



Shooting stars, yellow star-grass and puccoon carpet Chiwaukee Prairie State Natural Area, part of a globally important wetland complex straddling Wisconsin and Illinois along Lake Michigan.

DNR FILE

# Ecological treasures

WISCONSIN IS HOME TO WETLANDS OF INTERNATIONAL IMPORTANCE.

*Lisa Gaumnitz*

Pam Holy grew up on Kenosha's south side in the 1950s, a few minutes' walk from Lake Michigan where towering sand dunes gave way to undulating wetlands and prairies.

"It was a magical place," Holy says. "As a child, I couldn't stay away."

The young teenager would swim, stroll the beach and watch swallows dive along the sand cliffs. Wild strawberries and wildflowers abounded.

Decades later, this magical place has drawn her back and won international acclaim as one of the world's ecological treasures.

On Sept. 25, 2015, the 4,000-acre complex of wetlands and prairies straddling the Wisconsin and Illinois state line was designated a "Wetland of International Importance" under the Ramsar Convention, an intergovernmental treaty for protection of exemplary wetland systems.

The area, called the Chiwaukee Prairie Illinois Beach Lake Plain, joins the Everglades in Florida and Chesapeake Bay in Virginia, as one of 37 U.S. sites in the global wetland pantheon.

It is the second Ramsar site designated in Wisconsin in the last year — the

other the Door Peninsula Coastal Wetlands. Three other Wisconsin sites — Horicon Marsh, the Upper Mississippi River Floodplain Marshes and the Kakagon and Bad River Sloughs along Lake Superior's south shore — are Wetlands of International Importance as well.

Their new status doesn't change who manages or regulates them nor how, but highlights their ecological significance and celebrates the hard work and perseverance behind their protection, says Katie Beilfuss, who spearheads the Wisconsin committee seeking designations for Wisconsin wetlands.

"What it does is gives us a reason to be super proud of the work we've already done and our conservation heritage," says Beilfuss, outreach program director for Wisconsin Wetlands Association.

In honor of their designations, and in celebration of May as American Wetlands Month, we share the stories behind Wisconsin's most recent additions to the world's crown jewels.

## Piece by piece, a special place is secured

The Chiwaukee Prairie Illinois Beach Lake Plain includes six different wetland types, prairie and oak savanna, and is home to more than 930 native plant and 300 animal species. This abundant wildlife and scenic beauty attract more than 2 million visitors a year to the plain, the bulk of which lies in Illinois and all of which is open to the public. In Wisconsin, the designated area includes Chiwaukee Prairie State Natural Area and



KENOSHA NEWS PHOTO BY BRIAN PASSINO

Local citizens like Pam Holy lead the way in protecting lake plain wetlands and prairies.

has been managed as a partnership.

Holy returned to the area in the 1990s and now leads a volunteer group, the Chiwaukee Prairie Preservation Fund, that raises money and helps care for the site.

"This is a gem that is unequaled in the state," says Holy. Shooting stars carpet the prairie in May, gentians in September, and prairie grasses wave in the wind in autumn while monarch butterflies and hundreds of migrating bird species stop over to rest and fuel up.

"To have that much nature this close is a real special thing," she says. "It's so close and it's so magnificent."

That magnificent nature nearly met its match in the 1920s when developers planned a subdivision. The venture failed but the area was divided into hundreds of lots.

In 1965, a plan for a big marina on the site spurred local protection efforts.

"That's when volunteers got involved," says Holy. "People like Al Krampert, Phil Sander, Jim Olson, Gen Crema and others formed a committee and went to The Nature Conservancy for help. They raised \$5,500 to buy the first parcel to stymie the development. They recog-



Piping plovers, a federally endangered bird, are found in the lake plain and other Wisconsin wetlands recognized as globally important.

RYAN BRADY

nized what a special place it was.”

The committee incorporated as the nonprofit Chiwaukee Prairie Preservation Fund Inc. in the 1980s to better raise money and help care for the site. About that time, the Conservancy, the Village of Pleasant Prairie, University of Wisconsin-Parkside, and the Department of Natural Resources developed a land use plan that has led to the acquisition and preservation of more than 400 acres on the Wisconsin side.

“Chiwaukee Prairie is a great example of a dedicated group of local citizens literally doing everything for that place... field trips, bake sales, speakers’ talks and workdays,” says Steve Richter, the former longtime manager of The Nature Conservancy’s property in the lake plain.

“They would raise funds and we would buy the land. Knowles-Nelson Stewardship Program funds were also critical to put that project together.”

The Nature Conservancy staff negotiated with more than 400 owners for land in the southern part of the subdivision platted in the 1920s and 1940s. Likewise the Department of Natural Resources worked with hundreds of owners to secure lots in the northern part.

“It has been this tenacious and patient effort over 50 years,” says Richter. “It’s inspiring. I tell the story of that place to a lot of people.”

### Partnership across state lines

While work continues to acquire remaining lots in the subdivision from willing buyers, a big focus is controlling invasive species and runoff, says DNR wildlife manager Marty Johnson.

Frequent fires kept brush in check before European settlement; prescribed burns, along with brush mowing, are being used again to help maintain the prairie and oak savanna.

A DNR crew, a monthly volunteer workday hosted by preservation fund members, and volunteers from the University of Wisconsin-Parkside, the Illinois Youth Conservation Corps and Milwaukee middle and high school students have all helped control invasive species at the site.

As well, a growing partnership among Wisconsin landowners and Illinois conservation agencies and organizations is making a big difference.

“The partnership is not only resources and knowledge, it’s help from staff and communication,” Johnson says. “It’s a good coming together of a variety of agencies to work to benefit the lake plain.”



JOSH MAYER

**The lake plain includes the region’s most robust population of prairie white-fringed orchid, a federally threatened plant.**

Debbie Maurer of the Lake County Forest Preserve District led successful efforts to secure three grants to address runoff and hire a strike team of private contractors to nip new invasive species infestations in the bud. She also led efforts to secure the Ramsar designation.

Johnson hopes the lake plain’s status as a Wetland of International Importance will help attract a new generation of stewards and more stable funding.

“It’s important to know these things don’t just get saved because they’re there,” he says. “It takes active involvement and management.”

The beauty and diversity of the plants and wildlife that these partners protect offers visitors an endless opportunity to learn about the resilience of life in these diverse natural areas, says Jean Werbie-Harris, community development director for the Village of Pleasant Prairie.

“It is a significant and rare opportunity to be able to look back into our past and see what these small sections of the world looked like before human development approached.”

### A sanctuary for wild things and for people

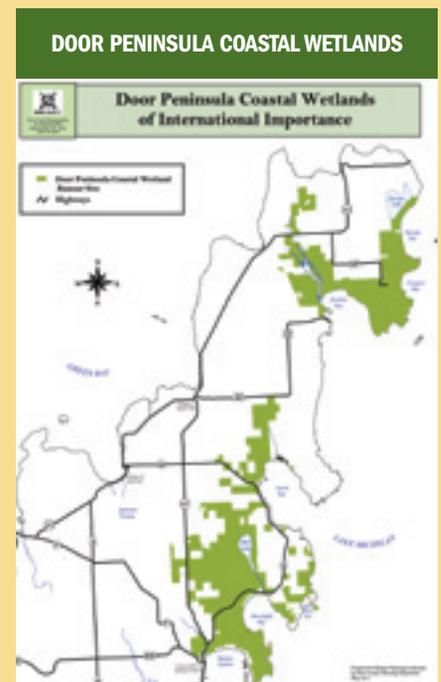
More than 11,000 acres of diverse wetlands comprise the Door Peninsula Coastal Wetlands, their variety captured in their names: Mink River Estuary, Ephraim Swamp, Mud Lake, Moonlight Bay Bedrock Beach and Bailey’s Harbor Boreal Forest state natural areas among them.

Over thousands of years, Lake Michi-

gan’s falling lake levels left behind former shorelines where sandy ridges alternate with wet areas known as swales. The lake now bathes the area in cooler, moister air later into the spring and warmer air later into the fall, creating a microclimate that allows boreal plants of the north to thrive as well. Together, the climate, geology and natural communities here make it the most biologically rich part of Wisconsin, with more plant and animal species found here than anywhere else.

Citizens, organizations and agencies have been working for nearly 80 years to acquire, preserve and manage this unique area as well as open it up to residents and visitors for recreation and contemplation alike.

The wake-up call came in 1937, when



DOOR COUNTY PLANNING DEPARTMENT



PHIL MCGUIRE

**The Lukes after receiving the Bronze Passenger Pigeon award at the 2010 Wisconsin Society of Ornithology convention.**



MARK GODFREY, THE NATURE CONSERVANCY

Nature lovers find much to explore at North Bay Preserve and other gems in the mosaic of open wetlands, streams, small lakes and forest along Door County's Lake Michigan coast.

Door County started to build a trailer park on 40 acres along Bailey's Harbor featuring ridge and swale topography. Local residents Olivia Traven and Anna McArde heard the construction noise, investigated and sounded the alarm. They contacted Dr. Albert Fuller, the Milwaukee Public Museum director who often brought people to the area to study its 25 orchid species. He wrote to the local paper and spoke to groups to agitate against the project.

"Fuller slammed his fist on the table and said, a city like London would pay millions to have a place like this," says Charlotte Lukes, who together with her husband Roy have devoted their lives to the site. "The Ridges Sanctuary grew out of that."

The organization raised money to expand the protected acreage and became the state's first land trust.

Roy Lukes became the first full time manager and chief naturalist in 1964. Charlotte met him in 1971 while visiting Door County to test out her new camera. She fell in love with the man and the place.

"I was fascinated with the entire environment — it was so different from the city," says Charlotte, who was living and working in downtown Milwaukee as a dental hygienist.

The couple married in 1972, lived in the light keepers' house on the Ridges property, and worked together giving naturalist programs, caring for the site, and highlighting its history, geology and living treasures.

Roy Lukes wrote a popular nature column and several books on the site while Charlotte Lukes became an expert in my-

cology, the study of mushrooms. She has identified 550 mushrooms in Door County, documenting and photographing them.

Even after Roy retired in 1990 the couple continued to lead hundreds of hikes, birding trips, and workshops for Door County residents and visitors alike. In 2000, they helped start a friends group for Toft Point State Natural Area, undeveloped land next to the Ridges featuring ridge and swale topography, a unique cobble beach and old-growth pine.

The Toft family, including Emma Toft, a founder of The Ridges Sanctuary, had sold the land to The Nature Conservancy, which gave it to the University of Wisconsin System. Now, the Lukes and other volunteers keep the trails open there and provide trail docents.

"There are people who love this place. They are dedicated and vigilant," says Bob Howe, who directs the Cofrin Center of Biodiversity at the University of Wisconsin-Green Bay. "I don't see how we could manage the place effectively without them."

One time on a field trip with the Lukes, a Hine's emerald dragonfly, a federally endangered species, landed on Roy's shoulder, "as if it was placed to order," recalls Howe.

The site's wildness and scenic beauty hits him when he looks for frogs late at night as part of his research or stands along the cobble beach on Toft Point.

"The feeling that comes to anybody is the sense of the power and strength of the lake — and the serenity and aesthetics of the coastal beach and surrounding wetlands and woodland," Howe says.

The wetlands provide a rich classroom

for students and faculty alike.

"Every time we study that area for some obscure group of organisms something special turns up," rare spiders, native bees, and four-toed salamanders among them. "I think we're probably just scratching the surface," Howe says.

Like Holy in southeastern Wisconsin, Terrie Cooper has returned home to care for this special area, "a living geology and ecology laboratory. The Great Lakes and its ecosystems are among the youngest in the world — created as the glaciers receded 25,000 to 10,000 years ago. It's so recent, you're still watching succession happen before your eyes with the rise and fall of the lake levels."

"I'm extremely bonded to this landscape," Cooper says. "And growing up at a time when the county was changing from being very rural to a burgeoning tourist economy, it nudged me into what we can do to balance protection of resources and accommodating the 2.4 million people coming up here every year to enjoy the beauty."

As director of land programs for the Door County Land Trust for the last 17 years, Cooper has worked with public and private partners to acquire land and increase awareness, a mission that led partners to pursue the Ramsar designation.

"It's about bringing attention to what we have up here and the resources of the Great Lakes," Cooper says. "We are reminded what we have here and the responsibility we all have together to take care of this resource." 

*Lisa Gaumnitz writes for the DNR's Bureau of Natural Heritage Conservation.*



Upper Mississippi River floodplain marshes.

ROBERT J. HURT LANDSCAPE PHOTOGRAPHY

## RAMSAR DEFINITION AND SITES IN WISCONSIN

### WHAT IS A RAMSAR WETLAND OF INTERNATIONAL IMPORTANCE?

More than 160 countries came together in Ramsar, Iran, in 1971 to agree to work together in nonregulatory ways to protect the world's most significant wetlands. That includes designating sites as Wetlands of International Importance through a formal nominating process that documents the site's scientific, historical and cultural significance.

Nominations must include letters of support from all landowners within the site boundaries, from the local or state wildlife or natural resources agency, and from one member of Congress representing the area nominated. The U.S. Fish and Wildlife Service must approve sites before they are submitted to the international Ramsar body. Worldwide, more than 2,193 sites have been designated Wetlands of International Importance. In Wisconsin, a committee led by the Wisconsin Wetlands Association has worked to nominate sites. That organization received The Ramsar Convention Award in 2012 in recognition of its work to increase Ramsar sites.

### CHIWAUKEE PRAIRIE ILLINOIS BEACH LAKE PLAIN

**Where:** 3,914 acres straddling southeastern Wisconsin and northeastern Illinois along Lake Michigan.

**Significance:** Largest intact coastal prairies in the Great Lakes, includes six globally rare wetland communities and supports the region's most robust population of prairie white-fringed orchid, a federally threatened species. Critical migratory stopover habitat for at least 310 migratory bird species and rare and declining species including the Franklin's ground squirrel, red-tailed leafhopper and prairie milkweed.

**Landowners:** Wisconsin Department of Natural Resources, The Nature Conservancy, Village of Pleasant Prairie and University of Wisconsin-Parkside in Wisconsin; and the Lake County Forest Preserve District, Village of Winthrop Harbor, Illinois Department of Natural Resources, Zion Park District and Waukegan Park District in Illinois.

### DOOR PENINSULA COASTAL WETLANDS

**Where:** 11,443 acres in Door County, including 22.55 miles of Lake Michigan shoreline and the Mink River Estuary, Newport Beach State Park, The Ridges Sanctuary and multiple state natural areas.

**Significance:** Supports the highest plant and animal diversity in the state, including uncommon animals such as colonial-nesting water birds, wetland-dependent breeding and Neotropical migratory birds, Great Lakes migratory fish and wetland-associated mammals and amphibians. About 150 species of birds nest here or stop over during migration. It's a hotspot for warblers with 23 species documented and it's home to the largest known population of the federally endangered Hine's emerald dragonfly, and to a substantial population of a globally rare plant, the dwarf lake iris.

**Landowners:** Door County, Door County Land Trust, The Nature Conservancy, The Ridges Sanctuary, University of Wisconsin-Green Bay, Department of Natural Resources, and two privately owned properties with lands permanently protected by easements.

### KAKAGON AND BAD RIVER SLOUGHS

**Where:** 10,760 acres located at the mouths of the Bad and Kakagon rivers on the south shore of Lake Superior.

**Significance:** Largest and possibly most pristine remaining intact wetland on Lake Superior and largest remaining wild rice habitat on the Great Lakes. Gray wolf and Canada lynx, a federally threatened species, are known to inhabit the area and the site is one of only two remaining Wisconsin nesting sites for the federally endangered piping plover. Critical aquatic and land habitats support migrating birds, hosting tens of thousands of songbirds, raptors, shorebirds and waterbirds. Trumpeter swans, sandhill cranes, golden and bald eagles all frequent the site. Pristine and increasingly important spawning habitat for lake sturgeon due to pollution affecting other spawning areas along Lake Superior's south shore. The site is the first Ramsar site owned by a Native American tribe. Access is by permission from the tribe.

**Landowners:** Bad River Band of Lake Superior Chippewa.

### HORICON MARSH

**Where:** 33,000 acres in state and national wildlife refuges in northern Dodge and southern Fond du Lac counties.

**Significance:** One of the largest intact freshwater wetlands in the United States and one of the largest cattail marshes in the world. Important staging area for migratory birds, especially for Canada geese and mallards; 80 percent of the Mississippi Flyway population of Canada geese (around 1.1 million birds) use the site during their fall migration. Habitat for staging, nesting or feeding site for other bird species including bald eagles, whooping cranes and the yellow-throated warbler. Over the years 300 species of birds have been sighted and it's not unusual to find up to 100 species of birds on Horicon Marsh alone! Important for maintaining the biological diversity of the region given the rapid loss of wetlands in Wisconsin; (estimated 50 percent loss since 1850 in most of Wisconsin and as much as 90 percent in southeastern Wisconsin.)

**Landowners:** Wisconsin Department of Natural Resources and U.S. Fish and Wildlife Service.

### UPPER MISSISSIPPI RIVER FLOODPLAIN MARSHES

**Where:** 302,000 acres of federal and state lands and waters along the Upper Mississippi River floodplain, including the Trempealeau National Wildlife Refuge in Wisconsin.

**Significance:** Natural floodplain backwaters of the Upper Mississippi River in the U.S. Upper Midwest were enlarged and enhanced by construction of locks and dams in the 1930s to improve commercial and recreational navigation. Today the site consists primarily of flowing main and side channel habitats, large shallow to moderately deep backwater marshes, flooded floodplain forests and shrub-dominated communities. Perhaps the most important corridor of fish and wildlife habitat remaining in the central United States, supporting significant populations of more than 100 native fish species and the federally endangered Higgins' eye pearlymussel. Sits at the core of the Mississippi Flyway, through which 40 percent of North America's waterfowl migrate.

**Landowners:** U.S. Fish and Wildlife Service, state lands of Wisconsin, Illinois, Iowa and Minnesota.