INSIDE:







A message from Preston Cole

The buzzing of bees. A tractor firing up. The casting of a fishing line. Warm breezes. Longer days. These are the signs of summer.

Not only does Wisconsin have a host of great summer getaway spots for locals or those visiting us from afar — Wisconsin is also home to a wealth of bountiful natural resources.

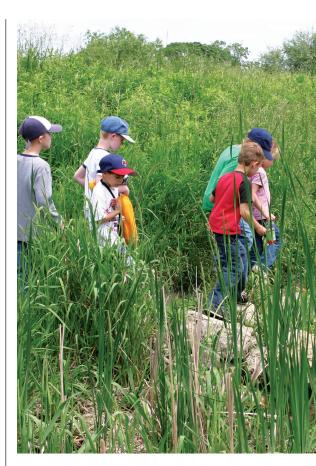
As a forester who grew up in a farming community, I have a true love for the great outdoors. I hunt, fish and enjoy hiking the state park system with my wife, Laura.

Wisconsin is a beautiful place. And at the Department of Natural Resources, it is our job to protect those resources, not only for today, but for generations to come.

This issue highlights the magic of summer in Wisconsin. And there's nothing more magical than the return of the trumpeter swan. Once wiped out in the state, they are back from beyond the brink after 30 years of hard work by the DNR conservationists, volunteers and many others like you, dear reader. The story of their journey is a fascinating tale shared on the coming pages in engaging detail.

In addition, we take a look at the invaluable educational programming across the state that's inspiring kids to get in touch with the outdoors. If you care about the state's natural resources as much as I do, you understand just how critical it is to engage our youth and help encourage them to take care of the land.

Another inspiring story in this issue is "Life's Better on the Brule," which chronicles four friends who are seasoned trout anglers that fish together on the Brule River in Douglas County. Those who fish trout know the sacredness of the



Brule, and those who don't will get an insider look at an angler's dream spot. (Just don't tell too many people.)

The Summer issue also features a special section putting a spotlight on the state park system celebrating 30 years of support from dedicated Friends Groups. Just like it took a village to bring back the trumpeter swan, it also takes a village to help care for Wisconsin's state parks, forests, trails and recreation areas. Here you'll learn about all the great work they do, and perhaps you'll even be inspired to join our Friends.

But it doesn't stop there. This issue touches on a little bit of everything and has something for everyone.

Getting people talking about the wonders of Wisconsin's wildlife and natural resources is what this magazine is all about. We try to create a mix of stories that inform and entertain, and even a little bit of both at times.

With that, give the pages a flip. From all of us at *Wisconsin Natural Resources*, thanks for reading.



ABOVE:

Nature programs are popular outings at state properties around Wisconsin, such as Richard Bong State Recreation Area near Burlington, and help to get kids engaged in the outdoors.

DNR FILE PHOTO

FRONT COVER:

Trumpeter swans, once extirpated from Wisconsin, are back in force thanks to a DNR-led recovery program launched 30 years ago.

PHOTO BY LINDA FRESHWATERS ARNDT

BACK COVER:

An old-growth forest of hemlock, white pine and sugar maple looms behind the shores of a boggy lake at Van Vliet Hemlocks State Natural Area in Vilas County.

PHOTO BY THOMAS MEYER. DNR



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PUBL-0C-019 ISSN-0736-2277 Wisconsin Natural Resources magazine (USPS #34625000) is published quarterly in Spring, Summer, Fall and Winter by the Wisconsin Department of Natural Resources. The magazine is sustained through paid subscriptions. No tax money

the Wisconsin Department of Natural Resources. The magazine is sustained through paid subscriptions. No tax money is used. Preferred Periodicals postage paid at Madison, WI. POSTMASTER and readers: subscription questions and address changes should be sent to Wisconsin Natural Resources, P.O. Box 37832, Boone, IA 50037-0832. Subscription rates are: \$8.97 for one year, \$15.97 for two years and \$21.97 for three years. Toll-free subscription inquiries will be answered at 1-800-678-9472.

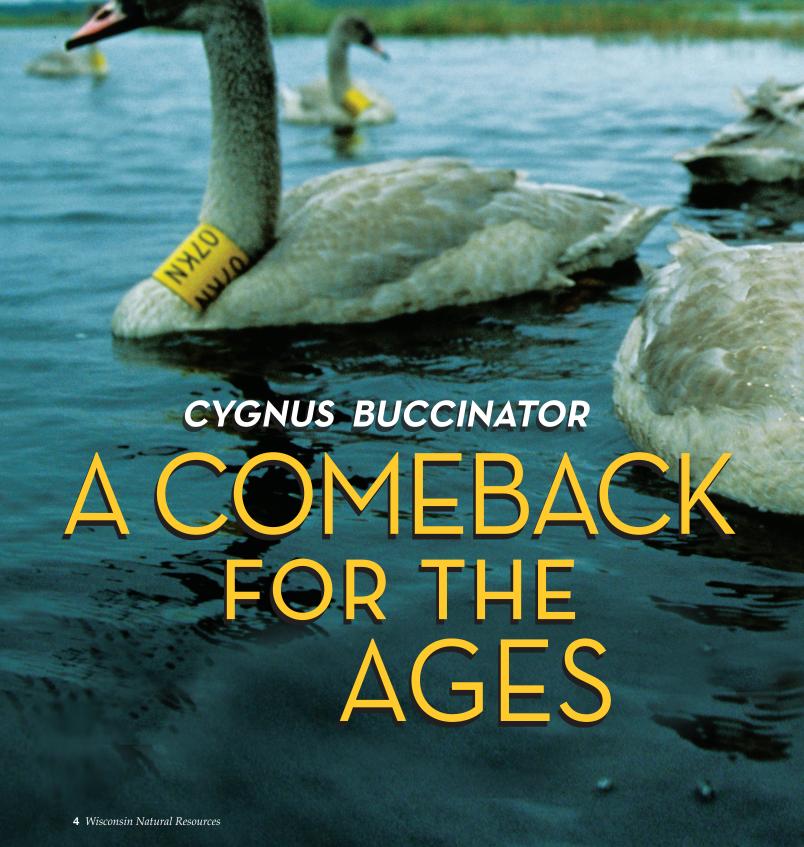
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In memory of Rodney J. King, Terry J. Kohler and W.C. "Joe" Johnson

Mary and Sumner had met two years earlier when he helped to lead an International Crane Foundation trip to China. When Sumner told her the plan was to collect swan eggs every year through 1997, Mary enthusiastically broke in with, "We're in! We'll fly you to Alaska and back."

"You mean this year?" Sumner asked.

"No, for the next nine years!" Mary replied.

Thus began the dedication of Mary and her husband, businessman Terry Kohler, to the trumpeter swan recovery program. The Kohlers' commitment, part of several statewide conservation efforts on their part, continued for more than a decade after the egg-collection work ended in 1997.

Anxious about egg collection

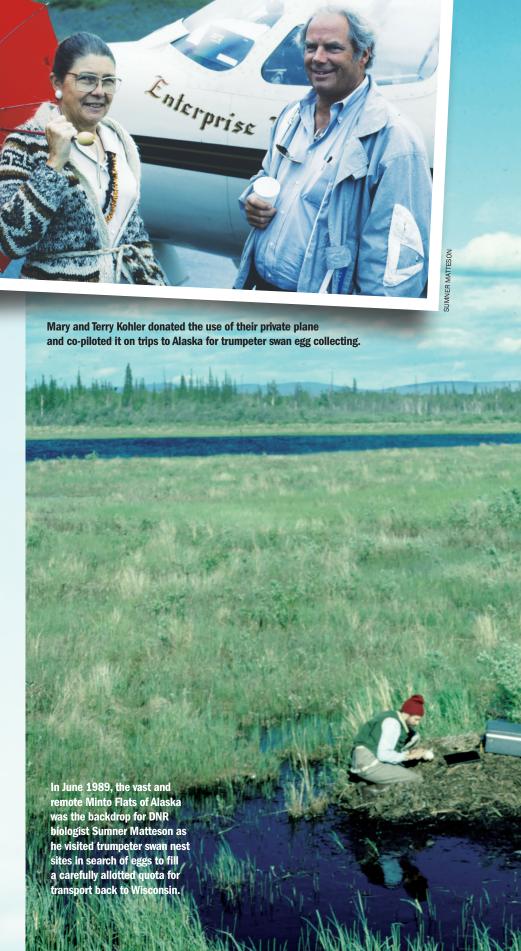
Even though the transportation issue was settled, there was considerable trepidation regarding the egg-collection process itself. No Wisconsinite — not even Dick Hunt — had any experience with trumpeter swans in the wild. Sumner's experience was primarily with waterbirds (not waterfowl) and Randy was a mammal guy who had focused largely on timber or gray wolves for much of his career.

Randy asked Sumner to be the egg collector while he focused on how best to keep the collected eggs viable. Fortunately, we had the benefit of learning from the experience of those who preceded us in Alaska — the Minnesota DNR and principally nongame chief Carrol Henderson.

That first year we used three large black-box suitcases equipped with hotwater bottles Carrol had used for keeping trumpeter swan eggs warm when he collected them. Carrol kindly allowed us to borrow these containers for our maiden voyage.

To become familiar with trumpeter swan eggs, we visited the only places known to have breeding trumpeters in Wisconsin — game farms. There we observed the electronic "candling" of swan eggs, looking inside at different points to learn the stages of egg development. We studied whatever manuals we could to help with further pictorial identification of egg development.

In addition to the large black suitcases, Carrol Henderson also provided the same field candler he had used in Alaska





at trumpeter nests. Basically, it was a black rubberized coffee can with different-sized holes at either end allowing one to view an egg without unwanted light.

Carrol also provided invaluable counsel regarding how to look at and assess eggs in the wild. If the egg looked opaque, without any embryonic development, it was either recently laid or "bad" (dead or nonviable) and therefore one to be left behind. Bear in mind, we followed strict U.S. Fish and Wildlife Service protocols requiring we leave in the nest at least two viable eggs, or eggs we believed to be fertile based on our field candling.

Eye from 'Sky' on nesting sites

The late Rodney "Sky" King, one of five Fish and Wildlife Service pilot-biologists in Alaska at the time, played an essential

role in our egg-collection trips. In previous years he had played a similar role with the Minnesota DNR in locating trumpeter swan nests during May flights, including those he deemed most accessible for visiting during egg collection in early June.

Rod flew us in a float plane to wetland sites he had marked on a series of topographic maps and advised us on how to best approach each nest, especially if a "cob" (male swan) or "pen" (female) was highly defensive. Rod then would return to each nest to monitor productivity and determine how and if egg

collecting had affected nesting success.

Trumpeters typically produce clutches ranging in size from five to nine eggs, with smaller clutch sizes often common with younger birds.

"We returned in the fall," Rod later told us, "and it didn't seem to matter whether they would start out with eight or six or four or two eggs. It seemed that the average was about three cygnets they ended up raising."

Into the wild

Along with us on June 5 as we headed for Fairbanks, was the late Joe Johnson, a highly opinionated, chain-smoking, gravel-voiced Michigan waterfowl biologist, who was the leader in bringing trumpeters back to Michigan, and a great resource on waterfowl breeding ecology. He had designed two wooden crates into



When gathering trumpeter swan eggs in the field, Sumner Matteson first "candled" them, below, looking inside to ensure viability. Once collected, the eggs were marked with a letter and number combination to indicate the collection location.



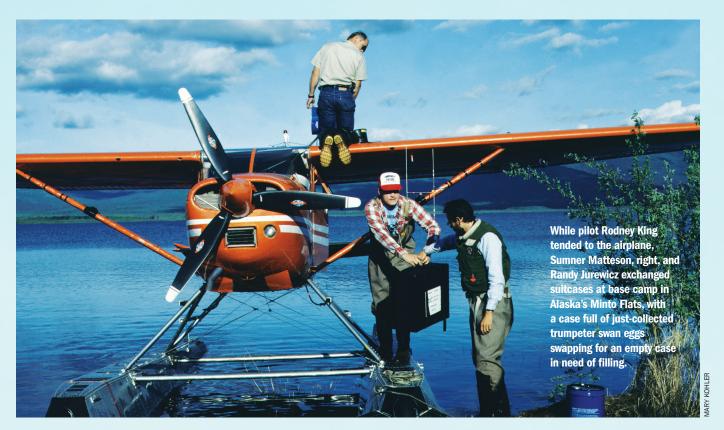
DNEY KING PHOTOS

which would go 20 eggs for Michigan's trumpeter program.

The flight from Milwaukee to Fairbanks took 11 hours, including two stops en route. We arrived at 11:45 p.m., Fairbanks time, to behold the land of the midnight sun. Instead of darkness, the light was subdued.

The following morning, Rod flew Randy, Sumner and Mary Kohler in a Cessna 187 float plane about 65 kilometers west to the Minto Flats and a remote cabin. Terry Kohler and Joe Johnson came out later in a separate float plane hired by Terry for the occasion.

The Minto Flats is a relatively flat and seemingly endless wetland complex characterized by myriad permanent and semi-permanent lakes surrounded by boreal forest and open meadows mixed with sedges and grasses.





At the cabin, Randy heated water over a stove and prepared hot-water bottles for the Wisconsin and Michigan egg containers. Then we were ready for the flight.

After dropping off Randy and Mary, Rod flew Sumner to the first nest on his topo map, taxiing right up to a nest. The collection itself proved somewhat challenging, made more so by Sumner's battle with severe air sickness brought on by circling over the nesting sites.

In later years, this reaction by Sumner — triggered by an inner-ear condi-

tion — thankfully was corrected with a scopolamine ear patch, but that first year was the hardest 13-hour period he'd ever experienced. At one point, Rod turned to Sumner and said, "You're not going to expire on me, are you?"

Sumner had taken to wearing a winter beanie because his condition left him seriously dehydrated and cold, despite a 70-degree day. But he drew on his experience as a teenager on long Arctic canoe trips with his father — and soldiered on to keep the objective of collecting all 60

allotted eggs. In the land of the midnight sun, the team could collect well into the evening.

High degree of difficulty

Reaction by parent birds to nest visits was quite variable, with some leaving the nest and swimming far away. Others, often the cob, stood ground and charged.

"Once the eggs get fairly close to hatching," Rod explained, "the adults are really drawn to protect the nest because then it's only a matter of a few days before they're outta here."

Each egg we collected was given a letter and number penciled in on the topo map to mark the collection location. Then the eggs were placed in a small gray suitcase and moved to the float plane, where they were transferred into one of the larger black suitcases, warmed by the water bottles to temperatures between 92 and 97 degrees Fahrenheit. As each black container was filled, the float plane returned to the cabin base camp where Randy waited to exchange an empty black suitcase for the full one.

Later in the egg-collection years, one of Terry Kohler's companies — the Vollrath Co. — developed a mobile, battery-powered incubator with a built-in fan that automatically turned on when the temperature exceeded 97 degrees. But in 1989, it was a different story. It was the job of our water bottles placed directly on the eggs to keep them warm.

What a challenge it was for Randy to monitor the egg temperature inside the egg crates, especially during the trip back to Wisconsin. The temperatures would stay high, high, high — and then suddenly plummet as the water bottles lost their heat.

As Randy later explained to reporters, we started to stage our return trips to airports along the way back based on the water temperatures in airport janitor rooms because we wanted to get the absolute hottest temperatures available.

Hatching, rearing and migration success

The final plane stop was a landing in Milwaukee, where Milwaukee County Zoo staff met us to rush the eggs to the zoo's large, modern incubators. The zoo aviary staff that first year was run by Ed Diebold and later by Kim Smith.

In the wild, hatching success is normally between 60 and 80 percent, but due to the outstanding care by zoo staff, we experienced 95 percent hatching success in 1989, with a subsequent overall average success rate of 93 percent for all years through 1997.

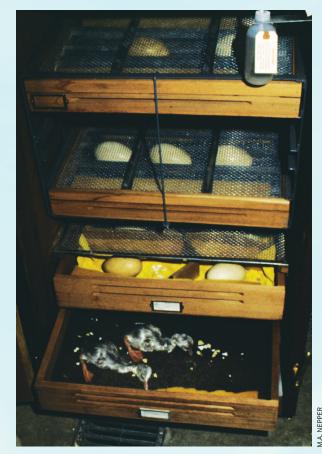
Nineteen of the 20 eggs collected for Michigan in 1989 also hatched successfully, prompting Joe Johnson to joke at a later swan conference: "Sumner Matteson couldn't use the smell test on that bad egg because he was too sick!"

The Wisconsin swan cygnets that hatched that first year were placed into two programs. One was captive-rearing,

where wing-clipped cygnets were kept for nearly two years on a fenced pond at the General Electric Medical Systems plant near Pewaukee. Biologist Maureen Gross was in charge of overseeing their care.

Also that first year, several cygnets in the captive-rearing program were placed temporarily at a pond within the Oakhill Correctional Institution in southern Dane County, under the care of wildlife management biologist Ricky Lien. After a short time at Oakhill, those swans were moved to join the others at the G.E. facility in early 1990.

The other program for the cygnets was decoyrearing, run by UW-Madison wildlife ecology master's student Becky



At the Milwaukee County Zoo, an incubator held swan eggs in various stages including just-hatched cygnets, bottom shelf.



It was the responsibility of DNR biologist Randy Jurewicz to keep trumpeter swan eggs at an optimum warmth of mid-90 degrees for their journey from Alaska to Wisconsin. He did this by packing them in cases with hot-water bottles and monitoring the egg temperature throughout the flight home. Abel. Decoy-rearing was the brainchild of former UW-Madison wildlife ecology professor Stanley Temple and Abel, along with input from Michael Mossman, then a Wisconsin DNR research ecologist.

Mossman also was charged with selecting lead-free and powerline-free emergent marshes as release sites. These sites had abundant and plentiful foods such as sago pondweed, arrowhead and other aquatic plants.

A life-sized trumpeter decoy was used at an isolated zoo chamber to imprint cygnets right after hatching by Abel and her UW-Madison interns. After about a week, the cygnets were flown to selected wetland sites.

There, in camouflaged float tubes, the interns used a similar trumpeter decoy to lead the cygnets to feeding and loafing sites on the marsh, then back again to temporary pens for the night. They did this until the swans reached fledging age at about 16 weeks, when they were allowed to migrate.

Would the birds migrate that first fall without parent birds to guide them? That was the question uppermost in our minds. It was answered after some delay when they migrated to a site in Texas, about 15 miles north of Dallas.

'So far, so good'

Back to that 1989 egg-collection trip. Perhaps the most memorable moment occurred near the end of the 13-hour expedition. As Rod taxied up to a nest and Sumner was mustering the energy to collect one more egg, the cob was reluctant to move. Finally, he slipped off the nest at the last instant.

If we thought that was that, though, what happened next came as a complete surprise. The bird, after becoming airborne, circled around then attacked the rear of the plane, clipping the communication antenna — thus preventing communication with the Fairbanks airport.

"We've just been attacked by a swan!" Rod exclaimed. Always prepared for emergencies, Rod retrieved a ham radio to call his wife, who relayed our estimated time of arrival to the Fairbanks airport. At 11 p.m., pilot Terry Kohler met the crew for the flight back to Milwaukee.

At the Milwaukee airport the next morning, a media gaggle greeted us before zoo staff whisked us away and Joe Johnson hopped a plane to Michigan with his state's egg bounty. Once at the zoo's aviary, and with all Wisconsin eggs safely placed in incubators, Ed Diebold smiled and uttered what became his standard refrain for the next nine years: "So far, so good!"

An avian ecologist with the Natural Heritage Conservation Program, Sumner Matteson has been with the DNR for 38 years. Randy Jurewicz spent 31 years as a wildlife biologist for the DNR until retiring in 2010.







Captive-reared trumpeter swans were housed at two locations in the first year of the recovery program: Oakhill Correctional Institution in Dane County and the General Electric Medical Systems facility near Pewaukee, top left. In the decoy-rearing program, a life-sized decoy was used to imprint cygnets in an isolated chamber at the Milwaukee County Zoo, top right. After a week, they were moved to the Crex Meadows Wildlife Area, above, where a person in a camouflaged float tube maneuvered a decoy to lead cygnets to feeding and loafing spots.





EDUCATIONAL PROGRAMMING ASPIRES TO PUT KIDS IN TOUCH WITH THE GREAT OUTDOORS.

Katie Johnson

It's a warm Thursday evening in June and Lake Wingra — the small Madison lake nestled next to Henry Vilas Zoo and the UW-Madison Arboretum — is clearly a popular destination. The sun, just beginning its nightly descent, casts a golden shimmer on the water as canoes and kayaks glide soundlessly in the distance.

Meanwhile, the atmosphere on the shore is nothing short of festive. Upbeat music emanates from a small radio in the window of the boathouse overlooking the lake. Boats bump and bang as they're hauled in and out of the lake by busy teenaged workers. Lively conversations are in full swing all around.

Gathering just around the corner, beneath the protective shade of a grove of trees, are dozens of parents and their school-aged children. They crowd together, finding seats on logs and weathered benches, switching places and scooting closer to make room for everyone. A soft breeze rustles the canopy overhead and carries the familiar summertime scents of sunscreen and bug spray.

It's Science Thursday at Wingra Boats. And while the weekly sessions are always an exciting affair during the summer months, it's tonight's topic — owls — that has lured this larger-than-usual crowd.

A table is prominently situated in front and features a large and attention-grabbing taxidermied horned owl as well as several samples of intact owl parts — feathery wings and a talon holding a permanent grip. After a few minutes to make sure everyone is listening and to allow for any late-comers, presenter Dawn Liska-Tollefson takes her place in front.

Hands-on because it's 'cool!'

Liska-Tollefson, an elementary and middle school teacher, introduces herself and invites the children to share what they already know about owls. Small hands shoot up around the circle in response. "They're nocturnal," is one answer. "They live in trees," is another.

"What do they sound like?" Liska-Tollefson asks. She pauses, and after a few giggles from her audience and halfhearted imitations, she whips out her smart phone with various owl screeches queued up and ready to go.

The kids are hooked. She passes around the owl wings for good measure, allowing each child to touch the feathers and see them up-close. As she moves through the group, she asks about an owl's diet, and hands are in the air again, waving with barely contained enthusiasm.

"Mice!" "Chipmunks!" "Maybe rabbits?"

"That's what we're going to find out tonight," she says, picking up a small foilwrapped object about the size of a charcoal briquette.

Then she describes tonight's project: dissecting owl pellets. Or, more graphically, the parts of the meal an owl couldn't digest, regurgitated into a compact little package that can fit in the palm of your hand.

The kids squeal with delight and run to nearby work tables where similar pellets have been set out. They eagerly tear off the foil to take a peek, shrieking and guessing at what they'll see.

Liska-Tollefson hands out plastic tools, bone identification charts and magnifying glasses, and the kids get to work prying apart their pellets to discover what the owl had eaten. Curious parents peer over the childrens' shoulders, cringing ever-so-slightly at the findings.

"Oh, cool! Mom, does this look like a shrew's skull?"

Popular, with a purpose

Studies about unstructured outdoor play and its effects on developing children have arrived at a seemingly unanimous conclusion - kids need it, and most of the time they don't get enough of it. Debi Leeper agrees. A elementary certified school teacher, she started Science Thursday at Wingra Boats seven years ago, when it was an extension of a teacher certification program.

"We held a weekend of science exploration at the boathouse with the teachers taking on the role of students as

if they came for a field trip," Leeper recalled. "Their final project was to present a topic of their choice to the community."

The program took off, said Leeper, who lives on Lake Wingra and also directs Camp Wingra on the lake in summer. "It just grew from there."

The programs were so popular they became a regular weekly feature and are now a highly anticipated part of many families' summer schedules. Leeper starts planning the 10-week summer program in February, communicating with a variety of scientists and area educators for months to hammer out details and ensure a good mix of science- and nature-related topics.

Through an annual grant from the Dudgeon-Monroe Neighborhood Association, whose area includes the northwest shores of Lake Wingra and Wingra Boats, Leeper is able to provide a nominal gratuity to each presenter. The grant's funding ensures that Science Thursday events are free to everyone — and also supplies popular miscellaneous items such as snacks and insect repellent for the kids.

DNR reaches out to kids

With the abundance of evidence about the benefits of getting children outdoors, it's no wonder the Department of Natural Resources also is a proponent of such activities.

State park naturalists work to engage youngsters through a variety of yearround programming and the OutWiGo initiative launched in 2018 includes ageappropriate pursuits such as the recent OutWiGo Girls event (see Page 13).



Getting a younger generation interested in the outdoors through fishing clinics and other activities is an important part of the DNR mission to protect and manage the state's natural resources.

The DNR's MacKenzie Center is a beacon of environmental education. Located on 285 acres near Poynette and open all year, the center includes wildlife exhibits, a museum and interpretive trails. It offers a variety of educational programming for school groups and other visitors as well as special events and summer day camps for kids. Admission is free, with donations always appreciated.

At Horicon Marsh State Wildlife Area in Dodge County, a hands-on Explorium opened in 2015 at the Education and Visitor Center. Open seven days a week, it offers a wealth of kid-friendly exhibits focusing on the history of Horicon Marsh dating back to the Ice Age. A nominal admission fee (\$6 adults, \$4 children, age 4 and under free) helps to support upkeep and programming.

A sometimes-overlooked educational opportunity can be found at the DNR's fish hatchery facilities. There are 17 hatcheries in the state, rearing a variety of fish species to be stocked each year in the state's rivers and lakes. Tours often are

conducted for school groups and others by appointment, and hatcheries have regular visitor hours plus occasional special events. Admission is free.

The Wisconsin Explorer Program is another DNR program that encourages outdoor activity, providing an incentive to kids who participate. The

program at state parks, forests and other properties is free and offers booklets with activities children and their families can do together to explore the outdoors. By completing at least half of the guide's suggested explorations as well as a few other tasks, kids can earn a patch to show off their accomplishments.

Beth Mittermaier, a DNR conservation biologist and educator who oversees the statewide Wisconsin Explorer Program, says she could write a book about all the benefits kids get from spending time outdoors. That could mean activities that build bonds with family and friends, she added, or sometimes just playing and exploring by themselves.

"I think kids need to feel a connection to the Earth — to ground them in something that is usually within reach, that is usually fairly cheap to enjoy, that is renewing," said Mittermaier, who also works at Havenwoods, the state's only urban state forest, including a nature center, located in the city of Milwaukee.

"They need time to just 'be' outside," she added. "Not to play soccer or organized sports — but just to be out there."

A variety of traditional outdoor pursuits also are facilitated by the DNR. Activities such as a tackle loaner program and the Free Fishing Weekend each January and June are designed to raise involvement in that pastime, especially among children, and the mentored hunting program works to reach new participants of all ages.

Promoting a lifelong love of outdoor pastimes allows them to be passed down to younger generations, which can be an important part of stewardship efforts.

"I think the world needs kids who grew up loving to be outside," Mittermaier said, "because it is not going to get any easier to take care of this Earth in the years to come." W

Katie Johnson is a mom, writer and adventurer in Madison.

INFORMATION

Here are several online resources to help find outdoor activities for kids:

- Science Thursday at Lake Wingra: madisonboats.com
- Wisconsin Explorer Program: dnr.wi.gov, keyword "Explorer"
- MacKenzie Center: dnr.wi.gov, keyword "MacKenzie"
- Horicon Marsh Explorium: dnr.wi.gov, keywords "Horicon Marsh"
- State fish hatcheries: dnr.wi.gov, keywords "fish hatcheries"
- · Hunting instruction: dnr.wi.gov, keyword "hunter education"
- Fishing instruction: dnr.wi.gov, keyword "angler education"
- OutWiGo: dnr.wi.gov, keyword "OutWiGo"





FOREST HABITAT TYPE CLASSIFICATION SYSTEM PROVIDES A PLANT-BASED CLUE TO SUSTAINABLE MANAGEMENT.

Patricia Alexandre and Colleen Matula

On a sunny June day, a forester walks through a Wisconsin forest holding a small, maroon-colored field manual. She observes an array of large white trilliums, admires the delicate drooping bells of Solomon's seal and smells the pungent aroma of wild leeks.

"Get to know the understory plants in your forest and then use the habitat type guide to help you understand the forest history and guide you to select ecologically and economically sound management options."

- John Kotar Ceator of the Wisconsin Forest Habitat Type Classification System As she reviews the plant checklist and diagnostic key in the manual, she takes note of the abundant bloodroot, blue cohosh and leeks as well as the notable absence of Virginia waterleaf and sharplobed hepatica — an important distinguishing factor within the key. Based on her careful observations, the forester classifies the site as "AOCa," a shorthand name for this forest habitat type.

Wisconsin's Forest Habitat Type Classification System is an ecological classification tool developed in 1988 by John Kotar, a scientist and instructor then at UW-Madison. The FHTCS is based on repeatable patterns of forest understory plants present across similar sites.

Plant composition and growth are determined by site factors including soils, topography, landform, hydrology and disturbance history. Together these factors represent the foundation of each unique habitat type.

Habitat typing helps foresters make decisions on the ground. With this science-based tool, they can confidently predict how the forest will respond to different management treatments such as thinning, harvesting and prescribed burning.

Each year in June, when understory plants are in bloom and easy to identify, new foresters from the Department of Natural Resources, county forests and other organizations receive two-day training on the habitat classification system. They learn how to apply the FHTCS so they are better able to assess site potential, define appropriate management objectives and predict the effects of various forest management alternatives.

System takes root in Europe

European plant scientists and foresters were the first to study plant community associations and variations across sites. Russian scientists led the way in describing how differences in soil led to differences in vegetation. In the Alps region (Switzerland, France, Slovenia), scientists studied plant community differences with changing elevation.

The first person to publish a classification system similar to what is used in Wisconsin was a scientist from Finland. Aimo Cajander systematically studied repeatable combinations of plants and created a theory of forest types based on plant associations. Research on plant associations in the U.S. and Canada began in the 1940s and was mainly done by European scientists who had fled World War II or by Americans who had traveled in Europe.

When talking to Kotar, who now owns Terra Silva Forest Ecology and Management in Eau Claire, it's easy to hear the excitement in his voice when he's asked about the Wisconsin habitat typing system he helped create. Kotar has a love affair with soils, and that is his usual starting point whenever someone asks him to explain how habitat typing works.

"Do you have some kind of feeling for the differences in soil?" he asks. For farmers or gardeners, the answer is yes. But even the unfamiliar can see there are differences between soil in a forest versus in a corn field or river corridor.

Once people understand that soils are different from place to place, Kotar explains how these differences influence plant growth.

Wisconsin is home to a rich landscape of diverse soils due to the geological history of this region. Glaciers advanced and retreated several times across most of the state, depositing and transferring materials that are the basis of the different soil types we see today.

Once a person understands that plant composition is dictated by soils, they can look at the plants found in a given area and immediately understand which soils are present and what that site can offer in terms of productivity.

Hall of Fame career, starting at Stevens Point

Kotar discovered his passion for soils early in his academic career and never looked back. He began in the forestry program at UW-Stevens Point, where he was curious about what caused forests around the world to be so different from one another. He then pursued graduate studies at the University of Minnesota, where he met professors familiar with the research from Europe and Russia who encouraged him to keep exploring plantsoil relationships.

While later completing his Ph.D. at the University of Washington, Kotar continued to connect with European scientists. His Slovenian background gave him a head start when he decided to learn Russian, allowing him access to original literature from the early soil scientists.

Kotar's path led him back to the Midwest, where he started thinking about how to apply his knowledge to forests in the region. In 1979, he accepted a faculty position at Michigan Technological

University, joining Michael Coffman who was already doing habitat typing work in Upper Michigan. Together they studied vegetation patterns in Midwestern forests, and over time they realized this information might be used to guide forest management decisions.

The two researchers began sharing their ideas with colleagues and foresters in Michigan, Minnesota and Wisconsin. The Wisconsin DNR decided to fund a project that would create a statewide habitat type classification system, and Kotar accepted a position in 1986 at UW-Madison to begin this work.

His efforts culminated in



a series of field guides, the first of which came out in 1988 and covered forest habitat types of northern Wisconsin. The "red book," as it was called for the color of its waterproof cover, was supplemented by the "blue book" in 1996 that covered habitat types of central and southern Wisconsin.

Together with training workshops throughout the state, these two field guides sparked even more enthusiasm for the classification system, leading to additional funding from the U.S. Forest Service. In 2002, the "maroon book" was published as a second edition for the northern Wisconsin field guide.

Even more recently, a wetland forest habitat type classification system was created and is available on the DNR website. Go to dnr.wi.gov, keyword "forestry," and select the "Forest management" header, then "Guidelines and handbooks."

Kotar's work on the habitat typing system, along with his decades of leadership in Wisconsin forestry, was recognized with his 2010 selection for the Wisconsin Forestry Hall of Fame, which is located at the UW-Stevens Point College of Natural Resources. Find details online at wisaf. org/wisconsin-forestry-hall-of-fame.

Better management, other benefits

Before the habitat type classification system, forest management was based on the dominant trees found on a site with no consideration for soil type or site productivity. But this changed as understanding grew regarding the role of soils in influencing plant composition and growth. It became clear that while the same tree species could grow on a range of habitat



types, the management options, productivity and succession patterns would be very different.

"The systematic approach of the FHTCS allows for consistent evaluation of differences and treatment options," Kotar says.

Improved forest management decisions are not the only benefit of the FHTCS. Ecologists, wildlife biologists and researchers also use the system for a range of other management activities and academic studies.

Knowledge and understanding of our natural systems, in part through habitat type classification, also has helped change attitudes about traditional forest management.

Kotar remembers a training workshop in the 1970s when the forest industry was

still closely tied to red pine plantations. He was training staff and executives from a private timber company that until then had always managed their forests for red pine pulp production.

Standing in a pristine northern hardwood stand, Kotar asked, "How would you manage this stand?" One of the foresters jumped in and said, "Clearcut it and plant red pine!"

The forester's supervisor asked to hear more about management using habitat types. Kotar explained that the site they were standing on was perfect for northern hardwood management, and in fact those beautiful hardwoods were worth far more than the pulp one would get from a red pine plantation on the same site.

"Why not use this site to its best potential?" Kotar prompted.

Shortly after this training, the company stopped managing exclusively for red pine and began using the habitat typing system, rather than the species, to identify the best option for the site.

The Forest Habitat Type Classification System provides a common language for describing and assessing forested sites. It has significantly improved forestry by providing an increased understanding of forest plant communities and their relationship to the environment and it continues to be a valuable tool in Wisconsin's sustainable forestry practices today.

Patricia Alexandre and Colleen Matula work in the DNR's Division of Forestry-Silviculture Program.

>>> LEARNING THE SHORTHAND

In the Forest Habitat Type Classification System, habitat types are assigned unique shorthand names based on the potential predominant species of trees and understory plants used to classify them. The first part represents the dominant late successional tree species, and the latter part represents the diagnostic understory species. For example, the AOCa habitat type stands for the Latin names of maple, sweet cicely and blue cohosh or Acer, Osmorhyiza and Caulophyllum. The FnOn habitat type refers to black ash (Fraxinus) and sensitive fern (Onoclea). An area featuring red maples and black ash trees with an understory of swamp dewberry would be ArFnRh, for Acer, Fraxinus and Rubus. And so the combinations go.



SPECIAL SECTION | A MILESTONE FOR FRIENDS GROUPS



FROM OUR niends

Wisconsin State Park System celebrates three decades of support from dedicated Friends Groups.



A pay station at Lake Kegonsa State Park near Stoughton allows for quick purchase of required use passes, made possible by the property's Friends Group.



One of the state park system's original Friends Groups supports the MacKenzie Center near Poynette, with events each year including the popular Maple Syrup Festival.

Stories by Janet Hutchens, DNR's Friends Group and Volunteer Coordinator

s a young member of the Girl Scouts, my troop mates and I were nurtured by two great leaders, seasoned outdoors women keen on sharing their love of nature with eight squirrely girls.

We learned all about how to survive in the great outdoors. These lessons included how to build a campfire and light it with one match, how to set up a tent, how to cook over a campfire and how to lash sticks together to make a table.

This was all great fun, but one of my favorite things to do when the campsite was set up and the foil dinner was eaten was to sing songs around the crackling campfire under the starlight with my best friends. One of our favorite songs was about friendship: "Make new friends but keep the old; one is silver and the other gold."

fniends GROUPS

As the hands of time have turned, I've come to realize friendship isn't about one or two special people in our lives, it is about building a community and continually growing the constellation of friends who provide support along our path. We add new friends as we go while hanging on to those friendships made long ago.

That's how I approach my work coordinating the Friends Group program for the Wisconsin State Park System. There is always room for one more friend to help support our vast system of jewels across the state.

At the DNR and the Wisconsin State Park System, we greatly value the wide variety of contributions from innumerable indi-

viduals who have been friends with us for 30 years or more, sharing their time and talents. We can't wait to create more friendships to help make our future even brighter.

So come along with me by the bright shining light of the moon and learn more about how you, too, can become a friend of the Wisconsin State Park System.

The making of Friends

Each year, Friends Groups provide thousands of volunteer hours and dollars to help support Wisconsin's state parks, forests, trails and recreation areas. The combined efforts of motivated volunteers have helped to promote and expand recreation opportunities that in turn enhance the economic opportunities for surrounding communities.

The expressed mission of Wisconsin's State Park System is: "To protect and enhance the natural and cultural resources of our Wisconsin State Park System properties while providing high quality recreational and educational opportunities and programs." It is only through our valued partnerships with volunteers and friends that we can fully achieve this purpose.

Dave Weizenicker, former director of the DNR's Bureau of Parks and Recreation, wrote meaningfully about park system volunteers in the inaugural Friends Group handbook in January 1990.

"Many individuals and organizations have worked to help the park system from its beginning in 1900. They have given land, equipment, money and a wide variety of volunteer services. They've conducted interpretive programs; served as campground hosts; built shelters and observation towers; planted trees and prairies; and provided facilities to better serve the public," Weizenicker wrote. "Without this help, the park system would not be what it is today."

The creation of the handbook and formal recognition of Friends Groups was the culmination of an extensive process of policy development by dedicated staff. The intent was to establish a consistent method for developing partnerships that would allow groups to raise funds, recruit volunteers and leverage additional resources to benefit an individual property. It provided a means to offer additional services to visitors above and beyond what state funding resources could support.

"In recent years, many of our friends have found they can better help their favorite park by forming a formal organization with that purpose — a Friends Group," Weizenicker wrote at the time. "The Department of Natural Resources encourages the formation of Friends Groups by entering into formal agreements with groups that meet the standards approved by the Natural Resources Board."

The ability to do this was officially authorized with the policy on Friends Groups — NR 1.71 of the Wisconsin Administrative Code — which was enacted by the Wisconsin Legislature on Aug. 1, 1989. At that time, 26 organizations were already working with the DNR to support increasing visitor services and needs at properties. A handful of these groups had been operating as far back as the 1960s and '70s.

Records show that in 1989 there were six Friends Groups with written agreements in place, seven concession corporations and 13 additional groups working toward joining the program. This new partnership program was designed to help efforts grow statewide and "clearly define the purpose, applicability, objectives and organization of our Friends Groups," Weizenicker wrote in a letter to all groups in September that year.

"The purpose of this rule will ... establish Friends Groups as the lead volunteer group for a property or program and define them as non-profit corporations organized solely to support, assist and promote the mission and activities of Department properties, facilities and programs," Weizenicker had noted in a January 1988 Natural Resources Board agenda item on the topic.

The program also was designed to enable recognized Friends Groups to

provide financial support directly to a specified property to enhance facilities, acquire land, expand recreational opportunities, provide programs for visitors and support education efforts at the property.



As former director of the DNR's Bureau of Parks and Recreation, Dave Weizenicker was instrumental in formulating the Legislative policy on Friends Groups 30 years ago. More recently, he and his wife, Joyce, have provided funds to create an endowment in support of Wisconsin's state parks.

At your service

Today, there are 63 Friends Groups, in addition to concessionaires, that support state parks, trails, recreation areas and forests in countless ways. In 2018 alone, 1,337 Friends volunteers provided 37,847 hours to the state park system. In addition, Friends Groups provide hundreds of thousands of dollars in donations

and in-kind services to help enhance park system properties.

Friends Groups and property staff work closely together to develop shared goals and put them into action. By engaging community members as volunteers, properties can develop new and improved recreational experiences and visitor services.

Fundraising efforts by Friends Groups are key to the process including matching grants, donations, concessions and special events. Projects range in size from painting picnic tables or building an accessible fishing pier to raising money for a large multimillion-dollar nature center. No matter the size of the project, each Friends Group activity has a great impact in enhancing the experience for millions of state property visitors.

Friends Groups work behind the scenes to provide many of the services visitors come to enjoy when at a Wisconsin State Park System property. Visitors look forward to stopping by a concession stand for ice cream on a hot summer's day or buying a souvenir to remember the fun they had on vacation. Campers often depend on the convenience of purchasing a bundle or two of firewood as they enter a campground or when they stay for an extended getaway.

At several properties along the water, visitors can launch a canoe and explore a lake or paddle along a designated water trail in a kayak thanks to rentals provided by Friends. Even adaptive kayaks and beach wheelchairs can be found at some locations to enhance the experience. Trail passes may be purchased at a depot along the bike path as a convenience for cyclists headed out on a day trip.

These services are valued, but it may not be readily evident that a Friends Group made up of dedicated volunteers has made that experience possible. Each property and associated group have a unique set of goals, but a common thread is the passion shared for providing the best visitor experience possible.

"For 30 years, our Friends Group program has shown us that partnering with passionate citizen-powered groups can create a positive impact on the services and opportunities we can provide to millions of visitors who enjoy our properties," said Ben Bergey, Wisconsin State Park System director.

"I encourage everyone to join me in thanking each and every Friends Group member who has given their time and talents to enhance the Wisconsin State Park System."

1989 SNAPSHOT

Here's a look at the Friends landscape when the policy on Friends Groups was approved by the State Legislature 30 years ago.

GROUPS WITH AGREEMENTS IN PLACE:

Friends of MacKenzie **Interstate Interpretive Association** (later Friends of Interstate State Park) Friends of Crex

Friends of Kohler-Andrae **Friends of Harrington Beach** Friends of Havenwoods

CONCESSION CORPORATIONS: Devil's Lake Concession Corp. Elroy-Sparta National Trail Inc. Heritage Hill Corp. Olympic Ice Rink Operating Corp. Peninsula Golf Associates Potawatomi Ski Club Sugar River Trail Inc.

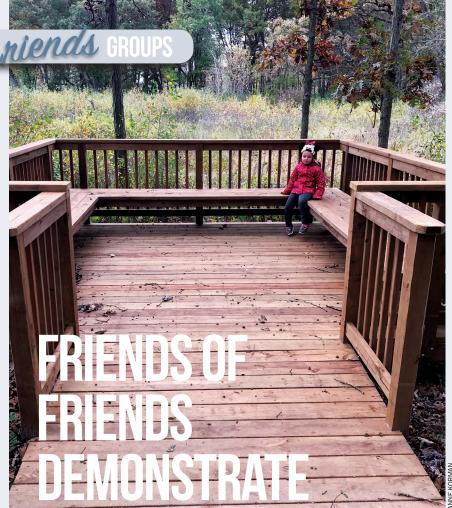
FRIENDS GROUPS WITHOUT **OFFICIAL AGREEMENTS: Bong Field Trial Association** Heritage Hill Guild **High Cliff Park and Forest** Friends of Lapham Peak Friends of Merrick Cooperative **Newport Wilderness Society** Friends of Perrot

DEVELOPING GROUPS: Friends of Cadiz Mother Nature Corp. (Council Grounds State Park) Friends of Kettle Moraine Inc. Southern Kettle Moraine Friends Group Friends of Lake Wissota Friends of Wyalusing



Friends of Harrington Beach State Park made possible an accessible cabin (above).

The Top of the Rib concession stand (right) serves visitors at Rib Mountain State Park, operated by the park's Friends Group.



THE POWER OF PARTNERSHIPS

wo key partners of the Wisconsin State Park System are the Friends of Wisconsin State Parks and the Natural Resources Foundation of Wisconsin.

These organizations recognize that Friends Groups have the flexibility and potential to create new and innovative opportunities for recreation and education programs across the state. This recognition has evolved into action with the formation of funding programs that leverage additional dollars to match and extend the fundraising capacity of Friends Groups.

Friends of Wisconsin State Parks

For more than 20 years, Friends of Wisconsin State Parks has been dedicated to "preserving, protecting,



promoting and enhancing Wisconsin's state parks, forests, trails and recreation areas." Working in collaboration with the Department of Natural Resources and more than 60 local Friends Groups around the state, FWSP has coordinated thousands of hours of volunteer efforts; raised thousands of dollars for vital state park enhancements and programs; and provided a public voice for our state's outdoor treasures in the Legislative process.

Scuppernong Springs Trail at Kettle Moraine State Forest-Southern Unit has an extended boardwalk and wheelchairfriendly overlook thanks to a project funded in part by an endowment grant from the Natural Resources Foundation of Wisconsin.

Each year more than 17 million people visit Wisconsin state parks. FWSP works with local Friends Groups to improve the experience and create lasting memories for these millions of adults and children. FWSP also strives to ensure that millions more will be able to enjoy Wisconsin's natural beauty in the future. Wisconsin's state parks and trails have a long heritage of connecting youth and families to Wisconsin's natural resources.

Who are the Friends of Wisconsin State Parks and how do they carry out their mission to preserve, promote, protect and enhance? FWSP is a 501(c)(3) nonprofit organization formed in 1996 and includes a group of dedicated board members from around the state who care deeply about the Wisconsin State Park System and its visitors as well as preserving these natural resources for future generations.

FWSP's work is focused on the four key points in their mission statement.

- Preserving: Each year FWSP supports Work Play Earth Day events across the state park system that draw thousands of volunteers who remove invasive species, clean up campgrounds, plant trees, build benches and picnic tables, and help with other essential projects. In addition, FWSP helps to inform lawmakers and networks with local Friends Groups and state residents on issues that affect the preservation of Wisconsin State Park System properties.
- Promoting: FWSP broadens awareness of the Wisconsin State
 Park System by providing information on the FWSP website
 and in social media and newsletters, while also promoting
 state park system events. FWSP supports local Friends Groups
 around the state by providing resources and workshops
 on relevant topics such as growing membership, fund raising, outreach and more to help them be more effec tive in their support of the state park system and its visitors.

Thousands of volunteer hours are donated each year by Friends members to improve the park system, making a lasting impact. To demonstrate the significance of these efforts, FWSP recognizes outstanding Friends members, state park system staff and community partners.

And don't forget the annual FWSP photo contest, with Wisconsin State Park System visitors encouraged to snap and share pictures of their outings. The contest (Sept. 3 deadline) culminates in the yearly calendar that is printed and shared in the Winter issue of *Wisconsin Natural Resources* magazine!

Protecting: FWSP is active in educating, informing and advocating for state park needs with Legislators. During the last state budget process, the Legislature's Joint Finance Committee voted to authorize \$2 million from the Parks Segregated

Fund and approved another \$2.2 million for the state park system. This funding will continue to go toward critical needs for property infrastructure, electrifying campsites, bathroom facilities, signage upgrades, fire rings and other critical projects.

Another victory for state park supporters was the passage of the Parks Revitalization Act. The bill utilized \$4.5 million in unspent Knowles-Nelson Stewardship Program funds to pay for water infrastructure projects. These include projects at Devil's Lake, High Cliff, Kohler-Andrae, Peninsula and Willow River state parks. The projects were identified by the DNR as critical for health and safety including drinking water and septic facilities.

• Enhancing: FWSP collaborates with local Friends Groups to provide match funding for park naturalists, educational exhibits, signage and programs, as well as infrastructure and landscaping that enhance the park experience. FWSP does this by raising funds for two different grant programs that provide more than \$35,000 in grant funds to local Friends Groups each year. The local groups provide a funding match, which doubles the work accomplished in the two programs.

As FWSP continues its dedication in support of Wisconsin State Park System properties, the group invites everyone to join these efforts by volunteering, joining a Friends Group and visiting park system properties. Other ways to support FWSP are by attending events, donating to FWSP or purchasing an annual Wisconsin state park sticker package online from FWSP.org

Natural Resources Foundation

Since 1986, the Natural Resources Foundation of Wisconsin has connected generations to the wonders of Wisconsin's lands, waters and wildlife through conservation, education, engagement and giving. The NRF also supports the Wiscon-



sin State Park System's Friends Group program through several efforts designed to grow the fundraising capacity of these motivated and dedicated volunteer organizations.



Interpretive signage and new rain gardens at Point Beach State Forest near Two Rivers will help to prevent stormwater runoff into Lake Michigan. The project was a cooperative effort that included the DNR, Natural Resources Foundation and Friends of Point Beach State Forest, using funds from the Knowles-Nelson Stewardship Program.

The Wisconsin Conservation Endowment held by the NRF is made up of a variety of endowment funds, many of which support a Wisconsin State Park System property, specific project or area of interest such as conservation education. A dozen different property-specific endowments also provide the opportunity for people to participate in supporting the properties they love.

An example of a recent grant-funded project can be found at Kettle Moraine State Forest-Southern Unit. The Scuppernong Springs Trail is now more accessible for all thanks to a 2017 endowment grant from the NRF to the Kettle Moraine Natural History Association. Funding was used to level the trail, update and extend the boardwalk and build a wheelchair-friendly overlook.

Another example can be found at Point Beach State Forest. In September 2018, the NRF in cooperation with the Wisconsin State Park System and Friends of Point Beach State Forest celebrated the completion of a \$100,000 stormwater runoff prevention project involving the installation of gutters and stormwater capture into two new rain gardens. The project is designed to help make the 6 miles of Point Beach's Lake Michigan shoreline cleaner and healthier for visitors.

The project multiplied its impact through numerous partnerships and a multi-faceted funding strategy. With help from the NRF, the team of partners was able to leverage grants from the Fund for Lake Michigan and the Knowles-Nelson Stewardship Program. The effort also was designated a priority project by the Office of Great Waters at the DNR, whose staff provided expertise for project design.

Included in the project, in addition to the new rain gardens, is signage to help educate school groups and other visitors about actions people can take to divert harmful stormwater runoff away from the lake. The signs also teach guests how to design attractive and beneficial pollinator habitat using rain gardens.

For more information about Natural Resources Foundation endowment funds that support the Wisconsin State Park System, contact the NRF at info@WisConservation.org or call 608-409-3122.

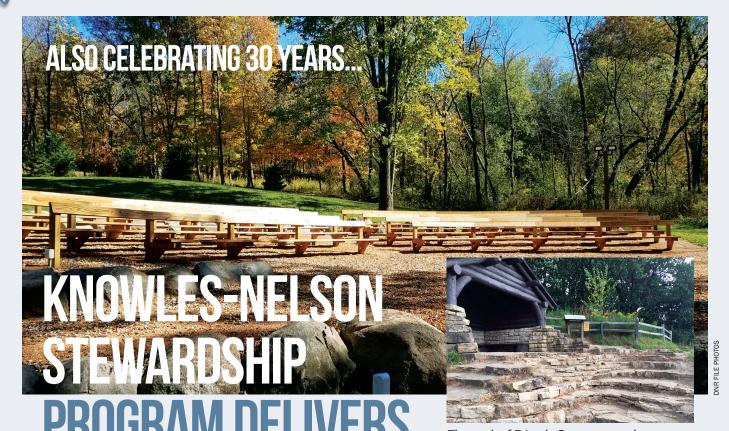
ON THE WEB

Friends of Wisconsin State Parks: FWSP.org
Natural Resources Foundation of Wisconsin: WisConservation.org



Friends of Kohler-Andrae State Park help to install new fire rings, one example of the many system-wide projects being supported with state budget funding advocated by Friends of Wisconsin State Parks.





t the same time the policy on Friends Groups was established in Wisconsin Administrative Code in 1989, the State Legislature also created the Knowles-Nelson Stewardship Program. The program provides funding to enhance natural resources protection and public out-

CRUCIAL FUNDING

door recreation opportunities on state properties and through grants to local partners.

Over the years, the Stewardship Program has provided nearly \$5 million — about \$250,000 annually — in matching Stewardship grants to Friends Groups and nonprofit conservation organizations (NCOs) to improve park facilities, build new recreation projects and restore habitat related to enhancing nature-based public outdoor recreation opportunities on state properties.

During its tenure, Friends and NCO partners have completed more than 500 projects through the Stewardship grant program. The program illustrates the extent to which Friends Groups and NCOs work together with the DNR to achieve property goals for the public.

A small sampling of recent projects funded through this program includes:

Perrot State Park: A section of West Brady's Bluff trail at Perrot State Park was renovated to prevent erosion. It is one of many historic trails built by the Civilian Conservation Corps at

The work of Friends Groups gets a boost each year with thousands of dollars from the Knowles-Nelson Stewardship Program, used for such projects as this trail restoration at West Brady's Bluff in Perrot State Park (inset) and a new amphitheater at the Kettle Moraine State Forest-Pike Lake Unit.

the park in southwest Wisconsin. Brady's Bluff is the most visited bluff in the park and provides a grand vista of the scenic landscapes of the Mississippi River Valley.

- **Rib Mountain State Park:** A new three-season indoor Friends Gathering Space was designed to provide a shelter with amenities for groups to celebrate special times together with a stunning view from atop the mountain.
- Kettle Moraine State Forest-Pike Lake Unit: Friends of Pike Lake received a grant to build a new event amphitheater for hosting events at the property.
- Harrington Beach State Park: The Friends of Harrington Beach State Park raised funds and worked with the DNR to construct an accessible cabin at the park's campground, providing recreational opportunities for people with all abilities.

In 2017, the Legislature authorized the spending of an additional \$2 million of park user fees from admission, trail passes, camping and concessions. Together, the Legislature and DNR's Parks and Recreation Management Bureau decided these funds would be used on projects that would have the most positive impact on customers by enhancing overall use in improving the properties.

In total, 40 partners such as local Friends Groups, the Ice Age Trail Alliance and one county partner were awarded \$250,000 in matching funding. Groups used this money primarily on fire rings, picnic tables, grills, park entrance signs, kiosks, orientation signs and trail maintenance projects.



tate parks, forests, trails and recreation areas are the gems

of Wisconsin's natural resources and often the doorway

through which Wisconsin residents are introduced to the lakes, forests, rivers and other natural areas of our state. Parks and trails provide an opportunity for people to get outdoors and hike, camp, fish, ski, bike and recreate, and they

are a place where wonderful memories are made.

Behind the scenes, Friends Groups and property staff strive to provide the best experience for those who venture into nature. That can be done through fun and educational programs, caring for special places, sharing information that features local flora and fauna, or telling the history of a culture or a unique historical place and time.

Friends Groups also help to plan a variety of special events to raise funds and enhance the visitor experience. Here are a few of the ways these dedicated volunteers get involved.

Work Play Earth Day

Work Play Earth Day is an annual statewide volunteer event supported by the Friends of Wisconsin State Parks in cooperation with property-based Friends Groups and the Wisconsin State Park System. It was established to encourage people to volunteer with the Wisconsin State Park System and make a difference. Earlier this year, more than 30 events were held across the state in conjunction with the designation of April 22 as Earth Day, ranging from planting trees to working on trails to tidying up parks and campsites.

"These events are not only a great way to give back to park properties you enjoy using throughout the year, they are a great opportunity to socialize with others who share your love of the outdoors and want to help protect our environment," said Janet Hutchens, the DNR's state coordinator for volunteer and Friends Group programs in the Wisconsin State Park System.

In 2018, the DNR launched a new initiative called OutWiGo

encouraging everyone to support their mind and body and promoting community wellness by getting outdoors and staying active. The focus for OutWiGo this year is "outdoor recreation for all." The state park system will dedicate many of its efforts to reaching segments of Wisconsin's population that may face barriers to participating in outdoor recreation.

Friends Groups play a vital role in offering exciting OutWiGo-related events that create opportunities for visitors and community members living near a property. These often include music events or fitness activities such as guided hikes, yoga or children's activities to encourage individual

Visit the OutWiGo webpage for more information at dnr.wi.gov, keyword "OutWiGo."

First Day Hikes

First Day Hikes have become an annual gathering to celebrate in the outdoors as the calendar flips to a new year. Sponsored by the umbrella group America's State

Parks, the First Day Hikes events take place on New Year's Day, joining all 50 of the nation's state park systems to provide guided hikes. Numerous properties in the Wisconsin State Park System, in cooperation with Friends Groups, participate each year in this fun, family-friendly day of hikes across the winter landscape.

Candlelight in winter

Also in the wintertime, Friends Groups work hard to organize a variety of candlelight events, which have become popular activities in the winter landscape. Volunteers prepare hundreds of luminaries to line the trails, cut and stack firewood to prepare for bonfires, prep hot cocoa to warm visitors and offer snacks to share after a trek along the lighted path.

Experiencing nature by candlelight — whether hiking or skiing or snowshoeing — has become a long-standing tradition at many properties, with several sites hosting such events for 25 years or more. They often can be important fundraising efforts for Friends Groups.

"Winter candlelight events are some of the most popular activities at Wisconsin State Park System properties," said Ben Bergey, park system director for the DNR. "We have had candlelight skis and hikes in the last few winters that have attracted hundreds and even over 1,000 visitors."

For information on Wisconsin State Park System events throughout the year at properties near you, check the DNR's online Get Outdoors! calendar. Go to wiparks.net and click on "Events and Programs."

PARK ADMISSION

When attending events at a Wisconsin State Park System property, remember that a vehicle admission sticker is required in most cases (\$28 annually for Wisconsin residents). State trail passes are needed at certain trails for ages 16 and older when biking or cross-country skiing, but not hiking. Check wiparks.net under the "Plan your trip" tab for details.

friends GROUPS

By Jonathan Ringdahl, Friends of Perrot State Park

reetings, park lovers! I have fond childhood memories of state parks, which have continued to be added to as a member of a local Friends Group. I remember my first visit on a school field trip to Perrot State Park. My experience was great due to a dedicated group of people caring for the park.

At the time, my childhood enthusiasm and knowledge did not lead me to consider the work that happened behind the scenes to help me fall in love with our Wisconsin State Parks. Being a member of the Friends of Perrot State Park has allowed me to see the work that goes into helping park visitors have a great experience.

It feels good to be helping others fall in love with Wisconsin

SHARE THE FUN

State Parks. Watching a kid try to teach a great horned owl how to be an owl at a raptor program at our centennial celebration was awesome. It was an experience I am sure she will remember for the rest of her life.

We, as a Friends Group, helped make that experience possible. It was a satisfying feeling.

During our annual winter festival, seeing families' smiles as they make s'mores, sled, ride dog sleds and take wagon rides brings warmth to winter.

Friends Group members help people want to keep coming back to their park. The best compliment is when people return to our events the next year. It is a great feeling knowing we did something that made them want to come back and we are making our park better.

I have developed new friendships with park visitors, Friends Group members and DNR staff through being involved in my local Friends Group. It has added richness to my life. We all know our park is better because of what we do.

Please join me as a Friends Group member in the park of your choosing. You may find you enjoy your park even more knowing you helped make it better.

OF BEING
A FRIEND

RIDGE 11

Priends Groups help to make the user experience better at state parks, forests and trails (such as Military Ridge) in a multifuled of ways including building projects, park services, signs, cleanup, kiosks and more.

FIND A GROUP TO GET INVOLVED

Do you have a favorite state park, forest, trail or recreation area? Want to have fun outdoors, make an impact or become a steward and give back? Consider supporting or joining a Friends Group today by volunteering for a project or an event.

Even if for just a few hours, becoming a Friends member allows you to share your time and talents. Or become a leader to help plan future possibilities for the Wisconsin State Park System. Whatever time you have,

you can make a positive and lasting impact.

Link up with a Friends Group today. For information and to search a list of Friends Groups, go to dnr.wi.gov, keyword "Friends."

Already a Friend? Snap a photo of a Friends Group event or activity at a Wisconsin State Park System property to share with us on social media. Use #WIFRIENDS30 to help us celebrate the positive power of Friends!



a goal of the DNR's new fishing initiative.

Recruiting anglers of all ages is

Easier for anglers

What will the Fish On ... Wisconsin! initiative do for the angler? For one thing, the initiative plans to use technology to make fishing easier for Wisconsin anglers.

Plans are in place for the ultimate catch—the development of a Fish Wisconsin app that likely will include interactive maps with fish species and lake information, boat access sites, shore fishing areas, "fishing near me" opportunities and regulations—all at your fingertips.

Fish On ... Wisconsin! plans also call for the expansion of the "Close to Home" fishing series, with printed and online interactive maps and descriptions of shore fishing sites, fish species present and nearby amenities including restrooms close to the state's major metropolitan areas.

A possible pilot project of the initiative is a "What's Biting Network," with mobile fishing forecasts generated by anglers for anglers. The initiative also will place an emphasis on the distribution of electronic fisheries survey information to help identify possible fishing locations and on an increase in fishing-related web apps

such as mapping, atlases, photo sharing and more.

Fish On...Wisconsin! was officially launched with the opening of the 2019 fishing season. Branding of the initiative includes a variety of species-specific options that can be used for promotions when appropriate

trout, salmon, bass, panfish, musky, lake sturgeon and more.

The DNR hopes the Fish On...Wisconsin! initiative will become a new way of life or a renewed way of life for residents and nonresidents alike when it comes to fishing Wisconsin's waters.

NEW INITIATIVE SEEKS TO REEL IN ANGLERS.

Karl Scheidegger

The fishing industry is facing a serious challenge. Current participation trends show younger, more diverse audiences reluctant to take up fishing, and those who do begin don't tend to stay with the sport. At the same time, older anglers are aging out of the sport.

These trends are evident both nationally and in Wisconsin, where a decline in fishing participation would have a significant impact on our state's economy, our conservation efforts and the fishing industry as a whole.

With that in mind, the Department of Natural Resources has launched a new marketing effort called Fish On... Wisconsin! The initiative — melding an often-heard fishing phrase with that most famous state song title — was created to build participation in the sport by engaging new and existing anglers. It also is designed to increase public awareness of the DNR's Fisheries Management Program and available fishing opportunities.

The multi-year, multi-faceted initiative will include the development of branding, messaging and an increased focus on customer, stakeholder and partner engagement. It will use a variety of marketing strategies and will advertise and promote fishing participation through traditional outlets such as television, radio and print as well as nontraditional media and social networking tools.

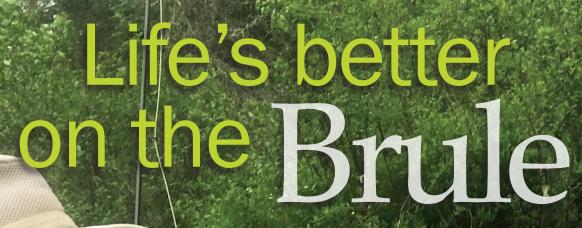
Fish On ... Wisconsin! will work with the fishing industry on special promotions and partner with the state's Department of Tourism, the hospitality and sporting industries, local Chambers of Commerce and other organizations to promote fishing.

The initiative also aims to build on national angler "R3" efforts by recruiting new anglers, retaining them once they're active and reactivating those anglers who may have stepped away from the sport. Described in fishing terms, recruitment is luring prospective anglers of all ages and setting the hook, retention is keeping them gently on the line and reactivation is seeping them gently on the line and reactive.

them gently on the line and reactivation is trying another lure to entice them to bite again.

Core messages of the initiative will include such ideas as "Fishing is fun ... and catching," "Fishing is easy and accessible" and "Fishing is a treasured Wisconsin pastime."

Karl Scheidegger is a fisheries biologist in the DNR's Fisheries Management Program.



FOUR FRIENDS AND SEASONED TROUT ANGLERS REFLECT WITH REVERENCE ON OUTINGS TO THE RIVER.



These four "Gentlemen Fishers" enjoy their first trip to Douglas
County's Bois Brule River in 2008. Back row, from left are: Dave
Williams, Brad Bowman and Mark Peerenboom. Seated is Howard
Bowman, also shown at left during the foursome's return trip in 2017.



Howard

There is what I would call a "majesty" about the Bois Brule River in Douglas County as it flows through its many permutations on the way to Lake Superior.

The river takes on a sacred quality for me as a result of the intense, quiet beauty of the place combined with my own memories.

More than 10 years ago, my son Brad convened a group of "Gentlemen Fishers" consisting of Dave, Mark, Brad and myself for a fishing trip to

the Brule. Nearly a decade later, we repeated the outing. Among my memory highlights are these:

On our foursome trips, Mark is the one with boundless energy. He is always ready with fly choices, shore lunches, local lore and contagious enthusiasm. On our first trip, Mark prepared a memorable gourmet meal at one of the shelters between Stone's Bridge and Winneboujou. Years later, at that same shelter, Mark's environmental awareness served us extremely well.

After we had eaten lunch, Mark looked at the sky and said, "I think we ought to wait a bit before getting back on the river." Sure enough, within five minutes the sky opened with thunder and lightning — not a good time to be on the river in a canoe.

Dave has been a rock of a friend to me for more than 20 years. He is a "detail person" with a great sense of inquisitiveness and, I would say, "spirituality" in the broadest sense. At the Brule River, we shared a moment that transcended time.

Floating the upper portion of the Brule on a cloudless, windless day, we came upon a place where the river broadens and the eastern shore is lined with deep green cedars and pines. In the stillness, the reflections of the trees in the mirror-like river were indistinguishable from the actual trees.

It was a place and moment sometimes referred to as a "thin place," where earth and heavens seem to meet. We both had the good sense to stop paddling, lay down our fly rods and just "be."

Brad is the consummate minimalist fly-fisher. He becomes one with the river and casts with great skill and obvious joy. He is also an intrepid wader. I've never seen him fall in the river like me!

I have, however, seen him catch significant fish. One such fish was brought to net on our first Gentlemen's Fishing Expedition, when Brad was healing from his wife's bout with cancer. The memory of this trophy trout will always remind me how proud I am to be his father.

Oh, the adventures and misadventures we've had together. As Brad is fond of saying, "Life is for living!"

As for myself, I am the oldest of our foursome and, merely by virtue of age, the "dean." My casting is adequate and my knowledge of flies sparse. I use what I would call an "intuitive" approach: I look at the river and say to myself, "This fly feels right," and proceed. Sometimes I'm correct, often I'm wrong. Dave and Mark serve me well with alternative fly suggestions when mine fail.

Give me a fly rod and a setting most anywhere on the Brule and I'm just a "happy old guy!" Whether with others or simply by myself, the Brule is my premier place of solace, healing and sacredness.

Mark

Mid-morning in mid-June. We perch the bow of the canoe on the rock dam and watch for rising trout. I sink my canoe blade into the river bottom to hold the canoe's

end

from drifting downriver as I watch my canoe partner in the front with fly rod in hand.

The overcast midday sky keeps the trout from spooking. The fly line cast overhead doesn't flash or create shadows in the sunless sky. The trout hold their positions, which provides opportunities for multiple casts. My canoe partner's casts are accurate and his drifting fly is intercepted frequently by willing brook trout.

Brad and Dave Williams. I am pleased to sit back and observe the

showing off the trout catch

from their 2017 trip are:

Howard Bowman, his son

During an earlier time in my life, sitting back and watching would not have been possible. I would be rigging and positioning the canoe, thinking about my next cast. Now it is a pleasure just to be a spectator and learn from someone else.

After a while, the river's personality changes and opens into what appears to

be a long, never-ending spring pond. The fishing action is found tight up against the bank where fallen trees and bank-side shadows create holding cover.

I find myself taken by the tiered landscape of the river valley. The high valley walls hold beautiful white pine, hemlock and spruce. Near the top of the valley, aspen leaves flutter against the horizon. The trees create a wall of green shapes. A white-throated sparrow whistle reminds me we are in its inner sanctum.

I stow my rod and put down my paddle, stretching my back as best as I can in the canoe. The valley and the river's flat water urge us to be content. We obey for



back



A hearty shore lunch is part of any good fishing trip, as the "Gentlemen Fishers" recognized in 2008.

a short time until our journey's end calls us to paddle on.

Now the river drops into rapids and demands our full attention. We stay alert as we paddle. We glide through "the estates," past log cabins with screen porches furnished with Adirondack chairs all shouting old money from a gilded time. In the past I would paddle by with envy; today there is none.

Beyond that, even more attention is required to maneuver the canoe past the rocks inhabiting this fast water. The rapids end in deep runs, which we fish. We all catch fish but one of us keeps taking more with a Royal Coachman swung down and across. He out-fishes all of us with this particular fly and technique.

His success highlights my own compulsion to overcomplicate with tippet sizes, techniques and too many fly patterns. I know my inability to simplify has been a burden not only in my fishing life, but in other parts of my life as well. I remain unteachable.

We shoot the last rapids and are at the head of Big Lake. The rest of the journey holds only pleasure. My partnership in the canoe is such that we can count on each other to make the last rocky runs before our take-out at Winneboujou. We are at the landing.

Reflecting now, months later, I treasure not my fishing but the images I collect-

ed, the wisdom gained and the lessons learned from the events on the river.



There is a lot of good fly fishing to be had in Wisconsin. Thousands of miles of designated trout streams spread out over much of the state. Spring creeks, small, medium and large streams and Great Lakes tributaries — what more could a fly fisher want?

There is one stream that is really special, the Bois Brule River in northwest Wisconsin. For those of us living in southeast Wisconsin, the Brule is a long way away, but the trip is always worth it for the experience and the memories. Ah, the memories ...

The Northwoods: The Brule is truly "up North" where you're surrounded by forests, tall pines and birch trees, campfires and cafes where people seem to sit a while longer telling stories. There's always enough time for another cup of coffee or a piece of pie.

Big water: Wisconsin has a lot of small and medium-sized streams. The Brule

is bigger, more rugged. You can often stand in the middle of the stream and cast in both directions. That's fun, and it's a stream you can canoe and fish. It's a whole different experience because you're in the wilderness, at times miles away from a highway or people.

Clear and cold: You know you're in a good trout stream when the water is crystal-clear and cold. The Brule is a good trout stream. I love looking down into the water, seeing the water flowing downstream over gravel and stones, the vegetation waving in the current. The deeper, quieter water demands respect.

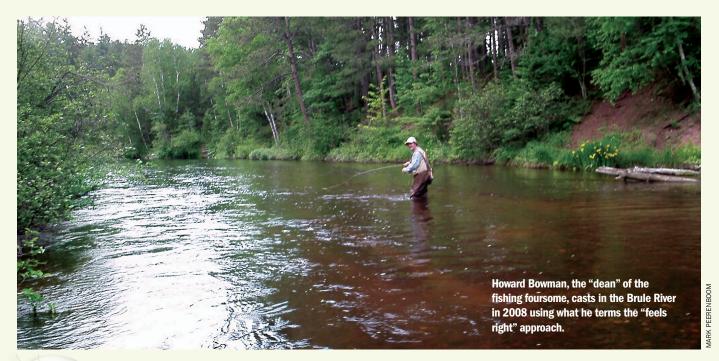
Away from it all: I love the quiet and solitude of fly fishing and the Brule provides both. Whether its wading in wide, sweeping shallows or canoeing deeper water, there are long stretches where you'll find nothing except the natural world all around.

The smells: I mostly fish the streams in southwest Wisconsin where the smells mingle with the scents of agriculture, traffic and higher population densities. There is something different about the smells of streams in northern Wisconsin; they are of "wilderness." Just being there provides the senses with something special. Different forest species factor in, but there is something more — the wildflowers, the ferns, the moss and bogs, the slow decay of organic matter as plants and trees live, die and come alive again.

The sounds: If quiet and solitude are to be cherished, the sounds of ripples and rapids are to be experienced. Wading or canoeing, the Brule River rapids and ripples are alive with sound. From a canoe, hearing the sound of rapids increases the heart rate just a bit — sometimes a lot! It's time for more communication and teamwork with your canoeing partner to plan the path forward. And when the canoe is safely through the rapids, it's time to stop and fish. The quieter water downstream is often where trout congregate to feed and "catch their breath" with freshly oxygenated water.

Camaraderie: Though I love the quiet and solitude, the Brule also is a place to share with friends. I know my friends appreciate the Brule in their own way. Whether it's pointing out things along the way or discussing flies to be tried or telling stories of trout caught and trout missed, the Brule River experience is something to share.

Oh, and the fishing: The Brule features a "hat trick" of brookies, browns and rainbows, small and big. When I reflect on the Bois Brule River, the fishing is amazing — as is the entire experience.





Brad

The trip always starts way before the trip. In this case it started in February 2017 when visions of summer and the Bois Brule River entered my thoughts. I acted on those thoughts by floating an idea to a group of my best fishing buddies and dear friends: It was time to return to the Brule.

We had been there together almost 10 years before. I knew it was 10 years because that was the year my wife was diagnosed with cancer. I had been by her side through aggressive chemo treatments all through that spring — we were and are beating this thing.

I also remember because I caught and kept one of the biggest brown trout of my life on that first trip. I rarely keep my fish but in that case, I needed something tangible.

That fish, a big healthy brown, attacked a soft hackle skated from the edge of a pool. I danced carefully with the trout as our canoe floated toward the rapids. Howard — Dad, to me — eventually helped me net the fish seconds before we might have gone over. I sensed his gentle encouragement and, I think, his pride as the process unfolded.

The Brule has lots of history. You can feel it walking along the banks, floating the river in a canoe or even talking to a local resident at a gas station. For decades, men and women have traveled to the

Brule and created memories not unlike my own. Collectively, these memories make up the soul of the Brule — you can feel it.

These were my thoughts on that cold February day. The next four months were filled with the kind of correspondence fly fishers love to have when they are unable to go fishing but are planning a trip: Where shall we stay? What meals are you bringing? What do you think the hatch will be in June? Which canoes should we bring? Do you remember that time at Big Lake?

Finally, the trip arrives. The Brule in June is magical and the latest trip reaffirms this.

After the long drive north, I want to take time to reunite with my fishing buddies but the tug of the river is greater. We quickly organize to go fishing. Dad leads us off-trail to a "secret spot." We split up water with nods and gestures and go off on our own adventures.

I know I should pause and take time to watch the water for bugs but I feel impatient, wanting to be part of the river. I step into the water, feeling cool pressure on my waders as I clop through the muck toward the center of the stream. I find my footing, strip some line and become lost in the rhythms of fly fishing.

The next day we're floating — Stone's Bridge to Winneboujou. It is visceral, gorgeous and varied, and takes all day to do if you fish along the way. Even though we've done this same trip before, it's never really the same. You can't step in or float the same river twice.

We spend the morning paddling and

fishing. We talk in spurts in between steering and casting. My boatmate Dave, modest as always, gets into fish and I delight in his happiness. At midday, it looks like rain and we opt to pull out at one of the lake shelters for lunch. I catch a shallow nap listening to the rain and feel at peace.

The next few hours are less fishing and more paddling. Toward the take-out, a combination of happily straining muscles and the visual masterpiece we float through has me in a punchy, euphoric mood. Pulling hard, we make it before dark. Later, I relive the smiles on my companions' faces as I drift to sleep. This was a great day.

About the authors

Howard Bowman is retired and lives with his wife in Madison, well situated near many Driftless Area trout streams. Mark **Peerenboom**, a retired school counselor in Eden Prairie, Minnesota, has been a trout fisherman for 46 years and is a member of the Kiap-TU-Wish Chapter of Trout Unlimited. Dave Williams recently retired from UW-Extension's Agriculture and Natural Resources Extension Programs. He lives in Waukesha and is a member of Southeast Wisconsin TU. And Brad Bowman is a self-described "father, husband, school counselor and trout bum" who also coordinates the Trout in the Classroom program in Chilton. For the past four years, the program has raised trout fry and, under DNR guidance, planted them into Stony Brook, the only trout stream in Calumet County.

Enthralled by odonates

CAPTURED THROUGH AN UP-CLOSE CAMERA LENS, DRAGONFLIES AND DAMSELFLIES DAZZLE WITH THEIR BEAUTY.

Story and photos by Kurt Huebner

I became interested in nature close-up and in macro photography many years ago. With the arrival of digital cameras, my interest really took off. Images suddenly were cheap to make and they offered

My first subjects were largely unusual insects and wildflow-ers and sometimes a few birds. Then, about four years ago, I was taking photographs in my front yard when I noticed a very small and colorful damselfly in the low grass. It was cooperative and allowed me to take several images.

I didn't have a close-up lens on my camera so I didn't expect to see too much when I downloaded one of the images on my computer. I was right; the image was pretty bad, not sharply focused and very small. I enlarged the image on my screen anyway and was immediately amazed by the delicate structure and colors.

the damselfly, so I searched the web looking for a match. I found it, identifying the damselfly as an Eastern forktail, one of the most common damselflies in Wisconsin.

Calico pennant



Blue dasher



Eastern forktail



Four-spotted skimmer





That was my initial contact with damselflies and the catalyst to beginning haphazard wandering near ponds, lakes and ditches looking for other species. I began to pay closer attention to what I was seeing.

Despite my initial random efforts, I started to find additional species. By the end of the following season, I had found 30 or so different species of dragonflies and damselflies — odonates.

Building a knowledge base

Of course, I had no idea what the odonate species names were, so I began looking for references and found three books that covered Wisconsin odonates: "Dragonflies of the North Woods," by Kurt Mead; "Dragonflies of Wisconsin," by Karl Legler et al.; and "Damselflies of the North Woods," by Bob DuBois, a research scientist and odonate expert for the Department of Natural Resources.

Even with these books, I still needed a lot of help with the identifications as it's not always easy. I found the Facebook page of the Wisconsin Dragonfly Society and joined the page and the society. I offered a few images to ask for help with the identifications, getting quick response from several helpful members.

Importantly, as a member of the WDS, I became aware of the Wisconsin Odonata Survey, which has been administered by DuBois to monitor odonates throughout Wisconsin. By recording my finds and sharing images with the WOS, I could continue my lifelong interest in science and become a contributing citizen scientist. Without the WOS and its massive database, my level of knowledge never would have progressed as it did.

I am still a neophyte and doubt I will ever become an expert, but over the past four years I've rapidly gained a base knowledge of Wisconsin odonates. I am now able to search for and find many common and uncommon species without much effort.

Through the help of the WDS and its members, I have come to know about odonates' habitats, species range, habits and when during the season certain species will appear. On any warm and sunny day with low wind, you will find me walking alongside and wading in rivers, streams, lakes and ponds—even drainage ditches and dried-up puddles—looking for common and less familiar species.

While I am far from an expert, I do spend more than half of the days from mid-April to mid-October in the field searching for and photographing odonates. My pursuit of dragonflies and damselflies will definitely continue — my 6-year-old granddaughter has called it my "obsession."

Where there's water

Dragonflies and damselflies, in general, can be easily found in many water habitats and in fields near or even distant from a water source. They may be perched on vegetation, on the ground or patrolling their territory. (While both are in the order Odo-

nata, dragonflies and damselflies have differences — most notably including eyes, body shape, wing shape and wing position.)

Odonates do need water to breed and develop. In fact, most of their lifetime, months to years, is spent hidden as voracious nymphs in their water habitats where they hunt insects, small fish, tadpoles and even other nymphs.

Once the nymphs are mature, they crawl onto shore vegetation early in the morning to avoid predation and, with much effort, emerge from their hard exoskeletons. About an hour later, when the body and wings are inflated and hardened, they fly off and become the dragonflies and damselflies we see flying around our neighborhoods, fields and waters

They are not fully mature when they leave the nymph state and typically will fly inland to feed on insects, some small, others as large as butterflies. Sometimes, they even prey on other dragonflies and damselflies.

This days-long feeding frenzy allows odonates to reach sexual maturity. Once they have matured, they return to their water habitat where the males may define a territory and seek or wait for a mate.

The mating process is interesting to witness. The male will attach himself to an area behind the female's head with structures at the end of his abdomen forming a tandem. The female's abdomen will then attach to the male's abdomen forming a wheel.

This complex process involves the passing of reproductive material to the female that will allow for fertilization of the many eggs she carries. The female then deposits the eggs into the proper water environment where the eggs can develop into nymphs. And the cycle continues.





Ready for their close-up

Photographing odonates can be a challenge. Some are an inch long while others are a little more than three inches, with every size in between. Many are just not willing to sit still for a photograph. Many have a limited area where they are found within the state, and they don't all show up at the same time during summer.

Given all those things and other considerations, photographing odonates is none-theless a great deal of fun. It is largely a solo project — too many cooks spoil the pot. Any wet spot or fields near water are perfect sites to get started. If they are immature, odonates can be found in more distant fields as well.

If you become more than casually interested, reference books will help you find locations, habitats and species range. Also visit the DNR's Wisconsin Odonata Survey pages and the Wisconsin Dragonfly Society on Facebook.

To date, I have been able to find and photograph 121 of Wisconsin's roughly 165 species of dragonflies and damselflies. Macro photography can be expensive but, really, any camera with close-focus capability will do. You can start with a good point-and-shoot camera, just try not to use the on-camera flash. I have even seen some good cell-phone images.

My technique is fairly simple: Get low and go slow. Walking up to a potential subject will usually flush the edgy odonate. I always get as low as I can and try for a side view. If the odonate allows, I shoot as many different angles as I can.

Do plan to miss a lot of shots. Most of my images are more diagonal, meaning I was looking somewhat down on my subject from a not-too-intrusive distance. I have found if I get too close and try to fill the viewfinder, I may cut off part of the subject. Stay back a little and center the image in the viewfinder. Recomposition and cropping can then be done with any image-processing software.

I usually start shooting as soon as I see the odonate and keep shooting as I carefully move closer. As you might guess, how close you can get is determined by the subject. Take multiple shots if possible. Images are cheap and, in the end, any image is better than no image. Overall, knowledge, patience and practice are the keys to successful odonate photography.

Kurt Huebner lives in the town of Vernon, near Mukwonago. He is a retired U.S. Air Force senior master sergeant, natural science college educator and clinical laboratory scientist who now spends much of his time as a nature photographer and citizen scientist.

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GET INVOLVED: WISCONSIN ODONATA SURVEY

There are more than 165 species of dragonflies and damselflies known to occur in the state and the Wisconsin Odonata Survey works to keep track of them all. With the help of volunteers, the WOS documents populations of odonates to increase knowledge of where species are found and what habitat is required. Dragonfly and damselfly species are pinpointed by identifying adults, nymphs and exuviae — the cast skins left behind when nymphs transform into adults.

The WOS, coordinated by Department of Natural Resources research scientist Bob DuBois, is one of several statewide surveys in the DNR's Aquatic and Terrestrial Resources Inventory program. It also is part of the Wisconsin Citizen-based Monitoring Network, which facilitates monitoring projects.

Volunteers are always needed to help with the WOS. Helpful "tools of the trade" can include close-focusing binoculars and an aerial net. Hip boots, waders or knee-high boots will help keep you dry around the wet habitats where odonates occur. To document finds, a digital camera with macro capabilities is best.

A good field guide to identify species is important. The "Color Guide to Dragonflies of Wisconsin" by Karl Legler, Dorothy Legler and Dave Westover is expanded to include all species in the state. Other field guides are listed on the WOS website under "Resources."

Additional information found on the website includes tips for recognizing species; process and rules for collecting specimens when needed (some species can be identified only under magnification); best times to survey (June and July are prime months); habitats to target; and tips for accessing public and private lands.

Find all the WOS details at wiatri.net/inventory/odonata. More information also is available from the Wisconsin Dragonfly Society, widragonflysociety.org, and the Dragonfly Society of the Americas, dragonflysocietyamericas.org.



ABOUT THE CAMERA SETTINGS

Photographer Kurt Huebner has won several awards for his odonate images and has had photos published in the news journal of the Dragonfly Society of the Americas, among other places. He spends much of each summer photographing odonates throughout Wisconsin. The dragonfly and damselfly macro images seen on these pages are all of common or fairly common species and all were taken at in-state locations.

For those interested in the more technical aspects of Huebner's photography, he provides these details:

"My DSLR (digital single-lens reflex) camera system is a Canon 7D Mark II with a Canon 180mm f3.5 macro lens and I use a Canon Macro Twin Lite MT-26EX RT flash. I shoot raw files in manual mode, though I do use autofocus because of aging eyes. I tend to center my odonate subjects so the camera is set for spot metering and a central focus point.

"Initially, the f-stop is set to f8 and adjusted as needed based on light and depth-of-field needs. The ISO is set to 400. I always use the external flash and because of that my shutter speed is set to 1/250 of a second."

IDEAL SPOT ON A SUPERB **MORNING** YIELDS FIRST AND LIKELY **ONLY TROPHY** TURKEY.

Kevin Feind

The spring turkey season, which took place in April and May, marked my 31st year of turkey hunting in Wisconsin. Over that time, I've made many very fond memories, but few can compare to the morning I called in a Nebagamon Creek gobbler for my wife, Lori.

To fully understand the significance of this hunt, which happened in 2008, we first need to learn a little about the hunter. Lori is my wife of 26 years and has always been very supportive of my turkey hunting adventures. But in most cases, mobility issues have meant she can't be a hunter herself.

Lori has had multiple surgeries on her legs and knees, so most turkey hunting is simply not possible for her. She can't walk through the woods or go up and down hills. Sitting against the base of a tree also is not possible or would be very painful for her.

Therefore, to get her out turkey hunt-

ing, I had to find a place where I could put her in a chair in a blind. The location had to be level and easily accessible yet provide some likelihood of calling in a turkey.

One day, I was talking to a landowner over breakfast at a small cafe in Lake Nebagamon in Douglas County. He had property near the Brule River State Forest where he said he commonly saw turkeys. There was vehicle access to within 100 yards of a food plot, and he gave me permission to scout the area.

Upon arriving at the property, I bumped a jake, a hen and a long-bearded gobbler from the food plot. I noticed a

spruce tree in the middle of the field that provided significant shade and made a good spot to set up a blind with two chairs, less obvious to incoming gobblers. Decoys could be placed in a very natural-looking area of the field.

all gobblers

The next day, we were excited for the morning hunt. The forecast called for calm winds, a low of 44 degrees and clear skies. Some might know that as a "bluebird morning." The landowner provided me with a key for the gated driveway on the property, assuring we'd have no conflicts from others.

We arrived well before light, parked the van out of sight of the blind and got Lori seated. I placed two hens and a jake decoy in an area Lori could cover comfortably. As it started to get light, we listened for the first morning gobble.

Time passed, and there was no gobble ... anywhere. More time passed, and still no gobble. I whispered to Lori that I was going to start with some light tree yelps to see if I'd get a response. I started with my trusty Quaker Boy Rite Touch slate and waited. Nothing. I tried again. Still nothing.

It was time to change calling techniques to see if it would trigger a response. Experience has taught me that if a hunter can mimic a high degree of excitement from a couple of hens at once, it can trigger a reluctant gobbler to cut loose.

With that in mind, I positioned my mouth diaphragm and loudly mixed cutting and yelping with both the diaphragm and the slate at the same time. Much to my surprise, a thunderous gobble erupted from about a quarter mile north of us. I smiled and whispered to Lori, "Bingo!"

He had heard me and I had his attention. With additional calling, I could tell he was walking back and forth, east and west, several times, but wasn't getting any closer. I realized he was on the other side of a stream and didn't want to cross it.

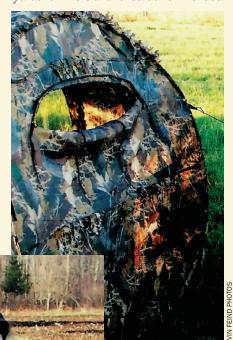
Normally, if hunting by myself, I'd move on him and get across the stream, but Lori didn't have the ability to be mobile. I called a few more times and each time, the bird gobbled back.

I decided to go silent on the bird. Sometimes this tactic causes the bird to come closer, although sometimes it results in the bird losing interest. It was a gamble I had to take. I forced myself not to call for 20 minutes, checking my watch to make sure I waited that long.

After the 20 minutes, I resumed with some medium volume yelps on my mouth diaphragm. Much to my pleasure, the bird not only gobbled back, but was much closer! Either it had flown across the stream or another gobbler had heard our conversation and was on his way. At this point, it didn't matter — the bird gobbled and he was coming.

Patience, then a precise shot

I was positioned off Lori's right shoulder and was peeking through a small window to the north. I could see about 60 yards to where a lane led out of the food



A small blind tucked away in a shady area (above) made an excellent lookout for Lori Feind in the hunt for her first turkey. Her patience in awaiting the pinpoint shot gave way to pride and pandemonium when she and her husband celebrated bagging a 20-pound gobbler.

plot. A gobble erupted again and this time it sounded so close I was surprised I couldn't see him through my peephole.

Lori got her shotgun ready. Suddenly, I heard the gobbler spit and drum and I peeked out the window to see where he was. I could see him in full strut about 40 yards away. I whispered to Lori and she shouldered the shotgun, keeping the muzzle from breaking the outline of the blind's window.

The bird was magnificent. He strutted closer, never dropping his tail fan, walking 8 feet, stopping, then walking 8 more. It was obvious when Lori could finally see the strutting bird, for her eyes got the size of saucers and she started to breathe rapidly. The bird circled around the jake decoy at 19 yards. Lori raised her gun and lined up the sights.

I whispered, "You can shoot him any time, he's in range." She clicked off the safety and sat there aiming but didn't pull the trigger. This was the moment of truth. Time stood still. Was she going to shoot? Would she flinch? Would she keep the sights lined up?

The bird was now facing off with the jake decoy at 17 yards and slightly quartering away from us. Still she didn't fire. Finally, the bird dropped his tail to half strut and stretched his neck to attack the decoy.

At that moment, the gun roared. I could see the shot column hit the neck of the gobbler about an inch above the greater caruncles. An absolute perfect shot! I was thrilled and overcome with excitement.

After clearing the shotgun and placing it in a safe place, we went crazy. There were hugs and kisses, complete pandemonium in our blind. I was overflowing with pride and joy.

When I asked Lori why she took so long to shoot, she calmly said, "I didn't want to damage the beautiful tail fan and I knew you'd want to mount it for me."

After several minutes, I exited the blind to retrieve the bird. It was a very respectable 3-year-old gobbler, with a 10½-inch beard and weighing about 20 pounds.

Since then, Lori's legs have only gotten worse so that likely will be her only gobbler. But it was an incredible hunt, made possible by a kind Lake Nebagamon landowner.

As expected, the tail fan and beard grace our living room wall.

Kevin Feind is the DNR's natural resource property supervisor at Pattison and Amnicon Falls state parks.

Readers *Write*

ONE SMART PUP

We love reading your magazine (the pictures are amazing) and are avid patrons of the Wisconsin Department of Natural Resources - hunting, fishing and camping in Wisconsin state parks, of course with our dog, Trigger, by our side. Caught Trigger on the couch with the lighthouse issue one evening. Perfect photo op!

Larry and Gina Fritz Sullivan



SMALL PRINT IS DIFFICULT TO READ

Thank you for an interesting magazine. My age may be showing. I did find the print in the articles smaller than I remembered and more difficult to read. Green may be a good color to remind us of the environment. but it is difficult to read small black print on the green background paper on (Readers Write) pages. I will have my grandfather's magnifying glasses close by when the next issue arrives.

Mary K. Melrose Meguon

Thanks for your observation, Mary, and you are right in thinking the Readers Write type size has been just a bit smaller than the rest of the magazine. We have tweaked the letters presentation for this issue, hopefully making it easier to check out the great feedback we get from readers like you!



IS THAT A REGAL FRITILLARY?

As I got to the last page of the Natural Heritage Conservation insert (Winter 2018) and saw the beautiful butterfly, I said, "I've seen that butterfly on my flower bush right outside my front door." I took several pictures of them, as there must have been a dozen going from flower to flower, the same flower (I think) that's in your picture. Anyway, I made an 8x10 copy of the photo and it is in my office where I look at it every day. Keep up the good work!

Jim Pat Patterson Oshkosh

DNR conservation biologist Jay Watson replies: The butterfly in the photograph is a painted lady butterfly. Some years they are pretty abundant in Wisconsin and other years almost absent. The reader's photo is dated from 2017 and that was a great year for painted ladies in Wisconsin.

ODE TO ANGLING

I am a communications instructor at Fox Valley Technical College in Appleton, and I wrote a sonnet about the stages Wisconsin anglers often go through: They want to catch the most fish, then they want to catch the largest fish, then they want to catch the most difficult fish. Through it all, however, they practice catch-and-release

and keep their trophies only in their memories.

I am sending you this poem with the hopes that you might print it in your fine magazine. I have subscribed to Wisconsin Natural Resources for years, and it is a very informative, useful magazine. It has helped me plan weekend excursions while teaching me about the natural goings-on around our great state of Wisconsin.

Jonathan Walter lwanski Appleton



An Angler's Cycle

The novice aims to bring to hand the fish of greatest number, only hoping that high Pisces hears and answers his one wish and tells him where His blessed goals are at. With time behind, the next aim is for size, for quality's own definition tends to change with he that hopes to think he's wise the standards sometimes change from what to when as the next stage for anglers comes to pass: not number, shape, or any such like goals; but just how difficult it was to catch this finned creature making him feel whole. Although I do not grasp to kill and eat, I think my trophy always for to keep.

WHAT KIND OF BUGS?

I have a healthy respect and a cautious admiration for spiders. I came across this small spider, only 7 millimeters long from abdomen to eyes. It is all black with no distinct marking, four dimples on the back and a reddish tinge near the joints of the legs. On the underside is a lighter brown area and a small whitish semi-circle. Having seen black widow spiders out West, this one looks similar but has none of the red markings. The closest possible match I can find after searching internet bug ID sites is a false widow or rabbit hutch spider.

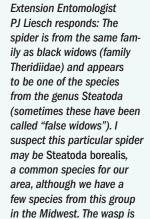
I also photographed a small wasp



and after much searching I believe it is a cuckoo wasp. I'm 60 and spent my life outdoors and never heard of one before. It is almost a metallic-looking green and blue and seems to like my passionfruit plant the best. Did my inner bug-nerd get the correct IDs?

Red Simpson Winneconne

indeed a cuckoo wasp from the family Chrysididae. With the beautiful metallic green color, they often aren't recognized as wasps at first! As director of the UW-Madison Insect Diagnostic Lab, I invite readers to contact us through our website - labs.russell. wisc.edu/insectlab - about having insects or arthropods identified. The website has instructions for submitting digital images or physical samples to the lab.



Back in the day

Forward thinking then benefits Brule River now

Andrea Zani

The reflections of four fly-fishing anglers can be found in this issue of Wisconsin Natural Resources, recalling fond

memories of trips to the Brule River. The ability to enjoy one of Wisconsin's true trout-fishing gems today is a credit to the visionary management of the Brule that began decades ago.

An example of that foresight can be found in the July 1950 issue of the Wisconsin Conservation Bulletin. A conservation warden in Superior writes to extoll the virtues of the Brule and notes that with careful planning, those shining characteristics will endure. Here are excerpts of that essay, with insight that seems just as relevant to the Brule nearly 70 years later.



By Wesley C. Newcomb Conservation Warden, Superior

An officer who patrols our most famous trout stream points out that we can take a good harvest from the Brule if we supply the management that counts.

The Brule River in Douglas County is truly a great trout stream. It has been in years past, it is at present, and it will continue to be if just a few basic things are done to preserve the physical characteristics of the stream.

Many factors determine the suitability of a stream for trout. The temperature the same as all other inland waters of this creation, and it will continue to change with time and tide as it continues to take the terrific beating of just being a river. The fact that people have used the Brule for travel, trapping, hunting, fishing, logging and living for these many years has made changes

and those which injure its natural habitat. northern pike, kingfishers, heron, mergansers and osprey are most destructive.

Another point to remember: We cannot

that have affected the trout population. If the truth were known, we probably would learn that so much more spawn is lost through natural causes as to make the damage done by waders seem insignificant. Count the natural enemies of the trout Deer, beaver, mink, otter, muskrats, rabbits,



Looking idyllic and serene along the Brule River, the Henry Clay Pierce estate is shown in 1940. Also known as Cedar Island Lodge and now privately owned, it was the site of **President Calvin Coolidge's "summer White** House" in 1928.

increase, individual anglers may have to get enjoyment out of fishing as such — out of the sport. The Brule is a beautiful river, but there is a limit to its production.

Nevertheless, the Brule will remain a good trout stream if three important basic things are done to preserve the stream:

- 1. No logging or cutting of natural cover along the banks of the stream should be tolerated.
- 2. No roads or trails should be cut or graded down to the river because of the erosion
- 3. No pollution from habitation or otherwise should be allowed to dirty the banks

Most people having summer homes and property on the Brule River have much at stake because they have a lot of money invested. In all but a very few spots on private lands, the river is kept clean and the scenic beauty is kept up. Property owners have always been good sports about allowing fishermen, and the fishermen should be very courteous.

In spite of some destruction, it is evident the Brule produces an excellent hatch of brook, brown and rainbow trout. With thousands of legal-sized trout being planted in the Brule River each year to bolster the natural reproduction, and the large run of all kinds of trout from Lake Superior each spring and fall, we have assurance the Brule will remain a favorite trout stream.

In short, if we do the basic things required to preserve the Brule, we can safely take a good trout harvest from it each year, with no fear that man will cause enough damage to loom up large among factors affecting this river.

Andrea Zani is managing editor of Wisconsin Natural Resources magazine.



VAN VLIET HEMLOCKS STATE NATURAL AREA

Today's "up North" landscape looked somewhat different when Wisconsin was granted statehood in the spring of 1848. Old-growth forests composed of sugar maple, eastern hemlock, yellow birch, white pine and basswood blanketed broad swaths north of a line slicing diagonally from Sheboygan on Lake Michigan northwest to Hudson on the St. Croix River. A colorful tapestry of wildflowers, ferns and mosses graced the floor and the forest teemed with a diversity of birds, mammals, amphibians and other animals.

Most of these mixed coniferhardwood forests were harvested during the state's so-called "cutover" period between the late 1800s and the early 1930s, fueling northern Wisconsin's economy and providing lumber to build cities to the south. Though valuable and beautiful in its own right, the postcutover landscape of today lacks the majestic old trees and biodiversity of the forests of the past.

Fortunately, a few remnants of those woods still survive, one of the best being Van Vliet Hemlocks located in Vilas County just a couple of miles south of the Michigan border.

Designated as Wisconsin's 673rd State Natural Area, the site protects more than 400 acres of old-growth forest hugging the shores of Averill and Van Vliet lakes.

Groves of large hemlock, yellow birch and sugar maple are punctuated by an occasional white pine that pierces the forest canopy. The herb layer features beds of intermediate fern, Canada mayflower, sweet cicely, wild sarsaparilla and rosy twisted-stalk. Adding to the natural area's biodiversity are a scattering of small swamps of black ash and white cedar, bog lakes and kettle depressions. Look in these wetlands for grass-pink orchid, bog laurel and the insectivorous pitcher plant.

The Friends of Van Vliet Hemlocks maintains a system of trails that loop through the preserve. The site was purchased in 2013 by the DNR and is open year-round. Admission is free.

For a map, directions and to learn more about this and other State Natural Areas, visit dnr.wi.gov and search keywords "Van Vliet Hemlocks."

> — Thomas Meyer State Natural Areas Program

