fact that ice doesn't form well or reliably in riverine situations."

Another important consideration as Wisconsin moves ahead with developing a panfish management plan is that fishing for panfish has become more effective as anglers have opened their wallets to state-of-the-art fish finders and even cell phones on the water. Avelallemant points to a phenomenon known as "pulse fishery" where anglers use social media to share where the fish are biting.

"They pull out their cellphones, text their fishing buddies and soon there are 50 people out there," Avelallemant says.

Welke contends that one of the biggest challenges may be moving away from a historical mindset of our fathers and grandfathers.

"I think maybe we've matured a little bit. Maybe we are a little smarter. And the economy has changed. Fewer people fish consumptively. Fewer people have gardens. Fewer people are responsible for their own food. More people now go to a grocery store. So we still have people who want to eat fish but I think they eat it less than they did 30 years ago."

In Wisconsin, many immigrants were

Catholic and grew up eating fish on Friday.

"And many of those fish came from the local lakes," Welke says. "Not as many people observe that tradition anymore. So that's also part of it."

In a video message to the public, DNR Secretary Cathy Stepp recognizes the importance of panfish in Wisconsin in the past and into the future.

"Whether you're seeking a tasty meal, introducing your kids to the fun of fishing, or just looking for some great action, Wisconsin panfish deliver," Stepp says. "We want to make sure they keep delivering food and fishing fun into the future."

What next?

Any potential changes to managing panfish or changing regulations are at least three years away. The Department of Natural Resources and Conservation Congress are working with the public to identify their issues and concerns related to panfish.

The next step is to form a stakeholder group that will help develop a draft management plan and management objectives. The plan will define the current status of the Wisconsin panfish populations and make recommendations.

After that the public will be invited to review the draft plan and share comments at public meetings, and through online and mail surveys.

The goal is to finalize a management plan at the June 2014 Natural Resources Board Meeting with potential regulation changes in April 2015 and rule adoption in 2016.

In the meantime, 10-year-old Michael Pawley says he intends to continue to hone his fishing skills fishing for bluegills with his dad, Justin Pawley of Sun Prairie, and his grandpa, Gary Pawley, of East Bristol.

"Panfish are the only fish to start kids fishing on," says Gary. "They are good eating and kids can catch them."

"Yeah," confirms Michael. "And I'd tell any other kid who wants to get started fishing that they [panfish] are fun to catch and good little fighters."

Sylvia Lim is a journalism student from Indonesia studying in Wisconsin and interning with the Wisconsin Natural Resources *magazine.*

To learn more about Wisconsin's efforts to create a panfish plan visit dnr.wi.gov and search "panfish plan."

FREE FISHING WEEKEND - JUNE 1-2

Bluegills – great fighters and a frying pan favorite.

DOUG STAMM

Megan shows us how it's done!

LEE FAHRNEY

No need to buy a license or trout stamp to fish on any inland lake, or the Wisconsin side of the Great Lakes and Mississippi River for this annual event. You'll need to abide by all other fishing rules, so grab a Fishing Regulations pamphlet at a DNR office or license outlet, or check them out online at dnr.wi.gov (search "fishing").

Not sure how to get started? Many places plan special events that include hands-on demonstrations of fishing basics and techniques. Check out dnr.wi.gov/topic/Fishing/AnglerEducation/FreeFishingWeekend.html or plan one of these events in your area. Many of these are for kids, but keep in mind when you plan your event that many adults missed the fishing boat as kids and make them feel welcome, too.

- **Annual Kids "R" 1st Fishing Contest** – Milltown (Polk County). Prizes are given for the biggest northern, sunfish, crappie, bass, rock bass and perch. June 1, 11 a.m. to 3 p.m. Contact (715) 646-2230.
- **Fishing Has No Boundaries** – Wild Eagle Lodge, Eagle River. This event opens the great outdoors for people with disabilities through the world of fishing. May 31 and June 1, 7 a.m. to 4 p.m.; June 2, 7 a.m. to noon. There is a $50 participation fee, but scholarships and sponsorships are available. Contact Wil Campbell (715) 479-9309, or email wbc1@newnorth.net
- **Free Fishing & Outdoor Activity Day** – River Park Lagoon, Sheboygan Falls. Hands-on demonstrations in fishing technique, fly tying, archery, tomahawk throwing, canoeing and more. June 1. Contact (920) 893-5210.
- **Kids Fish N Fun Day** – Edgewater Drive, Beaver Dam. Open to kids 4-12. Event is free but advance registration is required. Each participant gets a rod and reel, other fishing related gifts and a free lunch of brats and hot dogs. June 1, 8:30 a.m. to 3 p.m. Contact (920) 386-2531.
- **Kids Fishing Day** – 29270 County Hwy G, Ashland. Experienced anglers and fish biologists teach kids where fish live, how to catch them, all about equipment and casting techniques. June 1. Contact (715) 685-9983; www.nglvc.org
- **Willow River State Park Kids Fishing Contest** – 1034 County Road A, Hudson. Entry fee of $1 for kids up to age 12. Each entrant gets a fishing goodie bag and the chance to win a prize for most fish, largest fish or smallest fish. Some equipment is available and bait is provided (no artificial lures, please). June 2, 8:30 a.m. State parks admission is free June 2. Contact (715) 386-5931, or email aaron.mason@wisconsin.gov.

Compiled by Kathryn A. Kahler.

Invasive Species Awareness Month

Learn how to protect the places where you play.

CALVIN T. OF WOODSIDE ELEMENTARY SCHOOL

Tim Campbell

The warm and sunny weather that June brings allows us to get outside and enjoy some quality play time in the great outdoors. Whether hiking in state parks or boating on one of the many lakes, there is an abundance of outdoor recreational opportunities in Wisconsin.

Along with outdoor opportunities, June also brings Invasive Species Awareness Month (ISAM). ISAM is keeping all of those places in mind with its 2013 theme: "Protect the Places Where You Play — Keep Invasives Out!" It is up to everyone who uses Wisconsin's natural resources to protect them from the negative impacts of invasive species.

If you are unfamiliar with invasive species, they are nonnative plants and animals that cause great ecological, environmental, or economic harm; or that harm human health. Examples of the many invasive species in Wisconsin include garlic mustard, emerald ash borer and zebra mussels. Unfortunately, once an invasive species is in Wisconsin it is very difficult to control it. Luckily, there are many actions that we can all take to prevent the spread of invasive species so that the places where you play can be protected from their undesirable impacts.

Protect the places where you play by cleaning your equipment and gear after every use. Inspect your gear for dirt, mud, seeds and other debris, and remove as much as possible. If you were using your equipment on water, be sure to drain all the water from your gear. Then, if possible, wash your gear with water (hot is best) to remove any invasives that you might not be able to see, or try to let your gear dry for more than five days. These steps are especially important if you will be using your gear in a new location. After cleaning your gear, you can go play with little fear of moving an invasive species! Here are some more easy things you can do:

- Learn to identify invasive species and understand the impacts.
- Don't use invasive species in plantings or projects.
- Plant and promote beautiful noninvasive alternatives.
- Use local sources of firewood – invasive insects might hitchhike on the wood.
- Visit DNR's website for more prevention steps at dnr.wi.gov, search keyword "invasives."

In 2004, Wisconsin's governor designated June as Invasive Species Awareness Month. The Wisconsin Invasive Species Council has carried the tradition forward each year since. The Wisconsin Invasive Species Council is comprised of representatives from state agencies, universities, organizations and industries. The Council is advisory to the Depart-

BELLE BERGNER, ISAM COORDINATOR 2012

2012 Invader Crusader Award winners (from left to right): Eric Tarman-Ramcheck, Jerry Ziegler, Martha Lunz, John Lunz, Phil Pellitteri, Penny Pohle and Christian Malsatzki. Pohle and Malsatzki are representing the group winner, Youth Environmental Projects of Sauk County. Ted Ritter is not pictured.

BELLE BERGNER, ISAM COORDINATOR 2012

Several members of the Wisconsin Invasive Species Council pose for a shot at Olbrich Gardens during last year's Invader Crusader Awards Ceremony. From left to right: Paul Schumacher (Council chair), Travis Olson, Shelly Allness, Greg Long and Jim Reinartz.

ment of Natural Resources and helps coordinate invasive species actions for state agencies. The Council, in partnership with state agencies, programs and organizations, is highlighting events throughout the state to raise awareness of invasive species issues and to educate the public on invasive species prevention techniques. The Council's ISAM efforts this year are made possible by a grant from the Wisconsin Department of Natural Resources to the Invasive Plants Association of Wisconsin (IPAW).

In addition to promoting invasive species best management practices, ISAM has three marquis events — a statewide poster contest for 4th and 5th grade students, an education summit for invasive species educators and the Invader Crusader Awards Ceremony. Visit the Council's website for dates and locations at invasivespecies.wi.gov

These events help address educational priorities in the state's invasive species strategic plan. The education summit helps coordinate the efforts of the many invasive species educators throughout Wisconsin. The Invader Crusader Awards Ceremony recognizes and honors the hard work of volunteers and professionals working on invasive species issues. Lastly, the poster contest helps educate the Invader Crusaders of tomorrow on invasive species issues so that prevention activities become second nature to them. This year's posters can be viewed by the public in the Capitol Rotunda in Madison from June 7 to 20.

To learn more about ISAM, the Wisconsin Invasive Species Council, or the new Statewide Strategic Plan for Invasive Species, visit invasivespecies.wi.gov Learn more about individual species, best management practices and control efforts on DNR's invasive species webpages at dnr.wi.gov and search keyword "invasives."

To find an invasive species related event in your area, check out the ISAM event calendar at invasivespecies.wi.gov You can also follow ISAM on twitter by using the hashtag #ISAM2013.

Protect the places where you play this summer. Get involved to keep invasives out!

Tim Campbell is a communicator for University of Wisconsin Sea Grant.

Past Invader Crusader Award winners include:

2012
Phil Pellitteri
Youth Environmental Projects of Sauk County (YEPS)
Martha and John Lunz
Jerry Ziegler
Eric Tarman-Ramcheck
Ted Ritter

2011
Carol AveLallemant
Jack Rasmussen
Lee and Mary Krueger
Milwaukee County Parks Department/UW-Extension Natural Areas
Brian Swingle
Paul Skawinski
Mark Renz
Wild Rivers Invasive Species Coalition

2010
Alycia Crall
Ron Richter
Lawanda Jungwirth and Audrey Ruedinger
Transportation and Utility Rights-of-Way BMPs
Tom Boos and Bernie Williams
Diane Schauer
Connie Ramthun
Peter Flaherty
Northern Great Lakes Visitor Center

2009
Susan Kenney
Roma Lenehan and Glenda Denniston
Peter Layton
Bill Moore
Southeastern Wisconsin Invasive Species Consortium, Inc. (SEWISC)
Gypsy Moth Suppression Team

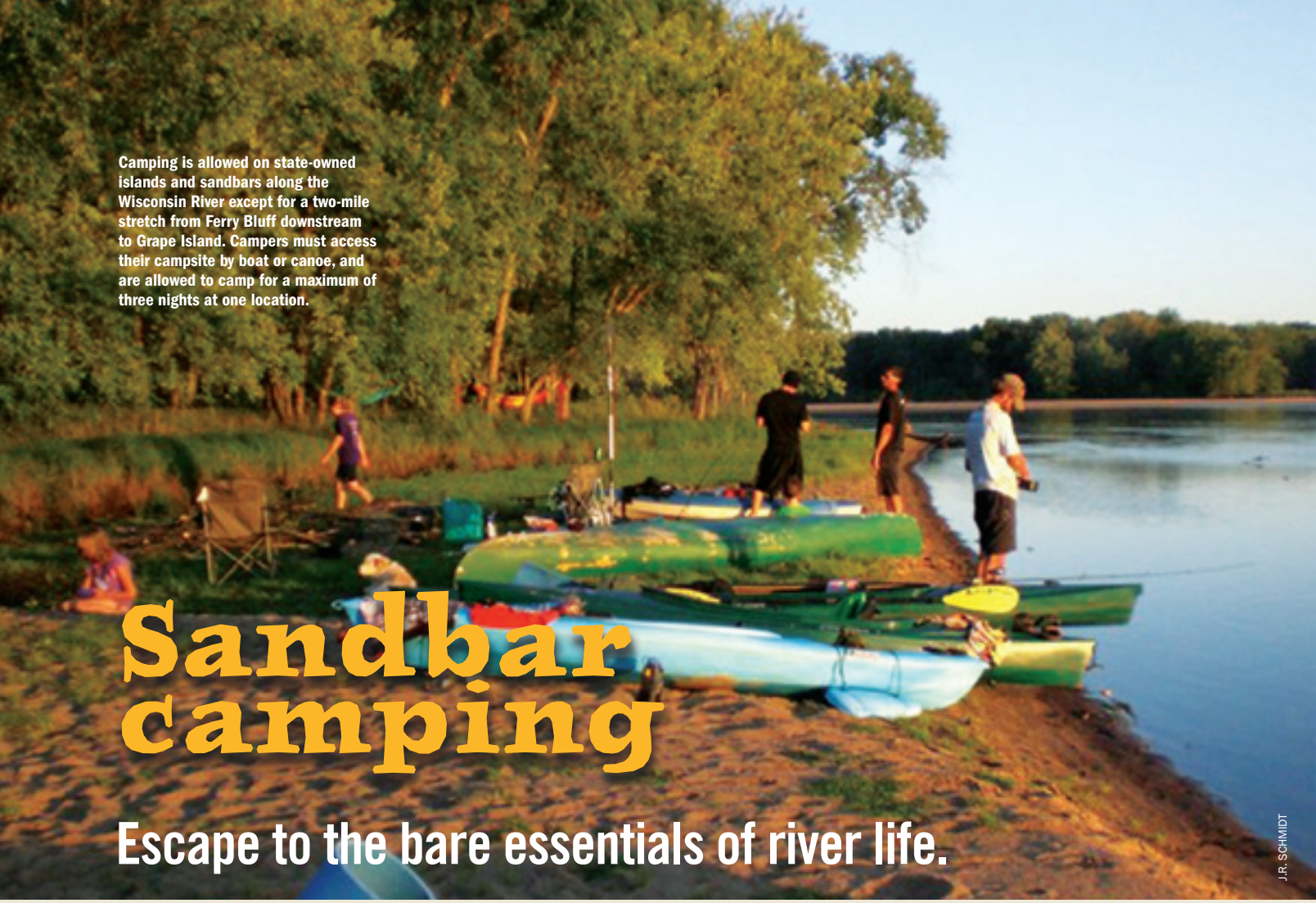
2008
Jerry Doll
Gene Roark
Greg Long
Ron Martin
Ryan Everson
Northwoods Cooperative Weed Management Area

2007
Baraboo Hills Stewardship Volunteers
Tom Boos
Kathie and Tom Brock
Linda Spelshaus
Laura Felda-Marquardt
Eunice Padley
Becky Sapper
Rick Shulte

2006
Vilas County Aquatic Invasive Species Partnership
Vilas County Lakes Association
Jane Swenson
Amy Staffen
Mike Fort
South Central Region State Natural Area Crew
Rhonda Reisenbuechler
Gigi La Budde
Fred Clark

2005
St. Catherine's High School Environmental Club
Terri Lyon
Betty Czarapata
Great Lakes Indian Fish and Wildlife Commission
Kelly Kearns
Kristin Westad

For more information about this year's ISAM and more about past award winners, please visit the Wisconsin Invasive Species Council's website at invasivespecies.wi.gov and click Awareness Month.



Camping is allowed on state-owned islands and sandbars along the Wisconsin River except for a two-mile stretch from Ferry Bluff downstream to Grape Island. Campers must access their campsite by boat or canoe, and are allowed to camp for a maximum of three nights at one location.

J.R. SCHMIDT

Sandbar camping

Escape to the bare essentials of river life.

Story by Brooke McGee

Casting my line ahead and to the right, I reel slowly. Guiding my kayak with each toss of my lure, I'm able to forsake my oar for a while, basking in the delight of my lazy drift while I direct my vessel with each pull of my cast.

Others in my group are equally as spread out as the pale-ale sandbars that dot this wide river. Knowing when the sun remains about six fingers from the horizon we will regroup and scout our site for the night, I surrender to the current.

Wisconsin travelers are spoiled. The last Wisconsin glaciation altered the terrain into a geographical work of art. Bluffs, riverbeds and gorges, painstakingly carved into ancient granite bones, are priceless examples of millions of years of adaptation. Wisconsin houses well-kept secrets. Meanwhile, vacationers flock to common areas such as the Wisconsin Dells and other concrete fields. Most are unaware that these popular tourist destinations were founded because of the natural wonders surrounding them.

But those who truly seek quiet natural beauty know exactly where to find it.

I bank my kayak and pull it out of the reach of the water's teasing grasp. The sand is cool where it meets the water. A few steps in, the captured heat from the sun warms the bottom of my feet as I step further inland. The scent is rugged, the smell of a rainy fall day and decomposing leaves.

In the distance, a bald eagle slowly circles above a school of shallow-water fish. A popular spot for eagle watching, this stretch of the Wisconsin River draws eagle watchers from near and far.

The variety that greets you on the sandbars is one even the seasoned traveler cannot predict. The ever-changing terrain, resculpted each year, each month, by the giant river, never tires of a new design. Every meandering curve presents a surprise, a new feast for your

Wildlife watching is one of the joys of camping on the river.

J.R. SCHMIDT

eyes. During high rains it is not uncommon for a sandbar to be washed away in a matter of hours, resettling downstream in an entirely new form.

Islands, new and old, are born and die over the years. It is because of these realities that one must develop skill in choosing your camp. Sandbars housing beds of long grasses, trees or shrubs provide stability. Yet, no matter how much vegetation has taken hold, the sand remains, morphing into paradise.

Motor boats are less common on this river. Despite the massive width, the sandy bottom is inconsistent and varies in depth, an unreliable venture for most boaters. Although there are a few canoes in our caravan, none chose to use the extra cargo space for a burdensome tent. With its imposing nylon walls and deliberate separation from nature, a tent does not fit our desires.

Peering into my dry sack, my necessities include a hammock, rope, pocketknife, tarp and mosquito netting. Small, waterproof satchels contain fishing line, a few hooks, flint, biodegradable soap, an aluminum dish, water purifying tablets and the sort. This is not luxury camping. Here, the minimalist is the most comfortable, the most unburdened.

Burning driftwood is not allowed. So we collect fallen branches and sticks and a small fire begins from bark and dried grass. The comforting smell assures us supper is on the way. While larger tinder is slowly added, those who do not have one, construct homemade fishing poles from sturdy sticks and a pinecone or bark bobber.

By the time camp takes form, four fingers of light are left to set our hammock and coverings. When trees are limited, it is not uncommon to see "bunk beds" of hammocks traversing the same set of trees.

We prepare dinner, mostly consisting of what is foraged or caught. Other food is available, but we only turn to our cache for meal compliments, midday lunches and to feed children in the caravan.

Known for its smallmouth bass, northern pike, walleye and panfish, we take to the shores to hunt the great river. Fire roasting a large fish, heavy on a burdened stick, is a primal moment in this hectic world.

Slipping into a nomad frame of mind becomes natural after a few days on the river. I am always amazed at how easy it is to transform after such a short break from society. At times though, I am pulled back when we pass a town or another location with a boat landing where one can, if you choose, bank and meander into town for some supplies.

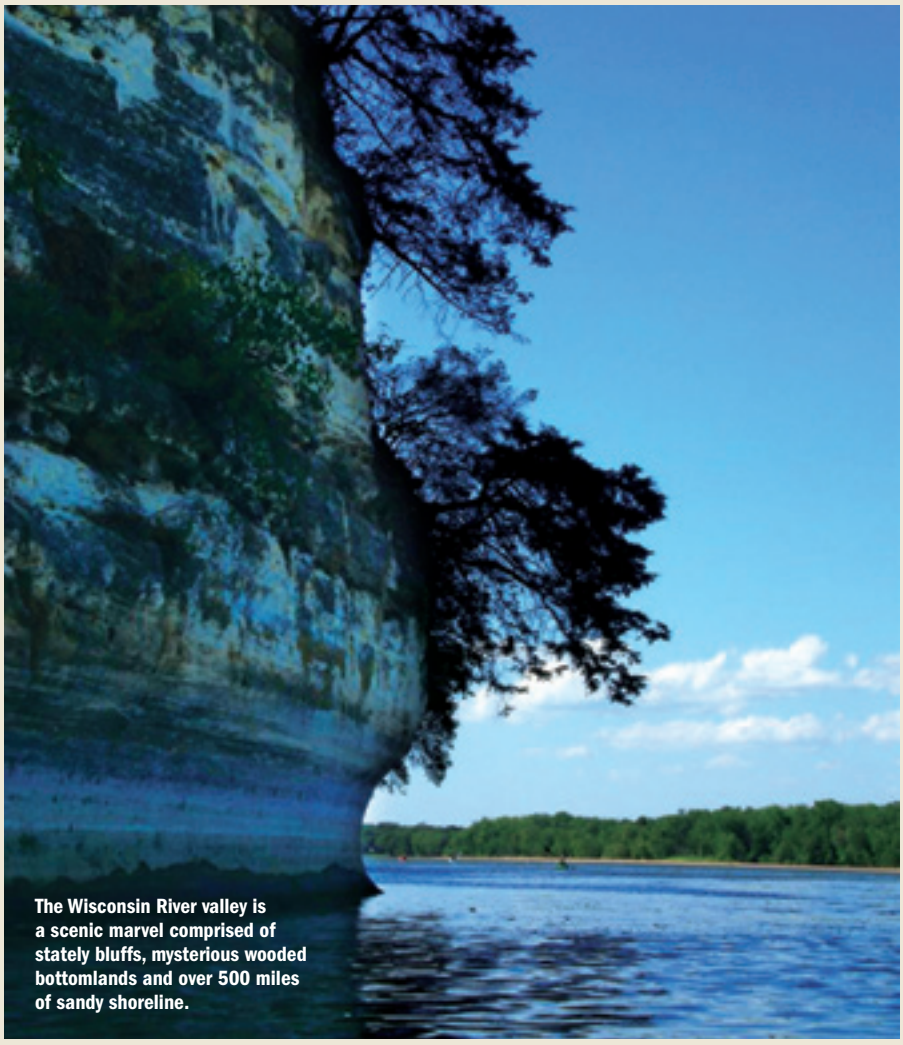
Despite the tell-tale sands that knowingly accompany sandbar camping, amazement always arises over its ability to infiltrate every crevice, every surface. Tinfoil squares, folded neatly into small packs, become treasure as we diligently cover all the food we cook. Rinsing my tin plate in the river, I quickly place it over the heat of the fire to sanitize and dry it before the sand infests again.

Placing a few chopped potatoes, sliced onions, a drizzle of oil and salt in a foil pack, I carefully seal the edges to ensure no sand will breach its borders. Placing it under the bed of coals to steam, a few aluminum cans of hearty soup are also placed in the coals. Mixed together to create a hearty, dense stew, vegetarians and carnivores are left filled and satisfied with a luau feast of chowder and fire-roasted fish. Cold drinks are never more than a reach away, with small buoyant coolers pulled with ease through the cool waters behind your vessel. Later dug into the wet shoreline beneath some shade, there they remain crisp.

As the night settles thickly around us, translucent red sparks rise from the fire, a small glimmer before surrendering onto the water or sand. Crackling logs talk boisterously to one another before fading into their eternal sleep. Long, whispered hisses come from the drying wood that lays next in turn, pulled close to the fire's warmth and propped onto a handmade drying stand of branches.

Words often leave us, with the slight chuckle of the water and the rustling branches taking their turn to speak. Tranquility.

Feeling my body grow weary, I know it is time to escape to my bed for the



The Wisconsin River valley is a scenic marvel comprised of stately bluffs, mysterious wooded bottomlands and over 500 miles of sandy shoreline.

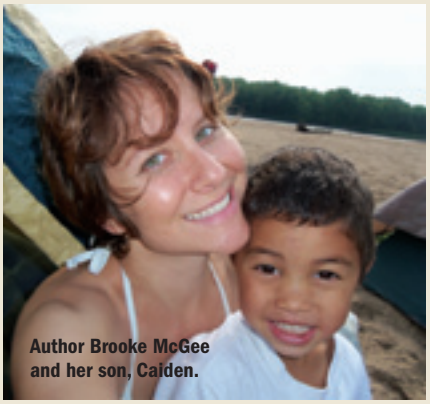
J.R. SCHMIDT

Because the sandbars are constantly shifting and the average depth is only 5 feet, motorboats have trouble navigating the river, which makes for a very canoe-friendly experience.

J.R. SCHMIDT

The Department of Natural Resources does not require camping permits or fees of any kind. Sandbars are first come, first served.

J.R. SCHMIDT



Author Brooke McGee and her son, Caiden.

MARK DRAKE

night. Undistracted by television, the sound of traffic or an exhausting to do list, it is unique to seek sleep based solely on my soul's request. Cradled safely in the midst of the river's large bosom, the small island we chose and scouted keeps us from harm.

The slightest jump of a frog or fish echoes across the water's surface, a natural alarm and a deterrent for anything that may hunt. The scent of charred wood, placed smoldering on the water's edge, also keeps animals at bay.

Rinsed dishes and food supplies are placed in a sack. To prevent disturbances during the night, we burn or bury food scrap on the far side of our island. Finding a tall, distant tree, we run our supplies up and out of reach. If a raccoon wants to investigate the smell, they will not succeed in their attempts to pry.

Tucked into my hammock, I feel the slight breeze as it sways my bed. These solitary moments are one of my reasons for this retreat. Swaying. Sleep comes easily as cricket songs gently wash over the quiet night.

In the morning, too quickly, the scent of warming sand revitalizes me.

Grouping together the embers spread from the night before, I prepare my coal bed. Taking a few pieces of dried birch bark, the paper-like flakes start easily with my flint, a priceless tool unaffected by water. Small bark pieces from other nearby trees are added on carefully, not too soon, not to smolder. As my fire grows, my friends also begin to stir.

Tearing down camp is operated in the same spirit as our arrival to these sand islands. We move gradually through the morning, unhurried.

Back on the ancient river we spread out once again to float, paddle or explore. Looking up, I know that when the sun holds an equal distance of sky in each of its hands, we will stop and gather for lunch.

The Department of Natural Resources has protected large stretches of the Wisconsin River from development, preserving nearly 80,000 acres along its borders. Between Prairie du Sac and Prairie du Chien, over 90 miles of nature's promised land await us before spilling into the mighty Mississippi River. These reserved lands require no camping fees, no sticker or permit of any sort for camping. You can boondock from spring on through fall if your situation allows.

Careful planning is the foundation of such an expedition. Deliberate and precise packing is essential, with great consideration for menu planning and water purification. Whether through the use of packed freshwater, a LifeStraw, water boiling or purification tablets, drinkable water needs to be planned with intent. If children are present, reliance on carry in/carry out water should especially be considered if you are not savvy with survival water purification techniques.

Burning restrictions are sometimes in place. To prevent fines and possibly a disaster, check with the Department of Natural Resources about burning permits and restrictions. A life vest also must be onboard your vessel for each individual present. Those age 13 and under must be wearing one at all times while in the water or on a boat.

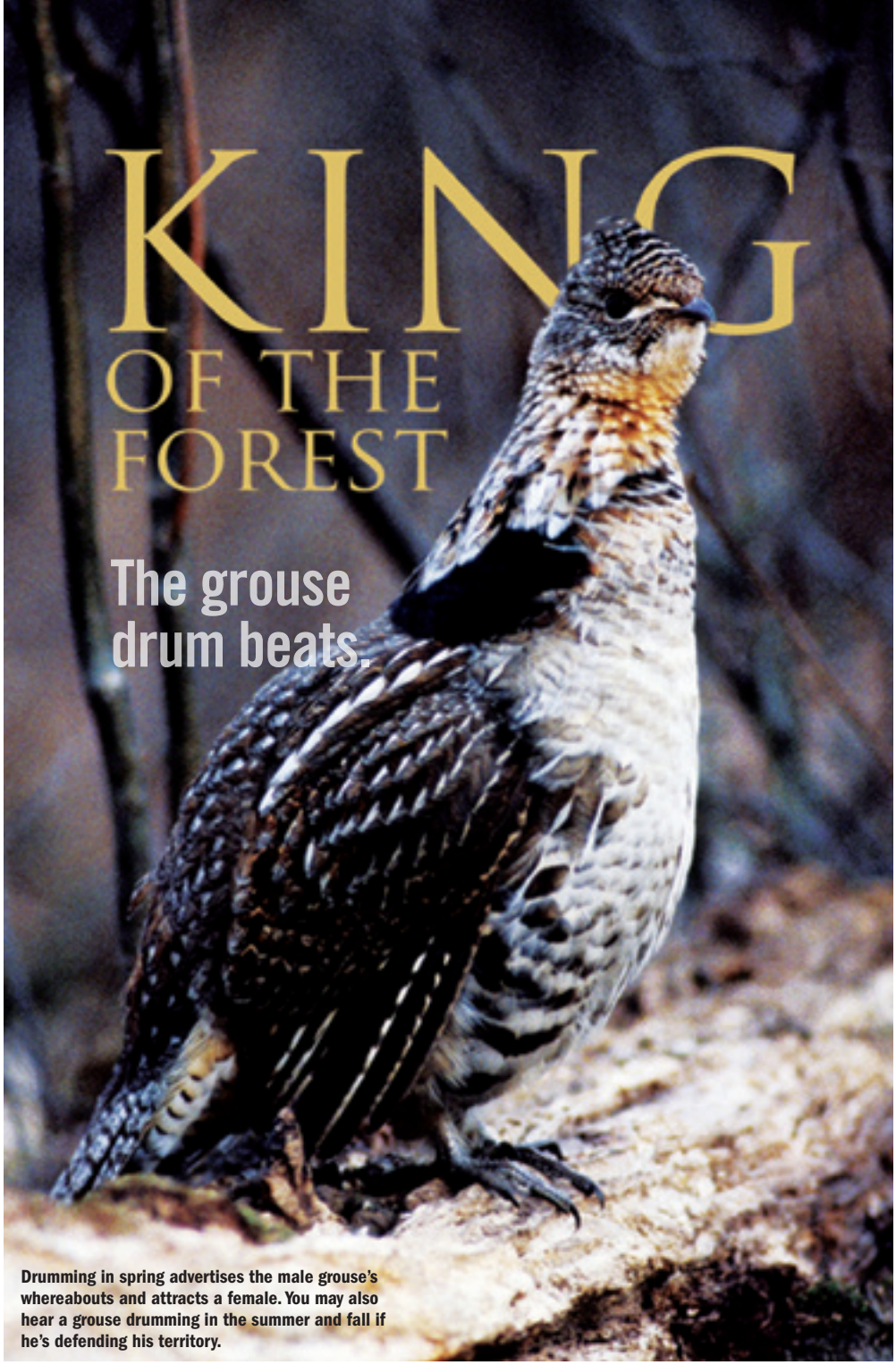
Launching is one of the easier parts of a Wisconsin River sandbar trip. With an abundance of public boat landings, waterfront access is as available. Returning to your drop off point should be considered part of the adventure, not something that will be handed to you in this isolated terrain. Vehicle coordination should be organized, making use of local public parking at both ends with your group. Ironically, what takes a week to cover by unrushed river travelers is covered in mere hours by vehicle. Privately owned canoe rentals are available, with some even offering pickup and transport.

In this hasty, urgent world, a trip down Wisconsin's sandbar-laden river will plant a seed in your mind. After your first encounter this seed will flourish, taking root under the fluorescent lights that dominate the everyday world that you return to. This thought, this river, is not one that will leave your mind easily, beckoning you, urging you back, back to nature where you long to be.

Brooke McGee writes from her home in Portage. She is a freelance journalist who loves to spend summers outdoors with her husband and children exploring some of Wisconsin's best kept natural secrets.

KING OF THE FOREST

The grouse drum beats.



Drumming in spring advertises the male grouse's whereabouts and attracts a female. You may also hear a grouse drumming in the summer and fall if he's defending his territory.

HERBERT LANGE

Birney Dibble

Quietly, tensely alert, he stalks through the leafless tag alders with the aplomb of a king reviewing his honor guard. He lifts each three-toed foot with infinite precision and places it unerringly directly in front of him. With each step his crowned head bobs in concert. It's a chicken-like bob, but there's nothing ludicrous nor unseemly about it. Rather, it conveys an artistry, the posturing of a noble aristocrat.

A sudden gust of wind swooshes through the alders. Overhead a small branch cracks like a pistol shot. The ruffed grouse freezes, feathers sleek, tail pointed straight down, neck elongated, head up and beak outstretched. Take your eyes off him, then look back. He's gone, and in his place is a short broken-off stump — with one beady eye searching the hostile forest. Imperceptibly his head turns in a full half circle, and you see the other eye, dark brown, almost black.

For a full minute, perhaps longer, he remains motionless. Slowly his head comes around again and he resumes his trek.

He enters a dense stand of red pines, some mere saplings, but most 20 to 30 years old, sired by a 200-year-old giant who still stands only 50 feet away from the grouse's destination. Without pausing even for a moment, the grouse jumps up onto a huge log 30 feet long and almost 2 feet in diameter. Still without hesitation, he struts directly to the exact spot on the log where he drummed last year, and where he has drummed this year since the snow melted and the vernal equinox turned winter into spring.

The downed tree which the grouse has claimed is covered with thick, dark green moss except for a small spot measuring about 3 by 5 inches. Here, where his feet have dug in hundreds of times, he has worn away the moss and soft grey outside wood and exposed the yellow inner timber. On the log and on the ground are his droppings, the fresh ones small grey cylinders, the older ones like fluffy, light brown caterpillars.

Motionless he stands, tail furled behind him, wings cupped easily at his side, breast thrust out slightly, neck elongated, beak pointing straight in front of him. His black eye is accented by spots of white directly fore and aft. His brownish crest is thrown upward several inches and blows gently in the breeze.

"Here am I," his manner says, "the

king. Here am I, the lord of this part of the forest. This is my log, my pines, my oaks and alders, my lake there through the scrub. This is where I live, and where my mate will come to meet me, and where I will die. And this is where I drum."

For half a minute his head turns slowly from side-to-side. He scours the shadows for fox and feral cat, scans the skies for hawk and owl. His tail is now partially fanned out, the black and white bars showing plainly in the bright sunlight.

Deftly he drops the tip of his tail onto the log and locks it there for balance. He puffs out his crest, wiggles his shoulders a little as if to arrange them into the proper slot, and then settles his whole body downward so that his rump is only an inch off the log. He no longer bears any resemblance to the graceful grouse who just pranced to his drumming spot. Rather he is a rectangular mass of feathers perpendicular to the ground.

With a quick but easily perceived motion he flips his wings straight backward and swings them together in front of him with a swift clapping movement.

A deep boom resounds through the brush. Even though you are watching the production of the sound, you scarcely can believe that it didn't come from behind you or above you or a hundred yards behind the grouse in the forest.

The ruffed grouse spreads its tail and presses it against the log, then begins a series of strong wing strokes. As the wings compress the air, they create a vacuum to produce a thumping noise which sounds like a distant motor. It starts out slowly, but rapidly increases to a drum roll which can be heard for a quarter mile or more.

HERBERT LANGE

Still maintaining his rectangular shape, he settles his shoulders and slumps his body, then beats the air again — and again — and again. Each boom follows the previous one by a slightly decreased interval of time, until his wings are a brownish blurrrr and the sound a ventriloquistic whirrrrrrrr. His wings never touch in front of him, nor do they ever touch his body.

Coincidental with the finish of the drumming, he tucks his wings against his body and with one fluid motion straightens his legs, throws his tail up behind him and fans it.

The entire performance has taken 11 seconds.

Proudly he stands, inert, alert and wary. Then he seems to relax just a bit, his neck not stretched out quite so far. His tail not quite so stiff.

He rests.

For about three minutes.

Then he gradually regains the regal pose he affected only minutes before. His head turns slowly, his eyes catching every subtle movement in his immediate environment.

Then his tail drops, his breast puffs like a pigeon's, his body settles onto the log, his wings flip backward.

And he drums.

He drums for hours, every two to four minutes. Then without warning he slowly marches down the log toward the root end, leaps gently to the ground, and disappears into the shadows. A few hours later, fed and rested, he wends his way back. He hops up and takes his place on the worn yellow spot on the moss-green log.

Poor bird, you think, tied inexorably to his instincts, drumming incessantly, off and on, night and day — and then you realize that this is what it's all about for a ruffed grouse. He drums because he has to, because he wants to, because he would be frustrated if he couldn't.

He's there still, as I pen these words, establishing his niche in the ecosystem, regal and haughty, the little drummer boy grown up into an imperial, majestic, sovereign soul.

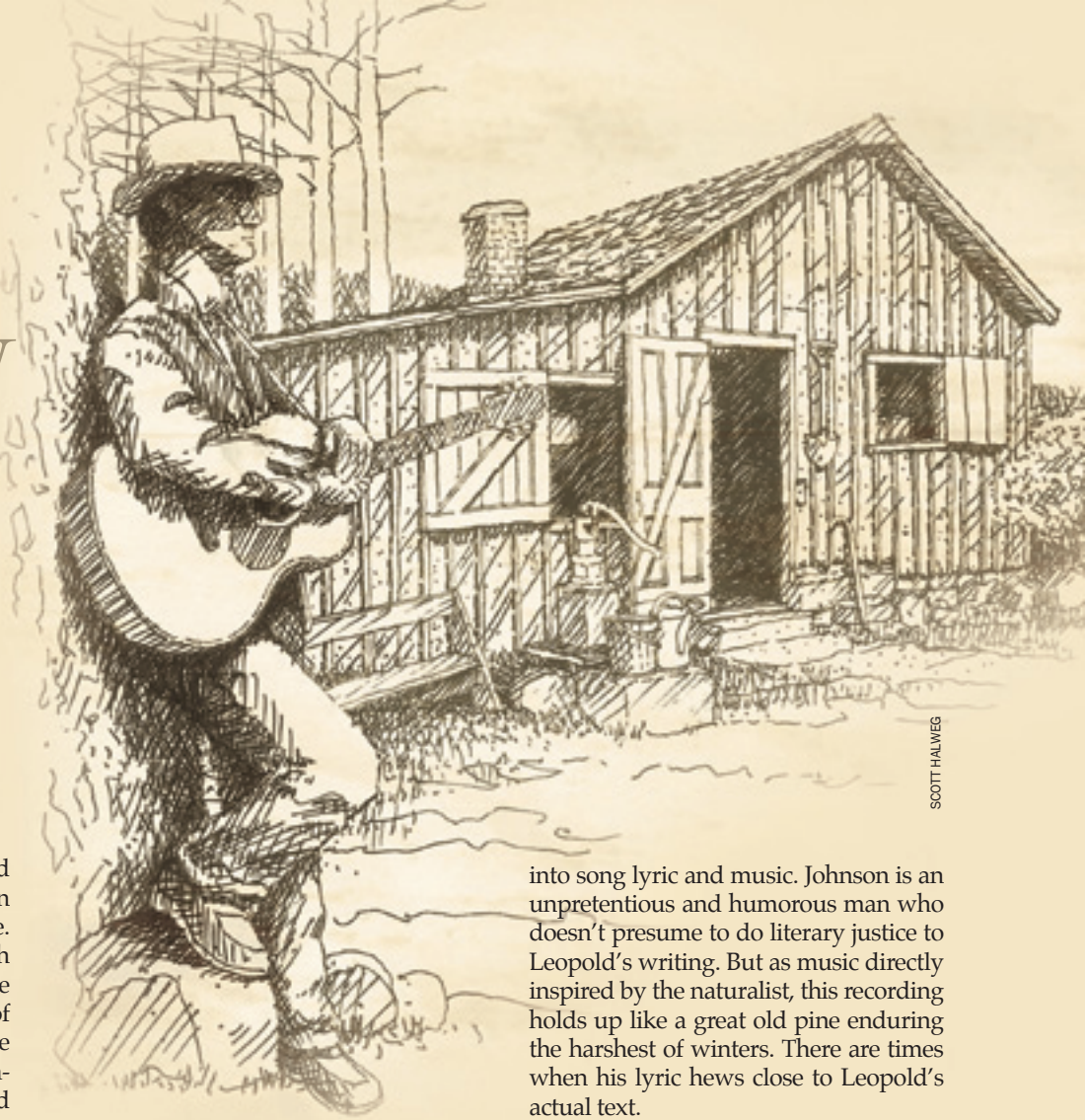
The king of the forest.

Birney Dibble writes from Eau Claire. He recalls that the grouse he wrote about drummed for three days just 30 feet outside his cabin window in northern Wisconsin.

Sand County Songs

Aldo Leopold's message made into music.

Kevin Lynch



SCOTT HALWEG

One brooding afternoon I walked along Dunn's Marsh in Fitchburg when a chilling cry pierced the rustling breeze. It sounded like a call of the wild through time, echoing the ancient history of life cycles. I looked up and saw an array of long, craggy wings floating on air. The majestic creatures descended in a rhythmic sequence and skated onto the pond surface, their vast wings shuddering close. Nine sandhill cranes and me. I felt frozen in time, and its unfathomable depths.

Tim Southwick Johnson refers to a similar unforgettable encounter with cranes below. A far more observant witness than me has shaped his viewpoint — and held his artistic life in thrall the last few years. That man is the great Wisconsin naturalist Aldo Leopold.

Every Wisconsinite — every person who cares about nature and humanity's troubling relation to it — should know Leopold and his legacy.

Johnson is doing something about that. Some years ago, the Lake Geneva-based singer-songwriter-instrumentalist encountered Leopold's classic journal *A Sand County Almanac* and, like the moon eclipsing the sun, it changed the way he saw the world around him.

Over time, he thought the revelations, insight and poetry of Leopold's classic text could be set to music. He began writing songs to connect more deeply with Leopold. He visited the Leopold Shack, where the naturalist stayed, a la Thoreau, amid the Wisconsin nature he was studying, contemplating and describing in his almanac.

"I got to sleep in the shack in June, the (Leopold) foundation just gave me the keys to the shack and there I was by myself," Johnson recalls over a meal of Vietnamese food at the West Bank Café in Milwaukee's Riverwest neighborhood, shortly before performing at The Art Bar, a few doors down.

"It was really cool. It was almost dark by the time I got out there and there is no electricity, so you open the place up and it sends you back outside," he laughed, describing the humble converted chicken's coop.

"So I went down to the river, and watched the cranes come home. I got back and birds were chattering overhead. I started a fire, hung out and went to bed."

"The next morning I woke up really early and got outside and did a recording of *Red Lantern* with my little digital camera video, at 5:45 in the morning."

The purity of experience in this natural setting helped Johnson continue reworking Leopold's evocative prose into song lyric and music. Johnson is an unpretentious and humorous man who doesn't presume to do literary justice to Leopold's writing. But as music directly inspired by the naturalist, this recording holds up like a great old pine enduring the harshest of winters. There are times when his lyric hews close to Leopold's actual text.

One example is "Crane Song." Johnson quotes Leopold from "Marshland Elegy": "A dawn wind stirs on the great marsh. With almost imperceptible slowness it rolls a bank of fog across the wide morass. Like the white ghost of a glacier the mists advance, riding over phalanxes of tamarack, sliding across bog-meadows heavy with dew. A single silence hangs from horizon to horizon."

In this song and elsewhere on *Sand County Songs*, Johnson's innate rhythmic sense and musicality capture the movement of Leopold's prose, its intense awareness and fluent oneness with the rhythms and secrets of nature.

Leopold's biographer Curt Meine said of the album, "*Sand County Songs* is wonderful. Tim Johnson has combined creative musicianship with a keen appreciation of Aldo Leopold's writing and experience."

Johnson's original music for video and film includes the Governor of Wisconsin's fire prevention video and the independent film Wisconsin Barns — A Touchstone of the Past, which aired on PBS nationwide.

But at The Art Bar, Johnson hardly

comes across as a tree hugger. He sings a variety of songs in a bright, high baritone and plays a bevy of string instruments with glittering virtuosity and a powerful rhythmic thrust, moving from acoustic to tenor guitar, mandolin, ukulele and Dobro. At one point, the largely young crowd gets a bit boisterous.

Johnson pauses and quips, "Would you all lie down on your mats and take your naps, so I can have some peace and quiet?"

He's trying to find musical commonality with them without being didactic. He admits that the album's prologue and epilogue might come across as a tad preachy, but overall it's an utterly engaging experience.

Nevertheless, the album underscores why there's plenty to consider and even act on, whether you make a living in nature, or simply care about the future of the state and the planet.

Tim Southwick Johnson at the Leopold Shack.

JENNIFER JOHNSON

Johnson has performed for Leopold Weekend, the first week of every March, at public libraries and schools. He'll often read from Leopold's almanac and play the corresponding songs.

Some think that the whole environmental topic shouldn't be a politically partisan issue; it's our planet and we all have to live on it. But Johnson thinks Leopold anticipated our current polarization on issues like global warming, deforestation and mining.

"He makes a lot of references to what (the fossil fuel industry and developers) are trying to accomplish and it all comes back to the dollar," the musician says. "When I was out in Iowa recently I talked to farmers and some have 6,000-acre farms. They're out there in their OshKosh B'Gosh and these guys are conservative Iowans. Even they are starting to come around because they're realizing that satellite technology was showing them how much topsoil they were losing. And they say, hey, that's our livelihood. So they're being forced to see it, through almost 100 years of people like Leopold talking about our way of living.

"One guy told me he's starting to see wildlife again that he hadn't seen even when he was a boy. He lived on a 1,000-acre farm and there was no deer or bobcats. So they're just starting to replenish the natural order."

Leopold himself owned 80 acres in Sand County in central Wisconsin. Once richly forested, the region had been ravaged by repeated fires, over grazed by cattle.

He developed an ecological ethic that replaced the earlier wilderness ethic of human dominance. He realized the importance of predators in the balance of nature.

Leopold championed an ethical sensitivity to understand that human relationships need to extend beyond our own species, toward relationships to society as a whole, relationships with the land. Exploitation and expediency regarding natural resources needed to be rethought.

Leopold saw wildlife management as a means of restoring and maintaining environmental diversity rather than primarily as a way to produce a surplus for sport hunting. He proposed expanding the concept of sport to wildlife research, and helped advance ornithology, mammology and botany as amateur pastimes and as value systems.

"Why cannot our concept of sport grow with the same vigor as our list of gadgets?" Leopold wrote, with uncanny prescience in 1949.

By the 1930s, he was the nation's pre-eminent authority on wildlife management. In 1933 he was appointed Professor of Game Management in the agricultural economics department at the University of Wisconsin-Madison, the first such professorship of wildlife management.

He put his theories to work in the field and eventually wrote *A Sand County Almanac* (1949), finished shortly before his death. He died of a heart attack while battling a wildfire in a neighbor's property. The book eventually sold 2 million copies, and presaged Rachel Carson's 1962 environmentalist classic *Silent Spring*.

Leopold is today considered the father of wildlife conservation in America. Yet his great book may have fallen into the category of a more respected-than-read classic. Johnson sensed a way to extend the book's message and meaning.

"I kind of wanted to convey the beauty of the book by adding music to try to further spread the message, in that nice lyrical way that he did," Johnson explains. "So it's a soft-sell approach."

There is a winning quality to Johnson's singing, which sometimes recalls Paul Simon, and avoids any self-righteous harshness. It strives to cultivate the listener to the Leopold viewpoint.

"It takes a certain maturity to come up with a project like this," he admits at age 54. He's performed in 30 states and is a former member of Mercury/Columbia recording artists Heartsfield and was a founding member of the band Famous Vacationers.

Johnson considers himself first and foremost an instrumentalist.

On *Sand County Songs* his instrumental prowess conveys the strength of the message and experience as much as anything. When Johnson double-tracks, he creates textural layers that sometimes evoke natural life forms.

"Yes I think there are some areas when you start to do two-guitar tracks and mandolin and things just happen, in a sense, that take a little bit of a life of their own," he says.

"There's a lot of little animals hidden in the fields, things that you can't see. They're just kind of hidden in the underbrush scurrying about."

Leopold would've heard them too.

Kevin Lynch is an independent writer, journalist, educator and visual artist from Milwaukee. He formerly covered the arts for The Capital Times.

Sand County Songs is available on iTunes or single song digital download. For hard copy sales of the CD visit aldoleopold.org/books/

SCOTT HALWEG

"Focus on Wildlife" photo contest

And the winners are...

Brooke Lewis

Dane County Humane Society's Four Lakes Wildlife Center is a state and federally licensed wildlife rehabilitation center in Madison that cares for the ill, injured and orphaned wildlife in south central Wisconsin, and promotes education and awareness of the crucial role of wildlife in our community.

The program was founded in 2002 by David Madden, former animal care director at DCHS, and Patrick Comfert, a local licensed wildlife rehabilitator. In the inaugural season, the fledgling wildlife program received over 200 patients.

After the first summer's influx of wildlife, the program began recruiting volunteers to help care for the wildlife patients that found their way through the doors daily. Grants and donations helped to make many improvements possible during the second year, and community volunteers pitched in to help build outdoor cages.

Since then, the wildlife program has grown greatly, caring for a wider variety of animals and caretaker volunteers providing the majority of the animal care.

In 2012, the center admitted over 3,000 wild animals of 109 different species in need of assistance. Each year it sees hundreds of eastern cottontail rabbits, gray squirrels, ducklings and songbirds. The center also cares for hawks, owls, eagles, turtles, herons, gulls, fox, badger, woodchucks, opossum and many other species.

If you find wildlife that you believe is in need of assistance, please call FLWC at (608) 838-0143 ext. 151 before intervening. Each year, hundreds of animals are taken from their home by well-meaning individuals and by calling first, FLWC can help you determine if the animal actually needs your help.

This year the center held a photo contest fundraiser called "Focus on Wildlife." Here are the winners.

"Sunday Stroll" by Michael Knapstein
"A Sandhill Crane couple and their young colt take a walk down the paved footpath around Tiedeman Pond in Middleton."

"Cooper's Hawk in Falling Snowflakes" by Joleen Griffin (Above)
"During a snowfall a Cooper's hawk came and perched on a shepherd's hook in my backyard. I was able to capture this photo without scaring him away."

"Reflections" by Carol Spiegel (Left)
"I used to take my camera with me when I walked my dog around Stricker's Pond. I was intrigued by the reflections in the still water."

Brooke Lewis is a certified veterinary technician, state and federally licensed wildlife rehabilitator, and Wildlife Rehabilitation Supervisor at Dane County Humane Society's Four Lakes Wildlife Center.

Keep the "wild" in wildlife

HERBERT LANGE

Cute to view, maybe. But don't touch.

Mandy Cyr

Wild animals have a place in nature. Every year thousands of people observe wildlife to make note of their natural behaviors and beauty. During certain times of the year, like spring and summer, wildlife viewing is even more popular because of opportunities to view wildlife parents and their babies. During these seasons it's especially important to understand wildlife's natural behaviors and how they care for their babies.

It is common in most wildlife species for parents to leave their babies unattended for periods of time while they forage or hunt for food. Parents also minimize time spent at nest sites to prevent predators from easily finding their babies.

Fawns are born with spots and little scent to help them blend into their environment and stay hidden. They move very little in their first weeks and they are often left alone for much of this time. Their mothers only return a few times a day to feed them and then fawns return to their hiding places. If you see a fawn lying on the ground by itself, you should leave the fawn where it is and try not to disrupt the area.

Baby rabbits also are usually alone in their nest during the day when the mother is not there. The mother rabbit will return a few times a day to feed her babies, but will then leave quickly because baby rabbits' best protection from predators is to remain in their nest concealed with grass or vegetation.

Watch "Born wild! Wisconsin's animal babies at home in nature" at http://youtu.be/8tn9eVM_fwI

HERBERT LANGE

Baby songbirds are also left alone in their nest at times when their parents are looking for food. As baby songbirds get older they move around more and start to test out their developing feathers. At this age, songbirds are called fledglings. Fledglings leave the nest just prior to the full feather development and, thus, cannot fly for several days to a week. During this time they hop around on the ground building their strength and coordination under their parent's watch. It is best to leave the fledglings alone to finish their developments.

It is a common misconception that human scent on a wild animal will drive the parents away. If you or someone you know picks up a wild baby that is healthy and not orphaned, and it has been held for less than 24 hours, place it back where it was found. Also keep pets and activity away from the area so the parents will feel safe enough to return.

It's also important to understand the laws and risks about handling wild animals. Most wild animals are protected under state and federal laws, making it illegal to take them from the environment without proper permits and authorization. However, citizens may temporarily possess sick, injured, orphaned, or displaced wildlife for up to 24 hours for the sole purpose of transfer to an appropriately licensed individual.

Most wild animals have an innate fear of humans and are not meant to live in captivity. They have complex nutritional, physical, mental and social needs that are not easily replicated in a captive setting. They can also be stressed by human interactions and noises associated with human activity; or even become habituated to and completely dependent on humans, making reintroduction back into the environment impossible.

Wild animals also carry diseases and parasites that can be transmitted to humans or domestic animals such as rabies, salmonellosis, mange or intestinal roundworms. If an animal is truly orphaned or appears to be sick or injured, you should contact the Department of Natural Resources or a wildlife rehabilitator immediately. Wildlife rehabilitators are licensed by the state and federal government to temporarily care for and treat wildlife with the goal of releasing them back into their natural habitat. An online directory of wildlife rehabilitators is available at: dnr.wi.gov/topic/wildlifehabitat/directory.html

Key points to remember:

- A healthy animal's best chance of survival is to remain in its natural environment.
- Wild animals are not meant to live a life in captivity.
- Young wild animals found alone are not necessarily orphaned.
- Human scent on a wild animal will not drive the parents away, so healthy baby animals can often be returned to their nests.
- If an animal is in need, immediately contact a licensed wildlife rehabilitator or the DNR's call center at 1(888)936-7463 (1-888-WDNR-INFo).

For more information on wildlife commonly seen in Wisconsin and tips on determining if an animal is truly orphaned, please refer to the Orphaned Wildlife fact sheet under the Educational Resources section of the DNR's Wildlife rehabilitation webpage dnr.wi.gov/topic/wildlifehabitat/orphan.html Younger readers can also visit the DNR's EEK! webpage "Leave wild animals in the wild" dnr.wi.gov/org/caer/ce/eek/critter/wildanimals.htm

Mandy Cyr is a DNR wildlife biologist.

Transformation on the prairie

Aerial view of the Badger Army Ammunition Plant prior to cleanup. STEVE ALES

What possibilities will greet visitors when the gates open at the Sauk Prairie Recreation Area?

Robert Manwell

Trans-for-ma-tion\ an act, process or instance of transforming or being transformed.

There is perhaps no better word to describe the decades-long process of creating a new state recreation area from a factory that produced propellants used by the military in three wars.

The new area has already been named. It is the Sauk Prairie Recreation Area, a name that reflects the landscape which is composed mainly of grassland and oak savanna and of the future use and recreational activities the property will offer.

ROBERT MANWELL

Mark Aquino

"We are near the end," says DNR Regional Director Mark Aquino, who has been involved with the project since 2001. "The plant has been decommissioned and the master planning process is underway. It has taken longer than first thought — in part because of the size and complexity of the property cleanup and also because of the extensive citizen involvement effort the Department of Natural Resources has insisted upon every step of the way.

"Before too much longer visitors will be able to enjoy outdoor pursuits as varied as camping, hiking, nature viewing, hunting, mountain biking and maybe even ATV riding and target shooting. Just what opportunities a future visitor will find are yet to be determined through the detailed master planning process currently underway."

A legacy of cleanup

Built in the 1940s after the United States entered World War II, the Badger Army Ammunition Plant produced military propellants for nearly 30 years leaving behind over 1,400 buildings, machinery, miles of piping, and soils polluted with materials used in the manufacturing process. The plant's owner, the U.S. Army, declared the property as excess to its needs in 1998 and knew it must clean things up before any transfer to new owners could take place.

Many of the buildings contained materials not considered hazardous at the time; asbestos and lead were common construction materials when Badger was built. These were removed and properly disposed of in approved landfills.

Whenever possible recyclable materials such as copper wiring and steel were separated and sold to scrap dealers. Fixtures, furniture and office items were sold through outlets like eBay. Much of the wood from structures was either brittle with age, coated with lead-containing paint or found to have soaked up potentially explosive materials. This wood was ground up and disposed of in appropriate landfills. But buildings with sound, clean wood were sold and moved to other sites while others were disassembled to salvage usable timbers for timberframe construction. Proceeds from sale of salvageable materials were used to defray other cleanup costs.

"We had salvage businesses from as far away as Iowa bidding for material," says Joan Kenny, director of the installation for the Army. "We think finding ways to reuse and recycle so much of the

material was a real success and a win for everyone."

Even the concrete from building foundations is being recycled as road building material through a cooperative agreement with the Department of Transportation. In 2007, 28,000 tons of crushed concrete was used to upgrade Highway 78 and a planned upgrade for Highway 12 north of the plant location will utilize another 180,000 tons of crushed concrete.

But due to its unique nature and purpose there were also some not-so-common compounds left behind, mainly industrial solvents and a chemical used in the propellant manufacturing process called dinitrotoluene or DNT which was a major component of the smokeless powder produced at Badger.

Considered a carcinogen by the U.S. Environmental Protection Agency, DNT cleanup has been a time consuming effort and has been a major focus of the cleanup for many years. Contaminated soils have been or are being removed or treated to levels sufficient to protect human health and the environment.

Monitoring wells, drilled to sample groundwater under Badger, have returned detections of solvents and DNT. Currently, water pumped from the most highly contaminated disposal site is being treated on-site, tested, and then discharged to the Wisconsin River.

The Army has been and continues to sample and test area private wells on a quarterly basis. To date, five wells have been replaced. Monitoring costs and if necessary, replacement of a well is paid for by the Army.

While the number of well replacements is low, there is a very remote chance that contamination could impact a private well in the future. One possible remedy would be to construct a municipal water system to serve the potentially impacted homes and any future homes in the area. If area residents and local governments were to favor such a proposal, the anticipated plan would be for the Army to construct and pay for the local government's operation and management for a specified time to be determined.

"Contamination transport in groundwater is very complicated," says Will Myers, a DNR remediation and redevelopment team leader and one of the cleanup project managers. "We evaluate speed and direction of groundwater flow, local geology and the characteristics of a particular contaminant and many more variables. Ultimately, we monitor the groundwater to see if the contamination moves and at what rate the contamination breaks down naturally. This is why monitoring wells are scattered throughout Badger. These wells act as sentries for private wells in the community around Badger."

Some cleanup activity continues but the pace and intensity of activity has passed its peak as Badger transforms into its new identity as the Sauk Prairie Recreation Area. Ten years ago, drivers cresting the Baraboo Hills heading south on Highway 12 were greeted with a view of more than a thousand low, squat buildings spreading across the landscape in carefully designed grids. Today, that same view is nearly unobstructed all the way to the distant Wisconsin River and Lake Wisconsin. It is a view that the first visitors to this fertile plain saw over 150 years ago.

Aerial view of the pump house.

GREG DELWICHE

Master planning underway

Properties under state ownership and management have master plans that describe how the property will be managed and for what. Plans are as different as the properties themselves but they are built on a basic foundation of integrated resource management which considers the fish and wildlife found on the property and also the forests, waters and recreational opportunities available.

What they all have in common is a robust citizen participation process in the development and review of the master plan.

"These are, after all, lands that belong to the citizens of Wisconsin," says Aquino. "We take very seriously our responsibility to manage the lands and the resources entrusted to us in an ecologically sound and sustainable way, but also to involve the public in the process."

Early in the Sauk Prairie master planning process the department held a public open house asking citizens what kinds of activities they would like to see at Sauk Prairie. Over 400 responses came back with dozens of recommendations ranging from managing the property as a large grassland, possibly with grazing buffalo, to a mix of dedicated recreation facilities with non-motorized trails for hiking, biking and equestrian use, ATV trails, hunting, shooting ranges and a desire to provide interpretive opportunities for the geologic, historic and cultural stories linked to the property.

Habitat for common and rare plant and animal species are also considered. Sauk Prairie presents a great opportunity for grassland birds and other species as well.

Unique opportunities

Sauk Prairie is an outstanding example of the oak-savanna and grassland habitat types that once covered large areas of southern Wisconsin. Sauk Prairie also has a

The property had to be cleaned up before transfer to new owners.

TOM BENNWITZ

Habitat for common and rare plant and animal species is an important consideration.

TOM BENNWITZ

unique human history. Both offer opportunities for education and learning. Human history can be studied at the Badger History Group's museum near the plant entrance. Natural history programs will evolve as the property is developed into the Sauk Prairie Recreation Area.

Soon, biologists with the DNR's Bureau of Endangered Resources hope to convert four old building foundations into bat hibernating sites or hibernacula. Research has shown that under controlled conditions, bats known to be exposed to the deadly white-nose syndrome that has killed millions of bats east of the Mississippi, can recover.

"Unlike natural hibernating sites which are often in caves with limited access, these old buildings can be disinfected in spring giving bats a clean, white-nose-free hibernaculum for the following winter," says Erin Crain director of DNR's Bureau of Endangered Resources.

"These buildings present an opportunity to save our bats at a very low cost to taxpayers. Some states have tried building hibernacula similar to what already exists at Badger at large expense. European countries have used old WWII bunkers for hibernacula much the same as we could do here. Use of these bunkers should not interfere with any other form of recreation."

Another unique opportunity found at Sauk Prairie is in the old reservoir used to supply water to the plant. The reservoir is home to a population of "neotenic" tiger salamanders. Salamanders go through life stages where they change their physical make up and appearance. Normally, tiger salamanders begin life as tadpole-like larvae living entirely in the water. They metamorphose into mostly land-dwelling adults at which stage they become sexually mature. Neotenic salamanders remain in the water and become sexually mature in their larval form.

The reservoir presents a safety hazard for future Sauk Prairie visitors, and is slated for draining and filling but not before a team organized by the department's Bureau of Science Services hopes to "rescue" as many salamanders as possible and relocate them to other habitats on Sauk Prairie and nearby ponds and wetlands. Several dozen of the unique animals will be shared with museums and schools for study.

Back to the big picture

"It's our job as planners to look at everything that a property might be reasonably capable of providing along with the public's suggestions and finding a mix that works on the property," says Diane Brusoe who leads the master planning process for the Department of Natural Resources.

"Master plans are intended to guide management and operations for a period of 15 years before they're renewed or updated. In terms of managing natural resources such as woodlands and grasslands and the wildlife that inhabit them, 15 years is a relatively short time. It also takes time to secure the resources and do the detailed planning for things like trails and other fixed facilities."

Planners also are working closely with those who would be neighbors to Sauk Prairie. It is expected that Sauk Prairie's 7,400 acres will be divided among three primary owners: the Department of Natural Resources will be the largest landowner at 3,800 acres, the U.S. Department of Agriculture's Dairy Forage Research Center will have 2,100 acres and the Ho-Chunk Nation has been offered 1,500 acres.

"Sharing the range of possibilities for the SPRA with USDA and Ho-Chunk is an important step in the master planning effort," says Aquino. "We don't want anyone to be surprised and we value their opinions as our future neighbors."

Ultimately, a master plan will come to the Natural Resources Board for review and approval. Planners anticipate that will happen sometime in the fall following a public review and comment period for the proposed plan. All public comments will be reviewed and responses provided to the board when the plan comes to them.

"We're planning on opening the entrance to visitors in 2014," says Aquino. "It's been a long and sometimes difficult road but I can't say enough about the enthusiasm, dedication and positive attitude citizens groups, local governments, our Department of Health Services, the Army, the National Park Service, the Environmental Protection Agency, the General Services Agency, the Bureau of Indian Affairs, USDA, the Ho-Chunk Nation and so many more have brought to the table. Transfer of a property of this size to the public at no cost for the land is practically unheard of. This is a once-in-a-lifetime opportunity. We want to be careful and we want to get this right. I can't wait to open the gates."

Robert Manwell is a DNR public affairs manager. His office is in Fitchburg.

Kettle Moraine State Forest

Pike Lake Unit offers spectacular glacial views, year-round activities.

Rob Wessberg and Paul Holtan / Photos by Rob Wessberg

When the glaciers receded from the area that is now Wisconsin about 10,000 years ago, they had sculpted a unique landscape known as a kame field along a section of the Kettle Moraine near current day Hartford. As the glacier melted, streams formed that deposited sediments in a triangular shape. The action of the stream flow sorted the different sediments, resulting in stratified layers of silt, sand and gravel.

This action created a series of steep triangular hills known as delta kames, combined with "kettle" lakes in this area. Many kames have been mined for their valuable sand and gravel, but a spectacular one is protected in what is now the Pike Lake Unit of the Kettle Moraine State Forest.

"The glacial landscape of this area displays what I call the 'Rocky Mountains' of Wisconsin, with an average peak elevation of 1,300 feet, offering outstanding views," says Rob Wessberg, superintendent of the Pike Lake Unit for the Department of Natural Resources.

A popular destination, Wessberg says, is to hike up the 1,350-foot Powder Hill kame that offers an elevated view from a 65-foot tower of the glacial landscape and heart-shaped Pike Lake, along with a breath-taking look at the Holy Hill Basilica, which was also built on a kame.

Located about half an hour from downtown Milwaukee, the Pike Lake Unit offers a wide variety of opportunities for year-round recreation and for urban families to connect with nature.

Pike Lake, a deep water lake left when the glaciers receded, is the main attraction during the summer months. At 45 feet deep, the 446-acre lake is the only natural reproducing walleye lake in the region and features a variety of game fish such as northern

Superintendent Rob Wessberg and Assistant Property Manager Drew Starch celebrate Smokey Bear's birthday.

Schlitz Audubon Nature Center presents a "Night Owls" program.

An accessible boardwalk .5 mile loop trail allows access to a fishing pier along the lake shoreline.

pike, perch, bluegill and largemouth bass. The lake offers a possibility for a trophy catch: an angler reeled in a largemouth bass that was 22 inches and weighed 6 pounds last summer and this winter a 41-inch northern pike won the trophy at an ice fisheree.

There is a beach that provides the opportunity to swim on the hot summer days, and kayaking is popular in the calm waters of early morning. There are three boat launches on the west side of the lake, which is large enough to accommodate wave runners and water skiers.

"I have talked with visitors sitting along the beach under a shade tree during the hot summer afternoons only to find they have been coming here for more than 40 years to catch the cool westerly breeze off of the lake — Mother Nature's air conditioning," Wessberg says.

Those loungers had a chance to see a bald eagle that was attracted throughout last summer to the smorgasbord of fish Pike Lake has to offer.

The Pike Lake Unit offers two reservable picnic shelters to assist people in planning for special events such as birthdays, graduations and anniversaries. A big attraction is the shade provided by large sugar maple trees along with the close proximity to the beach. Boaters may moor along the shallow shoreline and take guests out on the water throughout the afternoon.

"These are some of the traditions that have been started with families that have been gathering at Pike Lake for many years," Wessberg says.

Stone walls are found throughout the Pike Lake Unit — a sign of Wisconsin's agricultural heritage from settlement time. The glacier left cobblestone within the soil that settlers in the late 1840s had tilled up when plowing their fields. As the rocks were cleared

for planting crops, they were piled along the edge of the fields forming the stone walls.

One stone wall runs through the edge of the campground, which is nestled in a mixed hardwood forest that provides shade from the hot afternoon sun. The campground offers a backwoods camping experience, with 32 campsites, 12 of which are electric. The campground is popular, so campers should plan ahead by calling Reserve America to make campsite reservations.

The Pike Lake Unit offers a variety of looped trails, including one popular trail with a level surface for people with disabilities to access a boardwalk with a close up over-the-water view from a fishing pier. Hikers may witness a fawn and doe running, the sound of a woodpecker chiseling on a tree, or the frequent chirping of ground squirrels alerting others of their presence.

The Ice Age National Scenic Trail passes through the Pike Lake Unit on its way down from the Northern Unit of the Kettle Moraine State Forest, passing through the Holy Hill area, before heading through the Loew Lake, Lapham Peak and Southern units of the Kettle Moraine State Forest. As the trail meanders it provides hikers a feel of what the glaciers left behind while traversing the landscape. Many vegetation openings entice hikers to stop and take in a spectacular view.

A year-round property, fall and winter offer great outdoor experiences too. Fall colorama is spectacular, with the moraines and kames providing an elevated view of the color display. Wessberg says the drought of the past season brought incredible colors never seen before by the local residences.

Visitors can plan a stop as they drive the Kettle Moraine Scenic Drive that connects the Southern Unit through Lapham Peak, Loew Lake, and Pike Lake units, up to the Northern Unit. Visitors to nearby Holy Hill can climb one of the steeples in the Basilica, from which they can see Miller Park and the Milwaukee skyline.

When snow arrives Pike Lake offers up to five miles of cross-country skiing with trails groomed for classical and skate skiing. Other trails offer snowshoeing opportunities. Winter visitors will see multiple animal tracks in the snow, letting them know that the forest is alive with many mammals that had ventured out overnight.

A very popular winter event is the annual candlelight ski/hike in February each year. More than 1,500 people came out this past winter to cross-country ski and hike along a trail illuminated with over 350 bag candles. At the end experience a sip of hot chocolate and bonfire. Northern Cross Science Foundation offered a glimpse of Jupiter in a winter sky through a high power telescope.

Events at Pike Lake are sponsored or supported by the Friends of Pike Lake, a non-profit organization dedicated to promoting a greater appreciation of the Pike Lake Unit. The friends group has a new event called Discovery Day planned for June 1. It will be an opportunity for visitors to experience a variety of outdoor experiences such as fishing, geocaching, making fish-print t-shirts, bird hiking, kayaking and visiting with Smokey Bear.

The Friends of Pike Lake was also successful in securing an Affinity Grant from the statewide umbrella group, Friends of Wisconsin State Parks Unit to provide quality outdoor educational programs during the summer that include live raptor and animal demonstrations. More than 200 kids learned how to build a safe campfire and sing Happy Birthday to Smokey Bear and eat birthday cake last August.

"At a time when many younger kids and families are losing opportunities to develop a passion for the great outdoors of Wisconsin, this grant has allowed us to engrave a memory for a lifetime for these youngsters," Wessberg says.

View of the Basilica on Holy Hill.

Fall colors from the top of the tower on Powder Hill.

First snow on the Kettle Moraine Scenic Drive in the Loew Lake Unit, Town of Erin.

The Pike Lake Unit of the Kettle Moraine State Forest will be offering outdoor programs in 2013 every Saturday from Memorial Day through Labor Day. Check the Get Outdoors activities calendar of the DNR website or the Friends of Pike Lake website.

People interested in being part of promoting the Pike Lake Unit, can also visit the Friends of Pike Lake on Facebook or stop by the office for information on how to get involved.

- wsppikelake.blogspot.com/
- www.facebook.com/friendsofpikelake
- dnr.wi.gov/topic/parks/getoutdoors/events.html

Rob Wessberg is the superintendent of the Kettle Moraine State Forest – Pike Lake Unit. Paul Holtan is a DNR publications editor in the Office of Communications.

Often overlooked

Ephemeral ponds deserve our attention, too.

To learn more about ephemeral ponds visit dnr.wi.gov and search keywords "ephemeral ponds."

DREW FELDKIRCHNER

Cary Kostka

Ephemeral ponds are a vital but often overlooked component of wetland systems in our state, and as such need the same TLC as other wetland systems. By learning more about ephemeral ponds, better protection strategies can be developed.

What are ephemeral ponds?

Ephemeral ponds are formed from winter runoff and spring rains. These ponds are temporary and typically dry out by early summer, though this is dependent on other factors such as seasonal precipitation and temperature. Ephemeral ponds do not have inlets or outlets, and are isolated from other wetlands, making them fully reliant on winter snows and spring rains. Because they don't have inlets and dry out each year, ephemeral ponds do not support fish populations. They provide habitat for a diverse collection of invertebrates, amphibians and plant life, including wood frogs, blue salamanders, fairy shrimp, turtles, dragonflies, damselflies, pond snails, water sow bugs, smartweeds and orange jewelweed. The first three species mentioned are considered ephemeral pond indicators, because they spend most, if not all, of their life cycles in these ponds.

Ephemeral ponds and ecology

The diversity of species that rely on ephemeral ponds is key to local ecologies. The variety of plants that ephemeral ponds support provides a place for songbirds to breed, feed and rest. Amphibians and certain invertebrates rely on these ponds for breeding and maturing. Small mammals and migrating waterfowl find food sources here as well.

The isolated, still nature of these ponds complicates life for ephemeral pond species. Ephemeral ponds are shallow and have no currents so the water warms quickly and has lower levels of oxygen. Shallow, warm water with little oxygen evaporates quickly so time is not on the side of these species. To cope with unpredictable, ever changing conditions, many of these species can hasten their maturity into adulthood to beat the pond drying out.

Autumn leaves become a part of the food supply for invertebrate residents of woodland ponds which have longer life cycles since the surrounding trees provide cooling and shade, reducing evaporation. Many species reliant on ephemeral ponds bury their eggs in the mud, where they wait for the spring melt to hatch. Plants add energy to the pond by becoming compost at the end of their growing season. Plants also attract birds, insects and small mammals, whose waste products add to the natural composting process in and around the ponds.

The need for conservation

According to the DNR's "Species of Greatest Conservation Need" list, 12 species of birds, mammals and amphibians are listed as being "significantly associated" to ephemeral ponds, with another six species listed as having some pond association. Those 18 species reliant on ephemeral ponds can best be helped by furthering ephemeral pond protections.

The primary natural threat to ephemeral ponds is drought. A lack of precipitation, like Wisconsin experienced in 2012, can have wide ranging effects that we may not see for two to three years, according to Tom Bernthal, the DNR's

Wisconsin Ephemeral Ponds Project (WEPP) manager.

What if drought conditions persist? Jim Hyatt, WEPP program director for the Schlitz Audubon Nature Center writes that he would, "imagine that these species would have to find any source of water, even a permanent pond." He adds, "Permanent ponds also have more predators. This would mean a decline in the population of amphibians."

Landowners and developers also threaten ephemeral ponds by draining and filling them, perhaps unintentionally. Since ephemeral ponds are considered part of the Wisconsin wetland system, anyone wishing to drain, fill, or make any other changes to an ephemeral pond must first seek a permit with the Department of Natural Resources.

But how do you know if the pond is ephemeral? Identifying ephemeral ponds is a challenge, as many remain unmapped in the state.

Mary Hollebeck, Adult Program Coordinator at Riveredge Nature Center, says, "The biggest challenge is getting permission from landowners to monitor their ponds. Another challenge is that not all temporary ponds are ephemeral ponds. This is why surveying potential ephemeral ponds, and mapping out those that prove to be ephemeral, is so crucial and an important goal of WEPP."

How to help

WEPP currently focuses its conservation efforts in the eastern and southeastern part of the state. According to Katie Beilfuss at Wisconsin Wetlands Association, the focus is on these areas because they have the fastest development growth. The ponds in these areas are at greater risk, making the need to map them sooner rather than later a must.

WEPP volunteers have monitored ephemeral ponds since 2008 with local partners throughout eastern and southeastern Wisconsin. WEPP partners monitored over 150 sites in the first two years of the program. Those interested in helping can do so by volunteering to be a part of the Citizen Monitoring Network. A listing of partners can be found at http://watermonitoring.uwex.edu/level1/wepp/index.html

Volunteers are required to attend an eight-hour training session and are expected to monitor a minimum of three sites on a monthly basis from April through October, or until the ponds have dried out. Volunteers in the project work in teams of two or more, and enter various measurements and readings onto a supplied one-page datasheet. A common request from organizers is that if you decide to volunteer, be consistent and stick with the program through the entire season.

Making a difference

Hollebeck adds, "Since WEPP's inception, hundreds of ephemeral ponds have been verified in southeastern Wisconsin, which hopefully will ultimately lead to their protection."

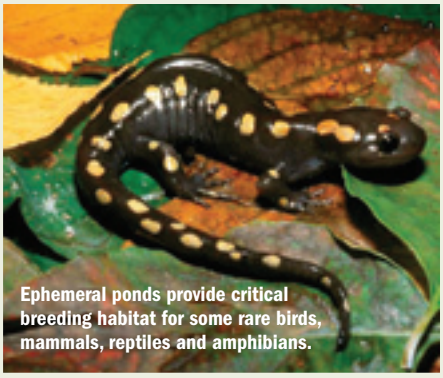
According to the Milwaukee County Parks/UW-Extension Natural Areas Program, 306 ephemeral ponds have been located and inventoried in the Milwaukee County Park System. The program only has the Menomonee River and Little Menomonee River corridors left to survey in Milwaukee County.

Brian Russart, the Natural Areas Coordinator and primary contact of the program, says that the project should be completed within the next year or two.

Conservation efforts of programs like WEPP and the Milwaukee County Parks/UW-Extension Natural Areas Program are yielding good results thanks to their dedicated efforts. Although ephemeral ponds have fallen below the conservation radar of most Wisconsin residents, awareness is growing. By raising awareness, ephemeral pond conservation efforts will continue to grow, ensuring that their dependent ecologies continue to thrive for generations to come.

Sandhill crane nest at the Kettle Hole Woods State Natural Area.

RICH STAFFEN



Ephemeral ponds provide critical breeding habitat for some rare birds, mammals, reptiles and amphibians.

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Decaying trees and leaves add energy as compost to this pond.

DREW FELDKIRCHNER

Cary Kostka has participated in the Wisconsin Ephemeral Ponds Project through the Schlitz Audubon Nature Center in Bayside. He writes from Cedarburg.

The Department of Natural Resources Wetland Identification Program helps residents determine wetland presence on their property. For more information, visit dnr.wi.gov/topic/wetlands/, or the interactive webmapping tool at dnr.wi.gov/topic/SurfaceWater/swdv/

Readers Write

RESIDENT ROBINS

The article on "Sense of Time" ("Adapting to Wisconsin's changing climate," February 2013 insert) might have noted that many robins do not leave Wisconsin at all. Hunting grouse these past 10 years has allowed me to see flocks of robins in the same location all through the hunting season – until Jan. 31. They have food and water and seem to care little about leaving their valleys south of Eleva off highway 93.

D.J. Perkins
Eau Claire

ROBINS, LOONS AND EAGLES ON GREEN LAKE

Double checking your information about the expanding/declining habitat of the common loon. Let me say your magazine is fantastic. I look forward to having it in our home every month. The February issue was no exception. The cover was beautiful. A lot of my family live in Minnesota and they are quite proud of their loons. We live on Green Lake and have enjoyed the loons for years. They show up here in late winter/early spring and are present during the summer when there is a lull in boat traffic. When the kids go back to school in the fall, the loons spend more time here as well. It seems they have increased their presence yearly since we moved here permanently in 2005.

Pages 4 through 9 of the February issue support what we have noticed, a yearly increase in the presence of common loons. The center of the issue includes another publication entitled, "Adapting to Wisconsin's Changing Climate." Page 4 of that section contains an article called "Sense of Time." In it we are told that since 2010, we can expect to see fewer loon sightings. We are only going into our third year since that bench mark, but I can tell you that from 2010 through 2012 we have enjoyed seeing more loons during the day and hearing their haunting calls at night. I am hoping we are the exception to the warning of fewer loons.

The "Sense of Time" article also spoke of the earlier arrival of robins to our area each spring. In 2008 I saw a robin fly through our neighborhood on Jan. 26. I was all puffed up thinking I saw the first robin of spring. When I passed this good news on to our neighbor who also lives on the lake but in a more wooded area two long blocks to our east, she said, "Oh they live here all winter long." Apparently, they enjoy the comparable shelter of her woods to the open winds of our peninsula! Both of us live on property that borders a marsh. Keep up the great work with your publication. I consider it to be easily on a par with *The Smithsonian* and *Arizona Highways*.

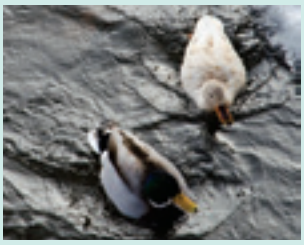
Arthur Ogren
Markesan

Editor's note: In a subsequent correspondence with Mr. Ogren, he shared more observations about bird life near his home: They must feel comfortable with the shelter and food supply during the winter months. I know that here several of us have seed feeders going. We also have a heated bird bath. Of course, all of this is coming from a guy who until a year or so ago never realized that those beautiful yellow finches stay here as well, but with a darker plumage. And then there are the bald eagles. We live here year around, but most of the homes are seasonal. As the people leave and the weather chills, the eagles appear. They like to perch in a tree not 60 feet from our windows. They will swoop low over the lake and perch in a tree just down the point from us. One sighting was of a mature eagle flying with an adolescent eagle. They would climb, dive, approach each other in the air and then veer away at the last instant. Once the mature bird had a fish and after playing with the younger eagle, climbed and dropped the fish. The adolescent simply rolled out of the climb without drawing in his/her wings, and streaked toward the water. Before the fish could impact the lake, the eagle had it in its talons. We like to think we were witnessing a training session but we humans are always ascribing reason to things we see. The eagles are a special treat just up until the lake freezes which this year was about Jan. 21-22.

MYSTERY MALLARD

With camera and tripod, I perched myself next to the Rock River in Watertown just below the dam on Feb. 4. Mallards were in the dozens, but one caught my eye. It is white. Upon looking it up, mallards and domestic ducks do interbreed. This is likely the identification for this bird. The icy waters did not stop these ducks, which had to preen and rub the ice off of their beaks from time to time. They hang out near an area where a kingfisher and a bald eagle are perched regularly.

Annette Clark
Reeseville



Andy Paulios, Wisconsin Bird Conservation Initiative coordinator, replies: *It's hard to say from just one picture but mallards do often interbreed with domesticated "white" varieties leading to some interesting plumages in the offspring. Alternatively, this could be a leucistic mallard. Leucistic birds have a pigmentation issue within the feathers or skin leading to blond or white looking birds or white patches of feathers.*

COMMENTS ON CLIMATE CHANGE

The [Wisconsin Initiative on Climate Change Impacts] eight page insert on Wisconsin's changing climate left no credible evidence that the short term research of the WICCI organization is a predictor of a climate warming and severe weather trend. Right away I was skeptical of the message of WICCI when I read the comments of associate professor, Dan Vimont, "The process of extracting local scale climate data from global models and 'downscaling' it to Wisconsin was ground-breaking and is now being used across the country…"

What global models was he referring to? There are many models being circulated by academia. Hope it was not the data that gave us Climategate. Most likely it was not the data of not so long ago, that suggested the climate was cooling (circa 1970s). Hot and cold climate is an ebb and flow that has occurred for millions of years. Natural variability is the only constant that I have confidence in. Everything else is a "Chicken Little — the sky is falling" syndrome. Us humans are naive to think we can control climatic events.

Larry Koschkee
Monroe

These inserts in your February 2013 issue bring up some key questions. A number of current UW-Madison staff is quoted. These comments, and the production overall, present warming as if it's a definite shift in climate. As one who worked for three decades in an agency that planned habitat burning, etc., I also saw spring phenology starting about 12 days earlier — since maybe the mid-1980s. However, as I recall it, the 1970s in southern Wisconsin were considered even colder than normal. A key question has to be: "How many years' data does it take to represent climate?" Another is: "Just how much can we really attribute to man's effect?"

As one studying prairies, I had the privilege of meeting world-class UW meteorologist Dr. Reid Bryson, circa 1970. He seemed to feel that if man had any notable effect, it would be more like cooling [see his *Climates of Hunger* book]. I contacted him early in 2007 about the issue; he sent me a two-page response entitled "HISTORY!! (Getting back to what it sort of used to be)." In it, he described a Greenland with Viking settlements much *warmer* in 900-1200 A.D., than in 2007. He also described the "observable

COMMENT ON A STORY?

Send your letters to: Readers Write, WNR magazine, P.O. Box 7191, Madison, WI 53707. Or email letters to dnrmagazine@wisconsin.gov. Limit letters to 250 words and include your name and the community from which you are writing.

NO ACCESS TO THE WEB?
Don't have access to a link we mention in a story? Let us know when you want to follow a link we list. We'll do what we can to get you a copy of the material if it is available free of charge and is relatively short in length.

volcanic record" as a main driver of hemispheric temperature while CO2 as only "a very minor dependent variable."

John Curtis was a UW-Madison world-class plant ecologist. In his (1959) *Vegetation of Wisconsin* (p. 450), a "Xerothermic" period in about 1600 B.C. was so much warmer than in 1959 that it even shifted the "tension zone" line between southern and northern vegetation types to the north — as is shown on the map (p. 451) [c.f., the 1959 map, on p. 20]. As I recall, even UW's Aldo Leopold put much credence in the theory of sunspot cycles causing cycles of drought and heat. Wouldn't really good science have to be open to the work of such people, for the proper interplay of the "sifting and winnowing" of the UW motto?

Jerry Schwarzmeier
Wales

GRAZING NOT AS SELECTIVE AS HUMANS

I have spilled sweat and blood on restoration sites from the shores of Lake Superior to the beaches of the gulf coast and have yet to meet an individual whose boots have touched more ground. I recently heard about and read the article on page 20 of the February issue ("Let's do brunch — or is it brush?"). I respect the great work being done by grazing and use it as another tool in my arsenal. However evidence-based learning has shown that too many rare native species are lost while waiting for this gradual process and goats are not as selective as human workers. The article gave the impression grazers destroy less good vegetation than they do in reality. Environmentally minded operators and applicators can more quickly and completely restore an area to a state that can be maintained with fire, shovels and gloves. The difference can be understood when one sees the diversity and habitat bring back some critically endangered species that would become extinct while waiting for grazing to have a similar effect. There is a drastic difference in the quality of habitat as well. Often times people choose this more gradual process to avoid public complaints. I refer these complainers to already established restorations and often times end up with recruits for volunteer projects. Besides, the future complainers will be more focused on yesterday's lack of action. I hope my words don't come across as critical.I believe the Wisconsin Department of Natural Resources is ahead of the curve when it comes to restoration and management. I have a lot invested in restoration and just wanted to throw in my 2 cents after being referred to this article. Keep up the good work.

Brian Heynen
Byron, Ill.

KUDOS FOR FEBRUARY ISSUE

I am a long-time, loyal subscriber and look forward to every issue but this time I am compelled to write and thank you for the most interesting, informative and enjoyable issue (February 2013), from cover to cover, in memory. Thank you to all involved. You set a high standard for all environmental publications.

Robert K. Searles
Wonewoc

I happen to be a very "looney" guy! Your last issue featuring loons was a real treat. I learned a lot. In my living room I have a life-size, limited edition replica carving of a loon on display. On the walls are two large limited edition pictures of loons. They are a constant reminder of many great fishing trips to northern Wisconsin. They like to be alone on a remote lake — so do I!

Jim Cox
Lodi

SHOWY SNOWY OWL

I'm sending a picture of a snowy owl I took about 11 years ago in early November on Allequash Lake. I thought maybe you could use it for the DNR magazine.

Eric Lewis
South Milwaukee

TRIO OF REDHEADS

Caught this picture of redheads in the Wolf River in Winneconne and thought you and your readers might enjoy.

Doug Sasse
Winneconne

Making memories on Lake Michigan

Continued from page 2

the boat and I landed it with the net. It was a nice salmon — and it was only the beginning. After we secured our catch in the cooler we let three lines out. Suddenly, we heard a reel start screaming as line was being ripped out.

"This is the big one we've been waiting for!" my dad yelled.

I grabbed the rod out of the rod holder and could feel a fish tugging. I knew it was a nice one. As I was reeling in the beast another rod went off screaming. My dad and I didn't know what to do. He grabbed one of the rods and left the other one in the rod holder. Finally, I brought my fish up to the boat and it looked like a shark in the water.

"Hold on and let me grab the net," my dad said as he set his pole with the fish on it into the rod holder so he could net mine. I helped him yank the beast into the boat. It was the biggest fish I'd ever caught and definitely the best fight I'd ever had with a fish. I ran to the lower deck to grab the scale and weigh my fish. It was 18 pounds and the biggest fish we had caught that year.

My dad ended up landing his fish, too, but we lost the one on the third line. No matter. It was an awesome experience as we ended the day with a cooler full of fish.

Salmon fishing not only grants me the chance to catch a lot of fish, more importantly, it also gives me the opportunity to hang out with my dad out on the big lake and create some memories.

Tyler Zacho, 13, lives in Cambria. He has a strong connection to the outdoors and enjoys nothing more than spending quality time with his father, William, or his brother, Brian, going after wildlife, whether hunting for white-tailed deer or on Lake Michigan fishing for king salmon.

CREATURE

Comforts

In defense of the helpful honeybee.

Paul A. Biedrzycki

As a recent and novice urban beekeeper, I have surprisingly discovered a certain level of tranquility amid the buzzing and humming of the *Apis mellifera* (European honeybee) that occupy a hive in a corner of my backyard.

Mindy Biedrzycki inspects the top-bar hive (beepod) in the corner backyard. Such inspections are conducted monthly to make sure the hive is healthy and active.

PAUL A. BIEDRZYCKI

Perhaps it is my fascination with their seemingly obsessive sense of purpose in serving the needs of the colony. Or maybe it is the fact the colony as a whole functions so uniformly as if it were a single organism in which the lines of individual and community are blurred in an inseparable symmetry.

Regardless, my current preoccupation has already paid dividends by providing me hours of personal enjoyment as well as feeding my curiosity.

My initial interest in cultivating an apiary revolved around fostering ecosystem sustainability (honeybees are critical to plant pollination and diversity) as well as growing the honeybee population ("colony collapse disorder" has decimated 50 to 70 percent of bee populations in many parts of the world).

Honeybees form teardrop comb within top-bar hive designs for brood, honey and "bee-bread" storage.

PAUL A. BIEDRZYCKI

However, I now have come to simply appreciate what I refer to as the honeybee "esthytique," or that which represents the natural rhythm and harmony of the bee colony. Observing and understanding the role of each bee in the colony only augments this perspective.

For example, a single queen provides thousands of eggs for countless generations that will supplement and supplant the colony. Male drones work to ensure egg fertilization and vital genetic input to perpetuate the species. Female worker bees (95 percent of the hive population) carry out the vast majority of tasks necessary for colony survival including foraging, nursing, cleaning, temperature control and guarding duties. It is exactly this type and level of social organization, cooperation and focus that both intrigues and invigorates the senses.

Nevertheless, dark clouds loom for this industrious and beneficial insect. An article in the journal *Science* suggests that neonicotinoids — a common and widely used insecticide — may be responsible for colony collapse disorder as witnessed around the globe.

Researchers postulate that these particular chemicals, which contaminate nectar and pollen in bee friendly plants, interfere with their ability to successfully navigate to and from the hive. Without the aid of this unique navigational capability honed over millions of years, bees can no longer bring food back to the hive much less return to sustain social cohesion and survival. It is believed that colonies eventually starve, disband and perish.

While the disappearance of the honeybee may seem trivial to some, it may indeed herald a more harsh reality for our own future. Without honeybee pollination, agricultural crop diversity and yields will eventually decline. This will further cripple food production in countries already stressed by famine or drought. Similarly, as non-agricultural native plants also dwindle, various insect and animal species dependent on this flora will subsequently falter, diminish and inevitably disappear.

Like the warnings surrounding the changing climate, unintended consequences of manmade ecosystem disruption ultimately threaten our own existence in ways difficult to predict with certainty or even imagine. With the current worldwide honeybee decline, we once again run the risk of becoming complacent while continuing to erroneously believe that nature is perpetually forgiving, planet resources unlimited and our human footprint relatively insignificant.

Mindy checks a bar of fully formed comb to locate the queen and evidence of egg-laying and brood.

PAUL A. BIEDRZYCKI

The author removes a bar of comb at the rear of the pod to check for capped honeycomb.

MINDY BIEDRZYCKI

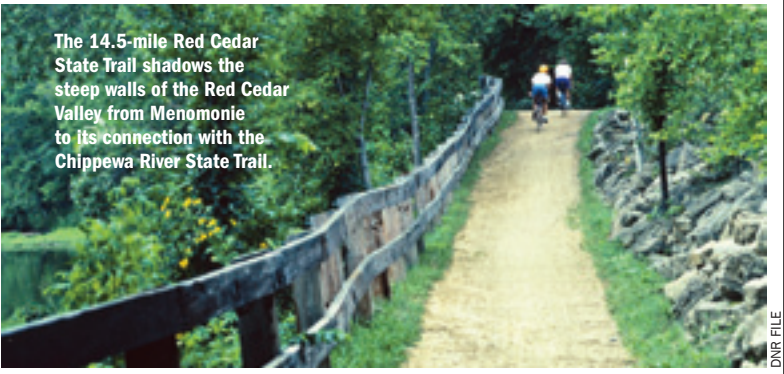
Paul A. Biedrycki writes from Milwaukee where he and his wife Mindy tend to a honeybee hive in their backyard.

Rivers, rails to biking trails.

Ellen Corso

When the Chicago and North Western Railway removed tracks and sold land to the Department of Natural Resources, Wisconsin built the nation's first rails trail — the Elroy-Sparta. Today, Wisconsin has over 127 state bicycle trails, 38 of which are rail trails. Start your bicycling season out on a river-rail trail and bike for free (no trail pass required) on June 1 and 2. For information on state bike trails visit dnr.wi.gov/topic/parks/activities/bike.html or the Wisconsin Bicycling Federation at wisconsinbikefed.org

The 26-mile **Chippewa River State Trail** in northwestern Wisconsin was built in 1990. The trail takes off from Phoenix Park in Eau Claire at the junction of the Eau Claire and Chippewa rivers. It travels south along the Chippewa River through river bottoms, prairies, sandstone bluffs and wetlands before joining the Red Cedar State Trail and the Danville Wildlife Area near the confluence of the Red Cedar and Chippewa rivers. It winds up at the town of Durand.



The 14.5-mile Red Cedar State Trail shadows the steep walls of the Red Cedar Valley from Menomonie to its connection with the Chippewa River State Trail.

DNR FILE

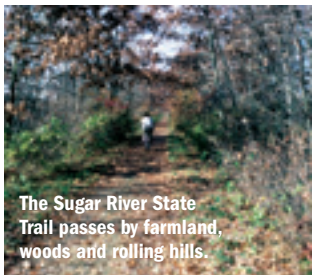
After operating for almost 100 years the Milwaukee Railroad line along the Chippewa River was abandoned in 1980, and a decade later transformed into this trail. South of Carryville the trail is rugged and forested. It provides bird and wildlife watching including encounters with frogs and salamanders. Relax in the shade on one of the many benches along the trail.

The 15-mile **Fox River State Trail** in eastern Wisconsin was developed in 1991. Trains ran this line for 116 years, but service was discontinued in 1989. The primarily flat trail meanders between Green Bay and Hilbert. The north end is asphalt paved for 11 miles; the remaining trail is surfaced with limestone screenings.

Traveling south through downtown Green Bay, homeowners showcase their gardens for riders. The Friends of Fox River Trail maintain the trail with fall and spring cleanups plus trail improvement fundraisers. From Green Bay to De Pere the trail darts in and out along the Fox River. Riders pass Heritage Hill State Park (heritagehillgb.org).

Clarence Covered Bridge replica on the Sugar River State Trail.

RYAN AFFLERBAUGH



The Sugar River State Trail passes by farmland, woods and rolling hills.

DNR FILE

In De Pere riders will find the De Pere Riverwalk and wildlife viewing pier www.depereriverwalk.webs.com Stop in for frozen custard at Zesty's on Riverside Drive (open April through September). Then bike through vineyards heading south towards Greenleaf. The LedgeStone Vineyard offers wine tastings and more Thursday 5 to 9 p.m.; Friday, Saturday and Sunday 11 a.m. to 5 p.m. The winery is easily accessible from the trail. Visit ledgestonevineyards.com or call (920) 532-4384. Continuing south from Greenleaf to Ott Road riders find small towns and rolling hills, farms, wetlands and wildlife.

The 12-mile **White River State Trail** in southeastern Wisconsin was built in 1999, following the former Soo rail line between Elkhorn and Burlington. This trail wanders over bridges and passes scenic vistas, quaint towns, farmlands and wetlands. Riders report seeing deer, coyote and chipmunks.

Visit the old Springfield depot, now the Pedal & Cup, which offers bike rentals, lunch specials and more (open May 1 to October 13). Call (262) 249-1111 or visit pedalandcup.com

The Friends of White River State Trail donated 12 benches to give riders a break and the group encourages trail expansion and improvements. In Lyons an old trestle bridge spans the White River. Biking east, the trail runs into Burlington at Spring Valley Road. Then it's a short pedal north on Highway 36 to downtown Burlington, known as Chocolate City USA. Visit the Chocolate Museum. Cycling from Burlington west to Elkhorn on the trail is more invigorating due to the overall incline.

The 24-mile **Sugar River State Trail** in southwestern Wisconsin is the sweetest. Built in 1972, this trail follows an abandoned railroad line from New Glarus to Brodhead. The Sugar River Trail headquarters in New Glarus is a restored 1887 railroad depot. There is ample parking and the headquarters offers bike rentals.

Cycling south towards Brodhead riders cover 14 trestle bridges crossing the Sugar River and its tributaries as the trail travels by farmlands, woods, rolling hills, scenic meadows, remnant prairies and glacial topography. Just before Brodhead, the trail goes over the Clarence Covered Bridge replica.

North of Albany to Monticello is the most scenic. The Albany Wildlife Area houses cranes, deer and snapping turtles. The trail is primarily flat but a few hills and sharp turns make for wonderful adventure. This is a great family trail. Take time to study railroad history at the Depot Museum.

The 29-mile **Tomorrow River State Trail** was built in 1996 along an abandoned railroad in central Wisconsin. The trail runs between the Plover and Manawa. Nearby is a separate adjacent path for horseback riders. The easy riding surface is packed crushed limestone. The trail passes through agricultural and forested areas. At Amherst Junction it passes the 143-acre Lake Emily Park with picnic tables, scenic views and bathrooms. West of Plover the trail connects to the Green Circle Trail and goes over the Tomorrow River at Amherst. The Tomorrow River was aptly named; it took Native Americans 24 hours to travel its full length.

Ellen Corso is the Wisconsin Natural Resources *magazine's circulation manager.*

Wisconsin, naturally

TOWN CORNER CEDARS STATE NATURAL AREA

Thomas A. Meyer

Notable: Encountering a fairy slipper is truly an occasion for celebration! This delicate orchid of the north stirs emotion in those who search for and find it given its rarity and singular beauty. Standing just a few inches high, with but a single basal leaf and a tiny solitary flower, the fairy slipper is a challenge to locate in its dark, mossy, cedar swamp habitat. The flower boasts bright magenta sepals and petals, one of which is modified into a striped and spotted slipper-shaped pouch similar to that of the larger and more common pink moccasin flower. Vivid yellow hairs that mimic pollen-bearing anthers stand at the entrance to the pouch. These hairs, false nectar spurs within the pouch, and a vanilla-like fragrance, lure bumblebees into the flower with the promise of reward. Though no prize is had by the bee, the flower gets pollinated in this evolutionary game of deception. (The white spots on the flower in this photograph are tree pollen). Also known as the calypso orchid (*Calypso bulbosa)*, it's listed as a state-threatened species by the DNR. Among the goals of the department's State Natural Areas Program is to protect habitat for Wisconsin's rare flora. More than 90% of our 129 endangered and threatened plant species find safe harbor in Wisconsin's system of 668 nature preserves. Look for this sparkling gem of the plant kingdom from late May to early June in the drier duff near the bases of old white cedar trees at SNAs like Town Corner Cedars and other cedar swamps.

How to get there: From the north side of Amberg (Marinette County), go west on Dow Dam Road 3.4 miles, then north on Smiley Road 2.5 miles, then north on Rock Road 1.1 miles, then east on Town Corner Lake Road 0.6 mile and park along the roadside. Walk south into the site. Visit dnr.wi.gov and search "Town Corner Cedars" for a map and more information.