

Wisconsin natural resources. Vol. 32, No. 5 October 2008

[Madison, Wisconsin]: Wisconsin Department of Natural Resources, October 2008

https://digital.library.wisc.edu/1711.dl/WDI475V4RNI5J9D

http://rightsstatements.org/vocab/InC/1.0

The libraries provide public access to a wide range of material, including online exhibits, digitized collections, archival finding aids, our catalog, online articles, and a growing range of materials in many media.

When possible, we provide rights information in catalog records, finding aids, and other metadata that accompanies collections or items. However, it is always the user's obligation to evaluate copyright and rights issues in light of their own use.

WISCONSIN NATURAI RESOURCES

wnrmag.com October 2008 \$3.50

PLANS AND PLACES FOR Waterfowlers

Duck hunt safety

A weasel with a secret

Meet tomorrow's woodland owners

A weasel with a secret



Discovering why marten are slow to recover in the Northwoods remains a work in progress and a bit of a mystery.

James C. Bishop, Jr.

n late September, at a remote site on the west side of the Chequamegon-Nicolet National Forest, 30 small weasel-like animals were quietly freed in a wooded area. Their capture and subsequent release are part of a continuing effort to revitalize wild populations of the American or pine marten, the only mammal remaining on the state's endangered species list.

Marten are members of the Mustelid family, carnivorous weasels that range in size from the tiny least weasel, to ermine, mink, skunks and otters on up to fishers and wolverines. The

reddish-dark brown American marten (*Martes americana*) weigh between 1 ½ to 2 ½ pounds, and males grow up to 25 inches in length. Marten have plush, lustrous fur and long bushy tails that are one-third of their total length.

Most people visiting the forests rarely see marten because they shy away from any human activity and are almost exclusively active at night. In the Midwest, these solitary animals live in mature, dense conifer and hardwood woodlands making the northern national forestlands an ideal home.

Continued on page 29

NATURAL RESOURCES

October 2008 Volume 32, Number 5



A weasel with a secret

James C. Bishop, Jr.

Why are reclusive American marten taking to parts of the Northwoods and struggling in others?

Footing the bill to spread their wings

Kathryn A. Kahler

Waterfowl hunters support and sponsor more space and more places for ducks and geese.

10 Don't wing it Natasha Kassulke

Plan for duck hunting success and safety.

15 Target hunger, help a neighbor

Travis Anderson

Harvesting deer for food pantries is good for the community and good for the herd.



Connecting people with nature

Natasha Kassulke and Kiera Wiatrak

Wisconsin's Stewardship Fund enters a new era.

17 Living with the rusty red menace Ted Rulseh

> Invasives like rusty crayfish can change a lake for decades, but slowing their spread is well worth the effort.

Tending to tomorrow's woodland owners

Virginia Mayo Black

What help do family woodland owners want so today's forests will be here tomorrow?

Readers Write

30 **Basic training**

Kiera Wiatrak

Creature Comforts digs up some basic help for getting dogs on track as companions.

31 Out and about Wisconsin Traveler takes you owl banding, on a swamp romp, to a canine Olympics, mushing on dry land and on a candlelit walk in search of fall fun.

FRONT COVER: Wisconsin is home to more than 125,000 wood ducks and their numbers are

increasing. Woodies are second only to mallards as popular prey in the fall waterfowl harvest.

SCOTT NIELSEN, Superior

BACK COVER: Kickapoo Valley Reserve State Natural Area in Vernon County. (Inset photo) Northern monkshood (Aconitum noveboracense). For more information, contact the State Natural Areas Program, Bureau of Endangered Resources, DNR, P.O. Box 7921, Madison, WI 53707 or visit dnr.wi.gov/org/land/er/sna.

© THOMAS A. MEYER, WDNR







Editor David L. Sperling Creative Products Manager Natasha Kassulke Circulation Manager Karen Ecklund Art Direction Thomas J. Senatori **Printing Schumann Printers**



Wisconsin Natural Resources magazine (USPS #34625000) is published bimonthly in February, April, June, August, October and December by the Wisconsin Department of Natural Resources, 101 S. Webster St., Madison, WI 53702. The magazine is sustained through paid subscriptions. No tax money or license fees are used. Preferred Periodicals postage paid at Madison, WI. POSTMASTER and readers: subscription questions and address changes should be sent to Wisconsin Natural Resources magazine, PO. Box 7191, Madison, WI 53707. Subscription rates are: \$8.97 for one year, \$15.97 for two years, \$21.97 for three years. Toll-free subscription inquiries will be answered at 1-800-678-9472.

© Copyright 2008, Wisconsin Natural Resources magazine, Wisconsin Department of Natural Resources, P.O. Box 7921, Madison, WI 53707. wnrmag.com

Contributions are welcome, but the Wisconsin Department of Natural Resources assumes no responsibility for loss or damage to unsolicited manuscripts or illustrative material. Viewpoints of authors do not necessarily represent the opinion or policies of the State of Wisconsin, the Natural Resources Board or the Department of Natural Resources

Printed in the U.S.A. on recycled paper using soy-based inks in the interest of our readers and our philosophy to foster stronger recycling markets in Wisconsin.

NATURAL RESOURCES BOARD Christine L. Thomas, Plover, Chair David Clausen, Amery Preston D. Cole, Milwaukee Jonathan P. Ela, Madison Gary E. Rohde, River Falls John W. Welter, Eau Claire Jane Wiley, Wausau

WISCONSIN DEPARTMENT OF NATURAL RESOURCES Matthew J. Frank, Secretary Patrick Henderson, Deputy Secretary Mary Ellen Vollbrecht, Executive Assistant Waterfowl hunters support more space and more places for ducks and geese.

Footing the bill to spread the

The price for hunting in popular places is seeing a lot of other hunters. Spend time scouting and you can discover equally good spots that provide more space and solitude for your hunting group.

4 Wisconsin Natural Resources



eir wings

Kathryn A. Kahler

isconsin waterfowl hunters are clear in what they want. They want to see more ducks and geese while hunting with friends and family. They want fewer con-tacts with other hunters while doing it. And they want more places to hunt.

Kent Van Horn thinks they can score on all three counts if they're willing to change some old habits and take some time to do a little

"On one hand, many hunters tell us they're dissatisfied with overcrowding," says Van Horn, head of DNR's migratory game bird program. "And on the other hand, 88 percent of them said they continue to hunt the same place they hunted last year. Wisconsin has 15,000 lakes, five million acres of wetlands and roughly 1,250 miles of Mississippi River and Great Lakes shoreline. And we know from

our annual surveys that we have enough ducks and geese. Waterfowlers should figuratively spread their wings a little and explore new

"Waterfowl hunters tell us they have the time to hunt but are spending less time considering hunting locations and getting ready," says Van Horn. "They're going into the popular, easy places that many other hunters also choose because they haven't taken time to look for other equally fine spots to hunt."

Take time to scout

Jason Hill, Ducks Unlimited's

Internet and TV that will give tips on how to scout," says Hill. "DU's website has some great information on selecting likely spots and techniques (see www. ducks.org and click on Hunting Tips). You'll also find a section where our members have submitted ideas over the years.

"Sometimes it's as simple as getting topographic maps or aerial photos, getting out the plat book, knocking on doors or talking to wildlife professionals in the region," Hill explains. "I think the key is finding good wetlands on private lands. One of the things DU focuses on in our priority areas in Wisconsin is putting dollars into private wetland restoration. Those can be some of the best hunting areas, and a lot of times they're associated with and located around those big public wetlands and lakes. Duck hunters tend to go out to the same area they've been to the last 10 years, but the birds might not even be using those places. You've got to put some time into exploring the surrounding landscape because birds move around. To have success and have a great hunt, you've got to put that time and effort into it.

"I hunted Crex Meadows last year," Hill adds. "I spent a whole morning during the season just scouting around to find where the birds were and had a great hunt that afternoon. Sometimes you have to give up some hunting hours to find out where the birds are that day or that week."

Hill also suggests investing in a GPS unit to find your way back to promising locations. He thinks more



hunters are using them because the units are better, offer more features and are becoming less expensive over time. Another resource for finding new places to hunt is the U.S. Fish & Wildlife Service's listing of waterfowl production areas (WPAs). Agency staff cooperate with private landowners to protect wetlands from draining and filling with soil. Most WPAs are open to hunting and are listed on the agency's website (www.fws.gov/midwest/leopold/ maps.htm and www.fws.gov/midwest/ stcroix/).

Diverse and enthusiastic group

As the author of DNR's 10-year strategic waterfowl plan, Van Horn talks to a lot of waterfowl hunters. Some plan goals cover habitat management, monitoring waterfowl populations and balancing perceptions of a growing Canada goose population. Another important goal — improving the waterfowl hunting experience by improving interactions among hunters and helping them see and harvest birds — is one Van Horn is already working to complete.

He meets regularly with the Conservation Congress Migratory Committee, the Wisconsin Wildlife Federation (WWF) and the Wisconsin Waterfowl Association (WWA) and surveys hunters to find out their habits and satisfaction with hunting experiences. Results of the most recent random mail survey are summarized on page 8. Van Horn calls Wisconsin duck hunters a large, diverse and enthusiastic group. In fact, Wisconsin can lay claim to 83,300 active waterfowl hunters, second highest in the nation only behind Texas which has roughly four times our population.

"A group of avid waterfowlers here even organizes an annual conference in Stevens Point every March," says Van Horn. "They bring in speakers from around the country who report on waterfowl populations, conservation and hunting for the audience of 100 to 200 waterfowl hunters who attend."

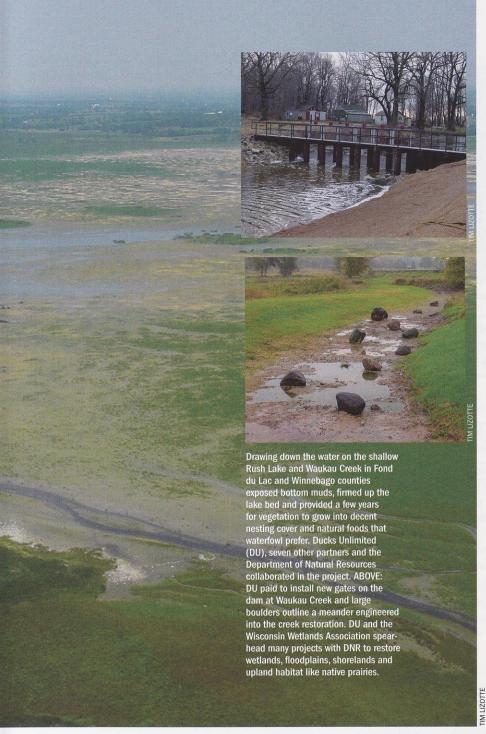
Wisconsin waterfowl hunters also invest in their sport, contributing more than \$500,000 each year to habitat improvement, here and on the Canadian wetlands. Most of the ducks Wisconsin hunters harvest are raised in-state and in adjacent states and provinces. State law mandates that two-thirds of duck stamp revenues are used to improve waterfowl habitat in Wisconsin: the remainder is sent to Canadian waterfowl agencies, primarily Manitoba. Last year, \$382,000 was designated for Wisconsin habitat projects, and \$188,000 went to Manitoba.

Van Horn also credits a broad group of government agencies and nongovernmental organizations that conserve and restore waterfowl habitat in Wisconsin. Besides the WWF and WWA, groups like Ducks Unlimited (DU), Pheasants Forever, county land and water conservation departments, local lake and watershed districts, and the U.S. Fish and Wildlife Service band together on projects ranging from a few acres to several thousand acres in size.

Steering a new course for Rush Lake

One such project completed last spring restored habitat on Rush Lake in southwestern Winnebago County and northern Fond du Lac County. The lake's shallow waters and marshy shoreline provided excellent waterfowl habitat for more than 150 years. But deforestation, sediment buildup, artificially controlled water levels, increasing carp populations and high levels of lead from spent shot settling into the mucky lake bottom took its toll. Quality habitat was dropping off and some waterfowl were dying from lead poisoning. The Rush Lake Steering Committee, a partnership among DU, the Department of Natural Resources and seven other partners, set ambitious goals to re-establish a mix of vegetation for food and nesting cover, better manage water levels, improve water quality, reduce carp populations, reduce the effect of lead, and improve habitat for fish and other wildlife, as well as waterfowl.

Beginning in 2006, the lake was drawn down to expose the lake bottom over two growing seasons. Naturally



occurring seeds germinated. Emergent plants that had been stressed by flooding had time to recover and the abundant carp were eradicated. A new dam was installed and the stream channel of Waukau Creek was graded.

"Now that Rush Lake is bigger than 3,000 acres and there's a new controlled outlet for Waukau Creek, the habitat is only going to improve," says Hill. "There's public access for waterfowl hunting and the Uihlein Waterfowl Production Area is just across the road. It's a significant area with plenty of hunting

opportunity, especially after this year's precipitation."

A big part of the success was cooperation and active involvement of local officials and landowners who learned better methods of controlling runoff. The steering committee held monthly meetings, two open houses, several informational presentations and still keeps in touch with quarterly newsletters.

One of the biggest remaining challenges is dealing with the lead shot deposited in the years before lead shot was banned. The committee hazed waterfowl away from the area during the drawdown when lead-laced sediments were exposed. Then they tried water jetting with high pressure hoses to drive and settle the lead deeper into sediments making it less accessible to waterfowl. Once bulrushes are reestablished, their thick root system will limit waterfowl's reach to ingest lead.

Undiscovered gems

One strategy Van Horn suggests hunters consider in their quest for lesscrowded hunting areas is to search just a little farther from home. For example, lots of hunters in the Wausau-Stevens Point area like to hunt the Mead Wildlife Area. Van Horn suggests a drive just a bit farther north to Vilas and Oneida counties, to find plenty of ducks and few hunters on thousands of lakes and wetlands.

Two DNR properties termed "undiscovered gems" by property man-

Partner projects

Two of the biggest organizations dedicated to waterfowl production and habitat conservation in the state are **Ducks Unlimited and the Wisconsin** Waterfowl Association.

In 2007, DU completed 87 projects in Wisconsin, invested \$556,013, conserved over 2,000 acres and provided technical assistance on 15,776 acres. Visit their website (www.ducks.org, pick "Wisconsin" from the "DU in your state" pull-down list) for more information on how DU monies are spent in the state.

The WWA also works with landowners to restore wetlands across Wisconsin. Among their 2006 accomplishments were projects totaling more than 150 acres where they removed drainage tiles and ditches, dredged and restored wetland basins, planted prairie, conducted crosscontouring to restore floodplains and installed biologs to restore shoreline wetlands. A restoration project in Green Lake County completed with the help of school children included soil surveys, topographic mapping and identifying cover vegetation, as well as building and erecting wood duck houses. For a complete list of WWA projects, visit their website at www.wisducks.org.



random mail survey completed in July describes state waterfowl hunters. Most choose to hunt on both private and public land, using a variety of techniques. Waterfowlers are about evenly split coming from both urban and rural communities. Most are older than 40 and are committed to improving their sport and introducing others to it. Specifically:

- 59% hunted on land owned by someone else while 47% hunted on state land
- · 45% of those who hunted private land also hunted state land; 53% of those who hunted state land also hunted land owned by someone else
- · 74% used decoys, 49% used dogs, and 57% never or rarely used spinning wing decoys
- · 48% are urban/suburban, 52% are rural residents
- · Hunters' ages follow our general population trends. The 18-29 year-olds -15%; 30-39 year-olds - 17%, 40-49 year-olds - 26%, 50-59 year-olds -22%, and 60+ year-olds - 21%
- 79% had introduced someone new to waterfowl hunting
- · 74% enjoy other hunting activities in addition to waterfowl hunting
- · 80% of duck hunters think the daily bag limit is "about right"
- · Most duck hunters think the season length (65%) and timing (59%) are about right
- · Canada goose hunters also think the season length (72%) and timing (79%) are about right, but only 53% are satisfied with the bag limit

"When asked to rank attributes of a satisfying waterfowl hunt, we found results that may surprise some people," says Van Horn. Rather than picking options like "harvesting a duck or goose" or "filling my daily bag," the top ranked attributes out of 20 choices are:

- · Not losing a crippled or downed bird
- · Not having conflicts with other hunters
- · Being with family and friends
- · Seeing ducks and geese
- · Not feeling crowded by other hunters
- · Passing on the waterfowling tradition to new hunters

Top problems that detracted from a waterfowl hunting experience could be lessened by gaining access to uncrowded hunting areas. Problems include:

- Conflicts with other hunters (65% of duck hunters, 75% of goose hunters)
- Obtaining access to hunting sites (55% for both)
- · Crowding at hunting areas (46% and 64%)
- Interference from other hunters (61% of goose hunters)
- Hunting pressure (56% of goose hunters)

"These numbers are important in guiding the future management decisions," says Van Horn. "Recent emphasis to assure that public lands purchased with Stewardship funds remain open to hunting should help. It also raises the need to look at creative ways to manage state lands to reduce crowding and hunter conflicts."

agers are Powell Marsh Wildlife Area in Vilas County and Thunder Lake Wildlife Area in Oneida County. Powell Marsh is a 4,300-acre wetland complex with several wetland types and plant communities, including open water flowages, forested and unforested wetlands, grassy upland islands and upland forest. It is a regionally important wetland because of its large size and open character that is maintained by a combination of prescribed burns, hand-cutting, mowing and shearing. See dnr.wi.gov/org/land/wildlife/wildlife_ areas/powell.htm for more information and to download a map.

Thunder Lake Wildlife Area is a 3,000-acre property in northeast Oneida County used by a wide variety of waterfowl, including mallards, blue-winged teal, ring-necked ducks and Canada geese. Half the property is open peat wetland and half is forested tamarack/black spruce wetland. It includes the 120-acre Rice Lake and 1.3 miles of shoreline on the 1,800-acre Thunder Lake. See dnr.wi.gov/org/land/wildlife/ wildlife_areas/thunderlake.htm for more information and to download a map.

Hill suggests that hunters in the northwest part of the state check out the 30,000-acre Crex Meadows State Wildlife Area, one he believes is under-utilized by waterfowl hunters. Crex Meadows is located in southwestern Burnett County near Grantsburg.

"With the adjacent Fish Lake Wildlife Area you've got almost 50,000 acres of public hunting owned and managed by the Department of Natural Resources," says Hill. "I don't think it gets much pressure just because it's pretty remote." See dnr.wi.gov/org/land/ wildlife/wildlife areas/ crex.htm and dnr.wi. gov/org/land/wild life/wildlife areas/ fishlake.htm for more information and to download maps.

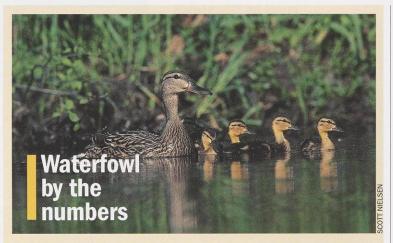
Pete Engman, property supervisor at Crex Meadows, adds Amsterdam Sloughs Wildlife Area to the list. Amsterdam Sloughs offers

What makes a hunt satisfying? Duck and goose gunners rated the pleasure of hunting with their family and introducing new hunters to the sport as much more important than filling their bag limit.

about 7,500 acres of wetlands east of Crex Meadows. "Especially after opening weekend, those three areas — Crex, Fish Lake and Amsterdam Sloughs — make up a block of waterfowl habitat with tremendous opportunity that is incredibly under-utilized by hunters," says Engman. "Other opportunities that are overlooked across the state are our river systems. Hunters may need to work to get back into some of the areas that aren't as accessible, but that's where they'll find the birds. I'm a little reluctant to tell a hunter where to go to find birds, but if someone asks me for four or five places where hunters aren't as likely to go, I'm happy to suggest them."

Kathryn A. Kahler writes about outdoor issues from Madison.





- While breeding waterfowl populations across the continent have followed normal cycles rising in wetter years and dipping in drier years over the past 10 years, Wisconsin has seen record numbers of breeding ducks and geese.
- Between 2000 and 2006, the average total breeding duck population was 622,444, and the average number of breeding mallards was 291,886.
- **Total breeding duck populations** in recent years has been 48% mallards, 22% wood ducks, 15% blue-winged teal and 6% ringnecked ducks, with the remainder divided among 12 other species.
- Mallard populations today average three times more than in the 1970s.
- Wood duck numbers have increased 6% per year for 33 years and they continue to be a significant part of the state's breeding waterfowl population at around 125,000 birds.
- Besides being the two most abundant breeding ducks, mallards and wood ducks are also the most abundant ducks in the fall harvest - 40% and 20%, respectively.
- Depending on annual conditions, 50% to 70% of our total duck harvest is produced right here in Wisconsin.

- The resident giant Canada goose population has continued to grow at a rate of 13% per year since 1986, averaging 141,000 each spring.
- Canada geese that breed in northern Ontario combine with resident geese to provide some of the highest fall goose populations that Wisconsin has ever experienced.
- Wisconsin pools of the Mississippi River are important for several species of migrating waterfowl. In March 2006, a one-day survey tallied 6,000 swans, 38,000 mallards, 40,000 scaup, 25,000 common goldeneye and over 100,000 canvasbacks.
- The Horicon Marsh sees concentrations of up to 300,000 Canada geese and 50,000 ducks each fall.
- The average number of ducks harvested per hunter each season since 1999 was 6.6, an increase of 2.78 ducks over the previous decade and the highest since the 1950s.
- The 2007 early Canada goose harvest was the highest on record at 21,760 geese.
- 95,872 hunters received regular goose season permits in 2007; the statewide harvest was 60,092.

For more Wisconsin waterfowl facts, visit dnr.wi.gov/org/land/wildlife/plan/waterfowl.htm



t was one of the most dangerous storms of all times.

November 11-12, 1940. The Armistice Day Blizzard. ■ Mild weather ahead of an intense low pressure system tracked from Kansas to western Wisconsin, quickly followed by a raging blizzard. People were caught off-guard by the storm's fury and plunging temperatures. Many were not dressed for the extreme weather as 50 to 70 mph winds and five-foot waves pounded their encampments. Winds whipped up 20-foot snow drifts. ■ More than 150 deaths were blamed on the storm; most were duck hunters along the Mississippi River who lost their life-and-death struggles. Some hunters were stranded on islands without food and froze to death in their blinds, their dogs by their sides. Others tried to make it to shore but drowned when their boats capsized. ■ "Many came in with frostbitten fingers or toes," the Eau Claire Leader Telegram reported. "Cherished guns, boats, decoys and other hunting equipment apparently counted for nothing in what became a fight by hunters to save their lives."



Safety still an issue

Each fall, about 85,000 waterfowl hunters venture into Wisconsin's waterways, wetlands and fields to harvest 300,000 to 500,000 ducks and geese. Despite modern technology, a few waterfowlers still perish each year, particularly when boats are overloaded and life jackets are left at home.

"Waterfowl hunters don't always think of themselves as boaters," explains Roy Zellmer, DNR boating safety administrator, "and that can really get them into trouble if they aren't prepared."

The Boat Owners Association reports about three dozen waterfowl hunters die each year nationwide from water-related accidents, most from drowning and hypothermia. Some fell overboard because their boats were overloaded, or they moved around their boats unsafely. And too many hunters still fail to wear Coast Guardapproved life jackets while traveling to and from their hunting blinds. In fact, 91 percent of sportsmen who died in boating accidents between 1995-2000 were not wearing a life jacket.

Consequently, conservation wardens are called upon to make dramatic rescues at a time of the year when most

> emergency responders have put away their patrol boats and water rescue equipment for the season.

> "Every person I've had to rescue or pull off an island thought it wouldn't happen to them, but I know how it happens," says retired Green Bay area conservation warden Roger Hanson.

> An avid hunter himself, Hanson says, "There are times I look at my hunting partner — often my dog — and ask, 'Are we crazy for going out in this?""

Waterfowlers are willing to take their chances

because the ducks fly low when the wind is blowing so hard there is a

small craft advisory. Some days it's calm when you head out early, but the wind picks up as the day progresses.

"Sometimes it seems like we can't help it," Hanson says. "There is just something about going out and sitting on the open water. We don't even care if we get a duck."

Conservation warden Ben Treml recalls one rescue in early December 2005 when the winds kicked up and temperatures dropped, stranding two hunters and a dog in a boat that became ice-covered. The Coast Guard called in Treml and the Brown County Sheriff's Office.

"That boat was full of decoys and there were three to four-foot waves," Treml recalls. "We rescued the hunters and headed for shore, but on the way my boat started to ice up too. We risked our lives and wound up beaching our boat on ice then walking to shore from there."

"I'm sure it will happen again," Treml says.
"We'll get a bunch of northern mallards coming down in December and it will make for fantastic hunting. But the weather can turn quickly on you. People don't understand how severe it can get even in protected areas."

His advice? Hunt with two boats using the buddy

system, and hunt in craft that are big enough and high enough for the water body. If one boat motor conks out, you still have a back-up. Make sure to tell someone exactly where you are going and when you plan to be back. Pack flares.

Treml recalls one hunter who had a medical emergency while in his blind. Since his wife knew what time he was supposed to be home, she called for help when he was late, and rescuers found him in time.

A prescription for cold weather

Bad weather can make for the best hunting. "That's why we call it duck hunting weather," says Tim Lawhern, DNR hunter education administrator.

Prepared hunters take several steps to make their plans known and stay in touch, should a problem arise. Leave notes at home and on your dashboard with your name and number, where you are going and when you are coming back. Bring along a charged cell phone. Balance the load in your boat, don't overload with gear and keep three points of contact as you

But the cool, raw weather of late fall can lead to injuries, such as exposure, frost-bite and hypothermia.

"To be safe, plan your hunt, then hunt your plan," Lawhern says.

Since fewer people boat in the colder months, it greatly reduces the likelihood of a prompt rescue. You need to buy yourself more time if things start to go wrong, Lawhern says. Take a charged cellular phone, check that you get a sig-

nal on water and pack the phone in a waterproof bag with flotation. Notify people in several ways detailing when you expect to return. Leave a map at home indicating your plan. Also place a card with your emergency contacts and hunting plan on the dashboard of your vehicle.

Keep a first aid kit on board in a

dry bag, and don't forget some high energy snacks.

Carry a marine VHF radio as a backup to your cell phone, especially if you plan to travel out from shore. The VHF radio can deliver a call for assistance, provide the latest weather report and keep you in touch with other boaters on the water.

Waterproof clothing like float coats, life preservers and waders are essential to duck hunting. If you need to stand in shallow water to place decoys, you will need chest waders to stay dry and you need to practice how to get out of them quickly in an emergency. If you stumble while placing your dekes, waders fill fast and the cold water is a real shock. You can quickly get in trouble, especially if you have to remove the coat before trying to get out of the waders.

If you are shooting from a boat or on-water blind, equip yourself with newer lightweight

life jackets and float coats that are more comfortable for hunting.

"Wear a hat, too," says Greg Dobratz, hunter education instructor from Wautoma. "You lose a lot of heat from your head." He also suggests layered clothing including wool so you can adjust to changing temperatures throughout the day. Pack extra dry clothing in a waterproof bag.

Even with good gear, you have to be

ready for the cold. Dobratz teaches his students who hunt along the Wisconsin River how to ward off hypothermia if they fall into the water and can't scramble back into a boat. He describes how to roll up in a ball to reduce surface area, by pulling their knees together and hugging them close to their chest in the HELP position (heat escape lessening posture). If two or more people are in the water, huddle together so the sides of your bodies are close together.

"A duck hunter must always be prepared for changing weather," Dobratz warns. "Always check the forecast before you head out because you need to plan what to do in case of fog, wind, intense sun, lightning and darkness, as well as rain and snow. Use a GPS or compass. Some mornings get foggy quickly, and hunters have become confused and lost."

If storms are predicted, plan to hunt from shore. If you do get caught in a squall, head for shore moving diagonally to the waves and avoid crossing large bodies of water. Count on waiting out the squall once you reach shore. You can't safely load your boat if wind and waves are pounding an unprotected launch site, and trailers can get stuck in mud and sand. Just tie up your boat and wait out the worst of the storm.

Even shoreland hunters need to attend to the weather.

Jeff Nania, a hunter safety instructor and president of the Wisconsin Wetlands Association, recounts when foul weather caught up with him.

"I only had a couple of hours to hunt. I was walking across a frozen marsh and thought the waters were shallow. I didn't know that I was crossing a drainage ditch and just under the snow lay flowing water topped with ice. I plunged neck-deep into very cold water.

"It was about 20 degrees outside, and I had to take off my coat and waders," Nania says. "Nobody knew where I was, and there was little potential that anyone would come looking for me in a timely manner."

Nania suggests telling someone specifically where you will be hunting and calling them when you reach the site. "Don't just say 'I'm hunting the Wisconsin River today."

"Most hunters know what they should do to be safe, but only some of them practice it," Nania says.

Other points in your prehunt plan Safe shooting zones – When hunting with a partner, establish and communicate a

Know your target

It's really difficult to identify ducks and geese species on the wing, but hunters have to learn that skill to harvest legally and responsibly. Each bird's size, flight pattern, call, location and height above the water provides clues. But in low light conditions and in rainy, snowy, windy weather, waterfowl ID is tricky. It is especially challenging for inexperienced hunters early in the season.

"If you don't know, don't pull the trigger," Lawhern says.

Dobratz suggests that before the hunting season, take a good field guide with you and spend some time glassing birds at local parks to watch and listen to the different species you are likely to see on the water. These field guides are recommended:

Ducks at a Distance, a pocket-sized free booklet developed by the U.S. Fish and Wildlife Service, is out of print. But DNR Service Centers may still have a few copies, and you can also download it online for free at www.npwrc.usgs.gov/resource/birds/duckdist/index.htm. Outdoor Empire Publishing Company also reprinted it in 8 × 11" format, and KE Publications includes it in their "Wildlife Identification Pocket Guide" series. Visit stores.kepubs.com.

Waterfowl Identification in the Central Flyway was published by states and provinces of the Central Flyway. Most member states and provinces supply complimentary copies to hunters. Contact DNR Service Centers to learn if copies are available, or visit www.npwrc.usgs.gov/about/faqs/birds/duckbook.htm

Once birds are in the hand, consider the **LeMaster Method of Waterfowl Identification** to become a more knowledgeable hunter. Richard LeMaster made life-size drawings of the shape and color of duck bills to provide a guide for recognizing species. To better identify ducks and geese on the wing, LeMaster charted the flight height that various species use over open water. His renditions of heads, wings and silhouettes of ducks in flight further aid in identification.

If you are new to waterfowl hunting, try to find an experienced mentor and start by hunting over decoys. "It's easier to identify ducks when you are using decoys because they bring wild birds in closer," Dobratz says.

When Jeff Nania mentors new hunters of any age to have safe, enjoyable hunts, he starts with the basics and takes the LeMaster book along to give the newcomers something to do while waiting for the birds to come in.





safe zone of fire before ducks are flying overhead. If you are in a boat or canoe, do not stand to shoot if your partner is shooting from a seated position. And be considerate of other hunters and people on shore. Your shot may travel up to 400 yards, and you don't want shot raining down on others in the area. Give yourself and others enough space.

Boat train your retriever – With any luck, one of your hunting buddies is your dog. Train your four-legged friend from an early age to lie or sit still en route to the blind, when crossing open water, when drifting a stream or river and when heading back to the landing. Tim Lawhern related stories of accidents where hunters laid a gun down in the boat only to have an excited dog hit the trigger and "the dog became the shooter." A boat offers close quarters, and retrievers need to get accustomed to the boat before the hunting season.

Check your gear - Firearms should be cleaned and closely inspected for any signs of mechanical wear that could result in a problem in the field. Clothing and other equipment should also be inspected for signs of wear and tear. Anything that might compromise your safety should be repaired, discarded or replaced. That includes the boat and boat lights.

Use the right boat for open water hunting - The waterfowl skiff you use on inland waters may not be big enough if

you are waterfowl hunting on the near shore of the Great Lakes.

"People underestimate the Great Lakes," Treml says. "I've seen hunters out in small boats in dangerous conditions with high winds and waves. A really fun day can become a devastating

day all too quickly," he says. "The wind can knock up, you lose your motor and then you either have to call for help or just wait for help to arrive."

Conservation warden Mike Neal, stationed in Sister Bay, notes that open water hunting from a boat surrounded by decoys has dramatically increased since he started hunting more than 30 years ago.

"Fifteen years ago, I used to be the only guy out there with a small, low layout boat, but not anymore," Neal says.

Liberal bag limits, home development near wetlands and loss of habitat

explain why birds are becoming more wary near the shore. Hunters are moving to deeper waters and using smaller craft searching for birds that are less

Portable duck hunting blinds are also more widely available, giving hunters more flexibility to simply move to different waters rather than building a new blind at each site.

You need to leave elbow room. Most duck boats are flat-bottomed and smaller than fishing or ski boats. They are lower to the water with less free-

board to the top of the gunwale, so they are more vulnerable to swamping in rough waters. It's very easy to overload a small jon boat with decoys, equipment, dogs, hunters, guns and game all vying for space.

Make sure the gear doesn't get in the way of having a good time and shar-ब्रुं ing a great experience. "If we believe in our traditions, like hunting, and think they are important, then we need to pass them on,"

says Jeff Nania. "We need to do that with safety in mind, keep an eye to the sky, and remember that responsible



Modern small layout boats provide stealth on open water, but they are vulnerable to wind and waves. Watch the weather and head in quickly if rougher conditions even start to whip up.

license."

Natasha Kassulke is creative products manager for Wisconsin Natural Resources magazine.

hunting just begins when you buy a

Target hunger, help a neighbor

Harvesting extra deer is good for the community and good for the herd.

Travis Anderson

aced with destructive flooding, rising fuel costs and a darn sluggish economy, many people are having the hardest times in several years providing healthy food for their families. That is why food pantries and local community action groups are asking hunters to help by harvesting an extra deer and donating it to provide quality, healthy protein for those who can truly use the help.

In southern Wisconsin, Community Action Programs (CAPs), food pantries and local meat processors teamed up last year to operate a deer donation program in the CWD Management Zone after a loss in state funds meant the Department of Natural Resources could no longer underwrite the program.

Thanks to that partnership with hunters, nearly 1,500 deer were donated, tested, processed and distributed to food pantries. Continuing on last year's success, the group has formed "Target Hunger," a nonprofit aimed to make it easy for generous hunters and other

community supporters to share the



tinued success, the program could be a model for setting up similar collection and distribution opportunities statewide.

Walter Orzechowski, executive director of Southwest Wisconsin Community Action, Inc. of Dodgeville, and a member of Target Hunger, notes that people really enjoy the ground venison available from food pantries and have asked if more might be available.





"We've seen growing demand for venison from pantries in recent years, and with the increased costs of fuel and food, we do not anticipate that demand will decline." Orzechowski adds, "Hunterdonated venison is extremely important to pantries, as it provides a valuable, nutritious source of lean protein for families who are struggling in today's economy."

During the year, members of Target Hunger have been busy raising funds to cover program costs. Two goals are to make deer donation a simple process at no additional cost to hunters and to encourage other community members to participate. Last season, hunters were asked to donate \$20 with their deer to help cover processing costs. This year, Target Hunger hopes to have enough donations from community supporters prior to the season to cover those expenses. All money donated can be claimed as charitable tax deductions and the Department of Natural Resources will fully cover all costs associated with testing the venison for CWD. Hunters will be able to drop off their deer at participating meat processors as well as at DNR-operated registration stations where Target Hunger volunteers will be present. Visit dnr.wi.gov/

Reducing the lead risk

Tests this spring in North Dakota found traces of lead in venison prepared for food pantry distribution. Subsequently, the Wisconsin DNR Wildlife Health Team screened over 200 samples of venison, and found four percent had minor levels of lead.

Sean Strom, Wisconsin DNR environmental toxicologist states, "There has never been a documented case of lead poisoning in humans after consuming hunter harvested deer. However, nobody has ever looked into this before."

Suggested guidelines all hunters should follow when hunting and processing their deer for their own use or donation:

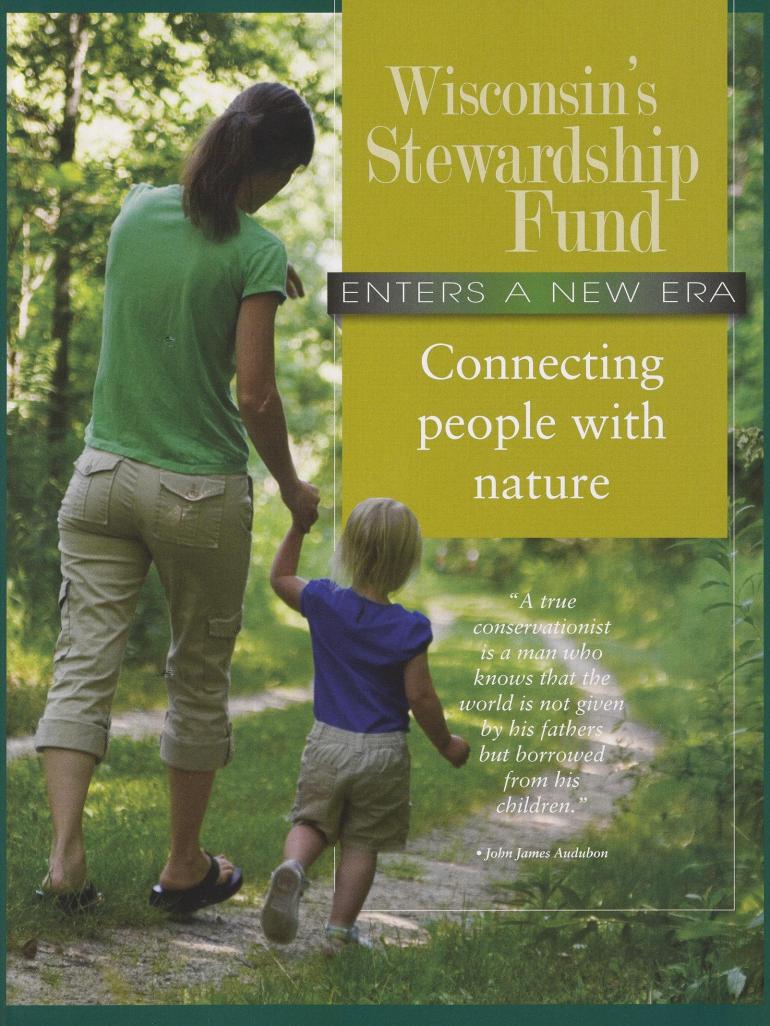
- · Consider switching to nonlead ammunition such as copper or other high weight-retention bullets, such as bonded bullets.
- · Practice marksmanship and hunting skills so you can get closer and make cleaner, lethal shots away from major muscle areas. Aim for the neck, the head, or the heart-lung vital area behind the shoulder. Don't shoot at running deer.
- · Avoid consuming internal organs that may contain extra lead from heart-lung shots.
- · If you process your own venison, or take it to a processor, pre-trim and dispose of deer meat with excessive shot damage. Always trim away a generous distance from the wound channel and discard any meat that is bruised, discolored or contains hair, dirt, bone fragments or grass.

org/land/wildlife/hunt for a list of station locations.

It's equally important to enlist the help of other hunters in harvesting additional deer to reduce the deer herd size, decrease the incidence of disease spread, reduce browsing pressure and reduce the number of deer-car collisions. Recent survey research shows that a majority of hunters favor such a deer donation program, but few have actually participated and brought in a deer to help stock the pantries with quality meat. With this in mind, local hunting and conservation groups, particularly in parts of Wisconsin where herd reduction is most critical, are making an organized push to get individuals and hunting clubs to commit to harvesting extra antlerless deer for the pantry program in the upcoming seasons. Jim McCaulley, Conservation Congress member from Iowa County, says, "Hunter participation can help bring deer numbers down. Hunters need to encourage other hunters to donate for charitable reasons and herd health. It's our turn to step up."

For details on how you can help through financial contributions or venison donations, contact Southwest Wisconsin CAP at (608) 935-2326 or Community Action Coalition of Dane County at (608) 246-4730.

Travis Anderson is a DNR wildlife biologist stationed in Dodgeville.



Why Stewardship?

Building on a major conservation achievement.

Natasha Kassulke

'n Wisconsin our natural resources are not just a part of our landscape, they're a part of who we are. As a state, we value our hunting and fishing traditions and access to nature — even for those who live in our largest metropolitan areas.

In his 2007-09 budget, Governor Jim Doyle recognized the importance of protecting these natural resources by calling on a major conservation achievement, the Knowles-Nelson Stewardship Fund, and proposing its reauthorization from 2010 to 2020. The Legislature agreed, and the annual bonding authority was increased from \$60 million to \$86 million for this 10-year period, which reauthorizes the fund while maintaining its historical purchasing power. Proponents of the increase argued successfully that as land prices increase so too must funding for Stewardship.

Land value appreciation in the last 30 years has put even solidly middle class families in the position of facing financial difficulty in passing land down to the next generation. Estate and property taxes are often more than the heirs can afford.

Lifestyle changes also warrant Stewardship reauthorization. Recreation continues to lead to organized activities rather than independent outdoor exploration. Stewardship is the primary tool that we have to purchase land close to population centers and provide opportunities for kids from all backgrounds to just "be" in nature.

Stewardship also provides public access to recreational areas in a time when farmland and forest fragmentation have created less opportunity for public access as compared to the past when large private holdings were open for exploration and recreation.

"The greatest threat to the vast majority of species that have called Wisconsin home for centuries is habitat loss," says Signe Holtz, director of the DNR's Endangered Species Program. "The Stewardship Fund is, by far, the best tool we citizens of Wisconsin have to maintain our natural heritage of plants and animals in natural communities."

And, we are learning that some wildlife, in particular forest interior birds, need large blocks of undeveloped spaces to survive. En-



dangered species also need special places for protection.

Continuing Stewardship, says Rep. Spencer Black (D-Madison), provides for state land protection by the DNR, local government and many nonprofit conservation organization partners. He adds that knowing that the program is extended to 2020 allows for long-range planning, negotiations with landowners, and continues a Wisconsin tradition of setting aside lands for public use today and for the future.

"I believe we have an obligation to future generations not only with our words, but our actions," says Governor Doyle. "Since I took office, we've gone forward with projects forever protecting forests, parks, natural areas, wildlife habitat and shoreland."

Stewardship lands also anchor a good portion of the state's economy — from the \$11 billion tourism business to the \$22 billion forestry industry and the state's \$4 billion hunting and

fishing investment.

"The Stewardship Fund has helped us preserve great natural places like Straight Lake in Polk County — a wild undeveloped lake and surrounding areas with a rich, vibrant ecosystem that includes everything from northern pike to trumpeter swans — and the bluffs of La Crosse, and the more urban setting of Big Muskego Lake," Doyle says. "Lands like these — some of Wisconsin's greatest outdoor areas — are one of the main reasons why people want to live, vacation and move here."

Wisconsin's Stewardship Program continues the work of the Outdoor Recreation Act Program (ORAP) enacted in 1961 with the support of Governor Gaylord Nelson and renewed in 1967 with the support of Governor Warren Knowles. ORAP was Wisconsin's first comprehensive, long-term land acquisition program. Over 31 years, the program protected 54,000 acres of land by collecting a one-cent per pack tax on cigarettes.

While revered as a pioneering program, ORAP was losing steam by the late 1980s. Then Speaker of the State Assembly, Tom Loftus, wanted to see the program reinvigorated and asked Black to head a committee to develop a new ORAP.

After many public hearings and meetings of a committee that included Knowles and former Natural Resources Board chair Harold "Bud" Jordahl — Nelson acted as a close advisor — the Stewardship Fund was born.

Stewardship goals were to be forward thinking, as well as bold enough to stand up to the threats to land in Wisconsin, including increasing development and changing land ownership patterns. The program also had to be cooperative involving partner groups and willing sell-

Straight Lake State Park,
whose undeveloped
shoreline was preserved
with Stewardship Funds,
contains an 850-acre
mature forest block with
some trees approaching
100 years old. It has a
great fishery and has
been nominated as an
important bird area by
the Wisconsin Bird
Conservation Initiative.
It is home to eagles
and a pair of nesting
trumpeter swans.

ers. And it had to be focused. After a few modifications, the fund was adopted and included in the 1989 state budget.

The name, "Stewardship," reflected its mission. "Stewardship is a time honored tradition," Black says. "It recognizes that we have an obligation to take care of our resources for future generations."

It is a strong program locked into a 10-year investment instead of being tied to year-by-year support.

Black recalls the first Stewardship event, held in Albany on July 10, 1990. Participants rode bicycles to the site — 194 acres of wetlands and forests including habitat for an endangered plant and springs feeding the Little Sugar River. Since then, the Lower Wisconsin River was protected along with parts of the Kettle Moraine State Forest. Extensive trails were developed and important watersheds like Lulu Lake protected.

Almost 20 years later, the Stewardship Fund has protected about a half-million acres of what's left of the best of Wisconsin, Black says. "It has preserved some very special places and expanded outdoor recreational opportunities."

The program is successful because it works with willing sellers, looks at buying easements when it makes sense, and leverages match grants that allow a broader public to become invested.

The Stewardship Fund has arguably be-

come the largest conservation effort in Wisconsin. "I've been delighted beyond expectations," Black says. "It would be a very different state if we didn't have the Stewardship Fund."

Stewardship has funded projects in 71 of Wisconsin's 72 counties from the majestic solitude of the Turtle-Flambeau Flowage to the urban Lakeshore State Park in Milwaukee. The program supports projects as diverse as acquisition of a pristine boreal forest in Ashland County to restoration of an urban riverfront in Beloit. And it is providing special places for residents and visitors alike to hike, bike, ski, hunt, fish, camp, canoe, learn and simply relax.

Growing support along with acreage

"Stewardship reflects the conservation and outdoor ethics of the people of Wisconsin, and is evidence that they want to get out and use these resources," says Steve Miller.

Miller has closely watched Stewardship throughout its history, first, while working with the DNR wildlife management program and more recently as director for the Facilities and Lands Bureau. Among the Stewardship projects of which Miller is most proud has been protection and enhancement of 21,000 acres in the Lower Wisconsin River Basin from the vast Lower Wisconsin State Riverway to the tiny spring creeks that are home to wild populations of brook trout.

During the second era of the Stewardship



program, Miller says, there has been a lot of discussion about how much purchased land is enough.

"We took a step back and took a long range look at what should, and what needs to be protected," Miller says. "And that was the genesis of the Land Legacy Project. It helped put a frame around what the 'green print' could be for Wisconsin."

The Land Legacy Report describes special places that will be critical to meet conservation and recreation needs for the next 50 years. Identified over a three-year process involving the public, nonprofit organizations and natural resource professionals, these Legacy Places are, collectively, what "makes Wisconsin Wisconsin." Visit the Legacy website at dnr.wi.gov/master_planning/land_legacy. The report is available for \$15 plus tax and shipping/handling. Call 800-362-7253 or visit any DNR service center.

The third phase of Stewardship, Miller says, looks at the Statewide Comprehensive Outdoor Recreation Plan (SCORP) in an attempt to classify, measure and ultimately provide for the preferences and needs of a statewide recreating public. Recent SCORP results show that more than 3.5 million Wisconsin citizens walk for pleasure, 2.3 million enjoy viewing and photo-

A BIPARTISAN BASE

The Wisconsin Legislature created the Stewardship Fund in 1989 to preserve valuable natural areas and wildlife habitat, protect water quality and fisheries, and expand opportunities for outdoor recreation. In the process, this innovative fund has proven that valuing and protecting our land and water resources is a tradition that crosses political lines.

This history of bipartisanship is reflected in the fund's name, which honors two of Wisconsin's most revered conservation leaders, Warren Knowles (Republican, Governor 1965-1971) and Gaylord Nelson (Democrat, Governor 1959-1963, U.S. Senator 1964-1981).

Since 1989, the Stewardship Fund has been adjusted several times from its original funding level of \$25 million annually. Governors Tommy Thompson and Scott McCallum, both Republicans, recognized the importance of maintaining the historic purchasing power of the Stewardship program, as has Governor Doyle, a Democrat.

graphing wildlife, two million enjoy bicycling and another 1.6 million enjoy fishing.

"The power of Stewardship is that it conserves the state's most important natural habitat while purchasing perpetual public access for all state residents," says Todd Holschbach, director of government relations for the Wisconsin chapter of The Nature Conservancy.

Holschbach says Stewardship fosters publicprivate partnerships that allow citizens to play an active role in protecting natural resources. The Nature Conservancy, for example, works with private landowners, businesses, government and other conservation organizations to conserve more than 139,000 acres of the state's most outstanding lands and waters. TNC uses sciencebased planning to identify lands that need protection and then leverages private matching funds

"It's proven to be a wise investment," Holschbach says.

Fine tuning

"Stewardship also has proven to be a successful program," Miller says. "Now we are fine tuning it."

Besides increasing the bonding to maintain the purchasing power of Stewardship, the reauthorization (Act 20) requires that administrative rules outline a process by which the Natural Resources Board may restrict public access for one or more nature-based activities, and how such decisions may be reviewed. These nature-based outdoor activities are hunting, fishing, trapping, hiking and cross-country skiing. DNR must report annually to the Legislature identifying lands where public access has been restricted or prohibited and the reasons.

Public comment sessions were held and DNR Secretary Matt Frank appointed a 30-member Citizen Advisory Committee to provide input on the rule.

"The advisory group represents various recreational constituencies, local units of government and land trusts," Frank says. "Working together, these members will help ensure that we continue to provide broad public access to lands acquired through Stewardship purchases or grants, promoting all forms of outdoor recreation."

At the first meeting in July 2008 Frank said, "The Stewardship program is near and dear to the hearts of people in Wisconsin. And we can be a model for the nation. It is about how we relate to nature and how Wisconsin citizens can access that...I can't think of a program at the DNR that means more to future generations. And I think we should celebrate that we are now going into the third decade of Stewardship."

Building blocks for future stewards

"As a member of the Natural Resources Board,

I think protecting land for the future is the most wonderful thing we do," says Christine Thomas, Wisconsin Natural Resources Board Chair and Dean of the College of Natural Resources at the University of Wisconsin-Stevens Point.

"Stewardship is not just important, but critical to the future of outdoor recreation as the population increases because not everyone can afford to have their own piece of paradise. There are people who would never have an opportunity to walk in the woods with their grandchildren if not for public land," she says. "Some of the best of what we do as an agency and as citizens is the Stewardship investment that we make for the future."

Thomas' favorite Stewardship project is the Wild Rivers Legacy Forest in Forest, Florence and Marinette counties. The Nature Conservancy and the state worked together to conserve more than 64,600 acres of forests, wild lakes and rivers in northeastern Wisconsin. The land transaction was the largest in state history, and working forest conservation easements keep the land open to the public for recreation and guides forest management in a sustainable manner. Funding came through a combination of Stewardship funding, Federal Forest Legacy funding, private equity from Conservation Forestry LLC, and its consortium partner, Forest Investment Associates, and private funds raised by The Nature Conservancy. "For decades citizens have been enjoying the fruits of managed forests, but we are at a time when many of these forests are at risk of being sold off and fragmented. With the Wild Rivers Legacy Forest, the new benefit we obtained is a guarantee for the citizens of the state that land would be accessible to them in the future as it has been for decades."

Students at UW-Stevens Point, Thomas says, are very much tuned into outdoor recreation, are users of public land and understand their

EXPLORE STEWARDSHIP LANDS

The DNR is electronically identifying Stewardship lands for customers. An interactive website helps the public find Stewardship properties, learn about property acquisition history and discover activities they might enjoy there. To access these maps, visit the DNR homepage at dnr.wi.gov and click on the "Maps" link under the "Favorites" heading and then go to "DNR Managed Lands." To learn more about the Stewardship program visit dnr.wi.gov/org/caer/cfa/lr/stewardship/stewardship.html

responsibility as future stewards.

"Many students are financially strapped, but because they have access to Stewardship lands that are open to the public for free," Thomas says, "they can afford to get out and enjoy the resources. Some also work on public lands through summer jobs, internships and volunteer activities."

As they work and play, these future stewards of our public lands are connecting with nature and finding out that clean lakes and rivers, lush forests and abundant wildlife — these things, together, are Wisconsin, Thomas says.

Natasha Kassulke is creative products manager for Wisconsin Natural Resources magazine.

"The Stewardship Fund has fulfilled its promise to the people of Wisconsin by preserving thousands of acres for use by sportsmen, conservationists and nature enthusiasts alike. The time, however, has come where we must devise a new program and strategy to ensure Wisconsin enters the 21st century as America's environmental leader."

 Governor Tommy Thompson on Stewardship Reauthorization in 1998

STEWARDSHIP IN A NUTSHELL

Under the Stewardship Fund, about 500,000 acres in 71 of 72 counties have been protected. Where does the money come from to pay for Stewardship? The state sells bonds to investors to pay back the debt over 20 years. This spreads the cost over time so it is shared with future public lands users. Debt payments come out of tax revenues, so all taxpayers in the state contribute to the Stewardship Fund, and benefit from its investments. Together land trusts and local governments have also raised over \$130 million to match grants through the Stewardship program.

What does the public think of Stewardship? There is strong public support. A recent bipartisan poll conducted by The Nature Conservancy found that nearly 90 percent of Wisconsin voters agreed that even in tight fiscal times the Stewardship program should be a priority. A Wisconsin Public Radio/St. Norbert's College public opinion poll showed that 76 percent of residents support state acquisition of conservation land.

What kinds of recreation are permitted on Stewardship lands? About 92 percent of all lands protected by the Stewardship Fund are open for public hunting, and 97 percent are open for fishing and other types of recreation, including hiking, wildlife watching, biking and more. Those lands not open to hunting include heavily used urban parks and trails like Lakeshore State Park and the Hank Aaron Trail in Milwaukee.

Are local governments compensated for loss of tax base? Yes. Each year, DNR makes property tax payments to all municipalities where the state owns land. This is called a payment in lieu of taxes or PILT. The state paid \$7.9 million in 2006 to local governments to make up for lost property tax revenue. While there are differences in how PILT payments are made depending on acquisition date, under the current program, local governments typically receive more money through PILT payments on land acquired after 1992 than they would have through regular property taxes. The Legislative Fiscal Bureau has this to say about PILT: "Although the

PROGRAM FUNDING HISTORY:

- 1990 to 1999 at \$25 million/year
- 2000 to 2010 at \$46 million/year for two years and \$60 million/year for eight years
- 2010 to 2019 at \$86 million/year (Beginning July 1, 2010)

NEW STEWARDSHIP ALLOCATIONS

(Beginning July 1, 2010) DNR and county			
land acquisitions	\$4	5	million
Grants to Nonprofit Conservation Organizations (minimum)	\$1.	2	million
Board of Commissioners of Public Lands acquisitions	\$.	2	million
Ice Age and other trails	\$	3	million
Recreational boating aids	\$	2.5	million
DNR property development	\$1	0	million
Local Units of Government assistance grants (maximum)	\$1	1. 5	million

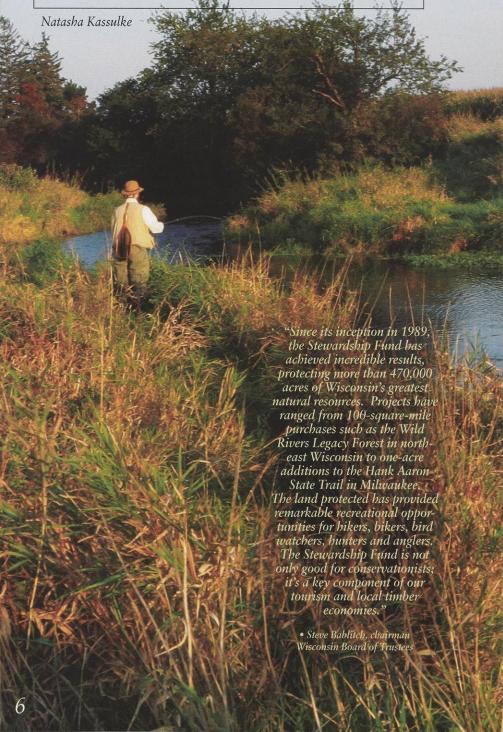
Total: \$86 million

formula for calculating aids in lieu of taxes is intended to produce a state payment equivalent to what is paid in property taxes, in practice, state payments typically exceed the property taxes that would have been paid because the purchase price of conservation land has routinely exceeded the property's assessed value."

Source: Legislative Fiscal Bureau Informational Paper 60 — "Warren Knowles-Gaylord Nelson Stewardship Program," January 2007

Stretching the Stewardship dollar

Partnerships are why Stewardship works.



he DNR cannot accomplish its mission by itself. We absolutely need our nonprofit and local government partners," says Mary Rose Teves, chief of the DNR grants section in the Bureau of Community Financial Assistance. "How lucky Wisconsin is to have partners who bring money and expertise to the table to conserve special places for future generations. Other states are not so fortunate."

Many agree. The Stewardship program's success is in its collaborative nature. Partners are involved at every level — from willing sellers working with the state, to local government and nonprofit conservation groups interested in leveraging funds, to State Parks Friends groups providing people power to maintain the lands and provide environmental education.

Janet Beach Hanson, the first to administer the Stewardship grants to nonprofit conservation organizations, says "Stewardship gave citizens — private landowners — the chance to get directly involved in conservation."

"Local governments also are seeing the success of Stewardship and they are submitting highly competitive grant proposals," says Amy Bradley, a DNR Stewardship grant manager. "In fact we've had over \$25 million in grant applications this year from local governments with \$8 million in allocations."

DNR land acquisition

The key to land acquisitions is matching a willing seller with conservation projects of regional or statewide importance. Stewardship, and ORAP before it, have been fortunate to draw from a strong conservation ethic among our citizens and those in authority who consider our land deals as an obligation to responsibly protect land, explains DNR Real Estate Director Dick Steffes.

After negotiations are complete, DNR asks for permission to get an appraisal. If the selling price is over \$350,000 two appraisals are needed. The DNR then reviews the appraisal and presents an offer.

As in the private sector, a title search and survey are done, if needed. If the purchase is over \$150,000, it must go to the Natural Resources Board for approval. All purchases also need governor's approval. After approval, the DNR draws up a contract and the landowner and DNR move to closing, assisted by a title company.

"I've seen records of negotiations going on for more than 30 years," says Steffes. "There is a lot of emotional attachment to land, and some negotiations take a lot of trust building." One selling point is that the land is then open to the public so the seller can always visit, which

HELLEY DUBIS

may not be the case if the land was purchased by another private party. The state's ability to resell that land is very limited and guided by statute."

Steffes says DNR priorities for land purchase include lands with significant benefit to endangered resources, privately owned parcels within DNR managed land, land that provides public access to public property, rare opportunities such as a paper company deciding to sell off a large tract, lands that make sense to purchase in concert with other entities such as federal partners, and Natural Resources Board and citizen priorities.

"The state pays a fair price — a fair market value," Steffes says. "We come from a tradition of paying fair market value based on appraisals consistent with professional practices, fairness and respect for landowners and focusing on important conservation needs. These are all needed to ensure the public trust and produce conservation accomplishments over the long term."

Working forest easements earn about \$350 to \$450 per acre. Fee title lands sell for \$1,500 to \$7,000 per acre with the average about \$3,000 per acre.

Steffes says one of his favorite purchases is the Rainbow Flowage in Oneida County, which involved 50 years of negotiations with the Wisconsin Valley Improvement Company.

For about 70 years, the Wisconsin Valley Improvement Company (WVIC), a private corporation that operates 21 reservoirs to regulate uniform flow in the Wisconsin River, had been the steward of the Rainbow Flowage located in the Northern Highland-American Legion State Forest.

When WVIC had to sell the land because of restrictions on foreign ownership, it looked to the state as a buyer.

"We had plenty of potential buyers interested in developing the land," says Bob Gall, president of WVIC. "But we also had an underlying stewardship philosophy."

After some price negotiating, WVIC agreed

to sell to the state. In 2004, the Natural Resources Board approved a \$7.04 million purchase using Stewardship funding to preserve almost 5,200 acres of primarily undeveloped forest land and 63 miles of frontage on the Rainbow Flowage and nearby Pickerel Lake. The deal worked out to about \$1,400 an acre.

The Flowage is a highly productive fishery and offers habitat for eagles, osprey and many species of waterfowl.

When the deal was completed in 2007 and 2008, WVIC also donated an additional 3,869 acres of submerged land at the Rainbow Flowage and 6,402 acres at the Willow Flowage,

and have learned more about property rights and how they may be shared among a number of people," Haag says.

He gives the example of a Bayfield County project involving three properties — the Nourse Sugarbush State Natural Area, the Bayfield/Mt. Ashwabay ski hill and 560 acres in between.

There were concerns that the spectacular views the properties provided might be developed and no longer open for public use. Mt. Ashwabay offers cross-country and alpine skiing featuring stunning views of the Apostle Islands National Lakeshore and the Chequamegon National Forest. The Nourse Sugarbush



The Patrick Marsh Natural Resource site is an educational and recreational area northeast of Sun Prairie in Dane County. The property, a protected ecosystem, easily could have been destroyed without the efforts of many individuals, organizations and governmental agencies working together.

Gall says. Today, the land is managed for wildlife habitat, forestry and outdoor recreation including hunting, shore fishing, hiking, bird watching and cross-country skiing.

"All the pieces were in the right place at the right time to allow the Rainbow purchase to happen," Gall says.

One aspect of Stewardship that DNR Real Estate Section Chief Doug Haag says he most appreciates is that it gives landowners, whether they are an international corporation or a long-time local landowner, a conservation alternative when they decide to sell.

"Stewardship has created a lot more focus on land and water conservation," Haag says.

Since Stewardship began, he says he has seen a tremendous increase in partner involvement and sharing knowledge, skills and funding.

"We've learned to layer funding sources

site had a long history of maple sugaring — for hundreds of years the Ojibwe tapped the large trees. In the summer, this area is the center of tourist activity in the region with the Big Top Chautauqua outdoor music festival drawing thousands of people to its performances. This tract also is at the core of a northern mesic forest that has been identified as a flyway for migratory birds.

Two years ago, the DNR proposed that the state acquire 400 acres in the area from Plum Creek Timberlands at a cost of \$1,088,000. Two hundred acres would be acquired for the Nourse Sugarbush State Natural Area and 40 acres for the Pikes Creek State Fishery Area. The remaining 160 acres would be held for sale or traded with Bayfield County or a local land trust.

A \$40,000 donation from Murphy Oil USA's Superior Refinery helped cap the pur-

chase of another 160 acres. Along with donations from individuals and businesses, the Murphy Oil gift triggered matching support from the Stewardship Grant Program totaling \$240,000 and investment of funds from Bayfield County, which will hold permanent title to the land. The land will remain accessible to the public and in forestry use.

"This is an important piece of property for the community, for skiing and for scenic enjoyment," Haag says. "This project embodies the community conservation ethic that makes Stewardship so successful and brings government home to people. Stewardship gives land owners a conservation alternative. We are fostering a stronger land ethic in a subtle way. These negotiations occur at mom and pop kitchens and sometimes in large board rooms."

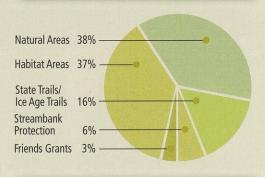
There are basic contracts and massive legal documents, but they all end up with the same result — a warranty deed.

Nonprofit conservation organizations (NCO) land acquisition

One of the more innovative and popular features of the Stewardship Fund is its grants program for nonprofit conservation organizations, or land trusts. Wisconsin is home to more than 50 of these citizen-run organizations, which work in communities across the state to protect natural resources.

"Land trusts are an excellent community-

NCO-FUNDED GRANTS



based complement to state and local government," explains Vicki Elkin, policy director for Gathering Waters Conservancy.

"Not only do they provide a way for citizens to get involved in conservation, but land trusts also raise private funds to match state dollars."

Gathering Waters is the nonprofit service center working to strengthen Wisconsin land trusts through technical assistance and state wide education.

"When Gathering Waters started in 1994 there were only 12 land trusts in the state,"

Elkin says. "Now more than 50,000 people are members of a local land trust."

Stewardship has allowed land trusts to work strategically, explains Elkin. With predictable funding for high quality projects, land trusts can do more than just respond to scattered opportunities.

Why should nonprofit conservation groups help carry the load? "Because we're losing some of our most precious places every day," says Elkin. "People see the landscapes around them changing. Places they've always loved are suddenly converted to residential or commercial use. They want to take action, and land trusts allow citizens, working directly with private landowners, to permanently protect some of these places."

Land trusts are already moving people onto these lands. They use the properties as classrooms and host field trips and volunteer work days.

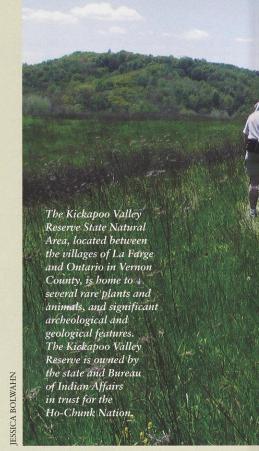
"We are in a tough budget time, and we can't rely on the state to fund all the needs. Stewardship and the matches the land trusts are able to raise are a way to stretch the state's dollars," Elkin says. "We all need to work together to be creative about how we will reach our conservation goals."

"The Stewardship Fund has been instrumental in the growth of the land trust movement across Wisconsin," agrees John Torinus, board member of The Nature Conservancy and Ozaukee Washington Land Trust. "Without matching public dollars, we would not have this powerful and passionate group of land trusts all working to save the most precious pieces of land and water. Wisconsin is way out ahead of most other states in terms of saving its best pieces of the natural environment. That leadership role could not be done with private dollars alone."

As an example, Torinus cites the Donges Bay Gorge Stewardship purchase in summer 2008. Stewardship kicked in \$2,256,500 for the purchase of 23.1 acres featuring over 1,200 feet of Lake Michigan shoreline, a ravine and most of Donges Bay Gorge in Ozaukee County.

Donges Bay Gorge is a stop on an international migratory flyway, home to 16 uncommon plant species, three plant species that are in jeopardy of becoming endangered, and a pair of nesting bald eagles named Kurt and Katie and their offspring. This is the first successful nesting by eagles in southeastern Wisconsin in over 100 years.

The Ozaukee Washington Land Trust has matched the Stewardship grant with three donated properties, which have been designated as natural areas of significance by the Southeastern Wisconsin Regional Planning Commis-



sion. Another major partner in the acquisition is the Milwaukee Metropolitan Sewerage District. The district has given the land trust a \$600,000 grant from its Greenseams Program in exchange for a conservation easement that will prohibit future development of the property with only a few exceptions, such as a parking lot and trails.

"The project simply would not have been possible without the Stewardship Fund," Torinus says.

The Natural Heritage Land Trust (NHLT), a leader in protecting natural and agricultural lands in Dane County, has leveraged Stewardship funding for 17 projects.

"Stewardship helps create confidence among donors that the project will happen," says Jim Welsh, executive director of the NHLT. "It helps us tell donors that the state is stepping up to the plate...Stewardship backs up all the talk and makes these projects happen."

Among the special places the NHLT has helped protect using Stewardship dollars are key areas of the Black Earth Creek watershed and Cherokee Marsh in Madison. Preserving the 990-acre Patrick Marsh Natural Resource Area is an ongoing collaboration among the DNR, NHLT, Patrick Marsh Conservancy, Dane County and the City of Sun Prairie. The Stewardship Fund has provided over \$750,000 in grants to match their fundraising efforts.

Kim Wright, DNR grants manager for the nonprofit portion of Stewardship, worked for The Nature Conservancy when the first Stewardship program was passed into law. "There



A gift that keeps giving six times a year for only \$8.97!

Bundle up a bargain for a song! 1 year • 6 issues

Only \$8.97 Give a little something to those

who give to you all year.

Please enclose a check payable to Wisconsin
Natural Resources and mail to WNR magazine,
P.O. Box 7191, Madison, WI 53707-7191.

Send or wrap up the attached gift card
to announce your gift.

Want to included the whole flock on your gift list?

Call our toll-free number 1-800-678-9472, or include the list on a separate sheet.

Gift to
Address
City/State/Zip
Gift to
Address
City/State/Zip
Gift from
Address
City/State/Zip

6/897

HAND



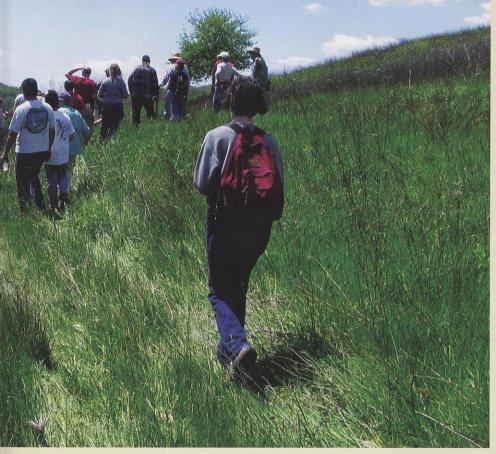
Enjoy your gift subscription to



From:

Place Stamp Here

To:



"The Stewardship Fund unites all lovers of the outdoors in their quest to make Wisconsin a desirable place to live. It provides an excellent opportunity for protecting the environment while still allowing us to use available resources. It is rare in the way that it satisfies both environmentalists and bunters alike. In a world where conflict seems to take over almost every aspect of our existence, we must preserve this innovative and insightful piece of legislation.

Julia Kolberg
 UW-Madison student majoring
 in biological systems engineering
(The Daily Cardinal, August 29, 2007)

were many more unique lands needing protection than there were organizations with the capacity to do so, prior to Stewardship," she recalls. She says Stewardship has transformed local groups of concerned citizens into viable conservation organizations, deepening a lasting conservation ethic in Wisconsin by making it possible for people to preserve special places in their own communities.

Wright points to the Military Ridge Prairie Heritage area as an example of preserving high quality prairie and grassland habitat amid a viable agriculture community. In 2008, Governor Doyle announced a \$405,200 Stewardship grant to The Nature Conservancy Wisconsin to purchase 153 acres in the Military Ridge Prairie Heritage area in Iowa County. The funds were used to expand Thomson Prairie, part of the Barneveld Prairie State Natural Area within the heart of the Military Ridge Prairie Heritage Area, an extensive grassland landscape supporting a high concentration of prairie and oak savanna remnants.

The Thomson Prairie Stewardship purchase represents one of the best opportunities to protect grassland birds, such as upland sandpiper and a rare insect, the red-tailed leafhopper. It will also substantially increase the permanent grass cover and provide habitat for the state endangered regal fritillary butterfly and two plant species of special concern — marbleseed and prairie turnip.

The Nature Conservancy has helped protect 1,823 acres in the Military Ridge area. It

has partnered with the federal Natural Resources Conservation Service, DNR, the U.S. Fish and Wildlife Service, Pheasants Forever, Blue Mounds Area Project and The Prairie Enthusiasts to conserve native prairie communities. The Thomson Prairie property was originally approved for high-end residential development, but The Nature Conservancy negotiated with the developer and protected the property.

"One misconception is that the Stewardship grants program just gives out money, but it's a very planned process often with several partner groups," Wright says. "Conservation is a collaborative activity."

Karen Blodgett, a DNR grants specialist in the West Central Region, works with nonprofit groups and points to a partnership among Pheasants Forever, Chippewa County, DNR and other local nonprofit organizations that has provided the public with 600 acres of prime hunting land at Hallie Marsh in Chippewa County.

Using Stewardship funds, private donations and federal funds from the North American Wetlands Conservation Act, the Chippewa Valley Chapter of Pheasants Forever over four years purchased 520 acres of wetlands, forests and former agricultural lands between Eau Claire and Chippewa Falls from private landowners. The parcels are adjacent to 80 acres owned by the DNR that was landlocked, Blodgett recalls. Pheasants Forever then transferred its land to the DNR for long-term pro-

tection and management, opening up the joined parcels to the public for hunting, hiking, wild-life watching and other recreation.

"Stewardship is a catalyst that gets these projects done," Blodgett says. "For most of these groups, the motivating factor is protecting a special place."

The Stewardship Fund also has been vitally important to the land conservation work of the Mississippi Valley Conservancy and its more than 900 members. As a regional, nonprofit land trust in La Crosse, the MVC has permanently conserved over 7,200 acres of blufflands, prairies, wetlands and streams in the Coulee Region since its founding in 1997. About 1,600 of those acres were funded through Stewardship.

The MVC works with private landowners and local communities on voluntary conservation projects in seven counties along the Mississippi River. In 2001, the City of La Crosse and the MVC formed a partnership with the state to protect the scenic and recreational values of an eight-mile stretch of blufflands along the Mississippi River.

These landmark blufflands were targeted for conservation by local citizens in the city's comprehensive land use plan. Using funding from the Stewardship Fund, as well as matching dollars, the partners have protected more than 840 acres, which are open to the public for hiking, hunting, birdwatching and other recreational and educational uses. Work to preserve the blufflands is ongoing and as the MVC acquires the land, it transfers it to the city for

long-term ownership and management. The city grants a conservation easement to the MVC, which protects the land permanently for future generations.

"Stewardship is a cost effective conservation tool because it leverages matching funds," says Tim Jacobson, executive director of the MVC. "It is effective, efficient and protects the natural beauty and heritage of these important places."

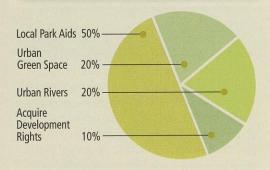
In areas like La Crosse where tourism is a major economic driver, Jacobson says, preserving the landscape is critical to success.

Local units of government

They call them LUGs in the grants business. Local Units of Government have received more than \$84.4 million since the beginning of Stewardship for land acquisition and development projects. Equally impressive, these same communities committed over \$84.4 million to match the public's investment in these projects.

This includes protecting more than 14,900 acres and grants for more than 765 projects. Stewardship funds, for example, contributed \$1 million to establish the Mequon Nature Preserve, a 438-acre natural area within Mequon in Ozaukee County. The partnership involves the City of Mequon, the Ozaukee Washington

LOCAL ASSISTANCE GRANTS

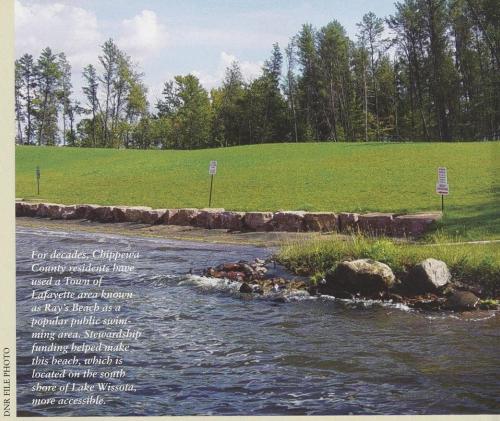


Land Trust, Greater Milwaukee Foundation and the state.

Lavane Hessler, a financial assistance specialist in the DNR West Central Region works with LUGs interested in pursuing Stewardship funding. She offers three examples of Stewardship funded projects in her region that have changed the face of local communities: Ray's Beach, Phoenix Park and Domer Park.

Ray's Beach on Lake Wissota in Chippewa County was owned by Xcel Energy, and people were trespassing to get to the beach, crossing a dangerous railroad track owned by Wisconsin Central Limited Railroad Company. Erosion was extensive.

Through a wide partnership involving local government (the county and Town of Lafayette),



Xcel Energy and the railroad, a safe access point was established. The Town of Lafayette was willing to take over the area, maintain it and eliminate the erosion. Xcel Energy agreed to put

\$50,000 towards area improvement and deed the land to the town for \$1. The county helped construct a safe railroad crossing to the beach area.

The area today is wheelchair accessible and includes a picnic space, restroom and boat dock. Development work was completed with cost sharing through the Stewardship Fund — \$149,193 of the total project cost of about \$306,032.

"Ray's Beach is an excellent example of what can occur when everybody works together," Hessler says. The beach opened in 2007 and is a model for other Stewardship projects.

Phoenix Park, in the City of Eau Claire, was once a blighted industrial area. It was contaminated with lead and heavy metals. But today, the area has been cleaned up and is a keystone in the economic redevelopment of downtown Eau Claire. Royal Credit Union built its corporate head-quarters on half the site, and the rest was developed as park property.

Visitors find Phoenix Park home to a recreational trail, a shelter, festivals, concerts and a farmers' market. Part of the Chippewa River Trail passes through it, and Stewardship was instrumental in funding the project at almost \$500,000 for land acquisition and trails development.

In 2007, Eau Claire received about \$210,000 from Stewardship to match local funds to buy the six-acre Domer Park in Eau Claire. The grounds

include a picnic area with trails, habitat protection along the shoreline and green space overlooking a fishing area. Domer Park houses some of the last undeveloped land on the river.

DNR facility development

While land purchases often attract the headlines, one of the most important functions of Stewardship is developing, repairing and maintaining state property. In fact, one-third of all development funding for DNR properties comes from Stewardship.

Stewardship has been used for everything from upgrading bathroom and shower facilities to creating park entrance centers and providing seed money for environmental education at places like Crex Meadows State Wildlife Area, Horicon Marsh and the Mead State Wildlife Area.

"Stewardship is the bread and butter of our recreational development program," says John Hagman, DNR section chief for facilities management. "It funds the facilities that give people their first and often lasting impressions of our properties."

"Because it is a stable fund, we can plan ahead," Hagman says. "It gives our property managers hope that we will be able to meet some of their requests and fund critical needs and improvements. With Stewardship, we can keep the roofs on and expand recreational opportunities for people. It's also a matter of health and safety."

Stewardship funds have been used to repair wastewater treatment plants in areas such as Peninsula State Park. The Pottawatomie Lighthouse on Rock Island is the oldest of Door

County's lighthouses. The Stewardship fund provided nearly \$63,000 in matching grants to the Friends of Rock Island for lighthouse restoration, maintenance and interpretive displays.

Stewardship funds were used to purchase a search-and-rescue boat to improve safety on Rock Island, and solar lighting to keep Rock Island off the grid. Stewardship also was used to reinforce the overhead tunnels along the Badger State Trail. And because of Stewardship, the DNR was able to open its first new parks in over 40 years — Lakeshore State Park in Milwaukee County and Governor Thompson Park in Marinette County.

"We have spent about \$1.75 million of Stewardship money on making our recreation facilities accessible to all users," Hagman says. "We spent almost \$12 million on park toilet/ shower buildings, \$8.6 million on park entrance and visitors stations, \$6 million on rail-to-trails projects and \$13.6 million on new and renovated campsites."

From a state parks perspective, Stewardship is critical, explains Kimberly Currie, DNR section chief for business management for state parks. "The Stewardship program gives us the stage for enhancing park amenities," Currie says speaking to the acreage purchased through the program.

"And every stage needs a production and a set," she says pointing to the park amenities the Stewardship Fund provides.

"The Knowles-Nelson Stewardship Fund is Wisconsin's most important land conservation program. Without it, places like the Mequon Nature Preserve and Milwaukee's Lake Shore Park would never have been established."

• Arthur Harrington, president of Gathering Waters Conservancy and an attorney in the Milwaukee office of Godfrey & Khan

FOUR WAYS LANDS ARE SET ASIDE

Stewardship Fund lands are set aside through outright purchases or fee title acquisitions, easements, partnership grants and donations.

■ OUTRIGHT PURCHASES OR FEE TITLE ACQUISITION

Fee title, also sometimes called "fee simple," is a real estate term that means the type of ownership gives the owner maximum interest in the land, entitling the owner to use the property in any manner consistent with federal, state and local laws and ordinances. For example, most homeowners own their land in fee title.

EASEMENTS

A conservation easement is a voluntary legal agreement between a landowner and the state, local government or qualified nonprofit conservation organization. The agreement places restrictions on the present and future property uses in an effort to protect its conservation values. The land remains privately owned and can be lived on, sold or passed to heirs. Conservation easements can be donated or purchased for a specific period of time or in perpetuity. A common easement would restrict development on a parcel.

When a landowner donates a conservation easement to a nonprofit, that landowner may be entitled to income, estate and property tax benefits. A gift of a conservation easement is considered a charitable donation. To qualify for an income tax deduction, the easement must be permanent,

must be donated to a qualified conservation organization and must serve conservation purposes.

Some landowners turn to conservation easements because of estate tax benefits. Placing an easement on a property generally reduces its fair market value since it restricts future development. This reduced value results in lower estate taxes, typically reduces property value, and may reduce their property tax bill.

The easement is attached to the property's deed and stays with the land, meaning that all future landowners must abide by the restrictions.

LAND DONATIONS

In Wisconsin, many lands and land rights are donated each year to land trusts and, to a lesser extent, to public agencies. Stewardship rules enable land trusts to leverage the value of donated properties to protect additional natural areas. "Land trusts can use land as a match, and it is sometimes easier to get people to donate land than money," says Vicki Elkin, policy director for Gathering Waters.

FEDERAL GRANTS

One of Stewardship's greatest strengths is attracting a diversity of matching grants. Stewardship uses state funds to leverage federal dollars through programs, such as LWCF, the Forest Legacy

Program, North American Wetlands Act and Coastal Wetland grants.

LWCF is the federal Land and Water Conservation Fund, approved in 1964, which created a fund to match grants to states for outdoor recreation projects. DNR is the state agency responsible for administering LWCF funds in Wisconsin. LWCF pays up to 50 percent of approved project costs, up to \$750,000 for acquisition, while development/renovation projects are limited to a \$400,000 grant maximum.

The Forest Legacy Program (FLP) is another federal grants program that complements Stewardship. The FLP is designed to identify and protect environmentally important private forestlands threatened by conversion to non-forest uses. No more than 75 percent of total payments can be paid by the federal government for the FLP purchases. State, local and private interests must come up with the remainder. Easements may include a variety of property rights but most often restrict development and subdividing.

The North American Wetlands Conservation Act provides matching grants to partnerships to carry out wetlands conservation projects that benefit migratory birds and other wildlife. The act was passed, in part, to support activities under the North American Waterfowl Management Plan, an international agreement that provides a strategy for the long-term protection of wetland and upland habitats needed by waterfowl and other migratory birds in North America. In December 2002, Congress reauthorized the act and expanded its scope to include the conservation of all habitats and birds associated with wetland ecosystems. Congress appropriated \$40.3 million to fund the Act's grants program in fiscal year 2008.

Additional program funding comes from fines, penalties and forfeitures collected under the Migratory Bird Treaty Act of 1918; from federal fuel excise taxes on small gasoline engines to benefit coastal ecosystem projects; and from accrued interest on the fund established under the Federal Aid in Wildlife Restoration Act. The U.S. Fish and Wildlife Service is responsible for the program.

The National Coastal Wetlands Conservation Grant Program is another matching option established in 1990. Under the program, the U.S. Fish and Wildlife Service provides matching grants for acquiring, restoring or enhancing coastal wetlands. Funding for the program comes from excise taxes on fishing equipment and motorboat and small engine fuels. States then provide 50 percent of the total project costs.

ith everything that goes into making Stewardship funds possible, it's easy to forget that its primary goal is making Wisconsin's natural assets accessible and attractive to all.

"We spend all this money on these lands, we want people to get out and use them, enjoy them and understand what activities they can do on them," says Elizabeth Kluesner, Nature is Our Business project coordinator. "They're not supposed to be a secret."

The DNR has put its ingenuity to the test by trying to attract diverse groups of people—including diversity of age, ethnicity, economic status and mobility capacities—to state lands. Kluesner says these efforts are essential and, since everybody's tax dollars pay for these lands, they should offer something for everybody.

Bruce Neeb, DNR government outreach team supervisor in Eau Claire, leads programs to underwrite costs of community projects and often works with Stewardship funds. Neeb says his biggest challenge with Stewardship dollars is making sure all the desired recreational opportunities are available.

"We've got a lot of different publics that are looking for access to outdoor recreational opportunities, and we try to balance those," he says. "[The renewal] created an assumption that Stewardship acquired lands would be available for some basic uses — hunting, fishing, cross-country skiing."

Regardless of what activities appeal to each individual or family, a primary goal of the program is providing Stewardship lands close enough to "make sure you don't have to own your own property to go out and enjoy nature," Neeb says.

These initiatives will likely benefit urban populations, whose densely populated communities and lower income levels often prevent them from experiencing the outdoors.

In fact, Neeb says that projects that acknowledge diversity of usage, income and population are more likely to be granted Stewardship dollars. Additional points are given to communities with populations of 50,000, 200,000 and 500,000 people. Also, projects in counties where the population has a faster growth rate are awarded extra points.

"Virtually anywhere in Wisconsin, urban, rural, north or south, you can get to Stewardship funded land quickly," Kluesner says.

Neeb points out that while "more conven-

Preserving your options accessible outdoor Creating diverse and Kiera Wiatrak The Kettle Moraine Natural History Association used Stewardship dollar to restore a barn at the Kettle Moraine Southern Unit.

tional tourist attractions are pricey," Stewardship lands provide free recreation that "families can enjoy every week if they want to," he says.

And, it seems to be working. James Buchholz, superintendent at Kohler-Andrae State Park in Sheboygan, says he has seen a large increase in ethnic diversity at the park over the course of 20 years.

He says minority populations in the area increased because of available jobs and churches that sponsored families, many of them Hmong. Buchholz says increased mobility for these populations due to purchasing cars for jobs, coupled with the close proximity of Kohler-Andrae, is probably responsible for increased minority visits to the park.

Eileen Hocker, a diversity coordinator with

the DNR Bureau of Law Enforcement, works closely with Hmong and thinks that population will benefit the most from Stewardship lands that allow access to hunting, a prominent part of their culture.

"[Stewardship lands] are going to be big for that community because it's hard for many of them to know which lands are public," she says. "They're hoping that with all this publicity about Stewardship lands, everyone will know, which tracts are free and open and where they can hunt and know that they're welcome."

The Hank Aaron Trail that connects Milwaukee's Miller Park Stadium to the Lake Michigan lakefront, "runs along the most densely populated and most racially diverse census districts in the state," says Melissa Cook, DNR park and recreational specialist in the Southeast Region.

Cook has noticed that many of the paths in nearby neighborhoods are worn down where people are walking to the trail, and the trail allows people to bike to work and downtown instead of driving. Some users receive health insurance benefits because they are exercising and the trail provides an attractive alternative for people who can't afford a health club membership.

"Some businesses that are close to the trail have started a health work group within the office setting . . . Programs that encourage people to walk at lunch time or to walk before or after work sort of rolled into a health awareness program," Cook says.

Beyond the urban walls

Stewardship projects also aim to attract racially and economically diverse groups of kids to the lands. "Our population is getting more diverse in this state. In the future, the people who are going to grow up and take care of this land aren't all going to be white, and they're not all going to have rural experience," Hocker says. "They're going to grow up in cities or densely populated suburbs."

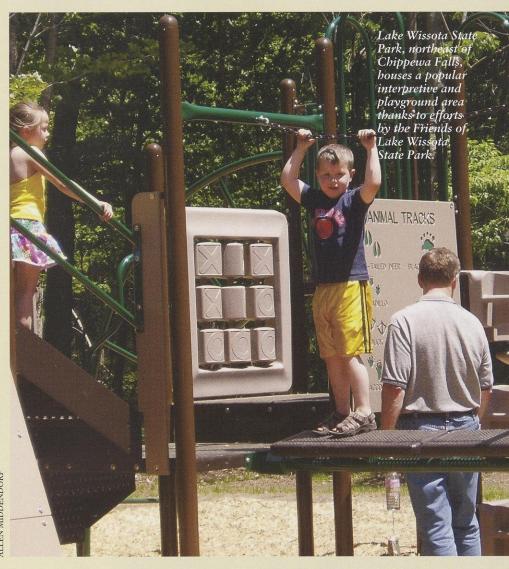
Therefore, she says, it's imperative to get children from minority populations to care about state lands so they are inspired to take care of them when they become adults.

Kluesner notes that the minority children of Wisconsin, who tend to live in urban settings, need these lands because they have few other opportunities to enjoy the outdoors.

"An urban kid who just sees concrete needs to be able to get to an outdoor space and feel that different kind of experience," she says.

But it's going to be a challenge.

"There is one study that shows that a lot of the youth in Milwaukee have never seen Lake Michigan," says Kate Zurlo-Cuva, a DNR staff specialist who has worked closely with the State



Parks Friends groups. "Through the Lakeshore State Park, the Friends are trying to create a gateway to natural resources and teach kids about what is out there, what it means to be involved in nature."

Zurlo-Cuva says the Friends have added park amenities including benches and signs in an effort to attract Milwaukee youth. Annually, \$250,000 is available for Friends groups with a 50 percent match required.

Cook says 10 Milwaukee schools are participating in an art program to decorate the Hank Aaron Trail. The Friends group is sponsoring bike camps where kids from nearby schools can learn about bike safety. Cook hopes to use Stewardship dollars in the future to further link the adjacent neighborhoods to the trails and make the river more accessible via ramps that make it easy to get down to the river.

In addition to the Hank Aaron Trail, Kohler-Andrae has attracted a lot of Milwaukee's urban youth.

"Quite a few school groups are bused here from the inner city Milwaukee area," Buchholz says. "I think that encourages them to come back when they have transportation of their own later."

However, Carrie Morgan, who coordinates natural resources educational opportunities for kids for the DNR, thinks the growing cost of transportation is a problem. She hopes that funding can be found to supplement the cost of busing so kids can come out on field trips.

Back to the basics

Getting a diverse group of kids outdoors is challenging given television, cell phones and computers.

"I think one of the things we talk about frequently with respect to Stewardship, is how can families get back to basics?" Kluesner says. "There's that time to just be in the outdoors without structure, without pressure, without other technology. It's important in fighting childhood obesity, it's important for fighting attention deficit disorder. [It's important] for kids having an appreciation of the outdoors and bringing that into their adult lives."

That point is exactly what Richard Louv highlights in his book, Last Child in the Woods.

Louv argues that today's youth have replaced nature with technology, which is largely responsible for depression, attention disorders and obesity.

"Yet, at the very moment that the bond is breaking between the young and the natural world, a growing body of research links our mental, physical and spiritual health directly to our association with nature — in positive ways," he writes.

Moreover, he adds that if children don't connect to the outdoors, they won't be motivated to take care of its withering state when they're adults. "How the young respond to nature, and how they raise their own children, will shape the configurations and conditions of our cities, homes — our daily lives," Louv writes.

Zurlo-Cuva says the Friends groups tend to highlight education in their projects.

about the outdoors.

"[At the zoo], they often have little stations along the way where you can stick your hands in boxes, or you can flip lids and look in," she says. "I think those kinds of things would engage kids a little bit better than just some flat panel."

Access for all abilities

Stewardship funds also are useful for making the outdoors accessible for people to ensure that their nature enthusiasm is met.

Andrew Janicki, DNR accessibility coordinator, hopes to use Stewardship funds to enhance the outdoor experience for people with disabilities. He suggests that state parks can make trails accessible by compacting dirt, or adding crushed limestone or granite. While it doesn't have to be paved, these materials are compact enough that wheelchairs can easily roll

across them. Visit dnr. wi.gov/org/land/parks/access/actrails.html.

Water accessibility is also a top priority. Janicki talks about establishing some accessible canoe campsites. At Pattison State Park, a plastic grid system is in the works to run along the beach, creating a trail that a wheelchair can easily cross.

Whitefish Dunes
State Park and KohlerAndrae each has a
beach wheelchair with
balloon-like tires that
can trek through sand.
In addition to the
beach, people with
mobility impairments
can reserve a night in
Kohler-Andrae's new
accessible cabin, par-

tially funded by Stewardship dollars. The cabin is available between May and October, but due to its popularity, reservations will probably have to be made far in advance.

Buchholz says one family told him that the cabin allowed their son to use a faucet for the first time in his life. The cabin faucet's height is adjusted to be within reach for people in wheelchairs. "It's giving people who visit here more ideas," Buchholz says, "for what they could do with their own homes."

Janicki says he will look into building more accessible cabins to complement the seven in

"This program unites politicians of both parties and people of all walks of life, from hunters and anglers to outdoor enthusiasts. Our natural resources make this great state what it is and are the fundamental part of our values as Wisconsinites. It was the vision of my father and of former Republican Governor Warren Knowles to create a means by which we can protect the waters and lands of this state."

Tia Nelson
 executive secretary Board of
Commissioners of Public Lands
and daughter of late Governor
Gaylord Nelson

ss/actrails.html.

Water accessibil

the Wisconsin state parks properties.

Creating a healthy economy

More than just nature benefits, Stewardship lands boost the economy of the communities they inhabit. According to a 2002 study, state park visitors spend over \$500 million a year in the communities surrounding their outdoor destinations. A significant chunk of this income comes from the pockets of out of town visitors.

"If you are a community that's looking to attract businesses, the fact that you have public lands that are easily accessible for employees can be billed as a reason why a business would want to locate there," Kluesner says.

While the parks have attracted tourists, the tourists have attracted environmentally conscious businesses.

Travel Green Wisconsin, a program that certifies businesses committed to conservation, has several green businesses in communities surrounding Stewardship lands.

"The data and information that we have about people who are taking outdoors vacations or day trips is that they want to spend their money at a place that is in line with their values related to the outdoors," Kluesner says.

Will Christianson, outreach coordinator with the Wisconsin Department of Tourism, agrees. "I'm sure it's a symbiotic relationship," he says. "When they see and recognize [the Travel Green Wisconsin logo] in other businesses...they know that it's a business that's interested in preserving and sustaining the natural resources that make Wisconsin unique."

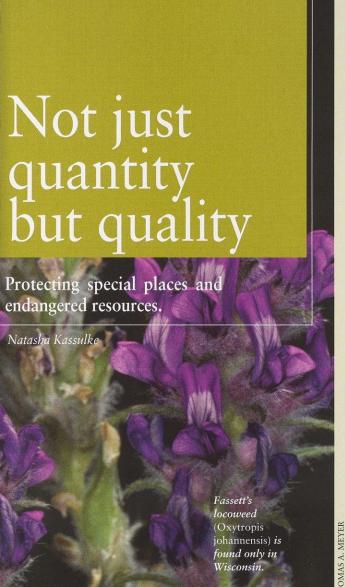
High Cliff State Park in Sherwood features a reservoir known as the Butterfly Pond. A path, the 1.5-mile Butterfly Pond Trail, provides a safe recreational area for those with mobility concerns. Several accessible parking stalls are provided adjacent to the trail.

Some educational attractions that Friends groups built with Stewardship dollars include the Tamarack Trail signage at Kettle Moraine State Forest, an amphitheater at Whitefish Dunes State Park and a solarium at the Richard Bong State Recreation Area.

Zurlo-Cuva highlights an outdoor shipwreck exhibit at Whitefish Dunes State Park. "It encompasses the mission of the Stewardship program by getting people outdoors and learning at the same time," she says.

Morgan thinks adding hands-on attractions would be a step forward in getting kids excited

Kiera Wiatrak is an editorial intern with Wisconsin Natural Resources magazine.



e owe much to Wisconsin's early conservationists — people like Aldo Leopold and plant ecologist John Curtis — who recognized the importance of natural areas and the consequences of their loss. Under their guidance, the first state-sponsored natural area protection program in the nation was formed in 1951 as the State Board for the Preservation of Scientific Areas and has evolved into the State Natural Areas (SNA) program within the DNR's Bureau of Endangered Resources.

Today, the SNA program, a partnership with several other agencies and private land trusts, has 560 sites in its statewide system of nature preserves. Stewardship has provided funding to acquire 36,200 acres at 102 of these sites. Using Stewardship, the state can purchase SNA acreage that represents the best examples of our natural landscape, such as Spread Eagle Barrens SNA in Florence County, which is co-

owned by the state and WE Energies and protects thousands of acres of pine barrens, and the 7,784-acre Bibon Swamp SNA in Bayfield County, which is home to rare orchids.

"We can preserve places that are near and dear to the hearts of Wisconsin residents and visitors, such as the Dells of the Wisconsin River State Natural Area with its sandstone cliffs, pine trees and rare plants," explains Thomas Meyer, a conservation biologist with the SNA Program.

"We are buying high quality natural areas," adds Mark Martin, another SNA program conservation biologist. "They are not all large parcels. Some are small projects that provide rare habitat for endangered species."

Both Meyer and Martin point to the Plainfield Tunnel Channel Lakes SNA in Waushara County as an example of a snippet of land that is critical to the health of one of our rarest plants. This 123-acre SNA is home to Fassett's locoweed, a federally threatened member of the bean

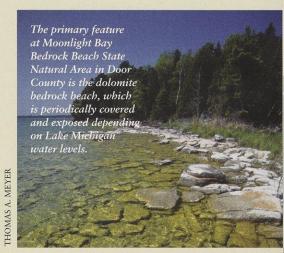
family that is endemic to Wisconsin and occurs only on the fluctuating shorelines of five lakes in central and northwestern Wisconsin.

Among his favorite preserves, Meyer cites Quincy Bluff and Wetlands SNA, which is a great partnership project between DNR and The Nature Conservancy-Wisconsin Chapter that protects a huge block of wetlands, forest and barrens in the bed of former Glacial Lake Wisconsin in Adams County. "The sandstone buttes rising above the lowland are really incredible," Meyer says. "The Stewardship Fund helped rescue this wonderful landscape from being converted to cranberry beds."

About \$680,000 in Stewardship funding was used to purchase 224 acres that became the Skunk and Foster Lakes SNA in 2003. This property was Gov. Jim Doyle's first Stewardship approval as governor. "The area has deep lakes that would have been developed otherwise," Martin explains. "And the Ice Age Trail

runs through the land."

Cassville Bluffs SNA in Grant County is another successful partnership between the DNR and a land trust. With Stewardship funding, the SNA Program and Mississippi Valley Conservancy purchased a 244-acre forest and prairie landscape on a bluff towering over the Mississippi River. Parts of Bark Bay Slough, Lost Creek Bog, and Port Wing Boreal Forest SNAs in Bayfield County were purchased through Stewardship and are widely used by migrating birds.



Water is a common thread that runs through many SNAs. Moose Lake SNA, 1,113 acres in Iron County, is funded with Stewardship dollars, and features a lake containing a classic Northwoods Wisconsin fishery surrounded by oldgrowth forest. About 105 acres of the Moonlight Bay Bedrock Beach SNA in Door County was purchased using Stewardship in 1990-91 for \$615,000. The area protects more than threequarters of a mile of Lake Michigan shoreline and a boreal forest along the Door Peninsula's northeastern coast. And Stewardship purchased 1,400 acres of the Tomahawk River Pines SNA in Oneida County from the Board of Commissioners of Public Lands. This area features several undisturbed stands of large red pines along a wild and undeveloped reach of the Tomahawk River upstream of the Willow Flowage. Its tall trees and isolated nature provide excellent nesting sites for bald eagles and osprey.

The Natural Resources Foundation has adopted the SNA program as one of its keystone projects and works to raise awareness of the program. The Foundation has developed a conservation endowment fund for natural areas management, which includes tackling invasive species, such as garlic mustard, restoration work, such as planting prairies and long-term management such as prescribed burns.

"These are legacy places that speak to what Wisconsin was once like." Meyer says.



Creating a forest legacy

etween 1997 and 2002, about 94 percent of Wisconsin's private industrial forestlands, or about one million acres, changed hands. Some of these lands were later subdivided into small parcels and re-sold — putting forest industry jobs, wildlife habitat and public access at risk.

The economics of land valuation is the culprit. Land is worth more as development property than as working forestland, and some companies are paying down their debts by selling off this land — often in smaller parcels, explains Rich LaValley, a DNR forest tax law field manager in Tomahawk.

Although the state has been able to acquire conservation easements on over 110,000 acres of these industrial forestlands, the rest of the 920,000 acres have no such easements that keep these lands in private hands and sustain public access for future generations.

"Stewardship maintains forest health and vigor for future generations," says Bob Mather, DNR bureau director for forestry management. "In forestry, size does matter."

Bigger tracts are easier to manage and provide greater benefits for wildlife and watershed quality. A goal of the forestry program has been to reduce fragmentation and ease costs to society. When cabins and homes are built into the forestland, fragmented parcels create greater demand for rural services and infrastructure like roads and utility corridors, and police and fire services.

Preserving large tracts of forestland and keeping them in production is equally important to the state's timber industry, Mather says, as these lands provide both economic and environmental benefits to the people of Wisconsin. Working forests are lands that are managed sustainably for the long term with harvesting and planting, and protecting endangered resources and water quality. The timber company may do the harvesting and planting, but it is monitored by the state to comply with the property management plan and compatible with forest management law.

"Because of the Stewardship Fund," LaValley says, "the state has been able to purchase easements on these large tracts of land to keep them intact. The state buys the development rights and public access so the land will not be developed and will remain open for recreation forever. In most cases the company still owns the land and manages it under a long-term forest management plan."

An example of such an agreement is the Wolf River Forest Legacy Project. In October 2005, the Plum Creek Timber Company, a real estate investment trust, announced that more than 18,500 acres of property near the Wolf River in eastern Langlade County would be permanently conserved through an easement with the state. The Wolf River area is important to those who use the land for hunting, fishing, hiking, bird watching and other outdoor activities.

State easement acquisition took place over two years. Approximately 10,700 acres were purchased in 2005 and about 7,800 acres were

purchased in the second phase in 2006. The area includes frontage on the banks of Nine Mile Creek and the Lily River, Tyra Lake and a six-mile segment of the Ice Age Trail.

"There is a growing interest in recreational trails and the need to secure linear corridors and links to build a trail network to meet the needs of a wide range of recreational trail users," LaValley says. "Many of the companies I work with are interested in providing public recreation such as snowmobile and cross-country ski trails."

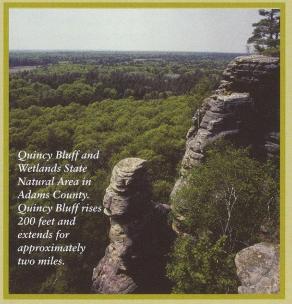
The Baraboo Hills Forest Legacy Area is an example of a different kind of project that involved several small landowners who, along with the public, benefited from Stewardship and the Forest Legacy Program. The Baraboo Hills project began in 2003 and was completed in 2007. The

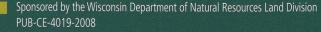
bluffs are composed of the largest surface deposit of quartzite in the Midwest, and thus as both a landform and mineral lode, have significance. Agreements were reached with 16 property owners to buy conservation easements on approximately 1,000 acres of forestland in the Baraboo Hills.

The easements were negotiated through the Forest Legacy Program, a partnership between the DNR and U.S. Forest Service.

Conservation easements ensure that these privately owned environmentally important forestlands are protected from non-forest uses, such as commercial development. At the same time, landowners have the ability to use, manage, benefit from, and enjoy their property.

"Acquisition of easements from a grouping of smaller landowners, combined with a wide variety of other conservation efforts in the area, will help protect the long-term conservation and forest production values of the Baraboo Hills," Mather says.





Produced by *Wisconsin Natural Resources* magazine: visit wnrmag.com Designed by Thomas J. Senatori

Cover photo courtesy of Jennifer Hassrick Photography



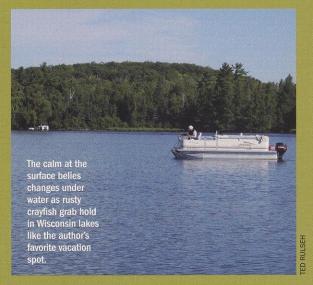
ne of the best fishing spots on the lake where we vacation was straight out from the cottage pier. A cabbage weedbed filled our end of the 300-acre lake, extending 50 yards off the nearshore rock and gravel shallows.

In early August, when we paid our yearly week-long visits, the bright green cabbage was thick enough to be unfishable, even with a weedless spoon. So I worked the deep edge, sitting in a boat at dusk, hopping a leech on an eighth-ounce jig.

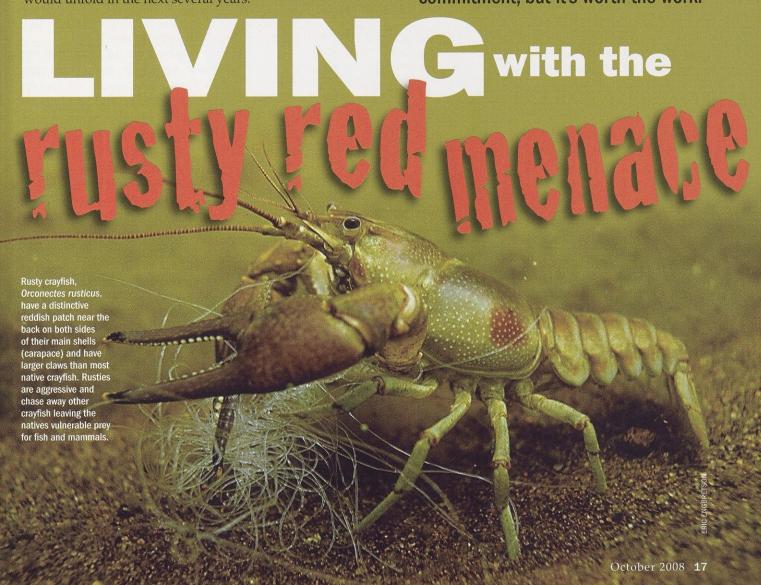
The lake was never easy to fish, and it had no smallmouth bass, my favorite quarry. But on that weed edge, when conditions and fortune conspired, I would catch walleyes — once a seven-pounder — and the occasional largemouth or jumbo bluegill.

For 10 years, a trip to the cottage from our home in southeast Wisconsin was a favorite tradition. Then circumstances kept us away for two summers. When we returned, I motored out the first evening, looked for the cabbage weeds, and found them — gone. Not trimmed back, not thinned out — gone. Acres of weeds, every stalk and leaf.

I knew immediately what had happened. What I didn't envision were the changes, many distressing, others wondrous, that would unfold in the next several years.



Rusty crayfish can change the lakes they invade for decades. Slowing their spread takes time and sustained commitment, but it's worth the work.



Sometime around 1960, a few anglers who fished a state to the south ended their trip to a northern Wisconsin lake by emptying their bait bucket – illegally — into the water. In succeeding years, other fishermen did likewise.

The bait, crayfish native to streams in the Ohio River valley, drifted to the bottom and dispersed. In this way, biologists believe, rusty crayfish (*Orconectes rusticus*) got a skittering foothold in the state's waters. As they became abundant, they probably spread farther as people harvested them, used them and sold them to bait shops.

Rusticus now live in lakes and streams throughout the state, including Lake Michigan and many of its tributaries. In

some spots, they take over completely.

Rusties are extremely aggressive and have huge appetites. They do the most damage by eating water plants. "The way I describe what rusty crayfish do, they are underwater lawnmowers," says Jeff Maxted, an invasive species research specialist with the University of Wisconsin Center for Limnology in Madison.

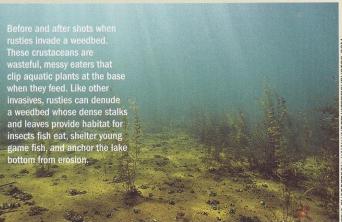
"They are very messy eaters. They clip off a plant right where it meets the lakebed. They eat a little bit of it, but let most of it float away, and of course it dies. So the native plant beds disappear as a result."

The crayfish also eat bottomdwelling insects like mayflies, stoneflies and midges, normally food for young game fish. They outcompete native crayfish for food which forces them out from under rocks, exposing the native crayfish to predator fish. Against rusties, the natives have no chance.

Rusties also reproduce rapidly — one female can lay nearly 600 eggs at a time. It's easy to see why they can take over, and when they do, it's not pretty.

I first saw *Orconectes rusticus* while vacationing in 1985 on Vilas County's Presque Isle Lake. They darted aside as I





snorkeled among pencil reeds in a shallow bay. When my eye caught a slender, white shape on the bottom, I reached down to get it — a walleye skeleton, picked utterly clean, head to tail. One word captures the sensation: chilling.

I knew from the start that there were rusties in our favorite vacation lake in east central Oneida County. I would see them beside the pier at night, my flashlight beam revealing the large, rust-colored spot on each side of their bodies.

For several years after we started visiting in 1988, the rusty population didn't seem to change. Our son, Todd, would entertain himself by putting on a swim mask, chasing crayfish with a small net, and depositing them in a bucket on the pier. (I confess to, on occasion, coaxing a shriek from wife Noelle or daughter Sonya by tossing a crayfish into the water beside them as they swam.)

But suddenly, the rusties overcame whatever equilibrium had held them back. When we arrived in 2000, after our two-year absence, their population had exploded. To explore the shallows with a flashlight after dark was to risk a case of the willies: for each square foot of bottom in our swimming area, a crayfish, or two or three, prowled along, outsized pinchers held forward.

That wasn't the worst of it. Except for a couple of underwater humps along the lake's north shore, I had found very little fish-concentrating structure on the lake. The bottom profile is mostally like a shallow soup bowl, a sloping gently down to a maximum of 25 feet. I depended on the cabbage weeds, more specifically the weed edges, to find fish.

Now the crayfish had cleared out the weeds — not just the big bed off our cottage but also a deeper-water patch out beyond the north shore humps, another good place for walleyes and for nice-sized perch. Here, along the edge at midday, Todd and I would catch perch on a fathead minnows, offered on

plain hook-and-split-shot

rigs, fished straight down.

So reliable were the perch that one afternoon, toward the end of a vacation, when Noelle announced we had no meat in the icebox, Todd and I volunteered, fully confident, to catch dinner. And we did. Now the weeds and the perch were no more.

That first year back, I poked and probed around the lake like a man wearing a blindfold, the spots I knew now barren; my favorite tactics useless. A leech bounced on the bottom almost surely came back in the vicious pliersgrip of a crayfish.

My only recourse was to cast floating plugs at evening near pencil reeds on the east shore where, now and then, I hooked a largemouth bass. It was dismal — so much so that despite all the good times the lake had given us, all the memories, the pictures, the stories, the traditions, I wondered: should we keep coming back? Had Orconectes rusticus ruined the lake?

Rusticus don't take over every lake to which they are introduced, says Steve McComas, biologist and owner of Blue Waters Science, a fish and lake management business in St. Paul, Minn.

"It's a question of habitat," says Mc-Comas, who has worked on rusty crayfish problems with Wisconsin lake associations. "Rusties don't burrow. They need to hide under rocks to do well. In a lake with a mucky or peaty bottom, they might be present but never become dominant."

But on a rock, rubble and gravel bottom, as in our lake, they are trouble. "They can maintain a slow-growing, sustaining population for a while," Mc-Comas says. "But when the population hits a certain threshold, they'll go exponential, until they run out of food to eat or something starts eating them."

Our lake lies a few miles outside the tourist madness of Minocqua-Woodruff and Lake Tomahawk. Our weeks there are blessedly quiet, especially once the working world calls the weekend water skiers (and there aren't many of them) home on Sunday evening. Tall maples and birches shade our cottage deck, a perfect place to rest on a chair with a book and a cold drink.

As many as half a dozen loons fish the lake, and they come closer to our pier and to our boat than is typical. With binoculars we can spy on a bald eagle perched in a tall, white pine across the water, or watch him soar over the lake toward evening. Each afternoon, painted turtles sun themselves on logs in a back bay we visit by paddleboat or canoe. The kids always counted the days until our yearly trips, and Noelle and I did, too. The cottage owners had become our friends. It was hard to imagine a better place to spend a

Northwoods week. So, in spite of rusticus, we kept returning.

Our second summer back, things looked worse than the year before. The nutrients in the water that once fed the cabbage weeds had to go somewhere, and that was into filamentous algae. It lay all over the bottom — fibrous clouds of it, several inches thick in some places.

Now it wasn't just difficult, it was impossible to fish a bait on the bottom. If I tried, the hook or jig came back covered with a musky-scented, greenishblack glob, sometimes with a crayfish besides. A crankbait or spinner would encounter, many times, a clump of algae suspended in neutral buoyancy, and return hopelessly fouled.

Since I wasn't about to give up fishing, there was nothing to do but try to adapt. Exploring carefully one evening, I found a fairly steep dropoff between a sunken gravel bar and pencil reeds along the lake's northeast shore. The contour of the hard bottom there formed what anglers call an inside

Rusty crayfish lay in wait on he inside edge of a fish crib. They are efficient scavengers that can overcome an injured, dying fish and pick their bones clean. They also feed on aquatic insects, fish eggs and detritus as well as plants. Trappers can reduce the density of crayfish but they are unlikely to eradicate the whole population once the exotic crayfish infest a water.

turn, generally a good walleye spot.

Knowing I had to fish deep but stay off the bottom, I dug into my tackle box and tied on a floating jighead. With my needle-nose I squeezed a split shot to the line a foot and a half above the jig. Baiting the jig with a leech, I cast it out and, bit by bit, drew it back. When I lifted it from the water, algae covered the sinker, but the jig stayed clear. Pleased with myself, I pulled the clump away and cast again.

Several tries later, my graphite rod transmitted to my hand a subtle tap, tap. I snapped the tip back and soon reeled in a walleye, which reached just past the 15-inch mark on my tape measure — legal size. I caught one more keeper, and a few smaller ones, before dark descended. As the week went on, I picked up a few more walleyes, and my family enjoyed the filets, shaken in flour and cornmeal and pan-fried in butter. The lake still held fish. All was not lost, though I still couldn't find the perch.

Then one evening, while working

my new favorite spot, I hooked a fish that didn't hold deep the way walleyes do, instead darting to the side, then rushing to the surface and leaping clear. When I brought it on board, no more than five or six inches long, the greenish-bronze sides and bright red eyes said it all: smallmouth bass.

A rusticus domination isn't usually permanent, McComas observes. "It's the typical invasive species pattern," he says. "You get an invader that's very well suited to the conditions. Because there is food, and because there isn't much of a predator base, the population explodes.

"That's how it is with rusty crayfish. But eventually the ecosystem can't sustain that high population density. And so it comes to an equilibrium. Eventually, natural forces catch g up, and the population stabilizes at a lower density."

Once they've taken out all € the weedbeds, the crayfish can become food-limited, McCo-

mas says. In addition, fish begin to prey on them — although that takes time. "Because rusty crayfish don't burrow," says McComas, "their behavior evolved so that when threatened, they take up a defensive posture. Native crayfish, when a fish comes by, will scurry away, but rusties will stand and fight.

"Because their pinchers are a little bigger than those of the native crayfish, that is a little bit scary to the fish, and

they leave them alone. So for a long time, fish are wary of the crayfish. They don't know how to eat them. Eventually, and it's hard to say how long it will take, the perch, bass and walleyes learn to eat the crayfish. It takes years for that to kick in, but when it does, there is some natural control."

Surprisingly, the best predators on rusties include yellow perch. "Perch feed on the smaller crayfish — up to about one inch long," McComas says. "Smallmouth bass are good predators, too, but yellow perch by far outnumber bass in most lakes, and they're pretty efficient predators."

The third summer after the rusticus explosion, there were signs the fish were beginning to take charge. At night on the pier, my flashlight caught far fewer crayfish than I had seen in recent times.

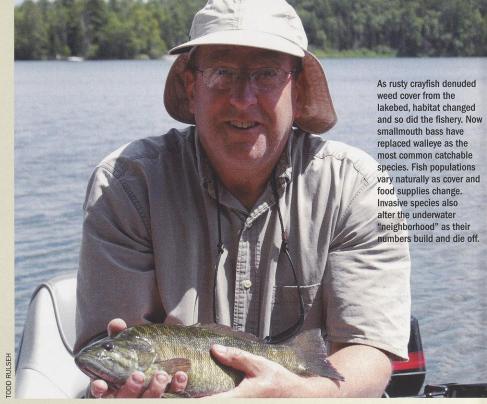
Unfortunately, algae still fouled the lake bottom, rusticus still intercepted my jigs, and the walleyes still were hard to find. When my inside turn in the northeast corner produced nothing, I turned to the sunken humps along the north shore. Floating jigheads, slip-bobbering, vertical jigging above the bottom — nothing worked.

Then, on the bright evening of our last day at the cottage, Todd and I tried the humps again, vertical jigging while drifting on a gentle breeze blowing toward shore. When Todd reported a hard strike, I tossed the anchor overboard. When it hit bottom in nine feet of water, I tied off the rope on a cleat.

Todd soon got another bite, and his rod bowed deeply. As I grabbed for the landing net, the fish jumped — a smallmouth, not a fingerling but fully mature, thick of body and brightly colored. A minute later, on the floor of the boat, it measured 15 inches. We released it and went back to work.

Moments later, Todd had another fish on, and then I hooked one - a double! Holding my bucking, bending rod in my left hand, I netted Todd's bass with my right. Todd then netted mine. In a flurry that lasted half an hour, without moving from the spot, we caught (and released) close to a dozen bass.

Besides providing sport, the bass surely were a reason for the crayfish de-



cline, but there was another. Looking around the lake from our pier, I could spot white objects floating at intervals near shore — markers for crayfish traps.

The latest research shows that the most effective control for rusty crayfish is a combination of fish predation and intensive trapping. The best evidence for this approach is the Sparkling Lake project in Vilas County.

There, a long-term study, funded by the National Science Foundation and being carried out by the University of Wisconsin Center for Limnology, has dramatically reduced the crayfish population through trapping and the manipulation of fishing regulations to favor smallmouth bass and rock bass. After eight years, Maxted estimates that the crayfish population in the lake has been reduced as much as 95 percent.

The problem is that trapping must be intensive and sustained, notes Mc-Comas. The 100-acre Sparkling Lake benefits from having a group of undergraduate students who take care of the traps each year. In a larger lake, relying on volunteers, such as lake association members, it can be hard to keep up the necessary trapping pressure.

"It just takes time," McComas observes. "You have to put in a major effort and sustain it over a number of years to start knocking that population down. When trapping, you're acting

like a predator. If you don't keep on top of them, you won't be able to get control. It's a matter of setting the traps, putting in the time, keeping after it.

"In time, your volunteers can get burned out. You can hire someone to do it, but that gets fairly costly. Either way, it requires a significant level of effort. The trappers have to go out every day or every other day. You need a lot of traps to be effective. In a lake with a great deal of rusty crayfish habitat, you probably want 20 to 30 traps per acre. Then you have to re-bait and reset the traps. And you have to find some way to [sell or] dispose of the crayfish. Cumulatively, it's a big job."

Rusty crayfish are edible, and there is a commercial market for them. Some restaurants, for example, buy them for crayfish boils. Others sell them to pet food manufacturers. But the market is limited. "People who are trapping crayfish are not making much money on it," McComas says. "Right now, the commercial appeal is low."

During the next summer's visit, Todd and I investigated one of the wire-mesh traps placed by the lake association. Lifting the trap by its nylon rope, we found a couple dozen large crayfish inside, clinging to a lump of bait.

When fishing that week, I focused on smallmouths. Halfway through the week, I had caught none - I couldn't find them where Todd and I had. Then on a cloudy but bright Thursday afternoon, I rigged with a leech on a plain hook and split shot, working it straight down, a foot or two above the bottom, moving gradually deeper, all the while letting a south breeze push me along a shoreline. Ten feet, 12, 14 — and then a twitch in the line. I set the hook, and my medium-weight rod soon bent to the point of creaking.

I call a smallmouth encounter satisfying when for a long spell we fight to a draw — he takes line, I get it back; he holds deep, I work him toward the surface hoping for a glimpse, and he dives again, making the drag sing.

This fight was satisfying, until on a powerful rush the hook pulled free. The next fish broke my six-pound line. Upgrading to eight-pound on a stouter rod, I tried again. On each of three drifts I boated one smallmouth, muscular and thick across the back — line-backer bass.

The next day I went back and did it all again, as always unhooking each fish and letting it swim off. Improbable as it may have seemed a few years back, our favorite lake had become an excellent smallmouth spot.

The pattern we've seen on our lake is fairly typical, Maxted says. Unfortunately, that pattern doesn't lead to the elimination of crayfish. "Once these things get into a lake and take hold, it is really, really hard to get them out," says Maxted. "That's why the focus re-

ally needs to be on prevention."

The question then becomes: How to focus on prevention? Money and people power are limited; there is no way to protect every body of water. "If we have 15,000 lakes in Wisconsin, and we want to implement prevention on some, how do we figure out which ones are most vul-

nerable and direct prevention there?" Maxted asks.

He and colleagues at the Center for Limnology first focused on learning the extent of crayfish distribution. Each summer, a crew of students set out traps in about 150 lakes and streams to see if rusties are present. "We find that they are pretty pervasive, perhaps in part because we're doing a better job of looking, but also because they are, in fact, spreading," Maxted says. "They are now found in every part of the state."

Which lakes are vulnerable? Those with hard rubble and gravel bottoms, for starters. Research also shows that rusty crayfish can live only in lakes with a certain combination of dissolved calcium concentration and pH. That means lakes on which to focus are those with crayfish-friendly chemistry where rusties do not yet live.

From knowing which lakes to protect, it's a long stretch to successful prevention. "We're getting pretty good at predicting where crayfish can live and where they can't," says Maxted. "But it's hard to move that information into the management realm, and it's hard to measure success. If a lake is not infested, is that because we protected it, or because it was never threatened?"

Preventive measures against rusty crayfish and against invasive species in general are widely known. Government agencies can monitor for invasive species, post signs at lake accesses, and perform education and outreach. Individuals can obey laws

that forbid transport of crayfish, empty bait containers into the garbage rather than into the water, wash boats and drain live wells and bilges, and inspect boats and vehicles when leaving a lake to make sure there are no hitchhikers.

Even though *rusticus* is now widespread, prevention remains critical, McComas and Maxted agree. "Rusty crayfish can fundamentally change a lake ecosystem," Maxted observes. "You may end up with a nice smallmouth bass fishery after years of infestation, but in the process you've lost a number of native species — aquatic plants, a mix of fish, native crayfish, and possibly other small organisms, such as snails.

"The key point to remember is that there are many lakes and streams that could be home to rusty crayfish, but as yet are not. A common perception is that rusties are everywhere and there is nothing we can do about it. In fact, there are still plenty of lakes and streams we can protect."

Last year on our lake, I caught small-mouths again, and walleyes, too, in the humpy area off the north shore. On the last day of the week, I found, wonder of wonders, a patch of cabbage weeds near a gravel point. Having a couple dozen small leeches on board, I tried them down in the weeds and brought in enough perch for supper. The fishing is good, definitely better than it was 20 years ago.

Still, I can't escape the nagging reality that a sinister pest lives in the lake. Given my choice, if it meant the

crayfish were gone, I would forego the smallmouth bass and go back to jigging for walleyes along the edges of the cabbage weed.

Since I don't have that option, the best I can do is observe the scientists' recommendations and do my part toward preventing the spread of invasive species, whether plant or animal. Nothing instills motivation like watching an invasion change the character of a place you love.

You can slow the spread of invasives

Before leaving a lake or river:

- Inspect your boat, trailer and equipment. Remove visible aquatic plants, animals and mud.
- Wash your boat with hot water or a pressure hose where the rinse water will not drain into a stream, lake or storm sewer. Let the boat dry thoroughly for five days before moving to another lake, if feasible.
- · Drain water from boat, bilge, live wells and bait containers.
- · Don't move live fish or fish eggs away from a waterbody.
- · Only use leftover bait minnows on the same water.
- Discard leftover minnows if lake water, river water or other fish were added to your bait bucket.

Ted Rulseh writes from Manitowoc.

Wildfires, invasive pests and development all take their toll on wooded acres, but making it easier for forest families to plan their future may

be more important in determining if the forest we see today will be here tomorrow. Tending Tending to tomorrow's woodland owners

Virginia Mayo Black



he big picture most people have of Wisconsin's 16 million wooded acres is that the forests consist mainly of large tracts of public lands and commercial timber. In fact, almost 60 percent of our forested acres are smaller parcels owned by individuals and families. And like the trees themselves, those owners are slowly aging. More than half of those private acres are owned by people 55 years and older. Their "kids" are often middle-aged with grown children of their own. These offspring are taking root far from their childhood homes and far from the forested acres their families own, often in another state altogether. As concerned as children may be about their parents' quality of life and endof-life issues, the offspring may not want or have the skills to manage forested land they will be inheriting, even when they say they want to keep the land in family ownership.

A new challenge facing the state and the nation is understanding the needs of this next generation of forest stewards, says Forestry Division Administrator Paul DeLong. "Will these children of current landowners maintain the same commitment to the land and can we provide them with the tools to manage these forests? Both the attitudes and actions of this next generation of forest owners are vitally important to our state's economy, to the quality of life we enjoy and to a healthy environment," DeLong says.

The graying of America has focused attention on being financially solvent to cover health care costs, but there are other issues. One area that is less stud-



ied is property ownership. Specifically, what happens to parcels of land that have a life of their own that continues when current owners die? According to research by the Pinchot Institute that specializes in forestry conservation issues, the biggest transfer of private forest lands between generations will occur within the next two decades.

Unlike the transfer of most belongings, land is a living asset whose management requires more than cursory attention and a future commitment of time and effort. Transferring land from one generation to another is more complicated than giving a painting, securities or a bank account to a relative. Forestland and farmland in particular require work to sustain their value and often carry ongoing legal requirements when the property has been enrolled in government incentive programs like the Managed Forest Law or the Conservation Reserve Program. Those inheriting such lands need to be prepared to handle those responsibilities.

Similar pressures have already drawn attention and concern among conservationists and land managers as multinational companies sell off their commercial forest properties. According to DNR figures, 94 percent of the 1.1 million forested acres owned by corporations doing business in Wisconsin has changed hands in the last seven years, sometimes more than once. Does this trend open the door to divide forestland into smaller and smaller lots for housing? Will the realities of caring for the forest motivate new owners to sell to developers who see bigger and quicker profits in housing than in working woodlands? Will those forests disappear just as demand grows for woody biomass as a fuel source and the role of healthy trees in offsetting society's carbon footprint are finally recognized?

Learning the concerns of forest families

The benefits from Wisconsin's forests are not just enjoyed by the owner.

Clean air and water, plant and animal habitat, outdoor recreation, beauty, and the economic benefits of a strong forest products industry benefit everyone.

So what incentives might entice future woodland owners to sustain these forests? To find out their needs, researchers started talking with them. Pinchot Institute researcher Catherine Mater partnered with the Northeastern Area State and Private Forestry program of the U.S. Forest Service and state forestry programs in Wisconsin and Pennsylvania to interview the children of families who own forested acres. Over several years of conversation, Mater noticed a disconnect between comments from older property owners and their children. She started formal survey work to discern if demographics like the gender and age of the respondents shed clues about kinds of concerns this next generation of woodland owners will need answered. The interview teams also asked respondents:

- if they belonged to forestry and environmental groups
- why they believed their family owned forestland
- what they valued about these properties
- if they were actively involved in managing the family forest
- if they knew that trained foresters were available to help them assess and manage private forestland
- what they thought would happen to their family's forest in the future

Mater also examined whether responses varied based on the size of the family forest, whether the land had been purchased by the parents or had been in the family for generations, whether the kids had been raised on the family woodlot, and whether the family was actively involved with forest management self-help groups or professionals.

Plan to keep the land

Michael Framberger is one of those "kids" who put a human face on the statistical portrait Mater's interviews painted. Framberger, 57, lives in California. He describes himself as a successful professional, married for 34 years and father of a 26-year-old daughter. His parents, in their 80s, live on 160 acres of forested land in the

Town of Mount Morris near Wautoma. He was 10 years old when his father bought the land. The previous owner's widow sold the property to pay back taxes. There is joy and affection in his voice when Framberger talks about his memories of hunting and working the family parcel.

"We lived in Oshkosh during the week, but spent weekends on the property," Framberger said. "I grew up in those woods. My brother and I did a lot of work there that helped put him through grad school."

Nearly three decades ago, "I considered coming back to Wisconsin and taking over the farm," Framberger said. "It was at a time when I had hand-planted hundreds of what was considered a new kind of tree in the area, Fraser firs. The trees are too big now and really need to be replanted. For 15 years, my dad shipped one of the trees I had planted to California every December. I was able to tell friends a tree I had planted was our Christmas tree."

As the son of German immigrants, Framberger's father could see value in land others considered worthless. Through years of careful management

and participation in the Managed Forest Law (MFL) program, the property he and his siblings now coown has increased in financial and emotional value.

"I'm very proud of our participation in the MFL program," Framberger said. "It means my siblings and I are not going to be burdened by taxes for the land my parents are living on. Dad had foresight. If we were looking at a significant tax bill each year, that would make it much more difficult to hang on to the property."

Framberger knows things are going to change in the near future. His father has health issues and the "kids" all live out of state. "We all know the distance will be more of a challenge," he said.

Framberger said inquiries to sell the land come in on a fairly regular basis. He is grateful there is not a lot of development pressure in the area. The property is also "pretty well-protected. Dad and the neighbors have done a good job. They have an informal agreement that if one of them wants to sell their parcels, they'll contact each other before putting any land up for sale."

The Framberger family remains committed to the forested property they have lived on and enjoyed for half

"I can't guarantee the land wouldn't be sold, and I really can't speak for my siblings. Other than a medical emergency, I know I wouldn't want to sell the property. We have all talked about this, and other members of the family, including grandchildren, have asked for first right of refusal."

What needs to be done to help families hold on to forested land?

"Give us an incentive," Framberger said. "We sell pulpwood, but maybe [offer] carbon credits for biofuel or come up with different products that generate enough revenue. If land be-

> comes a financial burden, it will be tough for people to hang on to it.

"We need to do more than talk about carbon credits. We need to share an environmental consciousness, a sense of responsibility to the land. I would love to make sure that kind of information is communicated to landowners and their kids. And if we could generate some income — or at least generate some social or environmental good - so much the better."

An important family event will take place this

"All of the kids, including all of the grandchildren and great-grandchildren, are coming home to Wisconsin," Framberger said. "It will be the first time everyone has managed to get back at the same time." He's hoping the reunion will be a gift to his parents, a celebration of their life, and yet another opportunity to take a walk in the family forest.

Share what you value most about the forest

Some of that same passion is shared by Julie Erbe, a busy professional in her 50s, born in Milwaukee and now living about 50 miles south of Chicago. Erbe's father, 77, and her mother, 72, live in southern Wisconsin. Along with a 72year-old uncle in Florida, they inherited about 40 acres of forested property in Door County from Erbe's grandfather in the 1940s. The land boasts views of Lake Michigan adjoining conservancy land. The parcel is held in a family trust that includes Julie, her three siblings, her parents and her uncle's family.

Erbe said she and her relatives all have wonderful memories of the Door County property while they were growing up. Her parents coordinate and schedule when various family relatives book the cottage. Julie enjoys walking in the woods, picking wild strawberries, seeing the native flowers.

"The difficult conversation" about what should be done with the family property happened when Erbe's mother began having health problems.

"About 10 years ago, Dad said he was concerned that the kids didn't want to take on ownership of the Door County property," Erbe said. "We came to him and said, 'Don't think we don't want the cottage.""

Erbe said her parents "didn't want to burden the kids (with property concerns) while we were getting started on our careers. Now that we're all established, keeping ownership of the land doesn't look like such a burden. There's not much to do - pay taxes and do basic maintenance every few years."

Erbe said there have been no disagreements among any of the property's owners. One reason for that may be the agreement her father and uncle have. If one wants to sell, other family members have a chance to buy the land. Erbe said she believes that ownership arrange-

Profile of the children of Wisconsin's private woodland owners

43% professional workers (as opposed to blue collar and service workers)

66% were not raised on the family forestland

78% live far from the family forest or out of state

66% won't be living on the family forestland in the future

98% have siblings to share future decisions for the family forestland

- 2007 survey results, The Pinchot Institute

"If anyone wanted to know about the future of forestry, just ask the kids," says Mater, in summarizing the results. So we talked to a few of those families.

ment will keep the land in family hands. But there is always a possibility that could change. She acknowledges it's difficult to take a hands-on approach when all but one set of owners live out of state. Then there are the notes left on the cottage porch from developers looking to buy land. Erbe said she believes environmental laws and zoning that limit the kinds of development will be a factor in keeping the property as it is right now. And if there is one goal Erbe has for the property, it's to keep development away.

"Keep it undeveloped," she says enthusiastically. "The biggest concern for folks in Door County is that everything that drew people up there in the first place — the clean water and the woods and the animals will eventually disappear, including the forests."

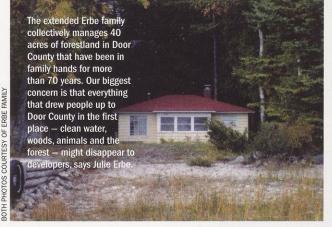
Make a plan and talk through it

Julie Hess, 28, and her sister, 24, both live only two hours away from the 80 acres of forested land in Pittsville, where their parents recently retired. Though her parents # are relatively young — $\mbox{\cong}$ in their early 60s — the \(\frac{1}{20} \) family sat down and § talked about what will 8 happen to their land. They had a good model. ₹ The recent death of an-

other family member caused relatively little upheaval because the family had discussed how such a land transfer would be handled ahead of time. Hess admits it's a little difficult to think about passing on land when she and her sister are just starting their professional lives, but it's important.

Her father has involved both daughters in managing their forest. They share their values and collectively reviewed the management plan. She learned what is involved in holding a timber sale and has some idea of the property's financial underpinnings. The land isn't mortgaged and the property taxes aren't particularly burdensome since the land isn't "super high-priced real estate." Development pressure seems light "since it's kind of in the middle of no place." Both Hess and her sister want to keep the land in the family. At 28, she also realizes she is young and that conditions could change. She is grateful she has had a chance to work side-by-side with her father and learned





from his approach to forest management.

"Likely by the time my sister and I retire, the property will be a better financial investment," Hess said. "[Right now,] if there were a bankruptcy or other family emergency, or if I had to pay the taxes myself, there could be a problem" keeping the land. Julie knows her sister is more interested in the house than she is, but she doesn't think there will be any arguments when the time comes for them to assume

Important factors to keep forestlands in the family

- * Work with the family as a unit since several offspring may be managing the land together.
- * Bring family members up to speed on finding sound advice on forest management.
- * Help forest families learn they can form groups to secure better rates for collective needs like health insurance.
- * Encourage family participation in organizations, workshops or cooperatives to learn more about caring for their woodlands and planning for its future - and to share their experiences with others.



Catherine Mater (right) led a team that interviewed 260 children of forest-owning families in Wisconsin as part of multistate research on what families need to sustain their woodlands into the future.

Shaking the branches of knowledge

To learn more about who will be managing the family forests and what they will need to do the job, researchers interviewed the children of private woodland owners in Wisconsin. The 260 respondents from 35 counties ranged in age from younger than 20 to more than 80. Most of their families own 10-500 acres of woodlands and about a third have owned the land for more than 50 years. According to their responses, agreement among the family (siblings, spouses and kids), property tax relief, and income are the most important factors to maintaining the family forestland. Go to the DNR website, dnr.wi.gov/forestry and look for "Private Landowners" or "Private Forests." Find the "Forestry Offspring Study" to read what the families valued most about their land, how involved the offspring are and will be in forest management, whether they've discussed a plan with their parents, and what might compel this next generation to keep or sell their family property.

ownership responsibilities.

A family trust for a forest future

The bulk of Gary Vander Wyst's life has been lived in forests - in Massachusetts, Colorado, Texas and Morocco. When he came home to Wisconsin, he worked for private nurseries and as a county forester before joining the Department of Natural Resources. He currently works as a forester in Park Falls, but his love for property his father owns in northern Wisconsin predated his choice of a vocation.

Vander Wyst describes an upbringing that included hunting, cutting firewood and planting hundreds of seedlings alongside his dad on 80 acres of forested property in Florence County. Vander Wyst said he, his two brothers and two sisters have a strong tie to the ing the shots." Although his sisters aren't as actively involved with the property as his brothers, Vander Wyst said all are comfortable with the joint ownership arrangement. "Dad says if any of us kids fight about the property, they're out of the will. And he's not kidding!"

Vander Wyst said he's sure the land will stay in the family and that ownership will eventually shift to the grandchildren, all of whom have fond memories of the Florence County property.

"Our only problem now is making sure Dad doesn't get the chainsaw going to cut his firewood for 2015," Vander Wyst says with a laugh.

As someone who refers to himself as his father's "on-call forester," Vander Wyst knows what can happen when forested land is not properly managed. And he knows the importance of in-

> volving a professional forester in forming a management plan for the woodlands. In the absence of such plans, he has seen what fragmentation can do to forested areas. And he knows it wouldn't take long for an 80-acre parcel to be divided up into three- and nive-acted lots to accommodate cabins.

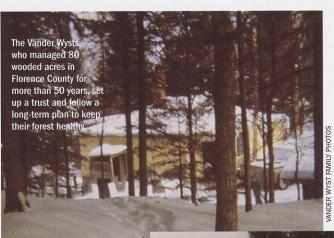
> > "I have no simple answers for how to ensure the future of privately owned forestland," Vander Wyst says. He believes it includes educating current and future owners. And it helps to have the kind of affec-

tion and respect his family has for each other.

Mater is continuing her research. She acknowledges it has importance beyond Wisconsin and the U.S.; Germany, France, and Ireland are also grappling with the same kinds of forest ownership issues.

Conventional wisdom would suggest that societies that have been celebrating Earth Day for most of their lives and who say they are committed to conservation and stewardship will ensure that forests remain forests. Mater's research suggests other factors and personal circumstances — taxes, family finances, proximity to the land, sibling rivalries — also play a role. Parents and children need to talk about the land now. And the only way to know with any level of certainty what the future of forests and forestry will be like is to talk it over with your kids.

Virginia Mayo Black writes for DNR's Division of Forestry in Madison.



land their 83-year-old father bought in the early 1960s. His dad started the discussion of what to do with the land once he passes on.

"One day, Dad came to the kids and asked, 'What do you think we should do with the property?" Vander Wyst said. "We all said, 'It's yours — do what you wish!' Dad's response was, 'What if I leave it to you kids?""

A trust was set up, and Vander Wyst and his siblings are the de facto owners of the land, though Vander Wyst makes it clear that his father is still the one "call-

Help with your wooded acres

DNR Private Forestry Website Contacts for DNR private foresters and consulting foresters working in your area. The site also takes owners one step at a time through establishing a woodlot, caring for trees, financial incentives for maintaining woodlots and planning a harvest. dnr.wi.gov/forestry/private

University of Wisconsin -Extension forestry services - publications and workshops for managing woodlands. woodlandinfo.org

Learn About Your Lands

Classes and workshops for woodland owners are scheduled annually. Check the site for dates, locations and curriculum. basineducation.uwex.edu/ woodland/conference/layl.htm

"The Essential Collection" An online collection of tips, fact sheets and advice for private woodland owners. forest.wisc.edu/extension/ CD/index.html

Woodland Advocates

Wisconsin Family Forests, a nonprofit group dedicated to caring for familyowned woodlands trains woodland owners who volunteer to listen to their neighbor's goals and help them connect with reputable forest professionals to reach their goals. Three such advocates are working now and another 10 are scheduled to start services in 2009. Contact Gerry Mich, Woodland Advocate Program, Wisconsin Family Forests, 625 E. County Road Y, Suite 700, Oshkosh, WI 54901-9731, telephone (920) 424-7888.

Readers

Write

COMMENT ON A STORY?

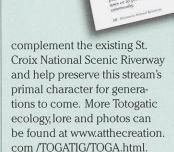
Send your letters to: Readers Write, WNR magazine, P.O. Box 7921, Madison, WI 53707 or e-mail letters to david.sperling@wisconsin.gov

TOTOGATIC RIVER ANOTHER WILD GEM

Your article on the 40th anniversary of the St. Croix National Scenic Riverway ("A wild ribbon of forest and water," June 2008) was a fitting tribute to the highly esteemed Namekagon and St. Croix rivers. Readers may be interested to learn of an initiative through DNR and area legislators to designate the tributary Totogatic River (tuh-TOE-ga-tik) as a State Wild River. A glance at the map shows Totogatic's strategic location tucked between the Namekagon and Upper St. Croix. It matches their landscape beauty while exceeding them in sheer wildness.

DNR's Northern Rivers Initiative (2000) ranked Totogatic in the top two percent (22nd out of 1,494 stream segments), based on its wild character, premier habitat and undeveloped shoreline. The lower Totogatic crosses ecologically rare pine barrens, while the upper river exhibits an unusual "trellis" drainage pattern with whitewater rapids, sharp turns and picturesque waterfalls where it dashes over basalt lava flows on the Minong copper range. Recent scientific studies show that in ancient times native copper was extracted from the upper Totogatic basin by indigenous peoples and worked into tools and weapons. Some of Gordon MacQuarrie's best outdoors stories were cast in the Totogatic pine and wild rice country.

Designating the Totogatic River as a State Wild River will



on Wisconsin's abundant public lands is getting

Herbert Wagner Minong

OUEEN OF FISHES

In 2006 you ran an article titled "Keeping the fight in the king of fishes" (August 2006). Wouldn't you have been more correct to say, "...queen of fishes?" I'm an interpretive field naturalist and wildlife filmmaker. I'm also an avid fisherman and have taken courses in ichthyology. Most of those big muskies shown are females — egg factories! Really excellent article in spite of the title.

Tom Sterling Crestwood, KY

Male or female, it's the musky's habits, fight and fury that makes it "the king."

WHY I HUNT PUBLIC LAND

I really liked *Make it public* about hunting on public land in the August issue. I think it's good to remind people that public hunting can be safe and enjoyable, and with sometimes better results than on private lands.

Of all the hunters I know, only a fraction of them are "trophy" hunters; the majority don't hesitate to take does and fill the freezers. For those of us who love eating venison, the does are just as tasty and public land provides more than ample opportunity to hunt them. Most of us can hunt for does all day long and be happy.

We've hunted public lands for more than 28 years. I have noticed that the hunting tends to be cyclical. Some years there are more deer than you can shake a stick at; other years, the pickings are slim, but counting back all those years, I remember only a handful of times we went without even seeing a deer.

We started with a group of four. As we all aged, two in our group had families, and their sons, their sons' friends, and my friends began to come up. Eventually our group swelled to over 15 some years. Some in our group didn't like hunting on public land. They'd say, "You'll get SHOT!" or "Too many hunters will shoot all the deer." Well, I am happy to report that none of that has happened and our vehicles have always been brought back intact.

It is interesting to see who and how many show up on opening day when hunting public lands. There have been occasions where one hunter sets up too close to another, but I have never encountered a

hostile situation. In my teens, I had approached my ground stand and found a much older hunter sitting in it, smoking. I said hello, and politely informed him that this was my stand. He apologized and promptly left. I have never encountered a bad hunt on public lands, and while I know there are stories that counter this, I think it really depends on how you approach someone. We're all out there to relax and have a good time, we should not be hostile to another hunter who happened to sit too close or in a stand. There're better things in life to get upset about.

I agree with your story that the hardest part of hunting public land is putting in the time to learn the land. Deer use specific "highways" and hide in particular cover. It just takes a lot of hours scouting an area to learn this. That time frustrates many hunters on public land, but I would encourage them to press on. I like the fact that I do not have to ask for permission from a landowner and I know each year will provide opportunities and something different. It took me years to learn "my" area, but now that I know it, I feel confident in the opportunities it presents each year. I know all the other hunters around me, and I wouldn't really want to hunt anywhere else.

David Butcher Richfield

Readers

Write Continued from page 27

UPDATE: WILD ROSE RENOVATION

A grand opening in mid-August celebrated the \$15.9 million renovation of Wild Rose State Fish Hatchery (See our October 2006 story *Rejuvenating a reliable workhorse*). The project updates the century-old facility that's long been a pillar of Wisconsin's stocking program.

Governor Doyle, DNR
Secretary Matt Frank, and
federal fish and wildlife officials
joined anglers and local residents in viewing improvements
in the coldwater hatchery to
help produce Chinook salmon,
coho salmon and brown trout.
In the future, Wild Rose staff will
start raising rainbow trout and
eventually increase the total
amount of trout and salmon
produced for Lake Michigan by
15 percent while meeting modern environmental standards.

"This project is critical to Lake Michigan's world-class fishing and to expanding fishing opportunities across the state," Gov. Doyle said.

Construction started in 2006 and was largely completed this spring. Additional renovations will add coolwater facilities to raise musky, walleye, lake sturgeon and northern. Completion on that project is expected in 2010. A third phase will restore the wetland, springs and stream disturbed when the hatchery was originally built in the early 1900s by a private fish farmer.

The new coldwater facilities were paid for by an innovative funding package, including \$6 million from environmental restoration agreements reached with paper companies for PCB contamination on the Fox River. About \$3.6 million came from Sport Fish Restoration — excise taxes collected on sales of fishing and boating equipment and \$1.5 million from Great Lakes Trout and Salmon stamps that anglers buy.

ON TOURNAMENT ANGLING

Your article in August providing an update on tournament fishing rules caught my attention. I am opposed to tournaments for a number of reasons. In describing the discussions with commercial and sport anglers as well as tournament organizers, your article states that "Tournament organizers didn't like provisions [proposed in the rules] that required participants to submit their boat and live wells to inspection by a conservation warden."

What is the problem? I fish for fun, not money, and I do not object to any warden checking to see if I am obeying the safety laws, fishing size limits and daily bag limits.

Jim Cox Lodi

UPDATES



FISH CAR ON A ROLL

Thanks to train fans, conservationists, history buffs and generous grants the Badger No. 2 "fish car" will be back on track within about a year. (See our story Across the trestles of time, December 2006). Built by the Pullman Company to the exacting specifications of the Wisconsin Fisheries Commission and put into service in 1912, the Badger No. 2 was used to transport and stock fish from the State Fish Hatchery until it was retired in 1945 as better roads and aerated, refrigerated trucks made stocking by truck more economical. The elegant 72-foot steel and wood car boasted 15 fish tanks, an observation deck, salon, galley kitchen and berths for its crew of four. The car was subsequently sold to a rail buff then purchased by the Mid-Continent Railway Historical Society.

The car's renovation is underwritten by a \$475,000 match grant from the Jeffris Foundation of Janesville. Fundraising during the

last 16 months matched the grant and included publicity at two Gandy Dancer music festivals for the railcar renovation. Our thanks to readers who contributed to the project.

GREAT LAKES COMPACT SIGNED

The eight-state agreement that governs how large-scale water diversions would be jointly considered by Great Lakes states was endorsed at a hearing of the Senate Judiciary Committee in Washington, D.C. in late July. (See our story about compact issues, *A firm hand on the spigot*, June 2007). The compact received presidential endorsement, and supporters will work for similar quick review in the House of Representatives during the September floor session, perhaps receiving Congressional approval before the fall elections. The President and both presidential candidates have expressed support for the compact.

HOW LONG DOES YOUR SUBSCRIPTION RUN?

You can check how long your subscription runs by taking a look at your mailing label on the back cover. Your subscription runs through the issue shown at the end of the second line. In this example, the last issue is April 2010.

#BXBGJHV********CAR-RT LOT**R 001
#WIS0000123456/4#19 APR10
JOHN & JANE DOF
1234 BUCK DRIVE
DEERFIELD, WI 53531

A weasel with a secret continued from page 2

Until 1925, American marten were widely distributed throughout northern Wisconsin but unregulated fur harvest and habitat loss eliminated the animals. Like other formerly displaced animals, including fishers, turkey and elk, reclaiming their niche in the natural landscape is part of our aim to restore natural diversity.

The Department of Natural Resources in cooperation with the U.S. Forest Service and other agencies, developed a marten recovery plan in 1986. The Great Lakes Indian Fish and Wildlife Commission (GLIFWC) later joined the group of active wildlife managers and researchers. The plan aims to reestablish a self-sustaining population of marten in the Chequamegon-Nicolet National Forest.

Over a period of 15 years, 300 marten were released in the forest with limited success. A mark and recapture study done by DNR Wildlife Biologist Jim Woodford estimated that marten populations in the northeast part of the release range of the Nicolet side have grown to about 220 animals.

"It appears these animals are holding their own." Woodford explained, "We have not noticed any increases or decreases in their numbers."

While the Nicolet marten have been surviving, the Chequamegon population in northwestern Wisconsin appears to be much lower as measured by winter track surveys and hair sampling, Woodford said.

Biologists from the three main agencies are trying to determine why marten populations are struggling. One theory considered is that an insufficient number of animals might have been released over such a wide area. The forest covers 1.5 million acres of land across the north.

There was also a concern with the sex ratio of the animals that were relocated and stocked. Woodford said more males than females were released during the reintroduction effort. Still, given that marten in similar ratios were released in both forests, it is uncertain why the Nicolet populations responded better than those in the Chequamegon region.

Another factor may be predation.



Fishers that are somewhat larger compete for similar foods and habitat as marten. Like their competitors, marten feed on squirrels, mice, shrews, rabbits, amphibians and reptiles. Bobcats and foxes that are plentiful in these forests also prey on similar foods.

When searching for food, marten sprint in a zigzag pattern across the forest floor stopping frequently to check for prey and predators. When threatened, they take to the trees. In a foot race scrambling through trees they can elude bigger animals.

A third reason these high energy animals may not be surviving well could be climate change. It appears, say biologists, that the animals need deep snows to gain a competitive edge on bobcats, foxes and fishers also hunting prey on the forest floor.

"The marten do better during years of high snowfalls in the north where they tunnel under snow in search of mice and other rodents," said Woodford. "When there is less snowfall, as we have seen in the last few years, they are at a disadvantage."

Marten are better adapted to deep snows as they are smaller, lighter and have hairs around the pads of their feet. The larger fisher cousin is not so well equipped.

Elimination of dry land trapping in and around areas where marten have been released has been a two-edged sword. On one hand, it has eliminated

the incidental take of marten; on the other, it may have allowed increases in the numbers of fishers that prey on their smaller cousins.

Biologists continue to look for ways to improve marten populations. One proposal approved by the sporting public at last spring's conservation hearings would allow dry land trapping in areas where marten are released using cage or box traps and cable restraints. These traps are effective in taking fishers, foxes, covotes and bobcats without harming marten.

A GLIFWC biologist, Jonathan Gilbert, has been studying marten in the forest since 1991. Gilbert has trapped, radio collared, and tracked them using telemetry equipment. He also measures the size and weight of each animal, and checks for parasites and evidence of reproductive success.

Gilbert also notes that marten, known as waabizheshi to the Ojibwe or Chippewa tribe of Native Americans, had historical cultural status as clan animals.

Over the next few years, 60 more marten will be released. Continued research, telemetry studies and winter tracking may provide clues for biologists to what management techniques can successfully return populations of this reclusive woodland resident to Wisconsin forests.

James C. Bishop, Jr. is public affairs manager for DNR's Northern Region and is stationed in

Comforts

Kiera Wiatrak

Basic training for dogs

Training leads to happier pets and a more comfortable home. Dogs, like most people, view relationships as a social hierarchy. If you are continually at your dog's beck and call whenever he wants a treat, affection or play time, he will soon believe he is in charge. Training sets some ground rules so you can have fun with your dog without worrying about aggressive behavior.

Training also requires time, but it's an investment that pays dividends over your long-term commit-

ment. It strengthens
your bond by providing both of you
with the tools
to communicate
effectively with
each other. An
obedient dog is
also a safer dog. A
dog that knows to

come immediately when called is in much less danger if he escapes onto a busy street or gets into a fight than one who doesn't.

By training your dog, you take on the role of teacher. Just as with a child starting kindergarten, the teacher's attitude determines the student's success. During training sessions, it's imperative that you maintain a positive attitude. If you're grumpy, your dog will pick up on that and won't learn to trust you. Obedience training is an exchange — good behavior for love and affection. If you don't hold up your end of the bargain, neither will he.

Make sure to be patient and consistent. If you only enforce commands some of the time, you will only confuse him. If your actions teach him that you're only serious about commands when it's convenient for you, he will only follow them when it's convenient for him!

Start training when your puppy is young. Just like people, this is when dogs' minds are ripe for ab-

sorbing information and they want your approval.
Also, teaching your dog good habits before he's had time to learn bad ones is much more effective than shaping ingrained bad behaviors.

HERE ARE SOME TIPS
FOR RESOLVING
COMMON
BEHAVIORAL
PROBLEMS

CHEWING

Although the difference between your leather recliner and your dog's squeaky toy may be obvious to you, your pet can't distinguish his toys from your possessions without training. To make matters more obvious to your pet, don't dote on your dog by providing tons of toys. Too many toys makes it more complicated for your dog to remember what is and isn't ok to chew. Keep it simple.

JUMPING ON PEOPLE

As much as you may love that your dog is excited when you come home, jumping on people is a problem, especially when your dog shows the same enthusiasm for people who may be afraid of dogs, or jumps on small children or seniors who are not tall enough or strong enough to withstand it. Dogs naturally jump to establish dominance, hierarchy and submission. The key to preventing this behavior lies in gently but clearly establishing that people are the boss. You need to react consistently and promptly. If you return your dog's enthusiasm when he jumps on you, he'll never understand the behavior is unacceptable.

Instead, teach your dog to sit using treats as positive reinforcement. Every time he starts to jump, tell him firmly to sit, provide hand signals and give him a treat if he obeys. Slowly phase out the treats until sitting at your command becomes automatic.

CONSTANT BARKING

Dogs bark when they feel isolated, lonely, territorial or fearful. Don't reinforce this behavior by giving him the attention he seeks. Instead, distract your dog from barking by dropping a few coins into an empty can and shaking it gently. This will surprise your dog and temporarily stop the barking. Then, reward him with affection and a treat for being quiet. React consistently because you make or break your dog's behavior.

TRAINING YOU AND YOUR DOG

Attending obedience classes with your dog, taking part in dog groups and clubs, or hiring a trainer is a fantastic way to get specific instructions on raising an obedient dog. Experienced trainers can ascertain individual needs of your family and your pet. Dog trainers and experienced pet owners also train people by giving hands-on demonstrations and feedback on techniques you can't get from a book

To choose a trainer, ask for recommendations from your veterinarian or friends who have completed courses and enjoyed the experience. Ask to sit in on a class before signing up to make sure the training methods are positive. Local dog clubs, dog breeders and vets may also recommend websites for finding a trainer who is right for you and your pet.

Kiera Wiatrak is an editorial intern with Wisconsin Natural Resources magazine.

Tyou, lie it lieves



Wisconsin

Traveler

Out and about

Pick your pleasure at a mix of outdoor events this fall, but watch your step!



Archery competition and an encampment at Fort Bon Secours.

in Cornell, October 11-12. Re-enactors at the fort take you back in time to 1754 to savor the flavor of life in colonial New France. The encampment features vintage music, foods, costumed settlers and contests like hawk and knife throws, archery shoots and matches that test canoe skills. The fort is located at 15859 292nd Street in Cornell, northeast of Chippewa Falls and just southwest of Pike Lake. (715) 667-5362,

www.fortbonsecours.org.
Bring those four-legged
lederhosen to **Barktoberfest**in Cambridge in central Dane
County on Sunday, October 12.
This canine-friendly festival in
Veterans Park on Main Street
(Highway 12) runs noon to 2
p.m. Go through your Olympic
withdrawal watching athletic
dogs play flyball and canine
freestyle and exhibit their
agility. The crowd can root for
the best dog costumes and

applaud the "best trick for a treat" pet contest. Follow the parade to lap up a cool one with your tail-wagging buddies during Yappy Hour from 2-4 p.m. (608) 445-0755, e-mail dirtdogs@charter.net

Take a hike and chow down some homemade goodies at the 15th annual **Romp in the**

18 at the Gordon Bubolz Nature Preserve, 4815 Lynndale Drive in Appleton. Walk the trails, enjoy the wandering folk musicians, play games for treats and bring a sack to haul home some of the cider, caramel apples and s'mores for sale. Advance registration recom-

mended for the 12:30-4:30 p.m. event, (920) 731-6041, e-mail info@bubolz preserve.org.

As it cools down and daylight starts to drop off, birds are on the move. Visit the annual **saw**-

whet owl banding and migration on October 18 from 8 a.m.

to noon at Woodland Dunes Nature Center in Two Rivers. The center is on Highway 310 west of town. An \$8 fee per family brings you close as these yellow-eyed, seveninch owls are fitted with bracelets and released on their fall journeys. Food and other nature activities round out the morning. (920) 794-4007, e-mail wood-

landdunes@lakefield.net.

Before the sun sets, continue your travels to Lake Kegonsa State Park in Stoughton for a candlelight hike on October 18 from 6-9 p.m. Weather permitting, the 1.2 mile White Oaks Nature Trail will be glowing with hundreds of jack-o-lantern luminaries. Stick around after your hike for a bonfire and refreshments or roast some weenies on the grills provided. You'll need a valid parks sticker, but there is no fee for the walk. The park is located at 2405 Door Creek Road, (608) 873-9695.

For those who can't wait for winter (and what's

WRONG with you anyway?), head north for the **Dirty Dog Dryland** Derby, a sled dog race without the snow on October 25-26 at the Ma-Ka-Ja-Wan Boy Scout Reservation in Pearson.

That's on County Road T southwest of Crandon heading

towards Antigo. Dogs need to run year-round and the races through the scenic grassy hills and trails let mushers and teams show their stuff as their wheeled sleds wind through the woods. Beverages and food are available. The event is free. Cheer on the sledders, and pat the dogs on g the head to show your appreciation. (715) 882-8080 or (715) 487-4191, www.witrailblazers.org.





Wisconsin, naturally

KICKAPOO VALLEY RESERVE STATE NATURAL AREA

Notable: The scenic Kickapoo River threads its way through large stands of mature southern hardwood forest,

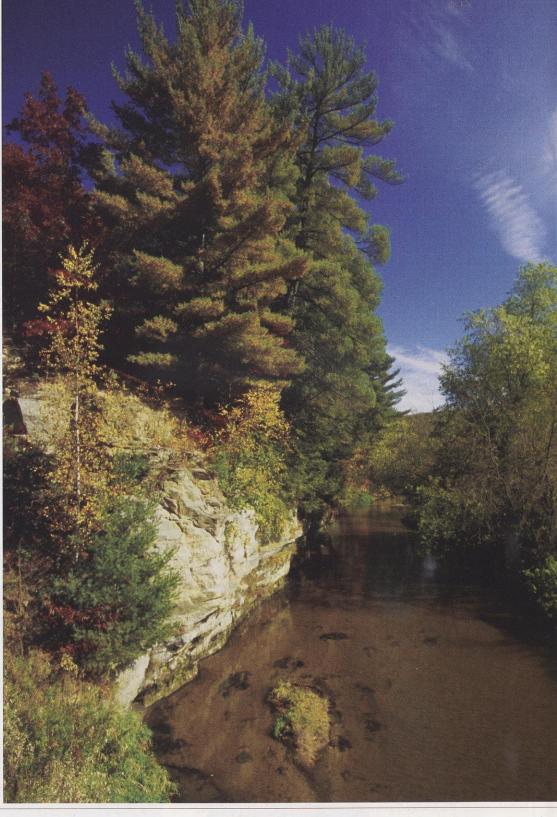


sedge meadows, and pine/hemlock relicts. Of special significance is the diversity of rare plants that grow on the sculpted sandstone cliffs eroded by wind and water. Northern monkshood, arctic primrose, Lapland rosebay, cliff cudweed and musk-root find niches in the sheer rock walls that hug the river.

How to get there: Stop at the Kickapoo Valley Reserve Visitor Center, located 1.5 miles north of La Farge



of La rarge (Vernon Co.) on Highway 131, for maps and information on current river conditions. Access is afforded at many points along Highway 131 and other county and town roads, as well as by water via the Kickapoo River. See dnr.wi.gov/org/land/er/sna/sna354.htm for a map and more information.



TO SUBSCRIBE CALL 1-800-678-9472
OR VISIT OUR WEBSITE WNRMAG.COM