

WISCONSIN NATURAL RESOURCES

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WILD AND SCENIC GOES GOLDEN

Let's hear it for the bees

DNR memories

Hiking the Ice Age Trail

PLUS: Hunting 2018 special section

A message from DNR Secretary Dan Meyer



Dan Meyer

BEN PIERSON

Welcome to the Fall edition of our *Wisconsin Natural Resources* magazine. After Labor Day, we start turning the page on summer. The fun we had swimming and boating starts to become a memory rather than reality. But the coming of fall, with the clear, crisp air and the burst of autumn colors, reignites our senses for the outdoor experiences to come.

Wisconsin has more than 17 million acres of forestlands that can make quite a colorful statement come September and October. Our scenic state parks, recreation areas, trails and forests are great places to go for fall colors. We hope you can get out to see the show.

Autumn also means hunting seasons are not far behind. In fact, bear and early teal seasons are already underway. Archery and crossbow deer seasons open Sept. 15. Gun deer season runs Nov. 17-25. Dates for other hunting seasons such as waterfowl, small game, pheasants and other game birds are found on the DNR website, dnr.wi.gov. Licenses and necessary authorizations, permits and stamps can be purchased online at GoWild.wi.gov.

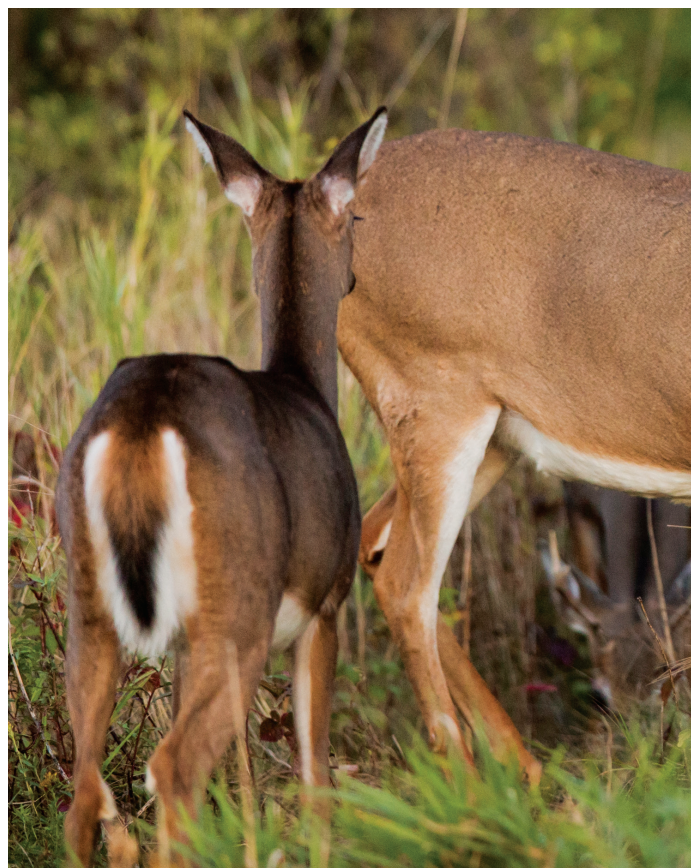
Whether you are a seasoned veteran hunter or a first-timer, now is the time to start looking ahead and getting geared up for another great season. As we shift to deer season, be sure to check out Wild Wisconsin — our web and podcast series — for the helpful information you will need. You can find it all at dnr.wi.gov, keywords “Wild Wisconsin.”

There is one new hunting season this year that has the Department of Natural Resources rightfully excited and proud of what has become an important conservation success story for the state: Elk.

When elk were first reintroduced to the state of Wisconsin in 1995, hunting was a “maybe someday” idea. Early management plans for the Clam Lake herd in the Chequamegon-Nicolet National Forest foresaw limited public hunting of bull elk when the overall population reached a certain limit.

Now, that “someday” is here. After more than two decades of dedicated herd management and continued reintroduction efforts, this fall will bring the first managed elk hunt in state history.

The agency’s role in bringing elk back to northern Wisconsin has been significant. Through



the work of DNR and partner organizations like the Rocky Mountain Elk Foundation and too many dedicated individuals to name here, the Clam Lake elk herd surpassed 200 animals this year — the required number to initiate a hunt.

This historic hunt will take place Oct. 13-Nov. 11 and Dec. 13-21 in the Clam Lake range. Elk also have been reintroduced more recently in the Black River State Forest, but that herd is not yet part of the managed hunt plans.

Four bull-only elk tags were issued by DNR in June through a random drawing open to Wisconsin residents. Interest was exceptional, with more than 38,000 hunters applying for the drawing. Revenue generated by the \$10 application fee will support further elk herd and habitat management.

An additional elk tag was awarded to a Wisconsin hunter as part of a fund-raising raffle by the Rocky Mountain Elk Foundation, and five more tags are being made available to Wisconsin’s Chippewa tribes — bringing a total of 10 bull-only elk tags for year one. As the herds continue to grow from year to year, the number of available tags should increase.

Summer activities may be just memories now but there are exciting times and experiences to be had during the fall whether you’re hunting or hiking. Good luck and enjoy a safe fall season.

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LINDA FRESHWATERS ARNDT

FRONT COVER:

Namekagon Lake, part of the expansive environs of Wisconsin's St. Croix and Namekagon rivers, veritably glows during fall, which seems appropriate since the rivers are celebrating a golden anniversary as part of the national Wild and Scenic Rivers program.

PHOTO BY CRAIG BLACKLOCK FROM HIS BOOK, "ST. CROIX & NAMEKAGON RIVERS: THE ENDURING GIFT"

BACK COVER:

For decades, the Flambeau River State Forest has been delighting visitors with action-packed paddling adventures — whether shooting Little Falls in a canoe in 1947 or taking a slightly more relaxing river ride in recent years.

PHOTOS BY WISCONSIN DEPARTMENT OF TOURISM (TOP) AND STABER W. REESE, DNR FILES

4 River jubilee

Andrea Zani

Wild and Scenic Rivers Act 50th anniversary puts spotlight on Wisconsin's own free-flowing waters.



ATC/MILWAUKEE BUCKS

10 Team up for trees

Ellen Clark

With an assist from the state's pro sports organizations, community forestry scores big.

12 Legacy of the Spill Law

Andrea Zani

Brownfields successes build on decades of vital work.

17 DNR memoirs

Kathryn A. Kahler

A dozen former staffers — with a combined tenure of more than 380 years — recount their dedication to Wisconsin's natural resources.

22 DNR labors for pollinators

Lee Fahrney and Andrea Zani

Bees, butterflies and other species can use a boost to take care of business.

25 1,000 miles to remember

Jenny Wisniewski

Wisconsin hiker's new book chronicles ambitious trek along her home state's Ice Age National Scenic Trail.

28 Readers Write

Readers' photos and feedback

31 Back in the day

Andrea Zani

Inspiration for hunters straight from the pew

32 Outside in Wisconsin

Flambeau River State Forest



Special Section

I Hunting inspiration

John Motoviloff

Characteristics such as patience and respect help to make a better mentor.

III Welcome to the club

Maddie Bohrnstedt

Campus group supports, encourages, unites young hunters.

IV Foraging for football-sized fungi

Philip Whitford

Puffball mushrooms are easy to find, safe to harvest and make a delicious staple for the freezer.

VI History in hand

Kevin Feind

A 90-year-old family heirloom fulfills a new dream.

VII Wild Wisconsin is primed for the hunt

VIII 'Why Hunt?' guidebook balances novelty, tradition

VIII Major fall hunting dates

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WILD AND SCENIC RIVERS ACT 50TH ANNIVERSARY PUTS SPOTLIGHT ON WISCONSIN'S OWN FREE-FLOWING WATERS.

The St. Croix River's challenging Big Fishtrap Rapids are found between Dry Landing and CCC Bridge Landing in Burnett County, just a few miles above the confluence with the Namekagon River.



River Jubilee

Text by Andrea Zani and photos by Craig Blacklock

"It is hereby declared to be the policy of the United States that certain selected rivers of the Nation which, with their immediate environments, possess outstandingly remarkable scenic, recreational, geologic, fish and wildlife, historic, cultural or other similar values, shall be preserved in free-flowing condition, and that they and their immediate environments shall be protected for the benefit and enjoyment of present and future generations."

Beginning with those words, the national Wild and Scenic Rivers Act was signed into existence on Oct. 2, 1968.

When President Lyndon B. Johnson touched pen to paper to make the legislation official 50 years ago, just eight rivers fell under the new law's scope.

Two of those sites were in Wisconsin: a 24-mile section of the rugged Wolf River in the northeastern part of the state and 200 miles of the St. Croix National Scenic Riverway between Wisconsin and Minnesota, including the St. Croix's main tributary, the Namekagon.

Today, 208 rivers in 40 states and Puerto Rico fall under the Wild and Scenic Rivers Act. Though the 12,734 miles covered might seem high, it represents less than one-quarter of one percent of the rivers in the U.S. Wisconsin has 56,884 miles of river, with 276 miles now

designated as wild and scenic. The original segment of the St. Croix that fell under the act — from near Gordon, where the river begins, to St. Croix Falls near Interstate State Park — was twice expanded. In 1972, 27 miles of the Lower St. Croix River became the first segment added by Congress to the National Wild and Scenic Rivers System. And in 1976, the addition of another 25 miles downstream was finalized, stretching to the St. Croix's confluence with the Mississippi River.

Incredible scenery, a variety of recreational activities and proximity to cities and towns combine to make the St. Croix River a mecca for outdoors lovers of all sorts. From fishing to bird-watching to camping, canoeing, hiking, rock climbing, boating, swimming and more, there is something for everyone. Inclusion in the federal Wild and Scenic Rivers System ensures that the St. Croix will flow freely while also embracing appropriate river management for development and use.

That's what lawmakers such as then-U.S. senators Gaylord Nelson of Wisconsin and Walter Mondale of Minnesota envisioned when they championed the Wild and Scenic Rivers Act decades ago. Their vision was to counteract years of damming, water diversion and unchecked growth and use that had combined for a detrimental effect on many of the nation's most scenic rivers and the associated landscape, wildlife and drinking water.

The Wild and Scenic Rivers Act seeks to balance development, dam construction, recreation and agricultural activities along rivers with the need to protect free-flowing conditions, water quality and river resources. Development is not prohibited nor does the federal government control any private property on designated rivers — categorized as “wild,” “scenic” or “recreational” — but care is taken to protect river heritage.

In Wisconsin, that means maintaining the St. Croix and Namekagon along with the Wolf rivers in their picturesque and often-rugged natural states. For 50 years, the Wild and Scenic Rivers Act has helped to do just that.

50

Andrea Zani is managing editor of Wisconsin Natural Resources magazine.





A train rumbles over the Namekagon River, opposite top, while in a quieter moment on the St. Croix, sunrise bathes the landscape in amber light below Raspberry Landing, above, not far from Fish Lake Wildlife Area. In winter, etchings are formed by crack lines in the ice of a frozen beaver pond, opposite, and wind-whipped snow holds tight to shoreline trees near Thayers Landing, top, just above Governor Knowles State Forest.



Wildlife on the St. Croix and Namekagon rivers is abundant and varied, from the northern leopard frog, top, to the great egret, opposite page. Recreation opportunities are plentiful, too, with quiet paddling a pure pleasure.



>>> BLACKLOCK'S BOOK HIGHLIGHTS RIVER BEAUTY

Nature photographer Craig Blacklock spent two years capturing images for his new book celebrating the St. Croix and Namekagon rivers and marking the 50th anniversary of the Wild and Scenic Rivers Act. "St. Croix & Namekagon Rivers: The Enduring Gift" features more than 200 pages of gorgeous photography of the two rivers, their surroundings and supported wildlife.

Blacklock, a Minnesota native, is passionate about the need for maintaining healthy land and water resources. He has been the photographer for 18 books celebrating the outdoors and significant natural resources such as the Apostle Islands and Lake Superior.

This latest work is Blacklock's first project since he was badly burned by fire in 2014. Because that incident left his hands sensitive to cold, he decided to move away from photographing the colder environs of Lake Superior and instead check out the warmer waters of the St. Croix River. He paddled every mile of the St. Croix and Namekagon rivers by canoe or kayak in the course of completing the book.

"St. Croix & Namekagon Rivers: The Enduring Gift" is available in three editions. The Collector's Edition is \$90; a Museum Edition is \$1,500, with three original prints of Blacklock's work included. The Signature Edition (\$4,000, limited to 120 copies) includes six original prints and is signed by former vice-president Walter Mondale, who co-sponsored the Wild and Scenic Rivers Act with Wisconsin's Gaylord Nelson when both were in the U.S. Senate.

The book is available through Blacklock's website, stcroixphotography.com. It also can be found at his galleries: Blacklock Gallery in Moose Lake, Minnesota, blacklockgallery.com, and Waters of Superior gallery at Canal Park in Duluth, Minnesota.

Anyone who purchases a copy of "St. Croix & Namekagon Rivers: The Enduring Gift" will receive access to a one-hour video with a slide show of Blacklock's images. A sample clip of the video is available on the stcroixphotography.com website.

In addition to the book and video, a traveling exhibit of Blacklock's work featuring select St. Croix and Namekagon photos is ongoing through early next year. Locations are:

- Phipps Center for the Arts, Hudson, through Oct. 21.
- Minnesota Marine Art Museum, Winona, Oct. 24-Jan. 20.
- Watershed Gallery of the National Eagle Center, Wabasha, Minnesota, Jan. 22-April 30.



>>> ACT FACTS

- Eight rivers were part of the original Wild and Scenic Rivers Act: St. Croix (including Namekagon) and Wolf rivers, Wisconsin; Clearwater (Middle Fork), Idaho; Eleven Point, Missouri; Feather (Middle Fork), California; Rio Grande, New Mexico; and the Rogue and Salmon rivers, Oregon.
- Congress or in certain cases the Secretary of the Interior may designate Wild and Scenic Rivers.
- A total of 208 rivers are now in the Wild and Scenic Rivers Program and Oregon has the most, with 60 river segments designated in that state.
- There are 12,734 miles of waterway covered in the program including 276 miles in Wisconsin.
- Rivers in the program may be in one of three categories: wild, or generally inaccessible except by trail, with primitive and unpolluted watersheds; scenic, or largely primitive and undeveloped shorelines but accessible in places by roads; and recreational, readily accessible with some shoreline development.
- Management of rivers in the system is administered by a federal or state agency, or sometimes a combination. The St. Croix is jointly managed by the Wisconsin DNR, Minnesota DNR and National Park Service, for example, and the Wolf River is managed by the NPS.
- The Wisconsin system of state Wild Rivers was established by the Legislature in 1965, predating the national Wild and Scenic Rivers Act by three years. The state system includes all or portions of the Pike, Pine, Popple, Brunsweiler and Totogatic rivers.
- Several federal websites offer information on the Wild and Scenic Rivers Program including the National Park Service, nps.gov/orgs/1912/index.htm; U.S. Forest Service, fs.fed.us/managing-land/wild-scenic-rivers; and the U.S. Fish and Wildlife Service, www.rivers.gov, which has details on every designated river, management plans, maps and GIS data, and information on the 50th anniversary of the Wild and Scenic Rivers Act and related national events.



The Milwaukee Bucks' "Trees for Threes" program this year focused on planting trees at schools throughout Wisconsin. Trees enriched a total of 83 schools including the Milwaukee Environmental Sciences Academy, shown here.

2011, the program annually distributes tree seedlings to fans at one regular-season Brewers' game each year. In addition, landscape trees are donated for planting in communities near Miller Park, home of the Brewers, and along the Hank Aaron State Trail, which is named for the former baseball legend and connects Miller Park to the Lake Michigan shore.

Generally, the team donates one tree for every 20,000 tickets sold during the regular season, with the goal to offset the number of trees used to print the club's regular-season tickets. Normally, it takes one ton of paper, or 24 trees, to print 500,000 tickets, equaling about one tree for every 20,000 tickets. With roughly 2.5 million Brewers tickets sold each year, that means about 125 trees accounted for annually and often the team donates more than that.

The DNR takes the lead with facilitating program outreach to partners, managing the logistics of getting trees where they are needed and ensuring planting procedures follow industry standards.

Kim Sebastian, a DNR urban forestry coordinator, notes the many advantages of planting trees in the Brewers' neighborhood, which includes the state trail, area parks and the Milwaukee VA Medical Center just southwest of Miller Park.

"What's not to love about being part of a tree-planting campaign that shelters bike riders on the Hank Aaron State Trail, cools Little League baseball fans in our county parks, and provides a respite for our veterans on the VA grounds?" Sebastian said. "It's great to be a part of the Brewers' tree-planting campaign and make a difference in parks, on community streets and along trails."

Another upside of first downs

The Brewers aren't the only professional sports team in Wisconsin to have a tree-planting program. Also launched in 2011, "First Downs for Trees" is a cooperative effort between the National Football League's Green Bay Packers and the DNR, along with Wisconsin Public Service Corporation utilities, Green Bay Packaging Inc., and Essity hygiene and health company.

The program donates trees to participating Brown County communities

TEAM UP FOR TREES

WITH AN ASSIST
FROM THE STATE'S
PRO SPORTS
ORGANIZATIONS,
COMMUNITY FORESTRY
SCORES BIG.

Ellen Clark

When it comes to Wisconsin's three professional sports teams — the Milwaukee Brewers, Green Bay Packers and Milwaukee Bucks — athletic prowess isn't the only thing to cheer. These teams also are to be lauded for their work involving environmental sustainability.

The "greening" efforts of these organizations have made Wisconsin three-for-three in tree-planting initiatives supported by its pro sports teams. And the catchy names of these programs make them fun to talk about, too: "Root, Root, Root for the Brewers," "First Downs for Trees" and "Trees for Threes."



Packers President and CEO Mark Murphy, right, gets to work at the "First Downs for Trees" planting event in 2011, the inaugural year of the program facilitated by DNR foresters.

It all adds up to a big win for Wisconsin's natural resources.

Planting crew

"Root, Root, Root for the Brewers" is a partnership between the Milwaukee Brewers baseball team and the Department of Natural Resources. Initiated in



"First Downs for Trees," a partnership involving DNR, the Green Bay Packers and private business sponsors, has resulted in the planting of more than 4,000 trees since it began in 2011. In July, DNR Secretary Dan Meyer, third from left, joined the latest planting effort at Klipstine Park in Ashwaubenon, which also included Packers President and CEO Mark Murphy, second from left, and former players Gerry Ellis (31) and Kabeer Gbaja-Biamila (94).

roughly based on the number of first downs gained by the Packers during the previous season, with bonus trees added for good measure. This year, in the eighth year of the partnership, 444 trees were provided to 17 communities through the "First Downs for Trees" program.

"The Packers are proud to have supported the surrounding communities with more than 4,000 trees since the debut of 'First Downs for Trees,'" said Packers President and CEO Mark Murphy. "Through our success on the field and the involvement of our partners, Green Bay Packaging and Essity, we've been able to reduce our carbon footprint and focus on sustainability and renewable resources in a way that will benefit local communities for years to come."

On average, NFL teams produce more than 450 tons of carbon dioxide per year in travel. The donated trees not only help the Packers offset their carbon footprint, they increase the urban forest canopy, improve water quality and provide a plethora of other social, environmental and economic benefits to Brown County urban areas.

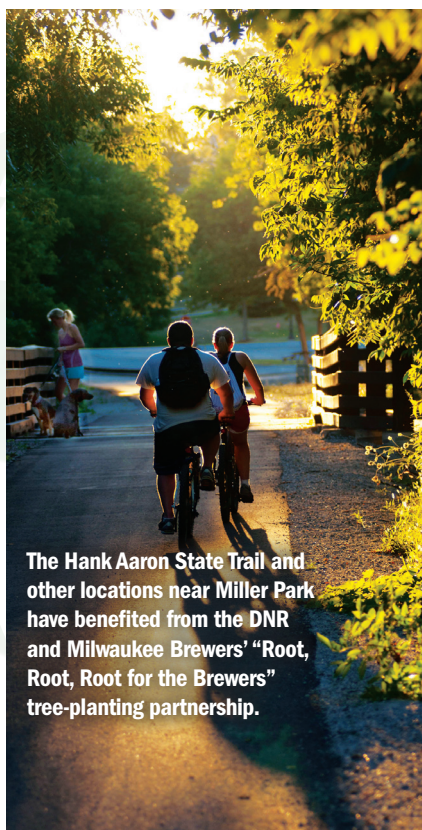
The trees are provided to local communities for planting in parks, terraces and green spaces where the trees can sequester carbon dioxide and help reduce storm water runoff. Officials from both Green Bay Packaging and Essity emphasized the importance of sustainability to their companies, and sponsoring the "First Downs for Trees" program allows the companies to benefit the Brown County communities where many of their employees live.

Benefits reach statewide

Like the Brewers and Packers, the National Basketball Association's Milwaukee Bucks also are looking for ways to create more urban green spaces for



The 2017 "First Downs for Trees" planting event at Green Isle Park in Allouez featured former Packers players George Koonce (53) and Kevin Barry (71).



The Hank Aaron State Trail and other locations near Miller Park have benefited from the DNR and Milwaukee Brewers' "Root, Root, Root for the Brewers" tree-planting partnership.

future generations to enjoy.

In 2016, the Bucks teamed up with the American Transmission Company to launch a new partnership, "Trees for Threes," which sponsors the planting of a new tree in Wisconsin for every 3-pointer the Bucks hit at home in a season. During the 2016-17 season, 355 trees were awarded to communities across ATC's service area to match the Bucks' home-court 3-pointer total, and in 2017-18, the Bucks scored 343 3-pointers at home, which helped provide trees to 83 qualified schools that registered for the program.

"The 'Trees for Threes' program was a huge win for communities last year, and this year for schools, too," said Anne Spalholz, ATC's director of corporate communications. "ATC supports programs that focus on the environment, education, and health and wellness. 'Trees for Threes' encompasses all three, and many students were able to take part and plant a gift that will keep on giving well into the future."

Trees line the streets we drive, fill the parks we visit, beautify our neighborhoods — and now surround the stadiums of our favorite sports teams. Even the landscaping of the Bucks' new arena, the newly opened Fiserv Forum in downtown Milwaukee, includes — what else? — plenty of trees.

Through sustainable management, community trees provide a wealth of benefits. They can help to offset the costs of cooling homes and businesses, improve air and water quality, bring people together and create safer neighborhoods.


"Planting trees in partnership with others is a fantastic way to unite our state," the DNR's Sebastian said.

Wisconsin's professional sports teams understand the importance of trees in their communities. They are working to bring communities and the state together — not only through their successes on the field and the court, but by beautifying neighborhoods and bettering the spaces where we live.

Ellen Clark is a communications specialist for the DNR's Urban Forestry Team.

>>> INFORMATION

For details on the DNR's efforts involving urban and community forests, including partnerships with Wisconsin's pro sports teams and more, check dnr.wi.gov/topic/urbanforests.



Legacy of the Spill Law

BROWNFIELDS SUCCESSES BUILD ON DECADES OF VITAL WORK.

Andrea Zani

There is a link on the web page of the DNR's Remediation & Redevelopment (RR) Program simply titled "success stories." Click here and users will find themselves transported to a sort of online scrapbook.

Much like proud parents sharing tales and photos of cherished offspring, the RR program uses this spot to tell about a number of notable community triumphs, special endeavors known as brownfields success stories. It all started 40 years ago with a law meant to deal with environmental spills — but more about that later.

The brownfields list features some impressive redevelopment projects from around the state. These are significant and sometimes historic efforts that have transformed so-called "brownfields" — abandoned and contaminated lands that sit idle for years — into healthy, vibrant sites well-suited and often ideal for a variety of purposes.

In partnership with community leaders, businesses, other government agencies, concerned citizens and more, the RR



DNR FILE PHOTOS

Top: Built on a former brownfield site, Freshwater Plaza in the Walker's Point neighborhood of Milwaukee includes first-floor retail tenants and apartment units that boast full occupancy since opening in 2017, with planning underway for a second phase of mixed-use development.

Bottom: Swimming pool chemicals and barrels of hydrochloric acid are removed during a site remediation, just one example of the type of work that can be required when transforming brownfields.



program has had a hand in helping to reclaim and revitalize lands that once might have been considered spoiled for good. In fact, since 2005, more than 25,000 acres have been cleaned up and made available for reuse.

Take the Harley-Davidson Museum in Milwaukee, for example, or Tundra Lodge, a waterpark resort and conference center in Green Bay. Both popular tourist destinations are built on former brownfield sites. The aptly named Phoenix Park in Eau Claire, a beautiful nine-acre waterfront park at the confluence of the Chippewa and Eau Claire rivers, rose from a brownfields site that once was home to the former Phoenix Steel Company.

Smaller municipalities benefit, too: The Potosi Brewery in Grant County, with its brew pub restaurant and National Brewery Museum, is a revitalized location now frequented by visitors, as is the Bong WWII Heritage Center in Superior. Prairie du Chien, a Crawford County community of about 5,700 on the Mississippi River, has several remade brownfield sites.

Or how about the Leach Amphitheater in Oshkosh? Opened in May 2005, the scenic spot on the Fox River at Lake Winnebago is home to live music concerts, festivals and many other community and private events. It was only made possible after eight acres of a former manufactured gas plant were restored for use through partnership efforts.

Beyond these impressive redevelopment successes, there is much to note on the remediation side of the RR program as well. Vital environmental cleanup work is facilitated by the program's experts on a regular basis and has occurred in 96 percent of the state's municipalities. Helping to guide the handling of hazardous substance spills and cleanup of contaminated soil and groundwater is critical public health protection work.

But to fully appreciate the story of RR and the ways it works in the community, it is important to understand the program's history. To tell the tales of brownfield transformations and discuss other key cleanup work, it is necessary to go back to the beginning. So let's rewind.

Laying the foundation

We can return to 1995, when the Department of Natural Resources began its Remediation & Redevelopment Program. The program is unique nationwide in its scope, responsible for overseeing all state environmental cleanup programs and many federal laws applied in Wisconsin

in conjunction with the U.S. Environmental Protection Agency. This simplified "One Cleanup Program" maintains uniform standards and practices for all remediation efforts.

That same year, 1995, the EPA created the federal Brownfields Program to provide specific regulatory guidelines for brownfield remedies as well as cleanup grants to spur the process.

A year before that, Wisconsin took a monumental step forward when it implemented the Land Recycling Law. This major state legislation promoted a new outlook on land reuse by establishing strategic liability exemptions and a state loan program to help local governments, land owners and lenders work together. Related legislation in 1998 established the Brownfields Study Group to independently evaluate policy initiatives and funding issues.

Before that, in the late 1980s, Wisconsin's passage of the Petroleum Environmental Cleanup Fund Act (PECFA) addressed problems involving underground petroleum storage tanks. And the early '80s saw key pieces of state legislation in the Groundwater Protection Act, the Abandoned Landfill effort and the Environmental Repair Law, which provided state funds for cleanups when the party legally responsible to take action was not available.

On the federal level, the EPA created its Superfund program in 1980 to address cleanup of the nation's worst hazardous waste sites, prompted in large part by New York's infamous Love Canal neighborhood chemical contamination tragedy. Other legislation and initiatives, both state and federal, have been mixed in along the way.

But to really understand the foundation for the environmental protection work guided by the RR program, 1978 is the year. It was then, 40 years ago, that the cornerstone of four decades of

cleanup and redevelopment capability was put into place.

That first step in the enduring process that has led to so many statewide success stories was Wisconsin's passage of a simple yet highly effective piece of legislation. Suffice it to say, it all started with the Spill Law.

Quick action for spills

The Hazardous Substance Spill Law is part of the broader Wisconsin Statute Chapter 292, which addresses environmental cleanup issues. The Spill Law requires anyone who causes, possesses or controls a hazardous substance that



DNR FILE PHOTOS

In Eau Claire, an area of abandoned and contaminated properties at the confluence of the Chippewa and Eau Claire rivers has been reclaimed and revived through efforts dating to the 1980s. It now includes businesses, apartments, a hiking/biking trail and Phoenix Park, which has a pavilion and amphitheater that host a variety of events.

was discharged into the environment to take action to restore the affected air, land and waters. Immediate reporting to the DNR is required, and the law applies equally to a recent spill or to old contamination newly discovered.

This call for prompt notification is key because it allows the DNR and local responders to take quick action to evaluate a spill and address immediate risks that might be associated with the discharge. RR staff then begin the process of overseeing any additional work needed to ensure health and safety protections.

The Spill Law was Wisconsin's re-



DNR FILE PHOTOS

Brownfield redevelopment benefits rural as well as urban communities, as these photos from the Polk County town of Amery show. The Super Locker meat storage and retail store site — which also had been a gas station, bulk oil terminal and car dealership before that — was cleaned up and replaced with a new fire station, completed in 2004.

sponse to years of dealing with spills, leaks and dumping of any number of hazardous substances, from chemicals used in industrial processes, to solvents used for dry cleaning, to fuels such as petroleum and gasoline. Even seemingly harmless substances like corn and butter can cause a problem if spilled in enough volume in the wrong place.

The law greatly improved DNR's ability to assess and address hazardous spills and issues of property contamination, providing the authority needed to protect natural resources and public health. Better environmental and public health is the result.

"I think the history of the Spill Law will show or has shown that it addressed tens of thousands of contamination sites, large and small, simple and complex, throughout the entire state in a way that was relatively consistent and protective," said Mark Giesfeldt, retired director of DNR's RR program.

Chris Saari, a hydrogeologist who is the Northern Region Team Supervisor for RR, also cites the direct benefits the law has had on people around the state.

"I guess the biggest impact is just seeing the positive effects that we've had on prop-

erties, especially ones where we've had situations where people's drinking water has been affected and we've been able to come in and help them," Saari said. "You know, nobody wants to go to the northern Wisconsin super club and wonder what's in the ice cubes in their old-fashioned."

Following passage of the Spill Law in 1978 and a decade focused on landfills and leaking storage tanks, state administrative rules known as the NR 700 series were developed in the 1990s to provide comprehensive guidelines for dealing with contaminated properties. These rules provide a roadmap for responsible parties and their consultants to obtain cleanup approval from the DNR. They are set up deliberately to empower vested partners such as businesses, local governments and communities to be in control of their sites, while still ensuring adequate oversight.

"It makes our partnership approach to cleanups even more important," said DNR's Brownfields Section Chief Christine Haag. "It's the opposite of 'command and control.' Outreach,

training and collaboration have been a cornerstone of the RR program, arming the people involved in these projects with information they need to complete cleanups and move forward."

About those brownfields

The environmental and public health benefits of the state Spill Law have now been felt for decades and more recently, economic benefits are coming to light. Perhaps nowhere are these effects more visible than when it comes to brownfields. The remediation and redevelopment of brownfield properties is very often tied to increased property values, jobs and other economic gains.

A 2015 study commissioned by the Brownfields Study Group and conducted by the UW-Whitewater Fiscal and Economic Research Center found that state brownfield grants to municipalities from 1998-2014 generated \$4.4 billion in direct economic output. Such grants also catalyzed the development of 9.6 million square feet of new or renovated industrial buildings and accounted for 29,500 direct new and retained permanent jobs, the study showed.

In La Crosse, for example, the Riverside Redevelopment Project dating to the mid-1990s, which included a new CenturyTel Inc. (now CenturyLink) headquarters, is credited by project partners with increasing property values and both retaining and creating jobs.

In Milwaukee's Menomonee Valley, the redevelopment of brownfields has brought back more than 5,000 jobs, according to a report from Menomonee Valley Partners, a nonprofit private-public group formed to facilitate redevelopment efforts there. In the past 10 years, the partnership group notes, 39 companies have moved to or expanded businesses in the Menomonee Valley. Combine that with revitalization projects such as the Hank Aaron State Trail, and the benefits to the area are enormous.

"It's an economic, environmental and public health success story for the state," said Dave Misky, co-chair of the Brownfields Study Group and assistant executive director for the Redevelopment Authority of the City of Milwaukee.

In Milwaukee and other cases, reclaimed areas have become integral parts of a city's revitalization. Examples include Kenosha's Harbor Park on Lake Michigan, the Plexus Corporate Headquarters on the banks of Little Lake Butte des Morts in Neenah, and the East Riverfront Redevelopment Area in Wausau,

which features more than 16 acres of waterfront undergoing redevelopment for entertainment and commercial uses and public green space.

In Ashland, on Lake Superior, brownfields work beginning in the late 1990s also transformed much of the downtown. Saari, the DNR hydrogeologist, is a native of Ashland and has a special connection to the redevelopment aided by the Spill Law there.

"It was multiple projects, but it was all within the center of the city of Ashland," he said. "I grew up in Ashland, I grew up around these areas. There were two railyards and two bulk petroleum facilities. We had a hand in cleaning all four of those properties up.

"Now that's sort of the centerpiece of Ashland. There are baseball diamonds there, there's a community center in that area, one of the main grocery stores was built on one of the old railyard properties. When you drive through Ashland on Highway 13, you're driving right by it and if you saw it now as opposed to what it looked like in 1991, it's so much nicer. And it's all because of the abilities that we were able to bring with the Spill Law."

Wide-ranging renewals

Uses of restored brownfields sites are vast and varied — everything from hospital expansion, retail shopping centers and grocery stores to apartments and townhomes, premier soccer complexes, senior housing and college residence halls. Even public service buildings such as the Platteville Police Department and the Amery Fire Station are on former brownfield sites.

Some areas are cleaned up for the sole purpose of creating greenspaces. In the town of Shields, for example, an open spot near the scenic Mekan River once was a blighted eyesore, a former scrap yard and dairy creamery before that, which had posed a number of environmental hazards and safety issues. What a difference brownfields work made there! Elsewhere around the state, there also are a variety of parks and recreational trails where cleanups took place.

Sometimes even cleanups of what might seem like tiny spaces can make a difference. Seven Mile Creek Park in Lamartine, for instance, checks in at just over one acre. And in Seymour, Veterans Memorial Park is even smaller than that, less than a half-acre.

Urban or rural, large or small, all around Wisconsin these former brownfields have been reborn.

Partnerships and funding

In both the remediation and the redevelopment sides of RR, working with people and entities across the board is vital to achieving desired results. Brownfields revitalization is a team effort. Cooperation with everyone involved is critical.

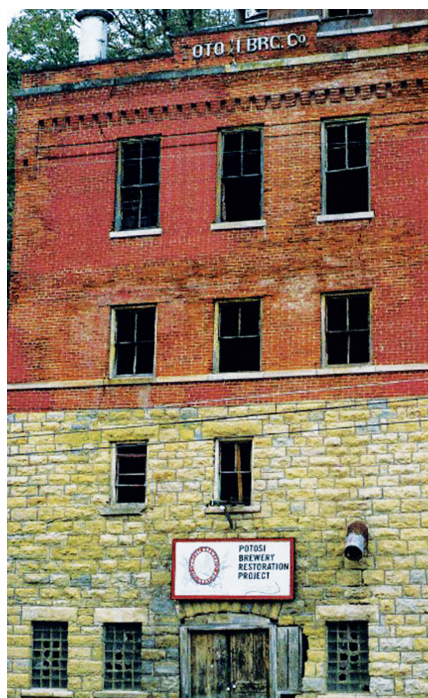
Local governments, especially, are major players in cleanup and redevelopment, with city, town and county leaders playing a huge role and often paving the way for successful community projects. Property owners, environmental experts, service contractors, developers, lenders and a host of others are integral to the process as well.

"It truly takes a village to clean up and redevelop a brownfields site," said Darsi Foss, director of DNR's RR program.

Communication among all the players in a project is key, added Trevor Nobile, a DNR hydrogeologist who works with brownfields. And that's where DNR's RR program can play an important role.

"Essentially, it boils down to effective communication and building those relationships with the local municipalities, consultants, other project managers, other DNR programs — develop those positive relationships and achieve that common goal," he said.

In addition to crediting the many other partners who work with DNR on brownfields, it would be an oversight not to mention again the Brownfields Study



DNR FILE PHOTOS

Long a fixture in Potosi, in Grant County, the historic Potosi Brewery building required plenty of TLC — testing, labor and cleanup — before it could be restored and reopened in 2008 as a tourist attraction that includes a brew pub, gift shop and the National Brewery Museum.

BY THE NUMBERS

In the past 40 years, Wisconsin's Spill Law has guided successful resolution of thousands of spill cases statewide.

28,856
total case closures granted

30,942
spills with no further action needed

25,132 ½
acres returned for reuse

For more about the work of DNR's Remediation & Redevelopment Program, check dnr.wi.gov/topic/brownfields.

Cleanup of hazardous substance spills is vital to protect health and safety.

DNR FILES

Group. Like the Spill Law, the BSG also is celebrating an anniversary — it has been 20 years since the independent advisory group was created to provide guidance to the State Legislature and the DNR on brownfields policy. The sustained work of



this group of expert volunteers has been immensely valuable (see sidebar).

The efforts of the BSG, determined local officials, private partners and intrepid developers are, alone, sometimes not enough to accomplish revitalization work; state and federal funding can be instrumental for success. Through the years, the RR program has managed a number of grant and loan programs to spur brownfield clean-ups and redevelopments.

And the program offers other financial and technical expertise as well — even tools to help handle targeted properties with unpaid back taxes fall under the program's scope.

The BSG-commissioned economic study mentioned earlier found that every \$1 of state funding for brownfields work was repaid 14 times over by new tax revenue from the resulting developments. Municipalities have benefited, and it hasn't gone unnoticed.

John Antaramian, Kenosha mayor and Brownfields Study Group member, has much praise for the work of the BSG and the RR program.

"There are a whole bunch of people in the DNR and in the brownfields program that have stepped up to the plate and made things happen. I guess I can't put emphasis enough on that," he said. "You make things happen, that's what makes you so important. Because you don't say, 'Oh, we can't do this because ...' It's, 'OK, how do we get it done? How do we make it work? How do we make it safe and how do we make the development happen?'"

"And I think that kudos go out to all the members of the brownfield group and all the hard work that they do."

Kenosha is a better place because of brownfields work, Antaramian added.

"I would like to say thank you to all the folks at the DNR, and especially brownfields, for all the work they've done," he said, "because Kenosha would not be where it is today had it not been for all of you."

From contaminated to cleaned up, and from rundown to revitalized, the Spill Law started it all 40 years ago. This simple statute continues to pay big dividends for health and prosperity in Wisconsin. **50**

Andrea Zani is managing editor of Wisconsin Natural Resources magazine. Christine Haag, Barry Ashenfelter and Darsi Foss of the RR program contributed to this story. Some of the comments included are from interviews conducted earlier this year for a DNR video, "Wisconsin's Spill Law 1978-2018: 40 Years of Places, Partnerships & People."



BROWNFIELDS STUDY GROUP MARKS 20 YEARS OF SUCCESS

Twenty years ago, the Brownfields Study Group was created at the direction of Gov. Tommy Thompson and the State Legislature to examine Wisconsin's ongoing brownfields efforts and make recommendations. Thirty of the group's initial proposals were adopted and that success prompted a continuation of the volunteer group of professionals, which now meets three to four times each year.

Group members have included local government and university officials, industry professionals, legal experts, conservation group members and others. Over the past two decades, this independent advisory group has driven important changes in brownfields work, particularly when it comes to incorporating incentives for cleanup and reuse of properties statewide.

It wasn't always easy, said Mark Thimke, an attorney and co-chair of the Brownfields Study Group. Brownfields redevelopment could seem like a daunting task and the group worked hard to get projects moving ahead.

"When we first started out, brownfields was not the active program it is today," Thimke said. "Most people refused to engage in doing any kind of brownfield projects because of the huge liability concerns. And so we had to tackle the effort of showing to the investment community and to the real estate development community and to local government that you could take this kind of property and you could put it back into productive use. And just being able to develop those tools was very important."

Art Harrington, attorney and member of the Brownfields Study Group, credits the DNR with forward-thinking in fostering a private-public model that has proven effective.

"At the time this was formed, this was something new that I think the department was being innovative by reaching out into the private sector and municipalities to bring them in for advice," he said. "It was a very, very new concept and I give the department a lot of credit when they came up with this idea."

"This thing is one of the first longstanding advisory committees that the department has used and I just think it is a terrific model for a collaborative working relationship that has now existed for 20 years."

A variety of initiatives count among the successes of the Brownfields Study Group including:

- **The Voluntary Party Liability Exemption program**, allowing those involved in property cleanup to obtain assurance against future liability for past contamination. By addressing risk management, it can help spur private developers to take on problem sites.
- **Wisconsin Plant Recovery Initiative**, helping communities and businesses to turn around closed or closing manufacturing facilities.
- **Brownfields Site Assessment Grant Program and Brownfields Green Space and Public Facilities Grant Program**, two state programs that over the years have awarded millions of dollars in community grants for cleanup efforts.
- **Ready for Reuse Grants and Loans**, one of the programs accounting for more than \$18 million in federal dollars the study group has helped secure for Wisconsin cleanups.
- **One Cleanup Program Agreement**, a comprehensive agreement between the DNR and EPA Region 5 to help expedite cleanups of contaminated properties in the state.

The Brownfields Study Group also commissioned the 2015 study by the UW-Whitewater Fiscal and Economic Research Center, which demonstrates the positive economic impact of brownfields investments in Wisconsin. The DNR continues to work in partnership with the BSG to advance remediation and redevelopment efforts in the state.

"We appreciate the extraordinary effort this group has made to ensure Wisconsin's brownfields program is effective," said Christine Haag, DNR's Brownfields Section Chief. "If you've seen an old, abandoned industrial property in your community find new life as a park, coffee shop, brewery or housing development, chances are this group had something to do with creating the mechanisms that helped make that happen."

— Andrea Zani



DNR FILES



HUNTING 2018



LINDA FRESHWATERS ARNDT

COURTESY OF EMILY IEHL

Hunting inspiration

Characteristics such as patience and respect help to make a better mentor.

John Motoviloff

Readers of *Wisconsin Natural Resources*, like conservationists in general, know something about the importance of hunting to the conservation world. As baby boomers age out of what can be a strenuous pursuit, hunter numbers could be expected to decrease rapidly going forward.

This is important for hunters and others concerned about natural resources for several reasons including the fact that in the United States, conservation is funded in large part by license sales and excise taxes placed on hunting equipment through the Pittman-Robertson Act.

Recruitment efforts over the last several decades have focused on encouraging children to develop an interest in hunting, but this approach has not produced new hunters on a large scale. That has pushed more government agencies and private conservation groups to focus on recruiting adults — who, in turn, can recruit their own family and friends.

With this approach, the importance of quality mentors has become ever more apparent. Bringing more millennials into the hunting world requires a special touch.

No one knows the importance of mentoring better than Cortney Schaefer, the Hunting Heritage Program Manager for

Mentor Jim Wipperfurth, right, and Emily Iehl are all smiles after a successful hunt. Iehl, who has learned to hunt as an adult, is the Hunting and Shooting Sports Coordinator for DNR. Wipperfurth previously worked for DNR and is now a Hunt for Food instructor.

Pheasants Forever. She runs the first nationwide mentor training program, part of efforts to recruit, retain and reactivate (R3) more outdoors people.

"It's vital to establish a standardized formal program for training ethical hunting mentors throughout the country," Schaefer said. "This not only helps meet the demand for more mentors, but also engages and empowers current hunters."

It's not necessary to be a great hunter to be a good mentor. No one expects perfection. Keith Warnke, R3 supervisor for the Department of Natural Resources, said hunting class surveys indicate something else is important to newcomers.

"What they're looking for is someone to help them navigate the world of becoming a new hunter, someone to stick with them," he said.

Here are other characteristics of good mentors.

- **Be relatable.** First and foremost, mentors must be able to relate, whether that's explaining chokes and shot size





Jacob Zeuske, second from left, with help from his dog, Art, mentored this group of novices on a pheasant hunt outing for adults.

COURTESY OF EMILY IEHL

in a way that's free of technical jargon or understanding individuals different than themselves. Millennials are the largest and most diverse generation in history, and women are the fastest-growing segment of the hunting population. These groups are key to the future of hunting. Good mentors need to grasp — and embrace — this.

- **Be respectful.** Good communication and respect go hand-in-hand. This means keeping personal views on politics and religion out of the blind (unless your mentee asks). Keep language and hygiene clean. Think of your mentee as your daughter or niece, your co-worker's son. You want to show a positive image of hunters. Respect also extends to the moment of the kill. Don't offer a high five if your mentee is sitting there quietly. Take cues from him or her.
- **Focus on the mentee.** It's common for hunters to think, "Shoot! Why don't you shoot? Here's your chance." While this kind of thinking comes from a good place — wanting to make everything come together for the mentee — it focuses on the mentor, and not the mentee. Better to say, "OK, this is a safe and ethical shot" and let him or her decide. She might take the shot next time. Or maybe he'll

go on to be a hunting advocate (equally valuable, as hunting's future depends on continued public support) instead of an active hunter. Like all ethical acts, the decision to take an animal's life has to be made freely by the individual.

- **Be in it for the long haul.** Single events don't make hunters and anglers. Becoming a sportsman or sportswoman depends on others who provide time and social support. "It takes multiple positive experiences in the field, woods, marshes with a good mentor before a new hunter is confident enough to hunt on their own," Schaefer said. Bring your mentee to the range, attend a game feed or Conservation Congress meeting. Watch wildlife in the off-season. Stay connected.
- **Have fun.** Who wants to start a new pursuit when it's a forced march? If you think it's cold or uncomfortable, chances are your mentee has been thinking that, too. If you sense signs of discomfort, it's time to head for breakfast and hot coffee. It's not a contest. Check in to see how they're doing.
- **Be patient.** Think back to when you started hunting. "You did not just read a book or watch a video and then instantly feel confident enough to go hunting," Schaefer said. "You likely had somebody to show you how to handle a firearm, how to scout, how to handle a gun-dog, process game, etc." Provide support to help your mentee hang in there, and let them know that you also miss shots, pick the wrong day to go out and occasionally just make a mess of things. Hunting and mentoring are like marriage — you learn as you go.



INFORMATION

Pheasants Forever offers mentor training for conservation organizations. To schedule, contact Marty Moses, R3 Wisconsin Coordinator, at 608-712-8625 or mmoses@pheasantsforever.org. To be a mentor for DNR-sponsored Educational Outdoor Skills Programs, certification including a background check is required. See dnr.wi.gov, keywords "mentor background," for details.

John Motoviloff is the Hunting and Shooting Sports R3 Coordinator for the National Wild Turkey Federation in Wisconsin.

Welcome to the club

Campus group supports, encourages,
unites young hunters.

Maddie Bohrnstedt

I sat in my deer stand, nine hours into the hunt, numb to impatience and to the chilly Wisconsin air. I had watched some does peacefully stroll by throughout the day, but I was waiting for my chance at a buck.

My mind was no longer wandering; I was simply one with the woods and had no cares in the world. Quite frankly, I almost forgot I was hunting.

I remained in a comfortable haze until I heard a twig snap. I looked to my left and there in the distance was a buck. At this point, I thought my eyes were playing tricks on me. I couldn't tell if I was seeing antlers or sticks. It all blended into the snowy backdrop.

I lifted up my rifle and peeked through the scope. I was right — a handsome spike buck stood rummaging through the snow looking for food.

My heart started pounding in my chest. My hands were sweating despite the frozen air. I put my finger on the trigger and waited for the deer to position


himself so I could have a good shot. He lifted his head, and the crosshairs lay right over his heart. I took a deep breath and my mind seemed to go blank as I pulled the trigger.

The shot of the rifle broke the silence of the forest and snapped me back into reality. The buck ran, but not very far, and lay in the snow. It was a clean hit straight through the heart. I sat there contemplating what had just happened, barely able to breathe over my shaking. I had just shot my very first deer.

Outdoors connections

I never would have gone deer hunting if it weren't for the Badger Hunting Club at the University of Wisconsin-Madison. As a young woman

→



UW-Madison student Maddie Bohrnstedt took up hunting only after joining the trapshooting team at her Minnesota high school. She now is an active member, including an officer, of UW's Badger Hunting Club.

who started hunting later in life, I was in the minority in the group. I was a little nervous to join the club at first because I don't fit into the stereotypical hunter mold. But everyone in this club was so welcoming to me and I felt like I belonged from the start.

I jumped into club activities at full-force, going on many duck hunts as well as pheasant and turkey hunts. I got my first duck through the club and got to meet a few of the members on a fantastic trip to the Mississippi River.

We spent three days camping and spending time outdoors, enjoying a campfire each night and waking up and heading out on our boats in the fog each morning to prepare ourselves for the hunt. I saw flocks of thousands of birds flying through the sky that weekend, which was a surreal experience, especially because I was still so new to hunting.

To add some context, the Badger Hunting Club was founded in 2006 as a social club at UW-Madison to unite hunters across the university. Its main goal is to keep students linked through social networking and to emphasize students' love for the outdoors.

Especially helpful for students who do not have extra resources to go on hunts themselves, the club provides Learn to Hunt programs, hunting gear and access to hunting land. It is continuously growing.

A big goal of the club is to change the face of hunting. In order for hunting to be accessible to all types of students from all backgrounds and experiences, the current hunter stereotype must be challenged and the people involved in managing the club are enthusiastic about accomplishing this.

New face of hunting

To paint a more thorough picture of myself: I grew up around hunting in my home state of Minnesota. My grandpa, uncles and cousins hunted for ducks and geese, and I had tagged along a few times, but I had never shot a gun. My junior year of high school was when I finally decided to try shooting.

As it turned out, I was a pretty good shot. I hit most of the clay pigeons thrown in target practice, and it didn't seem to be just beginner's luck. I ended

up fully immersing myself in the sport, saved up and bought my first shotgun. I joined my high school's trapshooting team during my senior year and placed well in my conference.

When I finally got to college, I wanted to get even more involved and found the Badger Hunting Club. To take it a step further, I have served as a club officer. All of my good experiences through the club inspired me to go out on that first deer hunt with a friend.

The kicker? I always swore I would never shoot a deer, nor be able to even if I tried. I was wrong. The club helped to open my mind about what the new face of hunting can be, and to show me all of the beautiful experiences we can have while out in the wilderness.

Right after getting that deer, I felt a wave of different emotions, including a deep sadness. But my biggest emotion was excitement and I simply cannot explain how satisfying it was to have my own fresh, healthy meat to share with loved ones, tied together with the whole experience I had to obtain it.

I also have a growing desire to continue to change the community of hunters. More adults need to try it, as well as more women. The current generation is one that is immensely different from the past, and for hunting to keep growing, it needs to change along with the times.

I never would have had this mindset of change without this club. Along with all of the great hunts I have been on, the club has provided many opportunities to bring new hunters into the experience. There was a full mentored turkey hunt where I learned all there was to know about turkeys and their behavior so I could go out on my own someday. And I had other opportunities to learn about conservation and hunting experiences.

Badger Hunting Club has opened my eyes to a world I never knew existed. Hunter recruitment, especially of women, is now my goal. Hopefully, the word can spread about this club to help inspire more people, like me, to try something new. It just might change your life.

Badger Hunting Club officer Maddie Bohrnstedt will graduate from UW-Madison in the spring with a degree in psychology.

Foraging for football-sized fungi

Mushrooms are easy to find, safe to harvest and make a delicious staple for the freezer.

A big part of the growing Hunt for Food movement focuses on wild game, such as deer, turkey and small game. Beyond these wild foods, there's an abundance of natural delicacies out there for the picking, from edible fruits and nuts, to wild mushrooms and asparagus. Magazine reader Philip Whitford, Cross Plains, sent us his advice on gathering, handling and preserving giant puffballs, along with a special recipe he has perfected over the years. Bon appetit!

Common in September, generally after a heavy rain, giant puffball mushrooms are easily identified by their spherical or loaf-shaped appearance.

INFORMATION

For more about UW-Madison's Badger Hunting Club, see the group's Wisconsin Involvement Network web page at win.wisc.edu/organization/bhc.

Giant puffball mushrooms are most commonly found in late August through September in Wisconsin. They usually appear several days after a heavy rain and can be found in lawns, forest clearings and pastures. Their unmistakable appearance makes them very safe to harvest. While commonly the size of a grapefruit, giant puffballs may grow as big as a basketball or larger. They are usually spherical or occasionally loaf-shaped. They never have gills or cylindrical stems on the undersides or within the body of the puffball.

If you find a puffball (*Calvatia gigantea*), it is safe and best to eat if the outside is very white and firm and the inside is white and firm as well when cut. If the center is turning brown, yellow or mushy, it will be bitter and not good to eat, so should be discarded. When you do find a good puffball, it is best to process it for eating or freezing very quickly, for they can deteriorate rapidly and become inedible in a day or two.

To prepare the puffball for eating, you need a very sharp knife for slicing. Begin by cutting through the middle of the puffball to make sure it is white and firm inside. If it is, continue by cutting, peeling and discarding the rubbery quarter-inch outermost layer of the white skin. Once that is done, simply cut slices to desired thickness and brown them in a skillet in just enough butter to lightly coat each side. Repeat until you have done the whole mushroom.

If desired, try adding a dusting of garlic powder to the butter while frying. Frying slices in bacon grease is properly decadent and delicious as an alternative to butter — if you have the coronary arteries and the courage to indulge yourself to that level.

Slices can be stacked on wax paper when cooled and frozen in plastic sealable freezer bags. I have found the mushroom slices last up to two years in the deep freeze when saved this way, and they taste nearly as good in cooked dishes as when eaten fresh.

We regularly eat several slices as samples while frying those we will freeze when we find a really big puffball. A giant puffball we found in fall of 2016 weighed 14 pounds and required frying 13 batch-

es of slices in a 12-by-28-inch stovetop griddle, and more than a pound of butter to fry them all. It's nice to know we still have several bags to use in cooking until we can hope to find more when autumn brings them "round" again, if you'll pardon the pun.

VENISON MOUSSAKA WITH PUFFBALL MUSHROOM SLICES

Meat mixture:

1½ pounds lean ground venison

10-12 3/8-inch thick slices from large, firm, white puffball mushroom*

12-16 3/8-inch thick slices of large black beauty eggplant*

1 medium onion, finely chopped

2 tablespoons butter

1 tablespoon olive oil

***Enough slices to form two layers each of mushrooms and eggplant in a 9-by-12-inch baking pan.**

Brown the venison and onion in olive oil; set aside. In a shallow frying pan, lightly brown slices of puffball in butter on both sides; remove from pan and set aside. Dust slices of eggplant in flour and brown on both sides, with minimal olive oil per slice; set aside.

White sauce:

12-ounce can evaporated milk

1½ cups half and half

1½ cups 2% milk

½ teaspoon ground nutmeg

1 teaspoon coarse black pepper

5 tablespoons white flour

1 cup plain bread crumbs, to top white sauce near end of baking

Whisk flour into milk until there are no lumps. Combine all ingredients (except bread crumbs) in saucepan and cook over medium heat until sauce begins to bubble and thicken. Remove from heat.

Assembly for baking: In a fairly deep 9-by-12-inch baking pan (or two bread loaf pans), arrange a layer of puffball slices across the bottom. Next, add a layer of the meat mixture. Then add just enough hot white sauce to cover the venison and top that with eggplant. Start



PHILIP WHITFORD

over with another layer of puffball slices, meat mixture, white sauce and eggplant. Repeat until you run out of materials.

Bake at 350 degrees in a preheated oven for 40 to 50 minutes. When the white sauce begins to bubble near the center of the pan, sprinkle the bread crumbs over the top of the dish and allow to brown for about 10 minutes. Remove from oven and serve immediately. Serves 6-8 people and freezes well for leftovers.

This dish goes well with a fresh salad and crusty baguette of French bread. If you don't find a good puffball or two, substitute slices of white or portabella mushrooms.



Philip Whitford is a retired professor of biology and native Wisconsinite. He also is known as "Dr. Goose" for his 30 years of research in Canada goose behavior.

IF YOU GO

Gathering of edibles is allowed on most state properties, including state natural areas. Here's what is allowed:

- Edible fruits, edible nuts, wild mushrooms, wild asparagus and watercress may be removed by hand without a permit for the purpose of personal consumption by the collector.
- "Edible fruits" means fleshy fruits from plants including apples, plums, pears, blueberries, raspberries, blackberries, junberries and strawberries that are harvested for human consumption.
- "Edible nuts" means walnuts, hickory nuts, acorns and other similar nuts from trees and shrubs.
- The collection of seeds, roots, or other plant parts is prohibited.

For more guidance, visit http://docs.legis.wisconsin.gov/code/admin_code/nr/001/45.

History in hand

A 90-year-old family heirloom fulfills a new dream.

Kevin Feind

There are many who have family heirlooms that have been handed down from generation to generation. Some have their great-grandparents' silverware, or maybe an old bed or trunk was brought over from the "old country." In my case, I'm the caretaker of my father's Iver Johnson "Champion" single-shot .410 gauge shotgun.

My dad got the little gun on his 8th birthday in 1928, the year before the Great Depression. As the story goes, my grandfather didn't tell Grandma he was going to spend the \$20 on the gift, and she was a bit upset at such an extravagance. One can only imagine how much \$20 could have purchased to support the household in those days.

Fast-forward to the 1970s. My three brothers and I all carried the .410 as our first gun while small game hunting for rabbits and squirrels. My first hunting memory of the .410 was when I was 11 years old. I was walking with my dad as we hunted for rabbits on a friend's property in the Marshfield area in central Wisconsin. Our beagle, Lady, was hot on the trail of a cottontail. There was about a foot of snow on the ground, and I was standing a few feet to my dad's right.

Those who rabbit hunt with a hound know that rabbits make a circle when being chased. Well, Lady was getting closer, and her barking intensified with every second. Dad and I were on high alert, waiting for the first sight of that rabbit.

Moments later, the rabbit came bounding through the brush from our right. I was unarmed, for I was only 11. I could see the rabbit, but Dad couldn't, and I tried in earnest to point to where it was. Lady's turbo-thrusters kicked in as the scent got hotter, and she was coming fast! It would be only a few moments before the rabbit would decide to gain more distance between itself and the incoming beagle.

Much to my surprise, after my several failed attempts at pointing out the rab-



COURTESY OF KEVIN FEIND

Kevin Feind used his family heirloom Iver Johnson "Champion" .410 shotgun to bag this jake.

bit, Dad did something that still amazes me today. He cocked the hammer of the .410 and handed it to me. "It's cocked and ready to go, see if you can shoot the rabbit," he said.

In awe, I carefully took the gun and aimed. I fired and a cloud of snow erupted, blocking my view of whether I had hit the target or not. Lady, at the sound of the shot, hit a high tenor voice and now was coming through the snow like a freight train. I handed the gun back to Dad and ran to where I'd shot at the rabbit.

I found the rabbit at the same time Lady did. Much to my dad's amazement, and mine, the rabbit was lying there. I proudly lifted the rabbit up, grabbing it by the hind feet. My dad's laugh is still clear in my memory.

Returning home, he explained to my mom how surprised he was that I had hit the rabbit. He was never a very excitable man, so hearing him tell the story with such delight still makes me smile.

From past to present

The memories I made carrying the .410 mean a lot to me, even more so since my dad died in 1985. His unexpected death was such a shock, it changed me and my family forever.

Being a passionate turkey hunter since 1989, I thought it would be a fun challenge in the 2017 spring season to harvest a turkey with the little .410. I bought and patterned some new No. 6 shotgun shells, and found it provided adequate hits out to 20 yards.

In early May, I was hunting at the Yellowstone Lake Wildlife Area in Lafayette County. It was a beautiful early evening when my hunting partner and I got two birds to gobble. We estimated them to be about 250 yards to our west.

We separated — I took the high elevation and he took the low. About an hour later, two jakes slowly made their way toward me, feeding on past-bloom gooseberry flowers as they approached. Using my range finder, I noted what

trees they had to walk past to be in range for the little gun.


I watched them for nearly a half hour, and finally the second in line passed a 20-yard white oak trunk, and stood at 19 yards. Finding the .410's hammer with my thumb, I had to make sure the movement was slow so as to not spook the bird. As I pulled the hammer back and heard the "click," I remembered my dad's words from so many years ago: "It's cocked and ready to go."

Carefully, I aimed the barrel's small brass bead just above the greater caruncles of the jake's neck and fired. I had fulfilled my dream, a turkey with the .410 — the first for this 90-year-old family heirloom.

For those three days that I carried the .410, I couldn't help but think of my dad. I found myself praying for him and talking to him as I carried his gun. I thought about all the hunts this little gun had been on, how my dad had carried it for more than 40 years before his first-born laid hands on it, and how each of his four boys had carried it on their first rabbit hunt.

Upon harvesting the bird, I fought back tears, thinking how proud my dad would be. I carried the jake back to my knee-high blind and posed for photos. I envisioned the smile on my dad's face and remembered his laugh, just like the one I'd heard when I shot that cottontail 41 years ago.

My dad planted the seed of hunting heritage importance with my brothers and me. My wife and I weren't able to have children of our own, so instead I've coordinated the Douglas County Learn to Hunt Turkey program since 2006. With the Gitchee Gumme Chapter of the National Wild Turkey Federation, we have introduced more than 150 first-time hunters to this sport I treasure. The dedicated volunteers in the program have encouraged so many new hunters. I hope this tradition continues to grow in years to come.

I so enjoy being the adult who coaches a new hunter to carefully take aim at a gobbler's greater caruncles. To quietly click off the safety, taking great care not to get spotted due to movement. And to whisper those treasured words, "It's cocked and ready to go." 

Kevin Feind is the DNR's Natural Resources Property Supervisor at Pattison State Park in Superior.

Wild Wisconsin is primed for the hunt

Sawyer Briel

It might seem difficult to get someone new interested in hunting. There can be many factors in play, but at the Department of Natural Resources, we are striving to address the accessibility issue. We want to show people it's not as hard as they might think to get into hunting.

One way we are hoping to carry that message is through our web series, Wild Wisconsin. Launched in 2017, it provides information that can help all levels of hunter — from novice to expert — to ensure we deliver a product that's worthwhile and interesting to everyone.

So, what's a web series? Think of it as your favorite TV show, but you can watch, rewatch and rewind at any time. You can view as much or as little as you want in one sitting, and you can always come back later to refresh your memory as needed. No commercials, no DVR, no hassle. You can even watch it on your smartphone. Pretty neat, huh?

Wild Wisconsin, our flagship web series, offers all kinds of important and helpful information, ranging from what it takes to get into hunting to how to cook wild game once you've gotten the job done.

We understand every segment won't be beneficial for everyone — that's why we've given you the ability to skip segments that may seem below (or above) your skill level. We're incredibly excited to offer this new tool, and we're looking forward to expanding it in Season 2.


But we need your feedback! Check out the series at dnr.wi.gov, keywords "Wild Wisconsin," and let us know what you think. We want to give you content that's relevant to your experiences in the outdoors and we can do that much better if we hear directly from you.

To complement the web series, we've also launched our own podcast channel, Off the Record, for audio-only information. Listen while you're commuting to work or mowing the lawn or just relaxing in your hammock.

Simply put, our podcasts take things that may seem overly technical — such as using browse data to monitor deer pressure — and present them in a way that's easy to understand.

So far, Off the Record topics have included an overview of gray wolves in Wisconsin, an inside look at the state's first managed elk hunt and a conversation with the director of DNR's Natural Heritage Conservation Program.

We're working hard to cover a wide array of topics to make sure that, once again, there is something for everyone (hopefully you're noticing a common theme here), and we will continue to create more content for the channel moving forward.

One more tool to help hunters of all levels is a brand-new mobile app. It's called "Hunt Wild Wisconsin" and will be available to download for free! Aimed at being your go-to in the field, it can be used to find DNR property boundaries, set waypoints, read a summarized version of hunting regulations and much more. 

Sawyer Briel is an administrative policy coordinator who handles communications for DNR's Division of Fish, Wildlife and Parks.

INFORMATION

Check our website for information on podcasts, web series and other important hunting details. Go to dnr.wi.gov, keywords "Wild Wisconsin."



'Why Hunt?' guidebook balances novelty, tradition

John Motoviloff

Mentors are one leg supporting the stool that is the future of hunting. Another is the new hunters themselves, whether they be college students like UW-Madison's Badger Hunting Club or a cohort of food-motivated young adults recruited through a food co-op. It's crucial they have the right tools to jump-start their hunting careers.

One indispensable resource is "Why Hunt? A Guide for Lovers of Nature, Local Food, and Outdoor Recreation," an 84-page volume published in May by the Aldo Leopold Foundation. Just as the work of Aldo Leopold served to link hunters and non-hunters in his time, Leopold's legacy continues to be a bridge between these groups today.

Buddy Huffaker, executive director of the Aldo Leopold Foundation in Baraboo, sees the book as "a catalyst for bringing these sometimes mutually exclusive groups into conversation together."

As the book's subtitle suggests, it is not your father's or grandfather's hunting guidebook. While traditional outdoor media often takes for granted the fact that people hunt, "Why Hunt?" frames it as a choice. The book reaches out to potential hunters by talking about game as responsibly harvested protein

and hunting revenues as the underwriter of conservation funding.

It's not just the book's point of view on hunting that sets it apart from traditional publications, it's also the book's authors. Six of the book's eight chapters are written by novice hunters, many of them women. The photos in the book, the reasons for hunting — even the call-out boxes for Madison's Willy Street Co-op and Milwaukee's Outpost Natural Foods — will have resonance with a population that is more diverse, urban and female than traditional hunters.


At the same time, this thin volume is thick with information that new hunters need: discussing gear essentials, finding a place to hunt, identifying game species, assessing their relative difficulty to hunt and finding a mentor. An insert card contains links to additional resources.

As an instructor for novice hunting programs, I am frequently at a loss for class materials that are not, on the one hand, written for seasoned hunters or, on the other, for children. "Why Hunt?"



The Aldo Leopold Foundation's new "Why Hunt?" book reveals its goal to reach an assorted audience in the subtitle: "A Guide for Lovers of Nature, Local Food and Outdoor Recreation."

threads this narrow needle by providing a book for novices that is written largely by novice hunters.

With support from the Wisconsin Department of Natural Resources, the U.S. Fish & Wildlife Service, Bast Durbin Advertising and several conservation organizations and businesses, the guide is for sale, \$10, on the Aldo Leopold Foundation website, with bulk ordering information also available. For details, check aldoleopold.org/whyhunt. 

John Motoviloff is the Hunting and Shooting Sports R3 Coordinator for the National Wild Turkey Federation in Wisconsin.

MAJOR FALL HUNTING DATES

DEER

- Archery and crossbow: Sept. 15-Jan. 6 (through Jan. 31 in metro sub-units)
- Youth deer hunt: Oct. 6-7
- Gun season for hunters with disabilities: Oct. 6-14 (not statewide; see rules at dnr.wi.gov/topic/hunt/disdeer.html)
- Gun season: Nov. 17-25
- Muzzleloader: Nov. 26-Dec. 5
- Antlerless-only: Dec. 6-9 statewide; also Dec. 24-Jan. 1 in select farmland (Zone 2) units

TURKEY

- Zones 1-5: Sept. 15-Jan. 6
- Zones 6-7: Sept. 15-Nov. 16
- Application deadline for spring 2019 permits: Dec. 10

COTTONTAIL RABBIT

- Northern zone: Sept. 15-Feb. 28
- Southern zone: Oct. 20-Feb. 28 (9 a.m. start on Oct. 20)

WATERFOWL

- Early season: Sept. 1-7 for teal and Sept. 1-15 for Canada goose, both statewide
- Youth duck hunt: Sept. 15-16
- Wild ducks: Sept. 29-Nov. 27 in northern zone; Sept. 29-Oct. 7 and Oct. 13-Dec. 2 in southern zone; Sept. 29-Oct. 5 and Oct. 13-Dec. 4 in Mississippi River zone
- Canada goose: Sept. 16-Dec. 16 in north exterior zone; Sept. 16-Oct. 7, Oct. 13-Dec. 2 and Dec. 16-Jan. 3 in south exterior zone; Sept. 29-Oct. 5 and Oct. 13-Jan. 3 in Mississippi River subzone

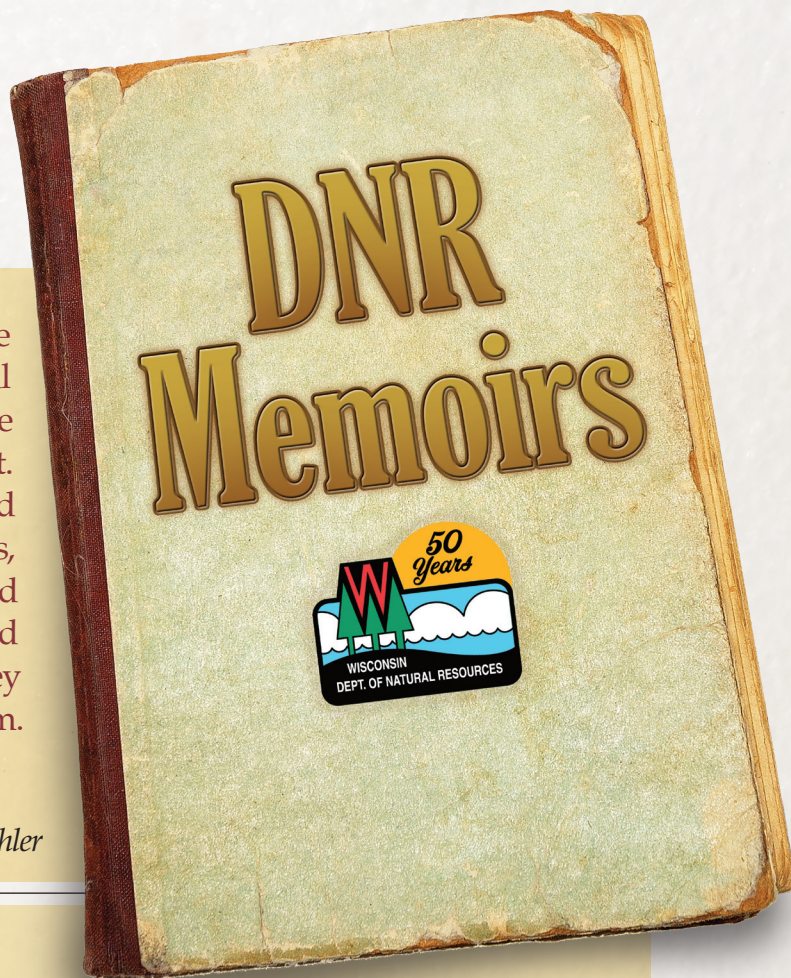
MORE INFORMATION

For details on hunting additional species such as fox and other furbearers, squirrels, bear and other migratory and game birds, as well as trapping information and complete rules and regulations, check dnr.wi.gov/topic/hunt.

A DOZEN FORMER STAFFERS — WITH A COMBINED TENURE OF MORE THAN 380 YEARS — RECOUNT THEIR DEDICATION TO WISCONSIN'S NATURAL RESOURCES.

As our magazine continues its celebration of the DNR's 50th year, what's been missing are personal accounts from former and retired longtime employees who contributed to the agency's past. These career public servants are the people behind the DNR who wrote the rules, tested the waters, fought the fires, framed the partnerships and planted the ideas of change. We recently asked DNR retirees to send us their recollections of key events or programs most memorable to them. Here are some of their submissions.

— Compiled by Kathryn A. Kahler



Protecting wild waterways

Charlie Higgs

The Flambeau, Brule, Oconto, Wolf, Fox, Peshtigo, Manitowoc, Menominee, Namekagon, St. Croix, Chippewa and Wisconsin are the rivers where I spent a significant amount of work time during 36-plus years with DNR. In addition the Pike, Pine and Popple state-designated Wild Rivers commanded a lot of my time and energy.

In early fall of 1980, Marinette-area land agent Dick Faucett arranged a visit to assess progress on the Wild Rivers program. Then-DNR Secretary Tony Earl, Resource Division Administrator Buzz Besadny, Faucett and I made the 2- to 3-mile round trip along a foot path to the base of LaSalle Falls. This was and remains one of the most remote and wild-est places in Wisconsin.

The rivers of Wisconsin played an important role in the settlement and development of the state. That role left many of the rivers polluted and degraded. Fortunately, with strong public and political support, especially from the 1960s forward, that situation has been greatly improved.

I feel great satisfaction to have been a part of the effort by the men and women of DNR representing so many disciplines. It took all of us to achieve this remarkable recovery! These waterways

are treasures to be enjoyed and cherished by residents and visitors alike.

Charlie Higgs' DNR career spanned more than three decades (1962-98), mostly stationed in Green Bay. He currently resides in Fort Collins, Colorado.



Then-DNR secretary Tony Earl (in back), Resource Division Administrator Buzz Besadny (left) and Lake Michigan District Director Charlie Higgs stopped to view the 22-foot LaSalle Falls on the Pine River in Florence County in this 1980 photo.

Wolf plate success

Chuck Pils

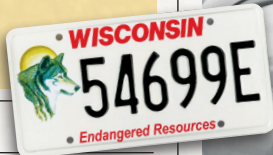
When I became director of the Bureau of Endangered Resources (BER) in the early 1990s, I made it a personal priority to come up with a major funding source for BER, which operated primarily on donations to fund management of rare species and habitats. Some states used special license plate revenues. Why couldn't Wisconsin do the same?

I was lucky! I mentioned this possibility during a 1995 meeting with The Nature Conservancy, whose government relations staff person was future Madison mayor Dave Cieslewicz. He thought it was an excellent idea. He found a legislative sponsor for the proposal and a bill was passed into law that same year!

We formed a committee with the Department of Transportation to get their buy-in and later announced that DNR was holding a contest seeking images for a new BER license plate. Eventually, the prize winner came up with the timber wolf as the figure to be placed on the license plate.

The rest is history: The original plate was revised to feature a badger and now eagles. To date, the plate has raised nearly \$10 million.

Chuck Pils retired in 1999 after 33 years of service with DNR's Bureaus of Research, Wildlife Management and Endangered Resources. He resides in Madison.



Conservation wardens played a key role in DNR's development, including responsibility for deer registration from 1953 through 1958.

DNR FILES

Gamekeeper turned historian

David Gjestson

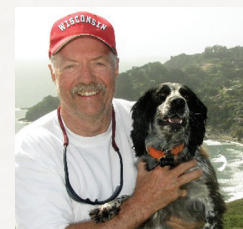
The history of the Wisconsin DNR is a fascinating story of science development and professionals dedicated to protecting the environment and the quality of life in the Badger State. Conservation wardens initiated the effort in the 1800s, long before they were followed by foresters, forest rangers, game managers, fish managers and park superintendents in the following century.

The reorganization of the Wisconsin Conservation Department and Resource Development into the Department of Natural Resources in 1967-68 expanded traditional resource management programs to include air, water and solid waste regulatory programs that were precedent-setting environmental programs in the United States. Endangered and threatened plant and animal laws created in 1972 coupled with natural heritage inventories and technological

advancements in the 1980s rounded out the broad challenges facing resource managers today.

Wisconsin's proud history of accomplishment in conservation programs is captured in my book, "The Gamekeepers — Wisconsin Wildlife Conservation from WCD to CWD."

David L. Gjestson's 30-year DNR career began as a field biologist with the Bureau of Wildlife Management. His avocation and passion for DNR's history culminated with publication of his book, which is a primary resource for DNR history. Check your local library or visit <https://dnr.wi.gov/topic/wildlifehabitat/gamekeepers.html> for purchasing information. Gjestson currently resides in Rio Rico, Arizona.



Dave Gjestson now lives in the southwestern U.S., where he hikes daily with his dog, Greta.

COURTESY OF DAVID GJESTSON

Forging forestry partnerships

Harry Mills

In 1972, the county forest specialist position was created in the Bureau of Forestry, a job to which I was the first to be assigned.

The County Forest Program originated in the late 1920s. By 1972, there were 28 northern and central counties participating with 2.25 million acres enrolled under Chapter 28.11, Wis. Stats. It was designed as a partnership whereby the counties provided the land and an administrator to direct local management and the state provided technical and financial assistance. Each county had a local state department forester assigned as a liaison to work with the respective administrator and forestry committee.

In 1972, Milt Reinke, then director of

the Bureau of Forestry, created the county specialist position to help streamline communications between the field and central office and help keep state-level efforts in tune with evolving county program needs. I was assigned and enjoyed this position until my retirement in 1989.

Working with the Wisconsin County Forest Association was very rewarding. This organization is comprised of a county board member from each participating county and an executive secretary. Being able to develop and forge a closer relationship between the state and the counties was a highlight of my employment as a forester with the DNR.



STABER W. REESE

Trees are prepared for planting in the Wood County Forest in this 1948 DNR photo. An

award for county foresters, below, is named in honor of Milt Reinke, who led the DNR's Bureau of Forestry in the 1970s and was instrumental in state-county cooperation.



This county forest program continues to flourish today by providing forest products, abundant wildlife and recreational opportunities for Wisconsinites and tourists alike.

Harry Mills worked for DNR for more than 32 years. His forestry career began in 1957 with the Wisconsin Conservation Department in Tomahawk. He currently resides in Wausau.

Early DNR IT milestones

Linda Morgan Wills

Linda Wills was a longtime program assistant for the Bureau of Information Management in Madison. She submitted a 25-year IT timeline, some of which is excerpted here. Wills retired in 2015 and resides in Madison.

Early 1980s

Placed computer terminals in the six district headquarters offices

1980

First five desktop PCs purchased by the Environmental Quality Division, price tag about \$5,000 each. The bureaus of Solid Waste Management, Air Quality Management and Information Management were the recipients.

1980

PCs purchased for "computer rooms," where DNR staff reserved time to use. PCs eventually became truly personal, as prices dropped and capabilities improved.

1988

DNR installed its own statewide network, followed by massive adoptions of desktop PCs.

Early 1990s

DNR was the first Wisconsin state agency to access the Internet.

2001

DNR joined the State Portal, providing the public Internet access to online systems.

2000

DNR passed into new millennium without failure of any IT systems.

Travel on a tight budget

Ron Poff

My first assignment in spring 1960 was to sample fish on Kenosha County lakes. It was cold, dark, foggy and raining at the end of the first day. I had to find a motel in Wisconsin for the night and mistakenly stayed over the line in Illinois. I had a lot of explaining to do to justify out-of-state travel and a \$4 room charge. Ah, the good old days. We could be reimbursed \$.65 for breakfast, \$.85 for lunch and \$1.25 for dinner, as I recall.

Ron Poff retired in 1998 after 42 years in Fish Management, 12 at the Nevin Fish Hatchery. He lives in Madison.



Ron Poff was in Kenosha County on a fish-sampling assignment such as this when he inadvertently spent \$4 on an out-of-state hotel room.

WILBUR STITES

Three generations of DNR

George, Sam and Marshall Ruegger

George Ruegger began working as a state trapper with the Wisconsin Conservation Department in the late 1930s, assisting small farmers in extremely rural northern Wisconsin where bears were damaging crops and killing livestock. A seasoned trapper, during his tenure George took over 100 bears, provided the first live-trapped timber wolves for the Poynette game farm and removed many beavers doing damage to town roads and fields. George also served as an advisor to deer studies that wildlife managers led in the 1940s.

George's son Sam came home from high school in Hillsboro in 1928 and upon getting off the train spotted a lookout tower for forest fires on the north hill outside of Radisson. The next day he went to Hayward to meet with Mr. LeMay, the district ranger, and started working as the Radisson tower lookout. The next spring, he went to Hayward as a junior ranger, and in 1939 supervised the Works Progress Administration building of the Winter Ranger Station where he served as the forest ranger until 1970.

Sam's son Marshall started in Mercer as a fire control dispatcher and moved several times as the Ladysmith ranger, Dodgeville-area ranger, southern district fire staff specialist and then to the central office as the fire equipment specialist, where he worked with fire departments across the state. His proudest assignment was as the 50-state forester's representative to the National Fire Equipment Committee. He was also a



STABER W. REESE

This 1941 DNR photo shows a marker at Ojibwa Roadside Park in Sawyer County, which benefited from contributions of the Ruegger family.

member of the first out-of-state fire crew.

All in all, three generations of the Ruegger family served the citizens of Wisconsin with more than 87 years of service. The Rueggers also served as emergency fire wardens after their retirements, for a combined total of 62 additional years.

Ojibwa Roadside Park (Town of Winter, Sawyer County) also benefited from their services. George was a seasonal caretaker, Sam was the park supervisor and Marshall was the town chairman and park supervisor after the DNR turned it over to the township in 1990.

Marshall Ruegger, who submitted this family history of DNR service, retired in 1993 after 30 years with WCD and DNR and lives in Mount Horeb.



Pack cans are used by a crew to quell a grass fire in this 1954 DNR photo, an example of some of the fire control work that might have included Sam and Marshall Ruegger.

V.E. HOLTZ

Story behind phosphate ban

Duane Schuettelpelz

Laundry detergents in the 1960s contained significant amounts of phosphates to produce clean clothes. Although phosphate content in the detergents had decreased into the 1970s, the concentrations of phosphorus in municipal wastewater was still of concern due to increasing algae and weeds in lakes and streams.

Following several other jurisdictions around the Great Lakes, the Wisconsin Legislature enacted a ban on the amount of phosphates allowed in laundry detergent, effective in mid-1979. This law contained a sunset date and expired three years later. Home economists, along with the washing machine and laundry detergent industries opposed the law, claiming that clothes washed in detergents without phosphates

were not clean and that substitute detergents caused early breakdowns of washing machines.

Suds cover the Fox River as it flows through the city of Berlin in this 1963 photo. Sixteen years later, a ban was placed on phosphates in detergents in an effort to reduce such occurrences.

was in effect, the DNR was directed to investigate whether the ban had any effect on water quality in the state. The study found reductions in the amount of phosphorus in wastewater, but due to the short time allowed, was not able to discern any changes in water quality.

After the ban expired, hearings were held, pitting opponents of the ban against DNR and other advocates. Fortunately, the law banning phosphates in detergents was re-enacted and became effective in January 1984. There was no indication after this date that the problems claimed by the ban's opponents ever occurred, probably because substitute detergents (primarily liquids) performed as well or better than those containing phosphates.

Duane H. Schuettelpelz was a DNR water quality engineer from 1967 until his retirement in 2008. He lives in Madison.

Answering the environmental challenge: Paul Didier and Carl Blabaum

Two longtime DNR bureau directors who were instrumental in the early water pollution permitting process both got their start in the Department of Resource Development, transitioning together in 1968 to the new Department of Natural Resources.

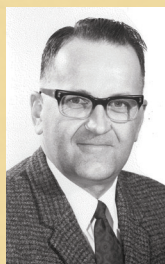
Paul Didier was a newly hired engineer with DRD who in December 1966 had received an announcement that the state was seeking applicants for "a substantial increase in personnel" to implement new laws to protect Wisconsin's waters.

"I was sitting at my desk in Milwaukee with five kids at home," Didier recalled. "The starting pay was \$750 a month and I said to my wife, 'This is an opportunity we just can't pass up!'"

Aside from the salary, Didier was hooked by a paragraph in the announcement that read: "If you would like to be associated with this challenging, exciting program — one that will require imagination, initiative and dedication, if you want to be a part of a hard-working, top-notch team that is determined to set a pattern other states can follow, the Water Resources Division of the Wisconsin Department of Resource Development would like to hear from you."

He applied and was hired as a public health engineer in 1967.

Carl J. Blabaum, who died in 2016 at the age of 87, worked beside Didier for three decades. He directed DNR's Bureau of Wastewater Management and was part of the team effort to develop the water pollution permitting process in the early 1970s.



Carl Blabaum

Didier described those early years of DNR's organizational history.

"We first had to deal with President Nixon's order to invoke the 1899 Refuse Act, requiring any person discharging to navigable waters of the U.S. to obtain a permit. The Federal Water Pollution Control Agency came to Wisconsin and started holding hearings, the first of which was at the Holiday Inn in Neenah-Menasha. The Industrial Waste Water Section, newly formed in August 1970, tried to help identify our 'major dischargers' — paper mills, power plants and so forth — and get those permits out there for discussion.

"That, however, never happened because of the objections raised by industries that such action under an antiquated federal law wasn't justified. A short time later Congress passed the Clean Water Act in October 1972, and we got our own laws up to speed with corresponding statutes in mid-1973.

"We then obtained full authorization to administer the National Pollutant Discharge Elimination System permit program in Wisconsin — the WPDES program — at a hearing at the Pfister Hotel in Milwaukee on Dec. 18, 1973. We were on our way!

"We had some 600 'major dischargers' and the goal was to get them all issued by Dec. 31, 1974, and we made that goal. Carl Blabaum won a bet with an influential official at EPA for a bottle of brandy when we accomplished it!"

Didier went on to become director of the Bureau of Solid and Hazardous Waste Management in 1982, retiring in 1998.

Reminiscing about his work with Blabaum, Didier said: "Carl was memorialized at a luncheon shortly after his death in 2016. Donations in his honor — which totaled over \$1,500 — were used to buy several fishing boats and a plaque at the boat landing at the Blackhawk Lake Recreation Area near his home in Highland. The plaque reads, 'Supported in memory of Carl J. Blabaum, P.E., who devoted his life to clean water for Wisconsin.'"

— Kathryn A. Kahler



A plaque commemorating Carl Blabaum, a longtime DNR crusader for clean waters, is found at the Blackhawk Lake Recreation Area boat landing in Highland.

BLACKHAWK RECREATION AREA

Native bees and other pollinators are vital contributors to all that grows in Wisconsin.

DNR labors for pollinators

BEES, BUTTERFLIES AND OTHER SPECIES CAN USE A BOOST TO TAKE CARE OF BUSINESS.

Lee Fahrney and Andrea Zani

Anyone watching a bee buzz from one bloom to the next may not give a second thought to the important work being done. But the pollinating process that takes place through the activity of bees and other species is vital to a whole host of things that grow, from wildflowers to agricultural crops, as well as to natural areas and broader ecosystems.

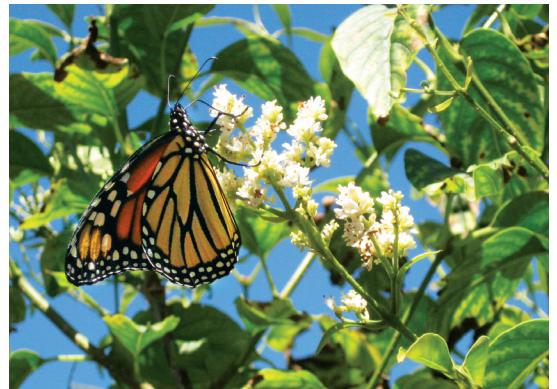
These species, small in size, pack a big punch when it comes to keeping things humming in the natural world.

To better understand pollinators, first consider there are a variety of types. Bees that are native to Wisconsin are critical pollinators, especially for native plant species and also for crops. Honey bees are not native to North America but are nonetheless important, particularly to the agricultural industry. Butterflies and moths are pollinators, too, with some migratory species such as monarchs traveling thousands of miles to get

the job done.

It's also important to know that many species of pollinators are facing threats. Those monarchs, for example, have seen their numbers decline precipitously in the past two decades, and native pollinators such as the regal fritillary and northern blue butterfly are on the state's endangered species list.

More recently, the rusty patched bumble bee was listed as endangered by the U.S. Fish and Wildlife Service because of steep population declines. And other species are being evaluated for federal



Among the pollinators who rely on good habitat for survival are monarch butterflies, which are a particular focus of conservation efforts including the new Wisconsin Monarch Collaborative.

listing as well because of concerns with dwindling numbers.

Problems involving habitat are atop the list of challenges for pollinators. Changes such as fragmentation and degradation and outright habitat loss have presented difficulties. Monitoring projects and efforts focused on maintaining enough suitable habitat are main ways the DNR and its partners are working to protect these essential species.

Support strategies

Because of their importance to state agriculture, honey bees fall under the realm of Wisconsin's Department of Agriculture, Trade and Consumer Protection (DATCP), while the Department of Natural Resources works mainly with native pollinator species. The DNR did participate as a stakeholder in DATCP's Wisconsin Pollinator Protection Plan, said Jay Watson, a DNR conservation biologist.

The DNR does a great deal of work overall to address pollinator habitat and education, especially when it comes to the state's many native pollinator species, he added.

"We are focused on improving and creating habitat for pollinators, along with outreach, education and monitoring pollinators," Watson said.

There are differences between honey bees and native bee species, including diseases that may affect each one and the types of plants each are best at pollinating. But habitat issues can be similar for both honey bees and native bees as well as for other pollinators, including butterflies, moths, pollinating beetle, fly and wasp species, and hummingbirds.

The DNR, particularly through its Natural Heritage Conservation program, works to understand and address many of these issues. June 18-24 was celebrated as Pollinator Week in Wisconsin and the DNR supports a number of programs, including citizen-based monitoring efforts, to help pollinators of all sorts.

"We just launched the Bumble Bee Brigade to help us understand the current distribution of the 20 bumble bee species that have been found across the state," Watson said.

And the agency also is focused on that other important pollinator, the monarch butterfly, he added. The recently formed Wisconsin Monarch Collaborative — with more than 70 stakeholders from government agencies, agriculture, public and private land management, education, research areas and others — will be instrumental in drafting the state strategy for monarch conservation.

"We are working on a strategy in Wis-

consin to help improve the monarch butterfly population as part of the Mid-America Monarch Conservation Strategy," Watson said. "Many habitat and other efforts by Wisconsin government, nonprofits and utilities on behalf of monarchs will be highlighted."



Joe-pye weed, with large flower clusters that bloom in late summer, is among the native plant species that can help to attract and nurture pollinators such as the northern amber bumble bee (*Bombus borealis*).

JAY WATSON

'All hands on deck'

Another boost for pollinators comes from what at first glance might appear to be an unlikely partner: Pheasants Forever. But this nonprofit group dedicated to the conservation of game birds also has reason to be concerned about pollinators.

Scott Stipetich, a senior farm bill biologist for Pheasants Forever, explained that for the first months of life, pheasant and quail chicks eat mostly small, soft-bodied insects. Without a habitat type that attracts those insects, chick survival rates drop — and that has a significant effect on fall populations. The same connection includes grassland songbirds, butterflies and native bees, among other species.

Stipetich and his fellow Pheasants Forever farm bill biologists help private landowners design, develop and find ways to fund habitat improvements, working with the DNR and the U.S. Department of Agriculture's Natural Resources Conservation Service. The

habitat work helps a number of species, including pollinators,

"Here in Wisconsin, we have seven biologists covering the partnership between Pheasants Forever, DNR and NRCS," Stipetich said. "Our job is to work with private landowners, largely writing plans and finding funds."

Pheasants Forever even caters seed mixes to landowners, he added, with the goal to create more suitable habitat areas.

Such efforts to help pollinators indicate just how critical a natural resource they are.

"It's all hands on deck for pollinators," said DNR Species Management Section Chief Owen Boyle. "Our native pollinators are incredibly important to maintaining Wisconsin's native ecosystems and agriculture, and we can all take steps to help them."

The DNR offers simple suggestions for supporting pollinators.

- Plant native species that attract pollinators. Some examples include blazing star, coneflowers, asters and milkweed.
- Provide water and shelter. Pollinators need water to drink and safe places to

rest, avoid bad weather and spend the winter. You can provide brush and leaf piles, bee nest boxes and water such as a bird bath.

- Minimize pesticides and herbicides. Insecticides can harm or kill pollinators, and herbicides can kill the plants they need to survive.
- Monitor and report. Recording your observations of bees, butterflies and other pollinators is helpful in conservation efforts.



Lee Fahrney is a writer and public relations manager for the Wisconsin Conservation Congress. Andrea Zani is managing editor of Wisconsin Natural Resources magazine.

>>> INFORMATION

For more on bees, butterflies and other pollinators, including how to help create better habitat and get involved in volunteer monitoring opportunities, go to dnr.wi.gov and search keyword "pollinators."



ABCs OF HONEY BEES

Laura Tisch has much to be concerned about when it comes to the pollination of apple trees. With 8,400 trees in her family-operated orchard near Blanchardville, in southwest Wisconsin, she maintains a total of 11 honey bee hives, each of which can contain tens of thousands of bees.

"The honey bees and other pollinators are crucial to a healthy orchard," Tisch said. "I need them for pollination and try hard to provide them with an attractive, healthy habitat."

She also is well aware of the threat from Colony Collapse Disorder, a problem first identified in 2005 that has caught the attention of the Wisconsin Department of Agriculture, Trade and Consumer Protection (DATCP) and other government, agriculture and conservation groups. CCD affects honey bees, which are not native to North America but are key in pollination, especially for agriculture.

According to the Environmental Protection Agency, Colony Collapse Disorder occurs when the majority of a honey bee colony's worker bees disappear, though plenty of food exists, leaving behind a queen and a few nurse bees. CCD threatens the sustainability of honey bee populations, which have an estimated annual impact of \$19 billion on agriculture in the United States.

The Varroa mite often is mentioned as the source of the abrupt

depopulation of honey bee colonies during the winter across North America, but it's not the only factor in Colony Collapse Disorder, said Dan Ziehli, an apiary inspector for DATCP.

"Things such as disease, vectors like the Varroa mite, hive beetles, wax moths and rodents" are an issue, he said. "The disappearance of honey bee habitat affects the colony, along with adverse weather patterns."

DATCP's Apiary Program monitors commercial and backyard beekeepers to help protect the places where bees are kept — apiaries. Ziehli is the apiary inspector for southern Wisconsin, one of two in the state.

"Our goal is to provide a free inspection service looking for all bee diseases and vectors," he said. "We educate beekeepers on new methods and health of honey bees, and we enforce compliance of our state statutes, from one colony to thousands of colonies."

The most common reason for winter kill of honey bees, a major pollinator in the state's apple orchards and cranberry bogs, is the failure of beekeepers

to use best practices, Ziehli noted.

"Mite control and its proper use and timing (are) the most common," he said. "Honey bees seem to winter pretty good in Wisconsin if healthy — keeping them healthy is the issue. A colony does not have to completely die to have colony collapse. It can slowly dwindle down to such a small size it is impossible to survive."

Knowing the basics of honey bees is vital. For beekeepers, this means being in tune with bee biology and the particular requirements of their apiaries.

Tisch, for one, embraces this aspect of beekeeping at her orchard and takes great pains to ward off the potential impact of Colony Collapse Disorder. A chemist by profession, she uses weather stations to collect temperatures, precipitation, relative humidity, leaf wetness hours and soil moisture in her bee habitats.

"With this information, I can run disease



LEE FAHRNEY

Just-forming apples are literally the fruit of pollinators' labors at Munchkey Apples, an 8,400-tree orchard in Blanchardville, in southwest Wisconsin. Laura Tisch, who directs the family orchard, checks out the handiwork of bees and other pollinators during a walk-through in spring.

and insect models," Tisch said. "This is how I make all my management decisions on what I need to do to keep my orchard healthy. Without my insect traps and weather stations, I would be guessing on how to care for things."

Researchers from UW-Madison also grasp the importance of knowing what's happening with honey bees. Hannah Gaines Day, a Ph.D. and assistant scientist in the UW Department of Entomology, is among those researching CCD and other issues related to honey bees.

"We are trying to understand how the surrounding landscape — woods, grassland and agriculture — influences the success of the hives in the summer (i.e. honey production) and overwinter (survival)," Gaines Day said.

A final note of interest in the world of honey bees is a relatively new wrinkle — an increase in migratory beekeeping.

For example, Wisconsin imports thousands of honey bee colonies from other states for use in the cranberry industry, Ziehli said. "Two or three semis loaded with bees will be coming into the state to pollinate the cranberries." Care must be taken with these imports to limit disease transmission that can impact our native species.

In addition, the state sends many honey bees out of state, Ziehli added. "The majority went to California for almond pollination."

— Lee Fahrney



SCOTT BAUER, USDA ARS, BUGWOOD.ORG

The dark oval shape of a destructive Varroa mite can be seen inside a honey bee hive, feeding on the midsection of a developing worker bee.



LEE FAHRNEY

Dan Ziehli, a bee inspector for the Wisconsin Department of Agriculture, Trade and Consumer Protection, checks the health of bee hives near an apple orchard in southeastern Dane County, keeping an eye out for various diseases, Varroa mites and other issues that could lead to Colony Collapse Disorder.

Wisconsin writer and avid hiker Melanie Radzicki McManus has thru-hiked the state's Ice Age National Scenic Trail twice, writing a book about the first experience and also sending regular updates from that 2013 trip to a first-grade class that followed the adventures of her traveling teddy bear, Buddy.

Perhaps few Americans are aware that Wisconsin is home to the Ice Age National Scenic Trail, let alone nearly 29,000 black bears. In fairness, even many Wisconsinites are unfamiliar with the Ice Age Trail, as McManus discovered during her adventure.

For outdoor enthusiasts like McManus, though, the IAT is a real gem, one of only 11 National Scenic Trails. Managed cooperatively by the Wisconsin Department of Natural Resources, the National Park Service and the Ice Age Trail Alliance, the trail scratches the dirt in not quite half of Wisconsin's 72 counties, winding through thick forests, passing by morasses and over rolling hills, and skirting lakes and streams.

The IAT is a trail McManus loves so much she has trekked it twice — first heading eastward then turning around two years later to walk the same route heading west. It is the first trek McManus chronicles in her book "Thousand-Miler: Adventures Hiking the Ice Age Trail," published in 2017

by the Wisconsin Historical Society Press. "Thousand-miler" is the designation given to those who hike the entire trail, whether all at once via thru-hike, as McManus did, or over time in sections.

Tracing a glacier

McManus, who lives near Madison, began her first Ice Age Trail journey on a hot August day in 2013, though most of her hike would take her into autumn, one of the most beautiful seasons along the trail. Interstate State Park in St. Croix Falls is the trail's western terminus. From there, it meanders two-thirds of

COURTESY OF MELANIE RADZICKI MC MANUS

1,000 miles to remember

WISCONSIN HIKER'S NEW BOOK CHRONICLES AMBITIOUS TREK ALONG HER HOME STATE'S ICE AGE NATIONAL SCENIC TRAIL.

Jenny Wisniewski

When Melanie Radzicki McManus stepped onto the 1,100-mile Ice Age Trail to begin a nearly month-long hike, her biggest fear was an encounter with a black bear. During her 36-day trek she would battle cellulitis in both feet, a knee injury, heat, humidity, rain and poor trail markings — but never a bear.

the way across the upper section of the state before taking a sharp turn and cutting due south all the way to Green County. It then moves diagonally back up the state to Door County, where it reaches its eastern terminus at Potawatomi State Park.

Envisioned in the 1950s by Raymond T. Zillmer, a Milwaukee lawyer and avid mountaineer, the IAT route is far from random. As McManus observes in her book, Zillmer's plan "traced the edges of North America's last glacial advance into Wisconsin, an inventive route that would allow visitors not only to recreate in the scenic outdoors but also to easily see some of the world's most outstanding glacial features."

McManus does a thorough job of explaining the geologic history of the state dating to the trail's namesake Ice Age. The debris that a major sheet of ice left behind when it exited the state for good some 70,000 years ago is significant and the reason for places along the trail with names such as Kettle Moraine and Mondeaux Esker. Both moraine and esker are geologic terms relating to sediment deposited by a melting glacier.

Yesterday's trash is today's treasure along the Ice Age Trail. That's seen in the form of lakes and fertile countryside, waterways, sandstone rock formations in the western section of the state and lots of forestland in the northern third.

People and preparations

In the tradition of Don Quixote, McManus' narrative is episodic, each chapter telling of a new adventure or introduc-

ing fellow IAT hikers. She devotes one chapter, "Drew Hendel and Paul Kautz," to a pair also known as "Papa Bear" and "Hiking Dude," two 50-something travelers who had met while hiking the Arizona National Scenic Trail a few years earlier and decided to take their trekking to Wisconsin. "Bob Fay, Archaeologist," "Adam Hinz, Seeker" and "Jenni Heisz, Warrior," are three other IAT hikers McManus describes in detail.

And she tells of "Jason Dorgan, Speed Demon," a 41-year-old hiker with a big goal — and a tight schedule. "Trying to cover the Ice Age Trail's eleven hundred miles in three weeks was an insane idea," McManus writes of Dorgan's attempt to set a thru-hike speed record for the trail.

Comparisons with Don Quixote are nominal, though, for McManus is no idealist heading into the wilds. She knows the challenges of a major hike. McManus carefully prepared before her journey, beginning with stocking equipment and supplies including nine pairs of running shoes. She also arranged places to stay at night along the way, opting to sleep with friends and family or in hotels and inns rather than to camp as some hikers do.

Next, she set up a crew of people — her husband, sister, parents, daughter and friends — who would shadow her trek, meeting in designated spots to resupply her with water, food, dry socks and shoes. They also shuttled her to the trail in the mornings and to her lodging at night.

McManus knew that like Papa Bear and Hiking Dude, every good hiker, especially a "thousand-miler," needed a

trail name. So one of her final preparations was choosing hers: Valderi. The name came from "The Happy Wanderer," a camp song she remembered singing as a child with her family.

Real trailblazers

As she hiked, McManus notes in her book, she recalled Jim Staudacher, the first thru-hiker to complete the IAT in 1979. It was Staudacher who became the first to measure the trail during his thru-hike that summer, a year before the trail was officially established in 1980. Working with U.S. Rep. Henry Reuss of Milwaukee, the trail's biggest advocate at the time (with an Ice Age Visitor Center now named for him in Dundee), Staudacher also reported on the condition of each segment of the trail and gave suggestions of where improvements could be made.

A staff member in Reuss' Milwaukee office, Sarah Sykes, was instrumental in helping Staudacher plan and publicize his ambitious first hike, McManus writes. The two met with officials from the Ice Age Park and Trail Foundation (now the Ice Age Trail Alliance), local government agencies, hiking groups and the DNR to go over details of the trek and draw attention to it as a way to promote the fledgling IAT.

Only 22 years old and a student at Marquette University at the time, Staudacher completed his hike in 77 days. He even wrote about it a year later for *Wisconsin Natural Resources*. "Jim's trip had been exciting, exhilarating, dangerous, tedious and exhausting," McManus writes. "Yet he ended it thrilled and fulfilled beyond measure."

'Singing a siren song'

Hikers often have their unique reasons for an extended trek, and for McManus it was perhaps a tapestry of motivations — her experience as a long-distance runner, her background as a writer, her lifelong residence in Wisconsin — that led her to the Ice Age Trail.

"I could get to know my beloved state on an intimate basis, step by step, in a way few other people ever would, unearthing its hidden secrets, inhaling its heady scents, listening as it spoke to me through the sighing wind, the rustling prairie grasses and the creaking forestland," she explains in her book. "I could become part of the landscape, and the very earth could become part of me."

"As someone who has always felt a



The Ice Age National Scenic Trail passes by rivers, lakes and streams, over rolling hills and into thick forests as it winds 1,100 miles through Wisconsin.


DNR FILES

primal connection to my home state, the thought was intoxicating. Seductive. The trail was singing a siren song, and I couldn't resist."

McManus experienced many interesting people and places along the trail, but she never stopped for long. Like Jason Dorgan, she had a personal goal to meet. Her spirit of competition led her on a quest to set an FKT — fastest known time — for women.

When she patted the designated rock at the eastern terminus, making the completion of the hike official, McManus had done just that. She completed the 1,100-mile hike in 36 days and five hours, beating the previous record by nearly two weeks.

McManus knew her speed-hike served a purpose — it brought attention to the trail. Though well-loved by many in the region, nationally the trail remains a well-kept secret. With attention comes energy devoted to its upkeep and expansion.

At the time of McManus' hike, the IAT consisted of 650 miles of trail and 450 miles of connecting routes. It continues to be improved by numerous dedicated volunteers across the state and hiked daily by those who enjoy it. 

Jenny Wisniewski is a professional writer from Wauwatosa. When not writing, she can be found doing yoga, reading and spending time with her family.



Yellow-blazed trail markers designate about half the segments of the Ice Age Trail while unmarked connecting routes comprise the other half.

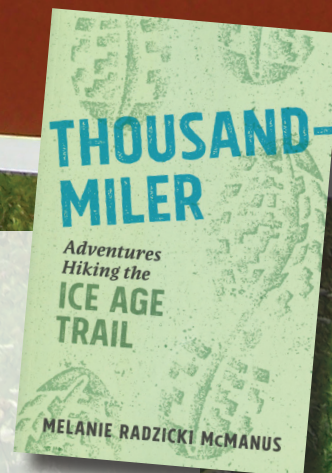
JOSEPH WARREN PHOTOS

Ice Age National Scenic Trail

Management of the Ice Age Trail, including this picturesque stretch at Devil's Lake State Park, involves joint efforts of the Wisconsin DNR, National Park Service and the Ice Age Trail Alliance, with volunteers handling the lion's share of maintenance work.

>>> INFORMATION

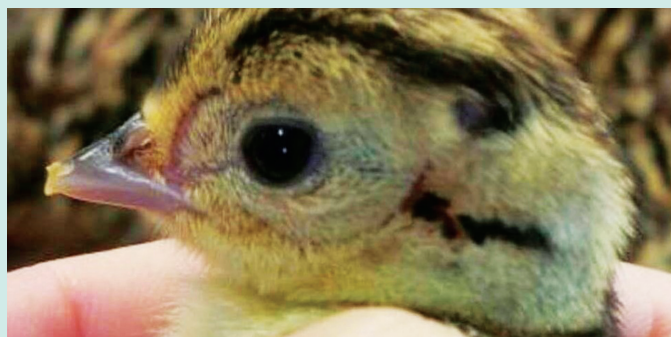
"Thousand-Miler: Adventures Hiking the Ice Age Trail" by Melanie Radzicki McManus was published in 2017, \$20, from the Wisconsin Historical Society Press. For details and ordering information, check wisconsinhistory.org, keywords "thousand-miler." McManus continues hiking of all sorts and in June completed a thru-hike of Minnesota's 300-plus-mile Superior Hiking Trail, a trip she chronicled for the Star Tribune newspaper. For more about the author, see her website at melaniemcmanus.com. Ice Age Trail information and resources are available from the DNR website, dnr.wi.gov, keywords "Ice Age Trail"; the National Park Service, nps.gov/iatr/index.htm; and the Ice Age Trail Alliance, iceagetrail.org.



DNR CELEBRATION

What an absolutely gorgeous cover on your spring "celebration" issue! I can actually feel the joy and delight of the kids caught in a surprise rainstorm and having a wonderful old tunnel in which to ride it out. It's a perfect photo to celebrate not only DNR and the NRF field trips as you state on the cover, but also to celebrate the many years Wisconsin citizens have been able to enjoy your wonderful, educational publication. Thank you!

Sheila Wistad Fugina
New Richmond



BOY OR GIRL?

The pheasant hatchery story in the Spring 2018 issue ("Hatching success at State Game Farm") mentions sorting chicks by sex a few hours after they're born. How do you tell them apart?

Bill Dunn
Middleton

That's a great question, Bill! Kelly Maguire, supervisor at DNR's State Game Farm in Poynette, explains there is a slight difference in the area just in front of the eye of day-old pheasant chicks. "The male chick (bottom photo) has a small, bare patch of skin corresponding to the cheek patch or wattles of the adult. It looks like a semi-circular reddish line in the eye area."

COMMENT ON A STORY?

Send your letters to: Readers Write, WNR magazine, P.O. Box 7921, Madison, WI 53707. Or email letters to dnrmagazine@wisconsin.gov. Limit letters to 250 words and include your name and the community from which you are writing.



BUCKET-LIST WHOOPER

I just wanted to share this once-in-a-lifetime shot I got in late March. I had only seen whooping cranes last year at a very long distance at Horicon Marsh but that weekend we came upon this whooping crane very close to the roadside and watched two of them dance and interact with the sandhill cranes. It was so awesome to see and capture!

Heather Landers
Kaukauna

After sending Heather's sighting to DNR wildlife biologist Davin Lopez, he shared this information about crane #39-16, pictured, from the Operation Migration Inc. website:

Hatched June 1, 2016, and raised by whooping crane parents at a captive breeding center in Maryland, colt #39-16 was initially released in September 2016 in Adams County, where he remained until early December. The morning of Dec. 7, he left with a buddy (#29-16) and many sandhill cranes on a southward migration. They over-wintered in Dyer County, Tennessee, and returned north in mid-April 2017 to Chippewa County, Wisconsin, and then to Ward County, North Dakota.

These two males (known to observers as "Mutt" and "Jeff") returned to Wisconsin in early October 2017 and were selected to have two female parent-reared chicks released near them. The release took place in Marathon County and while the foursome was observed together a few times, an official "adoption" did not take place. Male 29-16 and his pal 39-16 headed south again on Nov. 9 and by the 12th had returned to the previous winter's location in Tennessee. And as evidenced from Heather's photo, he was back in Wisconsin in late March 2018 on the Horicon Marsh.

The Whooping Crane Eastern Partnership is a nonprofit organization of individuals and government agencies dedicated to whooping crane recovery. Check out their website, www.bringbackthecranes.org, for more information, including what to do if you see a whooper.

YCC DEVELOPED APPRECIATION OF ENVIRONMENT

I am curious to know why there aren't YCC (Youth Conservation Camps) anymore. Back in 1974, I went to one near Clam Lake and it was one of the best experiences of my life! We did many conservation projects like tree planting, making small dams along waterways, built fire pits for campgrounds, pruned pine trees plus so much more.

We also had our hands-on educational times in the woods with our leaders learning about plants, animals, eco-systems. We also took some field trips, lived in dorms and had simple meals. We were paid a modest sum for our efforts and it was totally worth it. I think this would still really benefit teens nowadays to be more interested in preserving and appreciating our environment. What do you think? I would love to hear from someone there.

Lori Rowin
St. Croix Falls

The Youth Conservation Camp program was started in 1962 under the Conservation Department and was modeled after the post-World War II-era Civilian Conservation Corps. Over the YCC's 30-plus years, more than 24,000 high school-aged students spent summers at work camps across Wisconsin, such as Statehouse Lake (Vilas County), White River (Bayfield County), Ernie Swift (Washburn County), Mecan River (Marquette County) and Kettle Moraine (Washington County). In 1974, restrictions were repealed and girls were allowed to attend. By the mid-1990s, budget cuts, liability concerns and changing social norms were creating challenges to the program, and in 1995, the camps were closed.

Not only did young people benefit from their work experiences, but DNR properties did as well. Ray Hendrikse, YCC leader through much of the program's existence, said in 1986, "The simple truth of the matter is that without the assistance of the youth camps, development, restoration and maintenance of state parks, wildlife areas, forests, streams and lakes would be severely reduced. Without them, conservation work would continue to get done, but to a much lesser degree."



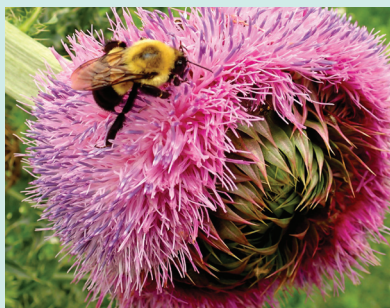
DNR FILES

BEE-UTIFUL MUSK THISTLE

The bees were busy collecting pollen today in Vernon County. Some think thistles aren't pretty. I am a firm believer that beauty is in the eye of the "bee-holder."

Len Harris
Richland Center

Jay Watson, a DNR conservation biologist stationed in Green Bay, confirmed this is the common eastern bumble bee (*Bombus impatiens*). While he agrees that bumble bees indeed like musk thistle, he cautions that it is classified as invasive and restricted under NR 40. The restricted classification applies to "invasive species that are already established in the state and cause or have the potential to cause significant environmental or economic harm or harm to human health." Learn more about musk thistle at dnr.wi.gov/topic/Invasives/fact/MuskThistle.html.



EYES ON THE PRIZE?

Last fall I arrived at my hunting land near Dallas, in Dunn County, and on my walk to reach my tree stand I encountered this visitor watching my every move. This short-eared owl was nestled amongst this grassland and by the look in its eyes, I really didn't feel a warm welcome to start my hunt. Seeing and listening to all the wildlife during my hunts provides me so much pleasure and appreciation for nature.

Tom Collins
Amery



FUR CARPET

While hiking in the eastern part of Vilas County, we came upon this massive carpet of deer fur on and near the trail. We're curious why there would be so much in one area! My husband and I are both Conservation Patrons. We love the magazine and are proud to be patrons of conservation in this beautiful state!

Wendy Lutzke
Manitowoc

Kevin Wallenfang, DNR's big game ecologist, provided this explanation: Most likely what they found is a spot where a deer succumbed to winter conditions or a predator kill. All flesh and bone have been carried off or decomposed, but hair can last for a long time. All that's left here is the hair.

PLANTING WITH A PURPOSE

My wife and I are involved in the Illinois Forestry Development Act and have a plantation south of Wisconsin near Rockford, Illinois. With the idea of possibly attracting the Kirtland's warbler, we planted more than 500 jack pines about 15 years ago. Being a subscriber to *Wisconsin Natural Resources*, we were delighted to read the article "A happy tune" (Summer 2018) concerning this species. It is heartwarming to know that there are others with similar intention.

We enjoy your magazine immensely and look forward to future articles!

Mark and Cece Dahlgren
Rockford, Illinois

STUDENTS PUSH TO PROTECT ENDANGERED SPECIES

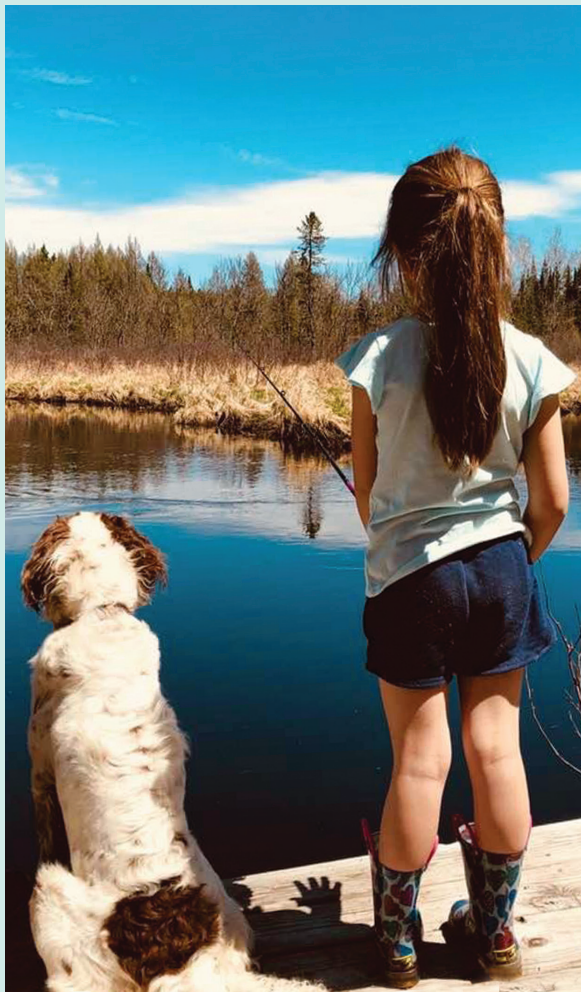
Magazine editors were heartened to receive about a dozen letters from fourth graders in the Stanley-Boyd School District. The students were given assignments to research endangered species in Wisconsin and write a letter to advocate for their protection. We received letters about wolves, whooping cranes, Hine's emerald dragonflies, piping plovers, northern long-eared bats, rusty-patched bumble bees, Canada lynx and eastern Massasauga rattlesnakes. Here's one of the letters.

Hi, my name is Macie LaGrander. I am here to inform you about the Hine's emerald dragonfly. They are a very endangered insect because of their habitat destruction and also because the adults usually only live up to four to six weeks. I was just wondering if you could help save this beautiful and tiny creature. If we do not do something quick they could become extinct.

The Hine's emerald dragonfly is very beautiful; it has bright emerald green eyes, and it has a metallic green body and yellow stripes on its sides. It is about 2.5 inches long and its wingspan is close to 3.3 inches long. They like to eat mosquitoes, biting flies and gnats. The Hine's emerald dragonfly was first found in Ohio. You can now find this dragonfly in Ohio, Illinois, Wisconsin and Michigan. You can find them in marshes, wetlands and in cool, shallow slow-moving waters. Because of habitat destruction they do not have very many safe places to have their babies so the population declines a lot. These little creatures are very rare to find. They need your help.

Macie LaGrander





GIRL'S BEST FRIEND

This is a photo of our 5-year-old granddaughter with our Llewellyn English setter fishing with her mom on Armstrong Creek.

Ray and Connie Gudowicz
Armstrong Creek



WHITE-WINGED BLACKBIRD?

Attached is a bird with strange markings that appeared at a feeder in Polk County. It looks like a magpie only the tail feathers are too short. One of the observers thought it was a mutation of a blackbird, as it was with other blackbirds. What are your thoughts?

Steve Price
Spring Valley

This is indeed a blackbird, specifically a common grackle. It exhibits leucism, which is caused by a genetic mutation that prevents the pigment melanin from being properly deposited in its feathers. Leucism also occurs in mammals.



SQUIRRELS OF A DIFFERENT COLOR

I had always thought that black squirrels were few and far between until I moved to the city of Waupaca. I have seen as many as eight in my yard at one time and am wondering if there is something different about my area or if this is common in other towns also?

Included is one of two squirrels that are hanging out this year. There are also three other black squirrels I have seen around with a white-tipped tail, very red tail, and one with white ears. My wife, Molly, happened to get a couple pictures of another squirrel (right photo) eating a peach. She has named him King Julian. We get the weirdest squirrels around here.

Andrew Stashek
Waupaca



I took this photo from my kitchen window on June 19 of this year. Couldn't believe my eyes. At first, from a distance, I thought it was a skunk, but as it got closer to my bird feeder, it obviously was not. I have seen albino deer, mink and a weasel, but never something like this.

Jim Shea
Omro

Mark Witecha, DNR's upland wildlife ecologist, provided this explanation: These color variations all stem from genetic mutations. They are fairly common in squirrels, and do seem to occur in pockets. I remember seeing many black squirrels in Baraboo and Stevens Point.

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Back in the day

Inspiration for hunters straight from the pew

Andrea Zani

Advice to deer hunters may not have changed all that much in the past 50 years as the Wisconsin Conservation Department and the Department of Resource Development morphed into the Department of Natural Resources. The basics are the same: Be safe, follow the rules, good luck in the field.

Those sentiments are captured in a funny little half-page article titled “Bless You But Shape Up!” that appeared in the September/October 1968 Wisconsin Conservation Bulletin, the DNR publication that preceded *Wisconsin Natural Resources* magazine.

Read this piece with its best intentions — and its history — in mind to keep it in proper context. No doubt it should be taken with a grain of salt, considering the era it was printed, its origins in a church setting and the inherent if now perhaps quaint assumption that all hunters were manly men who ate raw onions and left behind weeping “deer hunter widows” each season.

Here it is, word for word, straight from 50 years ago.

Bless You But Shape Up!

Father Richard Burzynski, Solon Springs, has a way with those sometimes rough characters, deer hunters.

That showed up during the 1967 season when Father Burzynski officiated at a 5:00 a.m. Hunters' Mass in Gordon. On the mimeographed program were these notes:

1. Ushers are empowered by the Conservation Commission to see that law and order prevails in the church at all times.
- 2.. Hunters who encountered skunks around camp or slept in their hunting clothes, ate raw onions or slept on the bar room floor will have to sit in their own special pews.
3. Sermon: “Look before you shoot — if you can't see, don't shoot at all.”
4. Effortory Collection: Although the state still has a one buck law, we will allow you to drop at least a couple of bucks

inside the church itself. Those with party permits are allowed, in addition, to drop a little extra dough.

5. Best shooting and praying is done from a kneeling position — above all else, aim high!
6. Hymns: “Where art thou Deer?” No. 24; “Oh Lord that I May See (one)” No. 78; “Nearer My Deer to Thee” No. 99.
7. Special Prayers: Will be offered for the success of the campaign of the Red Coat Army and a word of condolence to all those nine day deer hunter widows who weep alone at home.

8. Sunday is still God's Day, even in deer season — go to church. It should improve your odds.

9. Don't swear so much. Neither at the gun, the deer, nor at thy partner, nor at the log you stumble over, nor just for a “filler-in.” Profanity flows from a head empty of ideas and a tongue short on vocabulary.

10. Don't mix drinking and hunting. The hazards of ducking bullets are bad enough even when you're stone sober.

GOOD LUCK, MEN. GOD BLESS YOU ALL: We've taken a real liking to you, so keep your cool and may you fill all your tags. **50**

Andrea Zani is managing editor of Wisconsin Natural Resources magazine.



Hunters at deer camp in the 1950s and '60s — like this group near Necedah in 1953 — were sustained with plenty of good grub and, sometimes, a few words of inspiration before hitting the woods.



FLAMBEAU RIVER STATE FOREST

Paddling has long been a favorite pastime in the Flambeau River State Forest, established in 1930 when local residents sought to preserve land along north central Wisconsin's Flambeau River. In the late 1950s, with the state forest expanded from its original 3,112 acres to more than 65,000, recreational development began and the forest became widely known for its rousing river trips.

About 75 miles of the North Fork and South Fork of the Flambeau River flow through the state forest — now including more than 91,000 acres in Sawyer, Price and Rusk counties — and paddlers of all skill levels are welcome. The North Fork features slower class I-III rapids for a more relaxing ride, while the shorter 15-mile section of the South Fork boasts often wild whitewater up to class V.

Several primitive canoe campsites are available free on a first-come, first-served basis along the Flambeau River, limited to a one-night stay. Most landing sites allow room for two to three groups.

For other types of camping, there are two family campgrounds — Lake of the Pines and Connors Lake — with a total of 59 sites. Though Connors Lake closes for the season after Labor Day, Lake of the Pines remains open until Dec. 15 for off-season camping.

With the Flambeau River State Forest retaining much of its early rustic flavor, primitive camping for backpackers is allowed anywhere except the Native Community Management Areas. A permit is required, available free at forest headquarters in the town of Winter.

Hunters also are welcome and may camp in the forest during the nine-day gun deer season. Free hunter camping permits must be obtained before Oct. 31 each year. In addition to deer, the forest is open to hunting for waterfowl, ruffed grouse, bear and other game.

For hiking, more than 60 miles of trails are maintained in the forest. Trails also are available for ATV use and, in winter, cross-country skiing and snowmobiling.

Anglers will find sturgeon, musky, walleye, bass, trout and panfish in the forest's rivers and lakes. This includes Bass Lake, which in 1983 was designated a wilderness lake to protect its natural beauty.

— Andrea Zani

