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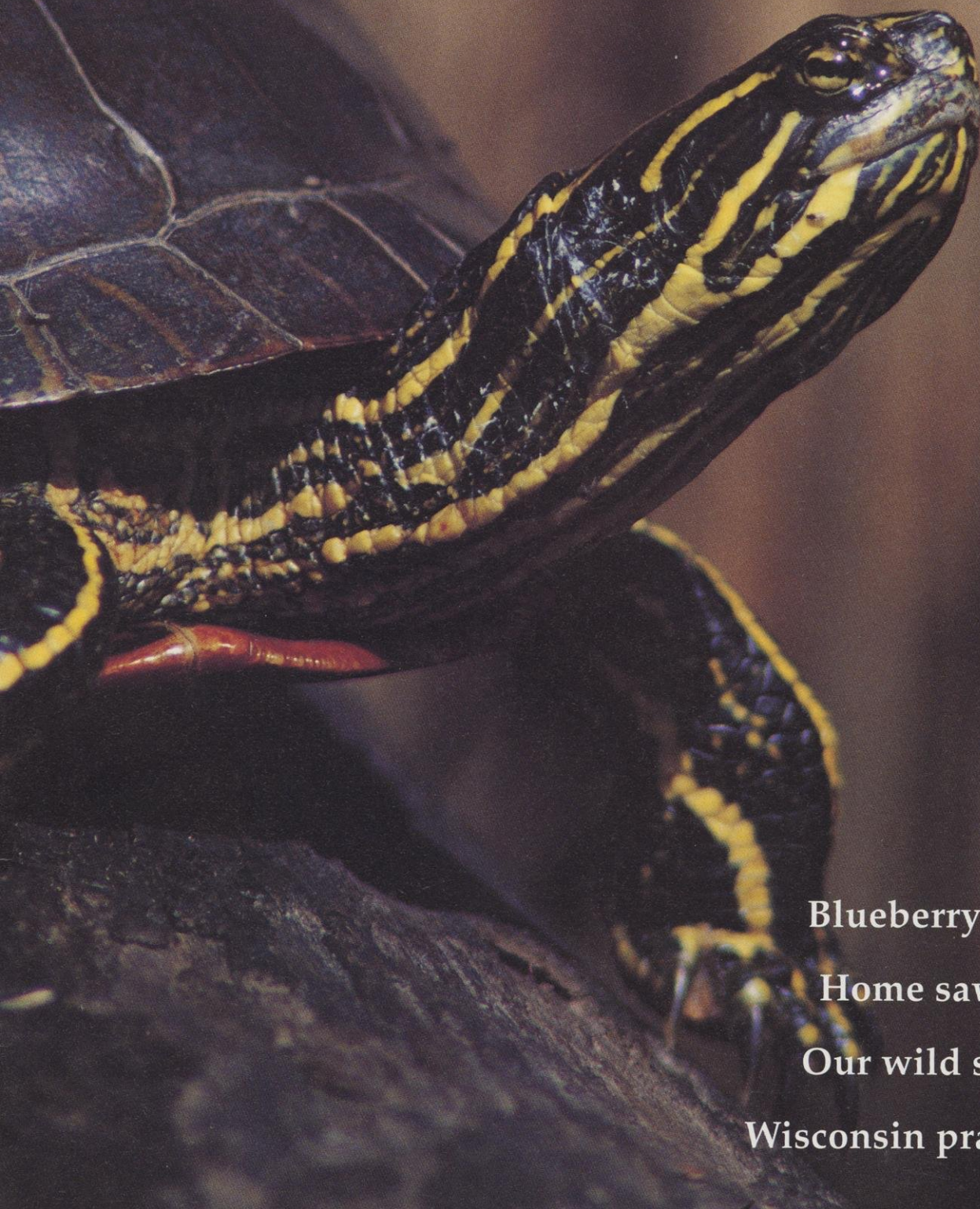
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WISCONSIN

NATURAL RESOURCES

June 1995 \$3.00



Blueberry memories

Home sawn lumber

Our wild state rivers

Wisconsin prairie dogs?

WISCONSIN PRAIRIE DOGS?



Exotic animals and plants can get here by many routes.

Scott Craven

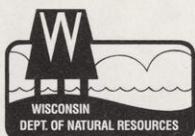
If you've visited the Dakotas, Nebraska or other Plains states, prairie dogs were likely on the list of animals you saw, but what about here in Wisconsin? My call to museums in Milwaukee and the zoological collections at the Madison and Stevens Point University of Wisconsin campuses turned up no records of prairie dogs in Wisconsin. Field guides and other references on mammals place the easternmost range of the black-tailed prairie dogs in the central parts of North and South Dakota and eastern Nebraska; quite a distance for a rotund, short-legged ground squirrel to traverse to reach the green fields of Wisconsin.

That's what led me to conclude "No way" when a caller to a public radio talk show told of a prairie dog in a farm field near Ferryville in Crawford County. We were discussing Wisconsin wildlife and a very pleasant woman called to ask if the prairie dog near their barn was unusual. I did my best to convince her that the brown animal with the large burrow system and mounds of soil was undoubtedly a woodchuck. Undaunted, she said the family was certain it was a prairie dog, it had lived alone in their field for nine years, and she would send pictures.

I honestly thought I had heard the last of the Ferryville burrower. Not so! A few weeks later, two excellent snapshots of the animal arrived at my office. To my embarrassment and great interest, it was clearly a black-tailed prairie dog. I have since visited the animal and, as of last summer, he or she is still living alone in the same area it has called home since 1986.

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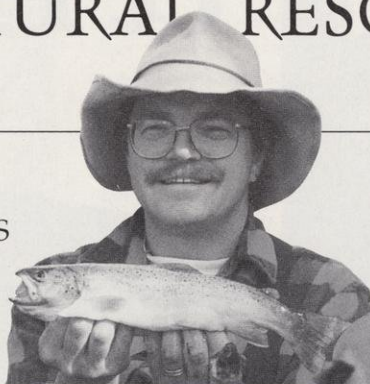
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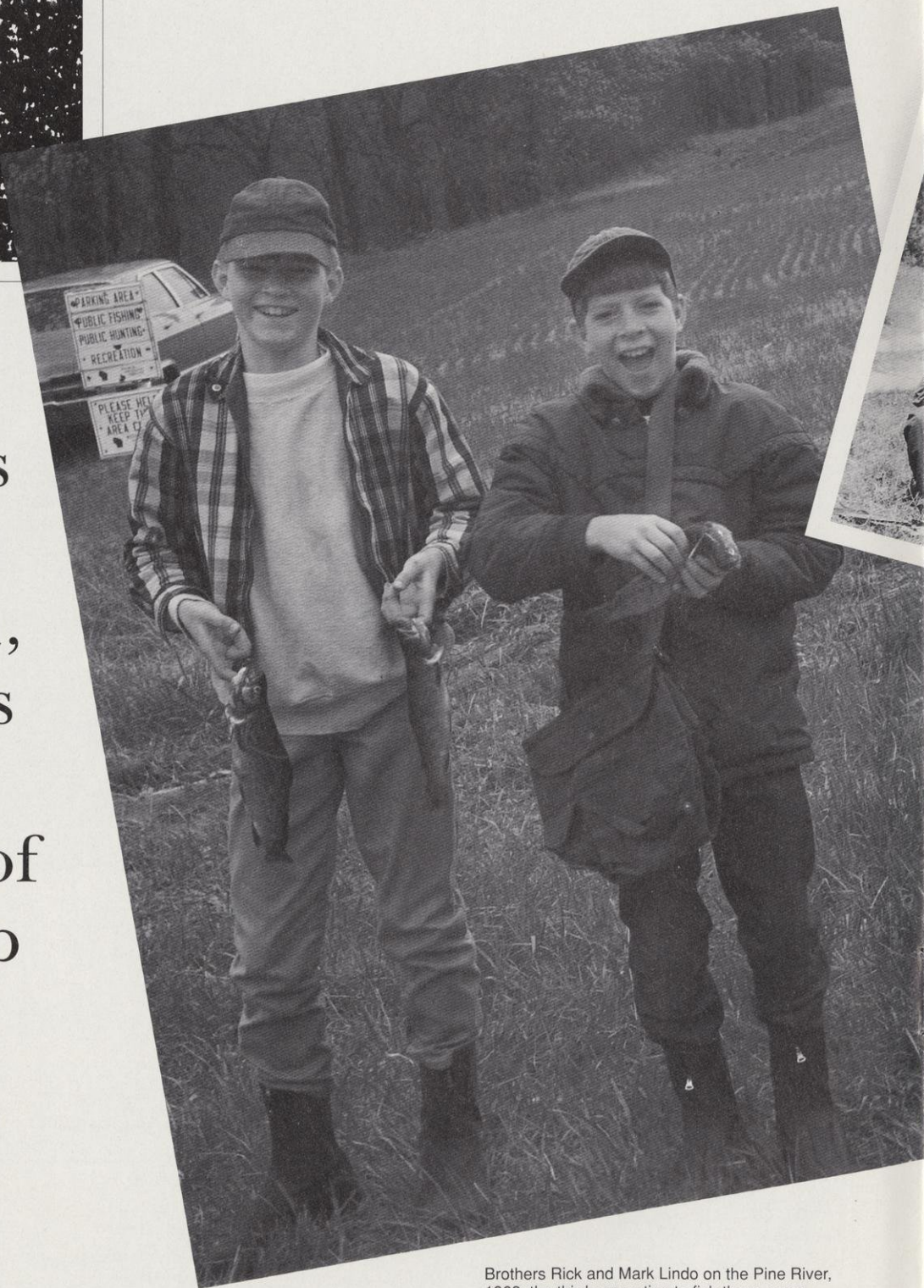
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F

amiliar waters

Fishing traditions are more about fun, memories and the comforts of friendship than catching.



Brothers Rick and Mark Lindo on the Pine River, 1968; the third generation to fish these same waters.



(left) Opening Day, 1956. Sid Lindo (kneeling left) and Orville Lindo (second from right) formed a family tradition on Waushara County trout streams.

(right) The catch from an outing in the early sixties.



LINDO FAMILY PHOTO

Bradley R. Pekoc

In the late forties, the old cars didn't go as fast, the highways from Illinois to Wisconsin snaked through one small town after another, and the roads that meandered back to the fishing streams were sand. It was easy to get stuck. After a rain the roads often got soft or slick as ice. Getting help was no easier, as many of the rural roads didn't have numbers or names. But it was worth the trip.

Back then, trout season started the first of May at midnight and two brothers from Aurora, Ill., Orville W. "Fat" Lindo and his brother Sid, got the bug to come "north" to fish. The journey evolved into an annual expedition for family and extended family.

Here's how it started. In 1946 Sid sold his paint and wallpaper store and moved to Oshkosh. He struck up a friendship with a neighbor, Sid Gordon, who introduced him to trout fish-

ing. Gordon wrote *How to Fish From Top to Bottom*, and he was an early advocate of improving stream habitat to build stronger trout populations. The Lindo brothers got hooked, big time. They scouted out potential fishing spots and decided to give the trout streams in Waushara County a try on Opening Day back in 1949.

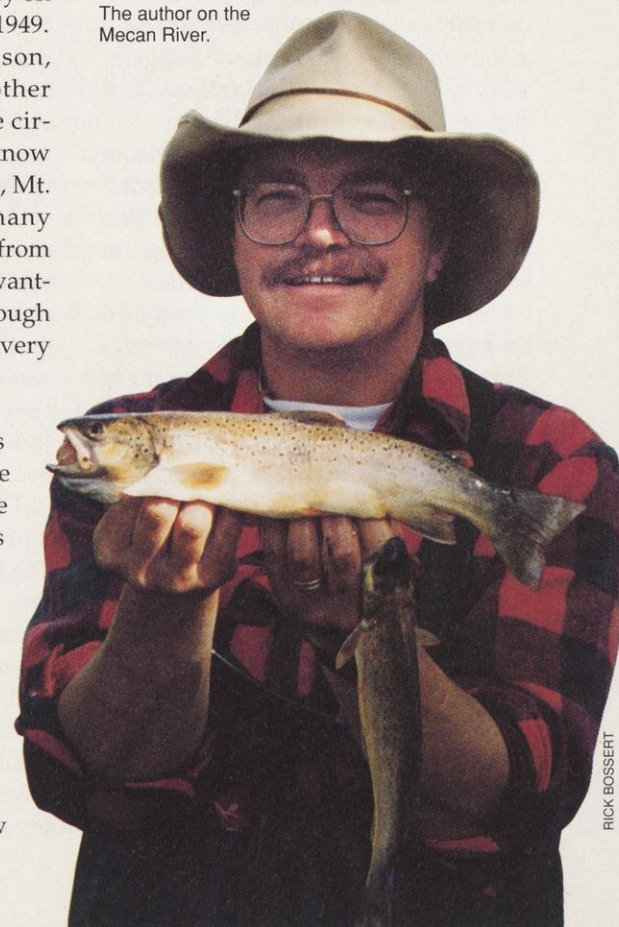
Soon after, Fat's son, Don, and younger brother Maynard joined in. The circle of friends grew as they got to know the locals in Wautoma, Redgranite, Mt. Morris, Wild Rose, and the many places they visited. Other friends from Illinois heard about the trips and wanted to take part, too. From 1951 through 1964, Fat and Don led the group every Opening Day.

Fat wouldn't make it the following year. In January 1965, his car broke through the ice while fishing on Lake Delavan and he drowned. His grandson, Rick, was to have accompanied his grandpa on that ice fishing trip, but fortunately didn't. That spring, father and son trout fished the Opener, shed some tears and shared memories of their years angling with Orville.

The family continued the Opening Day tradition. A few

years were missed, but the annual Wisconsin outing continued to build memories and a tradition that marked time for the group. Soon Rick's younger brother, Mark, and new-found college friends joined the group. A few years later, Rick's son, Stephen, became the fourth generation of his family to trout fish those same waters.

The author on the Mekan River.



RICK BOSSERT



Sid Lindo on the Lower Pine River bridge in 1955. Thirty years later trout stamp funds rejuvenated county trout streams.

The streams and memories got even better

From 1985 through 1992, the Wisconsin Department of Natural Resources renovated many of the streams in Waushara County. Don got a little discouraged as many of his favorite fishing spots were closed while the fisheries crews rerouted channels, restored streambanks, removed brush and replanted vegetation. A few of us diehard friends kept the annual trip alive.

In 1993, we convinced Rick to rejoin us for an outing. His enthusiastic report convinced Don to see the improvements stream reclamation brought. He was duly impressed.

During that trip, Rick, Don and Stephen met one of the DNR staff over breakfast at the Pioneer Restaurant in Wild Rose. Elward Engle, a DNR land agent, had started with the fish management program in 1958 and learned how to improve streams from Robert Heding, his supervisor. Heding was a true pioneer who designed many of the structures used to correct streambank and water flow problems in these sand country streams. Engle's conviction for maintaining quality trout waters and his extensive knowledge of fish management impressed the anglers. His choice of a fly rod and love of fly fishing forged a friendship.

Engle also helped us understand some of the legal and financial tools the Department of Natural Resources uses to protect trout streams. Through perpetual easements, DNR cares for the springs and land adjoining streams to protect the water, and ensures the public has access to fishing.

Trout stamp money, which I mistakenly thought was used for stocking fish, is mainly used to stop soil erosion and improve habitat in and around the streams. The trout stamp program, which started in 1977, was shepherded through the Legislature by State Supreme Court Justice Jon Wilcox, then a member of the state assembly, who revered the same trout streams we fish near his home in Wautoma.

Learning of fish, from fish

Through the years, we've enjoyed helping newcomers learn the subtleties of fishing trout. The rookies soon realize that stalking wild trout is a lot different than bank fishing for catfish. Learning the trout's ways is elemental to guessing where the stream holds fish. Stealth in approach and a delicate touch with the rod comes with time. My rookie year, I went fishless for three days before catching a nine-inch brown trout about two hours before our return home. One of our buddies was dubbed "The Sucker King" for hooking so many bottom-feeders.

The novice also learns to respect another's position on the stream. Spooking a fellow angler's trout is unethical. You need to walk quietly and far away from a section of stream someone else is fishing. Trout see and sense movements and vibrations on the bank. The big fish get away because their senses are so acute.

I start planning my fishing strategy long before we arrive at water's edge. The Pine, Mecan, Chaffee, Wedde, Willow...I can close my eyes and imagine a favorite stretch on each. Is the water running fast or slow, shallow or deep? Will it be clear or overcast?

Another important factor is to do some scouting. One year, we learned the hard way to never go fishing without water. We had decided to try fish-

ing an area of Columbia County that was new to us. It seemed on the map that this new spot was near the road. We decided to hike in to find the stream. Well, wearing waders on a two-mile hike produced blisters about the size of golf balls!

Don with a catch from the upper Pine River in the 1960s.



LINDO FAMILY PHOTO



BRAD PEKOC

LINDO FAMILY PHOTO

Like Grandfather, like Grandson. (L to R) Orville on Opening Day, 1955; Rick on the Pine River, 1969; Rick trout fishing Opening Day 1994 on Soules Creek

Memories, like good streams, flow from one trip into another. There was the time Rick loaned a buddy, Dan, some hip boots, a creel and a vest, but no net. Dan went downstream and fished until he thought he was snagged on a log. He crawled across the log to avoid deeper water and free up his line. Of course, the log broke. That's when Dan discovered he had a big fish on. He managed to get to shore, totally soaked, and yelled for Rick to bring a net. Rick



LINDO FAMILY PHOTO

Dan bought a net.

There's nothing I like better than the taste of freshly-caught, pan-fried trout, but there is also a thrill in catching and releasing a particularly fine specimen. When we fish, our focus is on having fun with friends, not filling freezers. We really appreciate that the gift our families share with us is the time to be outdoors, fishing, guilt-free.

Over the years, we've faced every kind of weather. On my first trip to Waushara County, we spent four days camping in the rain. The tent blew down, the temperature dropped to

yelled back "When are you going to get your own stuff?" Dan managed to beach the fish on the bank, then Rick showed up. They measured the fish — a 21-inch rainbow! Shortly thereafter,

40°F each night, and it was nearly impossible to start a fire. That was several years ago, and I haven't missed a year since!

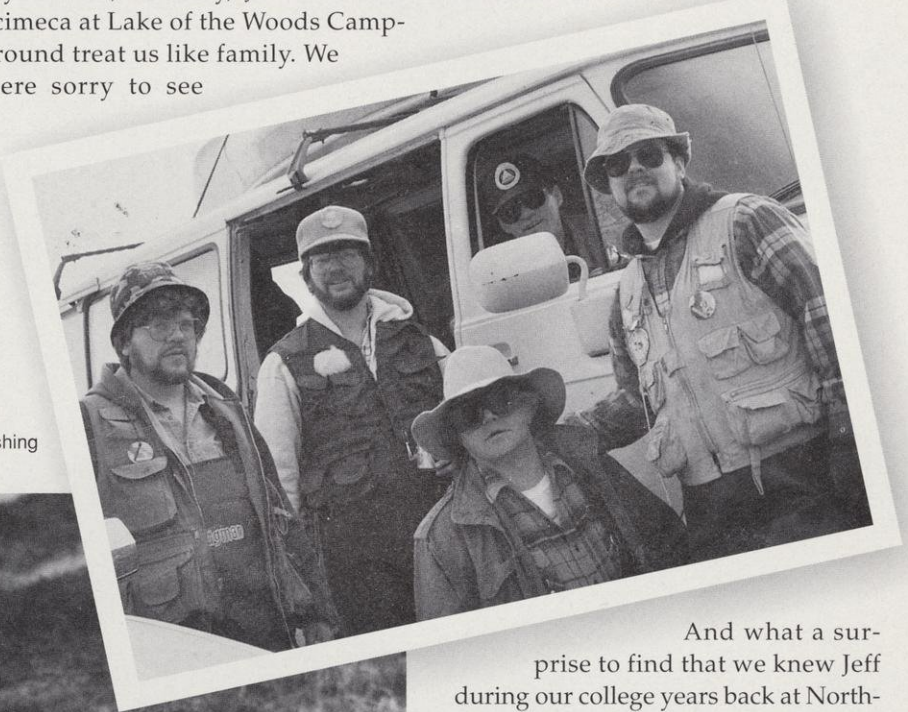
Still, we tend to remember events more than dates — like the trip we nearly broke the canoe in half, or the year the car broke down in Rockford and J.J. rescued us at 2 a.m. (We were streamside, Waushara County, at 5 a.m.) Then there was the year “ol’ Milktoast” was a rookie and landed a 19-inch rainbow, and the time Uncle Maynard lost all his new gear when the camp burned!

For us, the annual trip goes beyond fishing familiar waters. We continue to

explore and discover different areas while making new friends. It’s a special feeling to be on a first name basis with people you see only once or twice a year. Vic, Dorothy, Jack and Sue Scimeca at Lake of the Woods Campground treat us like family. We were sorry to see

Vern and Mavis Grosenick go when they sold the Dakota Inn. To our delight though, we now have Jeff and Debbie Bird to thank for great food and drink.

We keep fewer fish than we kept in the early sixties, but fishing camaraderie is as strong as ever.



And what a surprise to find that we knew Jeff during our college years back at Northern Illinois University, in De Kalb.

We enjoy planning the outing too. Once the new year arrives, we start counting the days left until the trip. During February we meet to work out trip details, share schedules and decide who will ride together. It’s just an excuse to get together mid-winter, enjoy each other’s company and reminisce — just when did they find that dead hippo on the Mekan River? Or how about the time Rick saw a big buck streamside and Dave said he hadn’t seen any deer at all that weekend. Rick pointed out you don’t see live deer coming into taverns very often!

Over the years I’ve come to realize the whole of our fishing experience truly is bigger than the sum of its parts — tradition, camaraderie, familiar streams, new friends, old experiences and the chance to catch fish keep drawing us back to these same comforting waters. I’m hooked. □

Brad Pekoc, runs Clear Creek Renovations and is also a studio potter in Millington, Ill. His family lives on 8.5 acres that was home to his father and grandfather before him.

Homegrown, homemade LUMBER



Got a few trees and a sense of adventure? Portable sawmill services can cut your logs into lumber right on your property.

Photos and story by Dick Schneider

It's the sort of classified you only see in a shopper or tacked up in a small country market: Portable lumber sawing. Lengths up to 34 feet, diameters up to 36 inches. Will saw logs at your place or mine.

Maybe you own a small woodlot or even a stand of nice yard trees that are scheduled to come down. This ad might be just what you want.

I say might, because you've got a lot to consider. First, stand back and take an honest look at the trees you want to cut. Would they yield good quality sawlogs? Are they straight, flaw-free and solid? Do you have some spare time and some space? Can you work on somebody else's schedule? Are you in no great hurry to use the lumber you'd cut? If so, keep reading. There are even some good tips here for the city-bound homeowners or apartment dwellers, the neo-pioneer types who someday plan on owning a rural home, a few acres for a hunting shack or a place to pitch a tent. Or maybe you're just curious to learn something new.

Don't bank on home-cut lumber as a money-making or even money-sav-



Cutting lumber within rolling distance of your logs is handy. To produce high-quality boards, start with quality trees. Follow these tips to keep logs clean and in good shape before the miller arrives.

ing alternative. Believe me. Lower grades of commercially-milled lumber are much more economical in the long run than home-cut pieces. First, there is vigorous competition among lumber yards to keep the price low. Second, commercial lumber is graded by quality, and you get exactly what you pay for — dry lumber costs more than green, select grades cost more than flawed, hardwoods typically cost more

than soft. Third, and this is especially important, commercial lumber is normally kiln-dried and ready for immediate use. It is also already planed smooth. Planing can cost as much per board as the cost of sawing boards in the first place. Finally, it costs just as much to saw junk wood as select trees and desirable species.

You're still with me aren't you? OK, let me describe some of the joys and pitfalls of bringing a portable sawmill to your trees. For me, there is a real thrill in seeing trees turned into timber and lumber that can become part of your house or your furnishings. Why consider portable sawmills? It's a lot easier for you if a mill operator hauls a wheeled rig to your logs than to hire a

commercial outfit to skid out your logs and haul them to the mill. Moreover, most commercial sawmills are not inclined to handle your tiny job and custom-cut your particular logs in their normal milling operations.

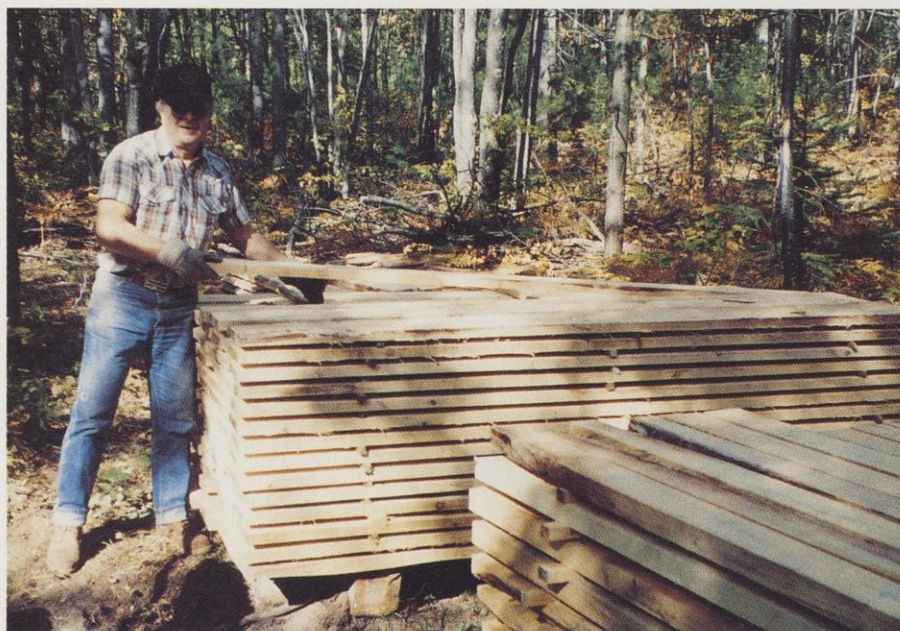
Don't fall for some of the shortcuts. There are a few chain saw-type rigs on the market which are relatively inexpensive, but they are slow-cutting, dangerous and they waste a lot of



(above) Positioning the logs. This portable sawmill can handle logs up to 20 feet in length.

(below) The miller, Ken Steinberger, carefully squares off a log to produce as much usable lumber as possible.

(bottom) Lee Bartsch stacks boards for air-drying. Thin strips of wood called "stickers" separate the sawn boards to promote even drying and prevent staining.



wood. Portable saw rigs are expensive, complicated machines that need a competent operator to do a quality job.

Most portable mills employ a band saw which cuts stationary logs horizontally on a rigid bed. The thin blade cuts a very narrow kerf, which obviously produces a minimum of waste as sawdust. Its main drawback, as with all mechanical saws, is the danger and cost if the saw blade breaks, typically from striking metal foreign objects imbedded in the logs. By the way, this is why millers usually refuse to cut urban trees which often hide nails, clothesline hooks and other hazards.

When considering your job, you'll likely need the help of a competent forester and logger. The forester tells you which trees need cutting and the logger cuts them. Either of these professionals or the miller or sawyer you hire can estimate the volume (board feet) of usable lumber in each tree. The amount will depend on each tree's straightness and lack of flaws as well as how the tree will be sawn.

The simplest and most economical method is to cut repeatedly long slices of one set thickness through the log. These boards have many uses and there isn't much waste, but they tend to warp easily. Better quality lumber is quarter-sawn: the cuts are made along lines radiating from the center of the log. This produces boards that are less prone to warping, but there is more scrap wood in the process.

You have to expect some waste as the half-round slabwood is trimmed off to square up the log. Keep an eye out for interesting slabs which can be used for quaint signs, rustic bird houses and feeders, or country fences. Most slabwood is useless and ends up as firewood. I simply criss-cross it in stacks so it dries quickly. Some people just leave it to decompose with the branches and slash cutting left over from logging.

The sawdust has little value. Some people use it in home smokers to smoke meats and fish. Others use it for plant mulch, but wet sawdust makes pretty poor animal bedding and fuel.

Prepare the site

Before the miller arrives, you have a lot of planning to do. Try to schedule firm contracts and dates for logging and milling. Local foresters can help you draft these agreements.

It's best to mill logs as soon as possible after cutting. Especially in warm weather, freshly-cut logs can quickly start to discolor and stain. Also insects start to bore into dead wood soon after it's felled. Logs can be kept in good shape by keeping them damp. Soak them with a hose or sprinkler.

You'll need to clear a large, flat area that is free from overhanging vegetation. The logs should be stacked parallel to the milling site so they can be rolled conveniently to the mill when it's set up. Keep the logs free of grit so they won't dull the saw blade. This means the logs should have been lifted and hauled to the stacking site. Logs which have been dragged and have become covered with dirt may need to be cleaned with a wire brush, a HUGE amount of tedious work.

Talk to the miller ahead of time to determine if the logs will have to be cant-hooked and levered up onto the sawbed or if the equipment has cranks and a cable lift. More expensive rigs may be equipped with hydraulic lift arms. Some millers may provide a forklift or tractor as side equipment. These labor-saving, time-saving devices should be considered when arranging the job, especially when you are paying by the hour!

Some millers permit you to assist in rolling the logs onto the bed or doing other jobs. Here's some sound advice — DON'T RUSH IN! The equipment is expensive, and the work is very dangerous for a rookie.

Care of the lumber

You'll also need to prepare a large area so the lumber can be stacked above the ground. You'll need to lay leveled blocks where fresh-sawn lumber can be stacked. A good foundation will minimize loss from warped and twisted boards later. Two strong backs are better than one for moving and

stacking fresh boards. Enlist family or friends to assist you, and equip everyone with safety equipment — heavy gloves, eye protection, ear protection, back protection and steel-toed work boots at a minimum. Pay attention, lift properly, take your time, and never get in front of the saw.

Stacking lumber so it dries properly takes some skill too. You may mix board widths in a stack, but each level layer ought to contain boards of the same thickness all the way across. Next, each layer must be separated by stickers: narrow strips of wood laid at right angles to the board lengths. Stickers provide necessary air circulation between the wood layers and minimize contact between the layers. Stickers need to be inserted immediately. Without them, boards that contact each other for even one day may leave discolored spots. The miller will be glad to cut such strips for you and demonstrate the proper technique.

Fresh-cut lumber should be end-sealed to reduce checking — the splitting caused by uneven drying. Any sort of heavy paint or varnish will suffice to seal off the ends. Some people even advise end-sealing your logs while they await milling.

Next, the wood has to dry properly. Kiln-drying to 20 percent moisture isn't readily available to small operators; less thorough outdoor air-drying may be your only option. The old rule of thumb is that well-stickered lumber piles dry about an inch of thickness a year. Some woodworkers start using their lumber after it dries for two months if the wood was cut and stacked during warm, dry weather and the lumber was protected by tarps or sheets of metal siding.

Don't plan on planing your lumber until it is good and dry. Commercial mills won't even take in green lumber because the delicate planer blades can get jammed up. Green-planed lumber will dry rough and will only need to be planed again once it's dry.

Then there is the matter of cost. Local millers typically charge about \$30 an hour. Inquire about added charges such as travel time, mileage expenses, set-up time, blade replace-



The author uses native maple and birch to make furniture that is beautiful and functional, like these spinning wheels designed by his spouse, Mryna.

ment and replacement time. A reputable miller will respond to and initiate these concerns as well as discuss liabilities. Also discuss how much time your job will take. Milling rigs are expensive and some operators want to disassemble their equipment and take it home at night to protect it from weather and vandals. Once a mill has been set up, you can expect about 4-6 eight-foot logs will be milled per hour.

For some small jobs, millers prefer to charge by the linear foot, so you will pay only per board times the length of your logs. A local norm here in the Stevens Point area is \$130 per thousand feet, and an average eight-foot log may yield about 60 feet of one-inch boards.

So there you have it. As much advice as one amateur woodworker can think of when considering home-cut lumber. Logging and milling is no longer a get-rich scheme as it was in the days of the lumber barons, but you can still capture a satisfying thrill as rough logs from your own trees are cut into beautifully-grained planks. □

Dick Schneider is a semi-retired teacher and part-time woodsman who lives in Stevens Point or Minocqua, depending on the season. You may remember him from a previous piece about snowshoes in our December 1992 issue.

the Wild Ones

**Their fast waters
and wooded shores
have been protected
as wild places
for 30 years.**

Let's explore the

**Pike, Pine and
Popple rivers.**

Dan Heath

Sure, you know Wisconsin's rivers. There's the hard-working Fox, flowing north past communities and paper mills into Green Bay; the powerful Wisconsin, whose dammed waters juice up 26 power plants between Otter Rapids and Prairie du Sac; the mighty Mississippi that rolls from its confluence with the St. Croix along Wisconsin's southwest border down to the Gulf of Mexico. There are also a host of smaller rivers that are weekend playgrounds for boaters, swimmers and anglers near our small cities — the Chippewa, the Black, the Lemonweir, and the St. Croix, among others. And then there are the rivers that are mainly

known to locals — a bit farther from towns, farms and easy access. These smaller rivers have their fishing holes, some quiet stretches, some rocky rapids. Among these little gems are three that can make you forget you are within a few miles of hotels, highways and putt-putt mini-golf courses.

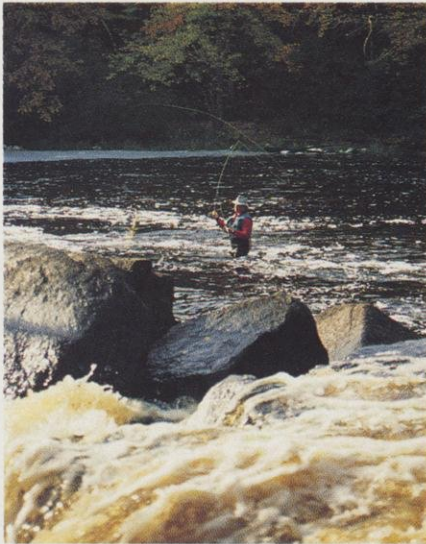
By rights, people ought to be throwing gala parties and giving great speeches to celebrate a special anniversary for these waters, but there are hardly enough neighbors along their banks to hold a five-minute parade. That's OK, the Pike, Pine and Popple rivers will find other ways to

mark their 30th anniversary as the state's official wild rivers.

Nestled in the wooded country of northeastern Wisconsin, the Pike River in Marinette County, and the Pine River and its tributary Popple River in Florence and Forest counties, were designated as wild rivers back in 1965, three years before similar federal law created the first national Wild and Scenic River, the Namekagon, in northwestern Wisconsin.

Our state law assured that these waters would receive special management to "assure their preservation, pro-

ROBERT QUEEN



ROBERT QUEEN

Fly fishing at Goodman County Park on the Pike River.

(right) Kayakers ply these waters in spring to catch the high water and rapid rapids that snow melt and spring thaw create.

tection and enhancement of their natural beauty, unique recreational and other inherent values..."

At the time of passage, the Pine, Pike and Popple rivers were to be the start of a statewide wild rivers program to preserve the natural heritage along our river corridors. Yet in the ensuing 30 years that saw the birth and development of major environmental laws and protection, no others have followed. Sure, recent protection for the Lower Wisconsin Riverway and the purchase of the Wisconsin Dells show a public commitment to rivers, but the call to designate more state waters and corridors as wild rivers has been surprisingly mum.

Let's look at Wisconsin's wild rivers after 30 years of protection.

The Pike River project encompasses 17,000 acres along a 65-mile corridor. Less than a quarter of the land adjoining the wild river (approximately 3,900 acres) is owned by the State of Wisconsin. Some 5,600 acres are managed by Marinette County and the remaining 7,500 acres by more than 250 private landowners who own as little as one acre to as much as 1,100 acres. The boundaries for the Pine and Popple wild river area encompass approximately 12,100 acres along a 50-mile corridor. Today approximately 5,195 acres are owned by the state, 1,283 by

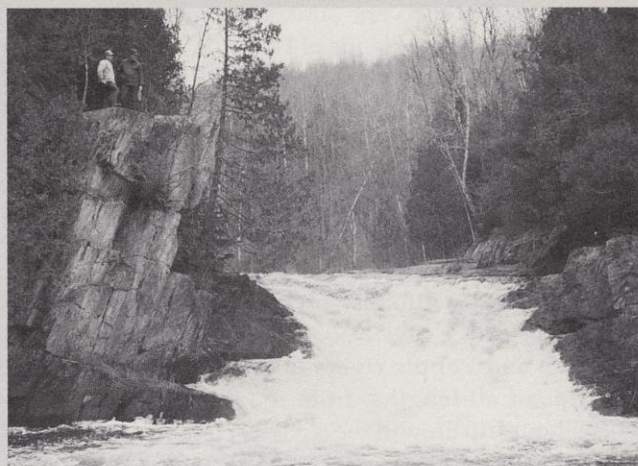


Custom management plans for wild waters

Human activities on lands owned by the state along each wild river follow a customized Master Plan to preserve each corridor's wild character. State law dictated that wild rivers "shall receive special management to assure their preservation, protection and enhancement of their natural beauty, unique recreational and other inherent values."

Development is limited in three protective zones that follow bends of the winding waters. The first 150 feet from river's edge or to the visual horizon, whichever is greater, is the "protection zone." In this area, the grasses, shrubs and trees are left undisturbed. Only activities needed to protect the river from erosion and degradation are allowed. In the second zone, from 150 feet to 400 feet from the river, only activities that benefit recreational river users or will enhance the river's aesthetic appeal are carried out. All proposed cuts of vegetation in this zone must "aesthetically compliment" the river. Outside this second zone, activities such as timber management must enhance the river environment and maintain the wild pleasing look of the region.

Management along the rivers is designed to show as few traces of human intervention as possible. Such "low impact" activities will include establishing public access to the wild rivers. As properties are purchased by the state, small two- or three-car parking areas are made with narrow trails leading to the river. Most are walk-in sites



La Salle Falls on the Pine River.

used for launching canoes and kayaks or for finding that secret fishing hole. Motorized vehicle access is restricted to designated areas outside the protection zone to help maintain the natural character of the rivers. A limited number of campsites solely accessible by canoe are planned. Walking paths to some of the best waterfalls are also planned. These will be low maintenance and designed for adventurous individuals. They will not contain man-made structures like overlooks and rails so the wild atmosphere will prevail.

Florence County, 4,133 by corporations and 1,489 by private owners.

Within the meandering boundaries of the project area, the state will purchase land from willing sellers to enhance the river corridor.

In the mid 1960s, such protection was deemed necessary "to afford the people of this state an opportunity to enjoy natural streams, to attract out-of-state visitors and assure the well-being of our tourist industry."

The Pike River flows through north central Marinette County. It starts as two branches, North and South, which join together just west of the small Village of Amberg to form a main branch that flows to the Menominee River.

The river has three distinctive recreational uses. The first is trout fishing. The North Branch is a Class I trout stream along its entire length, providing a good native population of brook trout and a naturally-reproducing population of brown trout. The South

Branch has Class I, II, and III trout water, meaning wild trout can sustain populations in certain stretches but others must be stocked to maintain fish. The Class II water is stocked yearly to sustain brown trout. The river south of the confluences to County Highway K is a Category 5 trout stream where special regulations limit the take to produce trophy-sized trout.

The second recreational use is canoeing and kayaking. While the upper reaches of the river allow for numerous short trips, the Pike is better known for two stretches of river from Highway 141 to Barker Road. The upper reach from Highway 141 to County Highway K has only one rapids area rough enough that canoeists must portage around it. The remainder of the trip offers some riffles and rocks but little to worry about. Total travel time is less than three hours. The lower reach from County Highway K to Barker Road is a differ-

ent story. Travel time is approximately the same, but you are moving much faster. It offers some exciting white water for both canoeists and kayakers. The drop just below Barker Road, a rapids locally known as Yellow Bridge, is for accomplished kayakers only.

You can access these popular river trips from the parking area at the Marinette County Park at Dave's Falls just off Highway 141, and newly improved parking areas at County Highway K and Barker Road.

The third recreational enjoyment a Pike River trip affords is the opportunity to see breathtaking scenery. There are well-known and rarely seen sights to behold. For the shoreline explorer, two of the Pike's most spectacular falls, Dave's Falls and 12-Foot Falls, run through Marinette County parks. The river's greatest attraction, however, is solitude. Miles of undeveloped shoreline allow everyone a chance to find their own special place.

While the Pine and Popple rivers share a lot of these attributes, they offer a true wild experience for canoeists and campers. Both rivers start in sparsely populated woodlands of Forest County. As they cross into Florence County, the rivers merge in the town of Fern for the 20-mile flow to the Menominee River. The area surrounding the Pine-Popple is rugged and undeveloped. High rock ridges and deep river valleys await exploration. Much of the land is publicly-owned and rarely visited.

The Pine and Popple rivers offer canoe trips of all lengths, from the short one-hour trip around the oxbow, to the all-day adventure from the Pine River dam to the Menominee River. River trips also offer an array of challenges from a slow float trip to shooting a Category 5 rapids. A kayak trip through LaSalle Falls or the area below the Pine River dam is only for the well-trained, very experienced kayaker. Washburn Falls and Jennings Falls offer only slightly less challenge. White water and beautiful scenery abound on this river system.

If you'd rather soak up scenery than frothy, cold water, more relaxing float trips are available. The most popular start at the County Highway N landing seven miles south of Florence and can end 1.5, 3, 4.5 or 6 hours down-

stream. You can add an additional 45 minutes to the trip by starting farther west, just below the Pine River dam power house.

Fishing these waters is productive for knowledgeable anglers. Early season cold water gives way to warmer waters in July. As summer progresses, you have to scout out trout concentrated around springs and cold inlets that feed into the river. You could spend a lot of time scouting out the river to find the holes that hold big fish, but the pay-off is worth it.

Warm water fishing is a bit more predictable on the lower stretches of the Pine. Below County Highway N expect to find northern, walleye, small-mouth bass and panfish.

All three wild rivers are located in an area of the state designed for nature lovers. The vast areas of land open to the public in the Nicolet National Forest, the Marinette and Florence county forests and industrial forests provide an unlimited opportunity to explore and enjoy some of the best Wisconsin has to offer.

To maintain their wild flavor, these state lands are not available for camping. A number of excellent county and private campgrounds are available with varying amenities. The more adventuresome among you can also set up camp in the Marinette and Flo-

rence county forests outside of designated campgrounds, but don't expect to find flat areas with fire rings or running water. For more information about such a trip, contact the Marinette County Forestry Office at (715) 732-7525 or Florence County Forestry Office at (715) 528-3207.

For those who would just as soon relive their canoeing experience from the comfort of a lodge or cabin, resort accommodations of all types are available throughout the area.

You'll find plenty to do once you come up to explore the wild river country. Fishing and other water sports abound. Hundreds of lakes and some of the best trout streams in the state can be found in every direction. Canoeing, kayaking and rafting are also available on the many other rivers that weave through the area.

The best time for white water running is April through May when spring runoff and snow melt swell the natural river flows. River runners in this early season often need to wear dry suits to fend off the cold air and frigid water temperature. Running the rivers in late May and early June offers warmer temperatures and just slightly lower water levels. In very dry summers, river running gets difficult from July through September, but wet summers extend the canoeing season considerably.

Fall brings beautiful hues and an excellent time to photograph waterfalls framed by blazing colors. Autumn also brings ample opportunity for turkey, grouse and other small game hunting far from the crowds. Winter is a quiet time, but those who brave the weather can bushwhack old, scenic logging trails on cross-country skis in genuine solitude.


Our wild rivers, the Pike, Pine and Popple, offer sights and activities to please the visitor for an hour, a day or a lifetime. So come and explore these quiet woods and waters that have been protected for all of us for 30 years, just a few hours off the beaten track. □

Dan Heath is the DNR land agent stationed in Marinette, Wis.

Solitude reigns in winter. A view of the Pike River from the Barker's Road bridge.



DNR PHOTO



MY
GASOLINE
IS NOT
BLENDED
WITH
ALCOHOL

Adjusting to RFG

A questioning public is gauging and minimizing the risks from using reformulated gasoline.

Robert Manwell and David L. Sperling

One out of four commuters in southeast Wisconsin has a family member with a health problem that is aggravated by air pollution. A major source of that pollution? The family car.

Gasoline-fueled cars and trucks release dozens of irritating substances as they are used and fueled. Not only is air pollution irritating, it's expensive. The American Lung Association estimates health problems from air pollution cost Amer-

icans \$93 billion per year. Children are especially sensitive to air pollution because their young lungs are still developing and they spend more time playing hard outdoors.

Curbing smokestack pollution and emissions from businesses is part of the air pollution solution, but in nine metropolitan areas of the country where unhealthy levels of ozone persist, the solutions are hitting closer to home. The need for clean air forces us to re-examine our habits, our vehicles and now, the fuels our cars use. Improvements in automobile efficiency and auto emissions controls like catalytic converters, fuel injection and on-board computers have helped, but given the number of automobiles on the road, greater opportunity for additional improvements lie in cleaner-burning fuels.

Gas stations in fringe areas where reformulated gas (RFG) is not required fuel the notion that oxygenated fuels are inferior. The concerns have not been borne out, but tests continue.

The dirty nine

RFG fuels have been introduced in these nine regions to help minimize ozone pollution deemed severe:

Baltimore, Maryland
 Chicago, Illinois to Gary, Indiana metropolitan area
 Hartford, Connecticut
 Houston to Galveston, Texas
 Los Angeles air basin
 Southeastern Wisconsin from Ozaukee south to Kenosha
 New York metropolitan area
 Philadelphia metropolitan area
 San Diego, California

All fuels pose risks, RFG curbs air pollution

All gasoline is a chemical soup containing over 1,000 identifiable components, many of which are toxic, and at least five of which are linked to cancer. Foremost among these is benzene, which the U.S. Environmental Protection Agency classifies as a known human carcinogen based on its proven ability to cause leukemia. Several other gasoline components — formaldehyde, acetaldehyde and butadiene — are classed as probable human carcinogens. Anyone using or handling gasoline is exposed to those pollutants and routinely accepts the attendant health risks.

To curb ozone pollution in smog-prone areas, unleaded gas has been reformulated to increase the oxygen content and reduce its toxic components. This oxygenated gasoline (called RFG for "reformulated" gas) burns cleaner and produces less pollution — at least 15 percent fewer toxic emissions and 15 percent less of the chemicals that form ozone — than regular, unleaded gasoline.

A variety of chemical additives can "oxygenate" gasoline. Alcohols or alcohols transformed into ethers are commonly used. A widely used additive in the gasoline sold in southeastern Wisconsin, Chicago and northern

Indiana is MTBE, or methyl tertiary-butyl ether; it's made by combining methanol with other compounds. Racing fans may recognize that MTBE is used to soup-up nitro fuels that put the hot performance in hot rods. Other reformulated gas is made with a common alcohol, ethanol, or an ethanol-based ether called ETBE. You may remember test-marketing of ethanol blends as "gasohol" during the 1970s and '80s when the politics of foreign oil supplies drastically changed the supply and price of gasoline.

Reformulated gas was introduced in southeastern Wisconsin when winter started. Some motorists believe it is causing health problems for them and performance problems for their cars, especially during colder weather. Some people inhaling even small amounts of raw gas fumes as cars are fueled or breathing tailpipe exhaust on the road have complained of nose and throat irritation, headaches, dizziness, stomachaches, nausea and disorientation.

Heating up in legislative arenas

Consumers' concerns prompted the Governor and legislators to float several ideas to respond to constituents' complaints about RFG — banning certain additives, delaying or removing

RFG fuel use, changing southeastern Wisconsin's designation as a polluted region — were all proposed as we go to press. Concerns seem to be abating as consumers are given more information and more options.

The search for answers

No one denies the symptoms, but the medical community knows similar symptoms may also be caused by exposure to other ingredients in gasoline. Moreover, motorists in the Chicago area and northern Indiana using the exact same RFG blends supplied by the same pipelines have not registered these same health complaints.

Still, the complaints are being taken seriously by environmental and health officials. The Department of Natural Resources, State Division of Health with help from the Centers for Disease Control and U.S. EPA are investigating the health and air quality issues people have raised. RFG levels in air will be measured at gas stations and at various sites in urban and rural environments. One study will examine health effects from MTBE exposure. A second will survey if certain car models or gasoline pumped in certain areas bring complaints from people. These results are being forwarded to other health and environmental officials for peer review.

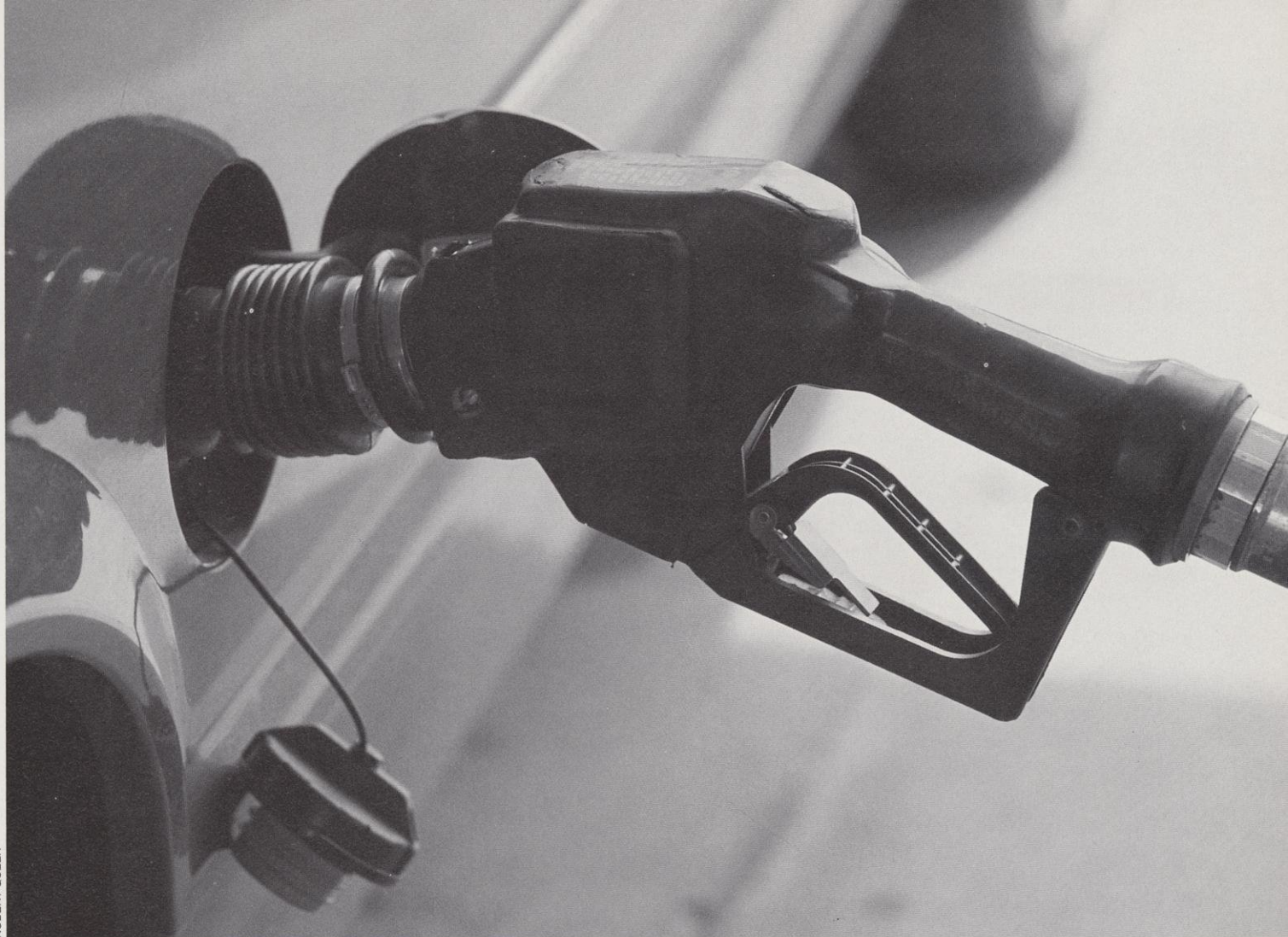
Trade associations, like the American Petroleum Institute (API), gasoline formulators and distributors are working with the Department of Natural Resources and service station operators to give consumers better information and more choices.

"Frankly, we are perplexed by the reports of headaches, nausea and dizziness," said Charles J. DiBona, API president, "because (previous) health studies could not duplicate these symptoms in people exposed to RFG fuels." The API also distributed suggested language for labels to service stations so gas pumps could be labeled to help customers choose the oxygenated fuel containing the additive of their choice — MTBE, ETBE or ethanol.

"In the event that some consumers have sensitivities to or react to particu-

An overflow crowd packed a public hearing in Milwaukee last February to voice concerns about RFG use in southeastern Wisconsin.





All gasoline is considered hazardous to use and handle. Stage II gas pumps reduce the risks to people and the environment. The pumps suck in gas vapors while gas is dispensed. Though such pumps are required in southeastern Wisconsin to help control air pollutants only 58 percent of gas stations have installed them, despite a state program that underwrote the costs of installation.

lar fuel mixtures, switching to a different fuel might make sense," DiBona said. "If any of us buys a laundry detergent, a perfume, an air freshener or some other product that produces a reaction, we would choose another brand. And that might be appropriate in this case, too."

Many people are not sensitive to RFG fuels

The effects of RFG reported by Milwaukee area drivers are not uniform and not everyone using the new fuel is affected. Vehicle & Equipment Specialist Jeff Tews, the fleet manager for the City of Milwaukee, says he "hasn't received a single complaint other than the fact that people note the distinctive odor of RFG." Charles Elliot, of the Wisconsin Petroleum Council, whose members distribute and wholesale gasoline, said his clients handle RFG

Cutting your gasoline exposure

1. Most people get their highest exposure to gasoline fumes when fueling their cars. Be careful not to spill gasoline and avoid topping off the tank by filling it right to the top of the filler neck.

2. If you are sensitive to gasoline fumes, try to fill up at stations with stage II vapor recovery systems. These special pumps constantly suck in gasoline vapors during refueling and return them to the gasoline storage tank. Most larger gasoline stations in the RFG-mandated area have or will soon have these devices installed on their pumps to control air pollution. Ask the station manager if such devices are installed on their pumps.

3. If you think that MTBE- or ETBE-blended gasoline is affecting you, try the ethanol-blended variety. The pumps should be labelled.

4. Avoid being in closed spaces where gasoline is stored or poured. Storing gasoline in an attached garage may allow fumes to enter living spaces. If possible, store gasoline in an unattached building in a tightly closed container. Do not use gasoline as a cleaning solvent. Refuel power equipment outside on a paved but open area.

5. Remember that carrying large quantities of gasoline in your car in gas cans is risky and hazardous. Gas can spill, it's highly flammable and gas cans can rupture in an accident.

all day, every day and have not reported problems.

What could be causing the different reactions? Perhaps weather and temperature are a factor. Motorists in Fairbanks, Alaska complained of acute symptoms similar to those reported in Milwaukee when MTBE-containing gasoline was introduced as part of a program to lower levels of carbon monoxide in their air in the winter of 1992-93. So many complaints were received that Governor Walter Hickel suspended the use of oxygenated fuel blends in Alaska until further studies could determine the cause of the symptoms.

Many factors affect fuel economy

In the Milwaukee area, many of the motorists calling the Department of Natural Resources said their fuel economy as measured by gas mileage dropped after RFG fuels were introduced in January. Tests by the American Petroleum Institute and engine manufacturers found one to four percent loss in performance between unleaded gas and RFG fuels, but some consumers reported up to 20 percent fewer miles per gallon in their cars.

In the Milwaukee fleet, Tews said it's difficult to verify fuel economy reports. RFG hasn't been used for enough time to conduct a controlled study under Milwaukee driving conditions. Clearly, many factors can affect mileage, he said.

The timing of the switch to RFG is also a factor. Cold winter weather always decreases gas mileage. Engines work less efficiently in cold weather and heaters and defrosters draw energy to keep vehicles and occupants warm, just as running an air conditioner in the summer decreases gas mileage in cars and trucks.

There are technical explanations too. All gasoline is blended in winter to have a lower energy content explained Robert Reynolds, a petroleum fuels specialist quoted in a Milwaukee Journal interview. Winter gasolines need to vaporize more readily to provide good cold starts and

warmup performance, he explained. Most tests show the RFG causes about a two-percent loss in fuel economy, which translates to about a half-mile per gallon in a modern car.

The age of your car is yet another factor that can affect performance. Newer cars with on-board computers can adjust fuel injection and richness rates to get the most from RFG blends. Older cars that rely on carburetors to achieve optimal air/fuel ratios may need slight adjustments by trained mechanics to get the most from RFG fuels.

Other drivers in southeastern Wisconsin have complained about rough starts. "Many of today's cars are computerized, and the computers don't begin controlling air/fuel management until the engines are warmed up," Reynolds said. (Warmup typically takes 5-30 seconds in colder weather). "Traditionally, a car would run on a richer fuel mixture while warming up. Oxygenated fuel is by nature a leaner fuel, therefore there's roughness until the engines warm up. The irony is that while engines are running rough, that's the time when the greatest emissions savings are achieved (less pollution). Don't think just because the car is running rough it's not running clean."

On the other hand, cars that aren't properly maintained can run rough and emit ozone-causing pollutants.

RFG in other engines

The concerns over RFG fuels are exacerbated for recreational engines that power snowmobiles in winter, or personal watercraft and boats in summer. Owners of new and old equipment should definitely consult their owner's manuals and mechanics to determine if carburetion, EFI adjustments, or richer fuel mixtures are warranted to compensate for oxygenated fuels. As we go to press, it appears marinas will be required to dispense RFG fuels. From an environmental perspective, it would make sense because the exhaust from motorized watercraft contains higher concentrations of ozone-causing pollutants than cars or trucks.

The artillery of motorized equipment you are unleashing on your lawn contributes air pollutants as well. Mowers, blowers, chain saws and weed whackers may also need to have the needle valves in carburetors tweaked for peak performance. Don Purcell of the Portable Power Tool Manufacturers Association says the RFG blends are compatible in every way with the products he represents.

Complaints that his association has investigated of alleged engine damage from the use of RFG more often than not show that problems were the result of neglecting routine maintenance, he said. "If reformulated fuels have an effect at all, it is to make it very important to keep up with the manufacturer's maintenance program," Purcell said.

Small engine repair shops tell customers the most important steps to maintain such equipment include regularly cleaning the air filter, keeping parts lubricated and draining the fuel tank if equipment will remain idle for more than a few weeks. All gasolines that are stored will separate into different components. Gasoline left in a fuel tank forms a varnish that can gunk up parts.

Storing RFG fuels for lawn and garden equipment, power tools or boats requires a little extra work. Some of the RFG fuel blends contain alcohol, and alcohol attracts water. When such fuels are stored for months in a garage or shed, the fuels may separate leaving a small alcohol/water mix at the bottom of the gas can. Such fuel should be stored in a tightly closed plastic container approved for gasoline storage. A few squirts of fuel stabilizer (available at auto stores and repair shops) will keep the gas from separating and will avoid fuel deposits on engine parts as the old gasoline is used.

By continuing research and giving informed consumers more choices, the benefits RFG fuels can bring are being balanced with the risks they might otherwise pose. □

Robert Manwell writes for DNR's Bureau of Information and Education in Madison. David L. Sperling edits this magazine.

Answers about RFG and engines

Local repair shops are a good place to start for specific questions about how RFG will perform in your power equipment and whether your engines need to be adjusted for peak performance.

Engine manufacturers all operate customer service lines. Many are made here in Wisconsin. You could contact:

Briggs and Stratton
(414) 259-5262

Harley-Davidson
(414) 342-4682

Kohler
Engine service
(414) 457-4441

Mercury Marine (OMC)
Technical service
(414) 929-5040

Tecumseh
Customer service
(414) 377-2700

Trade associations representing small engine and tool manufacturers

These groups may be able to help if you are having trouble contacting a manufacturer or if you are seeking more information about RFG fuels.

Outdoor Power Equipment
Institute
341 Patrick St.
Alexandria, VA 22314
Phone: (703) 549-7600

Engine Manufacturers Association
401 N. Michigan Avenue
Chicago, IL 60611
Phone: (312) 664-6610

Portable Power Equipment
Manufacturer's Association
4720 Montgomery Lane Suite 514
Bethesda, MD 20814
Phone: (301) 652-0774

Oxygenated Fuels Association
(800) 432-3247



ROBERT QUEEN

Mulchers, mowers and most power equipment are designed to run efficiently on the new "clean air" fuels. Manufacturers and service centers can provide information about adjusting fuel/air mixes so outdoor equipment runs well while minimizing pollution.

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Is any memory as sweet as the berries of summer?

Sarah Ainsworth Powley

Clumps of blueberry bushes grew along the path around the Wisconsin lake where my family spent summers when I was a little girl. In mid-July, as soon as we saw small, claret-colored beads hanging like ornaments, we began to think about blueberry picking.

Every day we brought offerings of four or five berries to mother; hard little shots sweaty from our tight fists.

Impatient for the expedition across the lake that we knew our family would make, we pestered our mother. Anyone could see it was too early to pick, but undaunted by the obvious, we besieged her with samples. We measured the berries progress with our ears instead of our eyes. We listened for hesitation in her voice before she said, "Not yet." In that second before she spoke, we hoped for "Today" or even "Tomorrow." As if their ripening could be nagged along, we chattered about blueberries at every breakfast.

"I like blueberry pancakes best."

"I like blueberry pie," I'd say. "That's the only pie I like."

"I like blueberries on Cheerios."

"Blueberry muffins are my favorite food, Mommy," said my little sister.

We flaunted our blueberry ambitions and put each other on notice.

"I'm going to pick two buckets this year."

"You will not. You always eat them."

"No, I don't. Anyway, I won't this year."

Finally, the berries were blue enough and sweet enough that Mother did say, "Today." She gathered all the sand buckets, several kitchen pans, and our father and us. We climbed into the boat to row to "The Point," a bony finger of land that jutted into the center of

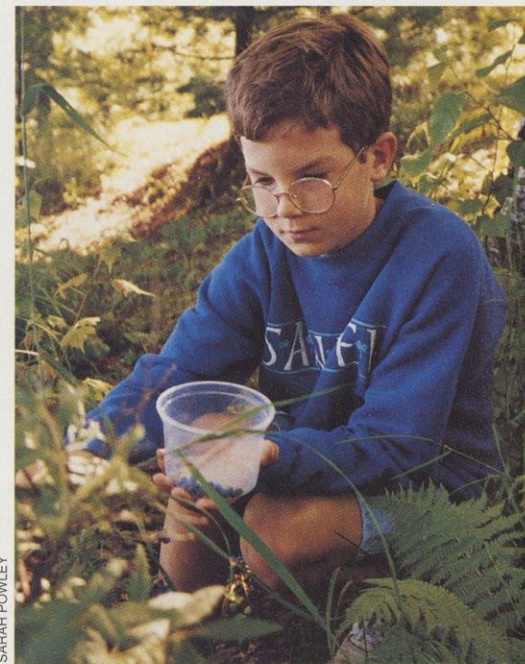
the lake. The bushes were thick on its ridge, and the berries, abundant.

When we anchored and stepped ashore, Mother handed each of us a bucket. We ran up the slope — first to look at the lake from this unaccustomed point of view, and then to survey the blueberries. Our parents had already begun picking at the water's edge, and we could hear the fruit rhythmically hitting the bottoms of their metal pails. We, however, picked in a frenzy, running up and down, fanning out over the hill. No system.

Father and Mother moved slowly and steadily. Periodically, we peered into their pails, measuring our take against theirs.

"Look how many Daddy has!"

"Look how many Mommy has!"



SARAH POWLEY



PAM HUANEN

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ROBERT QUEEN

Mommy, you have more even than Daddy!"

"Look at this big one. It's huge!"

We ate as we picked: instant gratification. Occasionally we admonished each other about eating too much, and we older ones were especially scornful of our little sister whose berries only barely covered the bottom of her pail by the end of the outing. "Mom, she's eating all of hers!" But then we'd turn our backs on each other and cram the delicious berries into our own hypocritical mouths.

We moved fast, skipped much and saw only the surface.

"Where should I pick, Mom?" my brother asked after his initial sweep of the territory. "There aren't any left."

"Don't you know where to look?" That from me, the oldest, the superior one. "Mom, I've covered this end. There aren't any more here."

Our ambitions dwindled as the excitement wore off.

"I'm thirsty, Mom."

"Yeah, how come we didn't bring any Kool-Aid? Let's go home."

She would tell us that we'd only been there half an hour and send us to new places — the places each other had missed — but we were noticing now that the bushes scratched our bare legs and the mosquitoes were biting our arms.

"Let's go home, Mom."

"Yeah, we must have enough."

Father and Mother, of course, did have enough. The rest of us contributed declining shares in order of age. Mother consolidated the contents of the buckets and carried the harvest herself, lest anyone spill theirs over the side of the boat.

At home, she rinsed the berries. Mounded in colanders in the sink, they were a terrible temptation, but we were not to snitch or play with them, either. Still, I liked to work my hands to the bottom of the container, lift up and feel the little blue balls run down my wrists and palms, making light taps on my

skin.

"Don't do that, honey. You'll mash them."

There was more than one expedition to gather berries, and for a week at least, sweet, fruity smells emanated from the kitchen. Flour was a fine dust over all the counters, and sugar crackled underfoot on the linoleum.

During that week we poured sticky, warm syrup on pancake stacks that were heavy with blue lumps and streaked with the juice of broken berries. We gorged on wedges of purple pie whose ice cream domes ran in white rivulets onto the plates, over the edge to the table and down our fronts. Lumps of butter melted instantly on muffins that steamed when they were split. Each bite burst with blueberry summer goodness. Even Cheerios were succulent: berries nestled in the O's, and the elusive ones bobbed afterwards in the sweet blue milk.

The essence of summer was on our plates and we ate greedily. What was left of the harvest, Mother froze. Then in mid-winter, when we were cold, and feeling cooped up and tired of school, blueberries appeared on our plates again. Her timing was perfect. Deep snow, audible January winds and indoor monotony disappeared when we split a muffin or cut into a stack. Summertime was inside, captured on our plates, reassuring us in our despair. We could be patient. The snow would melt, the sun would shine, and summer really would come again. □

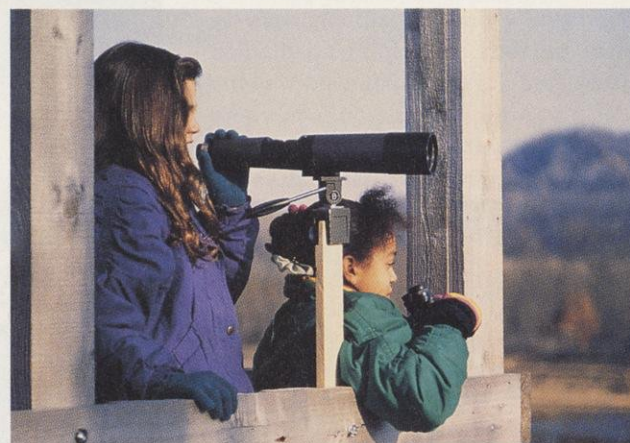
Sarah Ainsworth Powley lives in West Lafayette, Indiana. Family members have spent summers in Wisconsin on this same Langlade County lake for four generations. "I still taste those pies, and blueberry is still my favorite!"

Finding the RIGHT PLACE at the RIGHT TIME

A new guide gives the lowdown
and highlights for
wildlife-watching hot spots.

Mary K. Judd

Horicon Marsh
International
Education Center
DNR Headquarters



ROBERT QUEEN



There's a reason your hiking jacket has gusseted pockets and there are no gloves in your glove box. Binoculars, compass, wallet, field guides and the occasional peanut butter sandwich all have their place. Well, make room in your travel kit.

The Department of Natural Resources and a host of groups devoted to wildlife have published a new "Wisconsin Wildlife Viewing Guide," and it is just the ticket to help pick a location

for an impromptu Sunday drive, an afternoon walk, a day trip or a weekend getaway that includes watching wildlife.

Wildlife watching is one of the fastest growing forms of outdoor recreation in the nation. As a way to see nature, escape daily pressures, enjoy the fresh air and find a little solitude with family and friends, nothing beats it. Millions of people also feed wildlife in their backyards and photograph wild creatures in their native habitats.

Watching wildlife is a favorite pastime for young and old alike. Here, sandhill cranes return to the Sandhill Wildlife Area (Site 56) near Babcock.



ROBERT QUEEN

In Wisconsin, over 85 percent of adults engage in one or more of these "watchable wildlife" activities.

The guide provides the whereabouts of some of the best spots for observing wildlife on public lands and private sanctuaries available to the public. The 76 wildlife viewing hot spots described are arranged by ecological and geographic region. They take the reader from cool, boreal forests along the Lake Superior shoreline to desert-like sand barrens along the lower Wisconsin River, from windy Lake Michigan shorelines to the quiet backwaters of the mighty Mississippi River.

The selected properties highlight traditional and unusual wildlife viewing opportunities. For instance, some of the sites are excellent places to watch fish, insects and even bats. A few wildlife viewing areas were included for their unique or unusual habitats from prairies and oak savannas to sand dunes and floating bogs.

Listings for each site describe the kind of experience you can expect to find, and provide hints on wildlife viewing locations and times, a contact, a phone number and directions. Six regional maps and 24 site maps will help you find properties. When visiting some of the larger sites, call the contact listed and ask where you can get a more detailed map of the property.

Sites range in size from an eagle viewing area in a parking lot in Sauk City to the vast Nicolet and Chequamegon national forests. All 76 sites are accessible by car, though some are remote and the roads may be impassable in winter or after heavy rainfall. At most sites, the wildlife watcher will get the best viewing experience by hiking, biking, canoeing or cross-country skiing into the interior. Other sites, such as Necedah or Trempealeau national wildlife refuges, Crex Meadows or Navarino state wildlife areas have a system of interior roads which provide good wildlife viewing from the car.



SCOTT NIELSEN

**WISCONSIN
WILDLIFE
VIEWING GUIDE**



Mary K. Judd
A unique, multi-agency project developed
in cooperation with Defenders of Wildlife.



Road signs will mark wildlife viewing areas for travelers. The guide provides practical tips on where to park and when to explore for eagles, deer or even painted turtles.

The "Wisconsin Wildlife Viewing Guide" is the 20th in a series of similar guides prepared for other states. One benefit of this unique cooperative effort is that states are working with their departments of transportation to mark highways with uniform signs that show travelers how to reach wildlife viewing areas along routes. The brown road signs with a white binocular logo and arrow will also aid visitors who do not have the guide. The binocular logo was approved by the Federal Highway Administration and is being used along interstates, state and county highways in those states which have produced a guide in this series. This national network of wildlife viewing areas puts the visitor in direct contact with wildlife and native habitats...a very effective way to learn about Wisconsin's rich

wildlife heritage, just as travelers can better appreciate the rich cultural heritage they pass by taking the time to read historical markers on the route.

Copies of the 96-page "Wisconsin Wildlife Viewing Guide" can be purchased at book stores, at DNR's headquarters in Madison for \$8.95 plus tax, or ordered by mail for \$10.65, which includes tax and shipping. Send a check payable to the Wisconsin Department of Natural Resources to Wildlife Guide, DNR Bureau of Wildlife Management, P.O. Box 7921, Madison, WI 53707. □

Mary K. Judd designs and oversees wildlife education programs for DNR's Bureau of Wildlife Management. She also wrote Wisconsin Wildlife Viewing Guide published by Falcon Press Publishing Company, Inc., Helena and Billings, Montana.



Birders will find suggestions for woodlands and wetlands where one can perch and search for waterfowl and herons.



DON BLEGEN

To see without being seen

To make the most of your wildlife viewing trip:



Be right on time.

Great blue herons and woodchucks are not out and about in winter, but you can find dark-eyed juncos and red squirrels. Likewise, don't expect to find little brown bats or cecropia moths fluttering about at noon

on warm summer days. Set your sights for chipmunks and monarch butterflies. Learn the time of year and the time of day that's best for watching the kinds of wildlife you're interested in. In general, wildlife activity peaks in Wisconsin during April and May and again in September and October. Most wild animals are active at dawn and dusk, but know the exceptions; plenty exist.



Tiptoe through the marshes and forests. Move very slowly, quietly and with patience. Take a few steps, then stop, look and listen. If you are stalking a mammal, walk into the wind, since they have a great sense of smell. Or find a comfortable spot and just sit and wait. Wildlife will soon resume normal activity.



Be neither seen nor heard. The more you conceal yourself, the greater your chances of seeing wildlife, so consider fabricating a blind. Many forms of camouflage clothing are available from sporting goods stores.

On your own property, you can get some chicken wire, stake it into a circle and fill in the wire holes with old weeds, cattails or small branches. Your parked vehicle also makes a good viewing blind.

Remember, some of the best wildlife viewing is done on

the water. Wildlife seem less afraid of a canoe or boat that's drifting by than they are of people on foot. If you're out in a canoe or boat and you spy a heron, turtle or muskrat, turn off your boat's engine or stop paddling. Crouch low and use your paddle as a rudder to let the currents slip you in for a better glimpse.



Great expectations? Life is not a nature film. Don't expect to see all resident or migratory wildlife during your first visit to a particular site. The more you visit a wildlife viewing area, the greater your chances of spotting different species. So visit often.



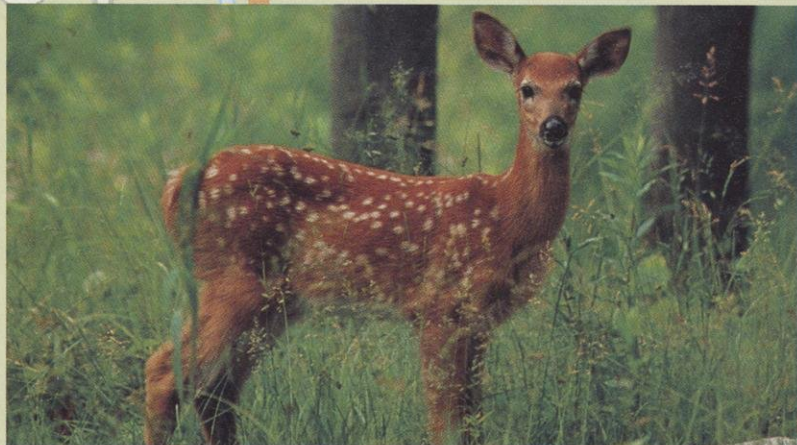
Look for calling cards. Though Wisconsin's wildlife is abundant, you may miss the opportunity to observe wildlife. You may have arrived at the wrong time of day, or the weather isn't cooperating. Or too many leaves or brush may block your view of the animal you seek. If this happens, change your strategy. Start reading the signs wildlife left behind. Tracks in the mud, snow or sand, nibbled branches, gnawed nuts, runways and tunnels, unfinished meals, and droppings give the attentive observer clues about the presence of wildlife.

Learn to use your ears to help you identify wildlife. You may not see that frog, warbler or cricket, but if you learn the calls, you'll feel satisfied knowing the animal is nearby. Check your library, bookstore or nature center for field guides to identify Wisconsin's wildlife. Learn what the animal looks like, where it lives, what it likes to eat and how it behaves.



Bug off! Consider your need for protective clothing for each outdoor wildlife adventure. Mosquitos, deer flies, black flies and ticks are unfortunately common Wisconsin residents. They play an important part in food chains, but to avoid being "bugged" on your trip, bring along bug repellents, hats and headnets. Tuck pant legs into socks. Dress like an onion—in layers.

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GREGORY K SCOTT

Learn when to look for spotted fawns or northern monarch butterflies clustering before migration.



DON BLEGEN

Respecting wildlife

You care a great deal about the animals you seek. However, even people with the best intentions can place wildlife or themselves at great risk. Follow these tips:

Know when you are too close for comfort: It's natural to want to get as close as possible to wildlife. Every animal has its limits of how close you can approach before it flees. Gray squirrels won't scurry until you are within yards, while white-tailed deer will often high-tail it if they spot you a quarter mile away. When wildlife watchers get too close, serious problems may arise: the animal might abandon its nest or young, it may burn valuable energy at a critical time of the year, such as during hibernation or winter sleep, it may injure itself running away, or it may attack the intruder.

Feed your face, not theirs: Cheese puffs and candy bars are not part of a healthy diet for wildlife. If you think feeding wildlife is cute, think again. When wild animals become dependent on handouts they may approach cars and risk colliding with oncoming traffic. They can also lose their natural fear of humans and become aggressive and dangerous. Waterfowl that become dependent on handouts may delay their traditional trip south for winter, putting them at higher risk of death due to extremes of weather. The exception to this rule is backyard bird feeding, a very popular and rewarding pastime.

Wildlife belongs in the wild: Though wild babies may look adorable and helpless, they are rarely abandoned by their parents. Usually the adults are lurking in the shadows waiting until you leave before they return. If an adult animal allows you to approach, something's wrong. It may be injured and aggressive or it may have rabies. If you suspect either, leave the animal alone and report the case to local authorities.

Fair chase: It is against Wisconsin law for people or pets to chase, harass, molest or otherwise maliciously harm wildlife. Your wildlife viewing trips will be more successful if you leave your pets at home. Many properties prohibit pets. Call ahead for details.

R.E.S.P.E.C.T: You will not be the only one visiting a site. Many other wildlife watchers and other outdoor recreationists from hunters to backpackers, anglers to canoeists, share your interest in the outdoors. Please respect their rights and avoid interfering in their activities.



SCOTT CRAVEN

One wonders how the naturally social prairie dog survived so long alone.

continued from page 2

How did the prairie dog come to be so far from its normal range? During the winter of 1985-86, the farming family had purchased a load of hay from North or South Dakota. The prairie dog had turned up that spring. The animal was probably "harvested" along with the hay, peacefully sleeping away a cold snap in a bale or haystack. The next thing it knew, it was alone in a foreign, but apparently hospitable, landscape.

It is not unusual for animals to be inadvertently (or intentionally) moved around the landscape by people. A few years ago, a roadrunner showed up in Chippewa Falls on a moving van from Palm Springs; it was given a round trip back! Rats and house mice made their way across the oceans on our ships. Gypsy moths hitchhiked on our vehicles. Unwanted pets, from birds to fish to the infamous alligator in the sewer, are released to fend for themselves. This is simply another example of the powerful influence we humans have on fellow species.

What is remarkable is that this lone animal has stayed put and survived the hazards of weather, predators and accidents for nine years. One reference states a longevity for prairie dogs of only 8½ years in captivity. Also, prairie dogs are very social animals with a complex system of mutual warnings and social interaction. This animal has survived in a prairie dog void, but it had some help. The family farm protects its furry tenant. The field it lives in is off-limits to cultivation, and each spring I receive confirmation that it has emerged for another season.

Prairie dogs are rodents in the squirrel family. A typical adult weighs two to three pounds and is about a foot long with a three- to four-inch tail that has a black tip. They are yellowish brown, lighter on the underparts. Their characteristic upright pose when alert, and the extensive burrows and mounds of soil they excavate make them easy to identify. If seen firsthand, a prairie dog should not be confused with a woodchuck.

The Ferryville prairie dog seems normal in every way, and I wish it well. The next time you see or hear about an animal that just couldn't be where it is or what it appears to be, double-check before you say "No way!" It might just be so! □

Professor Scott Craven is an Extension wildlife specialist with the University of Wisconsin-Madison Department of Wildlife Ecology.

Readers Write

THAT BLANK LOOK

Editor's note: A few readers have received copies of the April issue where the print was extremely light or illegible on a few pages. If that happened to you, please forward the copy to our editorial office for replacement (WNR magazine, P.O. Box 7921, Madison, WI 53707). We remain committed to providing you with an interesting, beautiful publication at an exceptional value.

MINING CONCERNS

Reclaiming the Mineral Point lead and zinc mine waste sites is to be applauded. Hopefully, hundreds of other abandoned waste piles in Southwest Wisconsin can also be reclaimed.

I find it unbelievable that we are continuing to allow heavy metal sulfide mines in other parts of the state, most notably in north central area. As the article pointed out, the Mineral Point cleanup cost \$900,000, most of which came from the State Environmental Repair Fund. Where did this money come from? Taxpayers.

Where are the mining corporations after the party is over and it is time to clean up? Haven't we learned from disaster in the southwestern part of the state or do we need to pollute all the water in the state? As the article stated "mining brought bounty to one generation, but our predecessors have left us with decades of work to do." Are we going to leave a similar legacy for our future generations?

*Gerald A. Bucholtz, M.D.
Marshfield, Wis.*

Bill Tans of DNR's Bureau of Environmental Impact responds: The Environmental Repair fees are charged to those who generate solid and hazardous wastes in Wisconsin. The fee is paid to dispose of wastes in licensed landfills, thus taxpayers did not provide these funds through their property or income tax pay-

ments.

The first comprehensive mining law in Wisconsin was passed by the Legislature in 1973. It was later revised in 1977. Mining in the southwestern part of the state began in the early 1800's at a time when people did not express concern with the consequences of environmental disturbances. Our mining laws and other environmental protection laws and rules that apply to mining are comprehensive and tough. They require that businesses are bonded to ensure that mining site reclamation will be conducted according to an approved plan. The laws require proof of financial responsibility during the long-term care period following reclamation and require long-term care responsibility forever.

HOLIDAY HARE

I read with interest the February article "Rabbit Hunting Revival."

Rabbit hunting was a way of life in the household in which I was raised. My father, almost 79, still takes a walk through a local strawberry farmer's fields in pursuit of rabbit to fulfill a family holiday tradition that came from England with his grandmother.

Each Christmas morning we feast on rabbit gravy served on buckwheat pancakes. Now, my brothers live all over the United States. They did not encourage their sisters to hunt, and the family has grown. Consequently, it's hard to come by enough wild rabbits to feed the crowd. To uphold tradition, I now have to supplement our wild rabbits with some ordered at a very chic grocery, quite an irony given that the tradition was based on cheap, readily available game.

To make this wonderful concoction, clean and cut up a few rabbits. Dredge them in seasoned flour. Brown the pieces in a pan, then transfer them to a roaster and finish them in the

Readers Write

oven. Cool until you can handle the pieces and take all the meat off the bones. Make a gravy from the pan drippings, add the cooked meat, heat and serve with buckwheat pancakes for a real taste treat.

Sharon Cook
Milwaukee, Wis.

ROCK ISLAND REGULARS

Readers may remember a piece from August 1992 about Rock Island State Park and the unusual history of Chester Thordarson whose home now houses park exhibits. A Friends of Rock Island group will hold its first annual meeting on Rock Island this July 15th. The group will work to renovate the Thordarson garden gate, some of the Icelandic furniture now sitting in the boathouse, and the Potawatomi Lighthouse. Those interested are welcome to contact me and attend the meeting.

Timothy Sweet
126 Country Club Drive
Clintonville, WI 54929

WOODLAND PARTNERS

Can you publish the address of the Wisconsin's Forest for the Future Fund? Your February article was very interesting and I believe many individuals and companies would be interested in the program to plant more forests on public lands.

Mark Lohry
Knob Noster, Missouri

You bet. Contact Paul DeLong, FR/4, Wisconsin Department of Natural Resources, P.O. Box 7921, Madison, WI 53707, to discuss a potential project or pursue a partnership.

DECOY FISHING

One of my neighbors graciously gave me a copy of the February issue and it was so interesting that I decided to subscribe. I was especially interested in the article about fish decoys. When I

was a youth living in Oconto many, many years ago, we used this method to catch fish and we painted our own decoys.

In addition to using a dark fish shanty with a four-by-four-foot opening in the floor, we used to sink a six-by-six-foot sheet of white canvas to the bottom and we played our decoys over it. When fish would swim by to examine our decoy, we could see them very clearly over this white bottom. We caught many fish that way.

James Peshek
Madison, Wis.

CLEAR THE AIR

The "Where's the Air" poster (Dec. 1994) contained recommendations and solutions to air pollution. Jet-skis, grills, airplanes, woodpiles, etc. were listed as air pollution sources, but where were the outboard motors? The best solution to these "stinkpots" is, of course, rowing.

J.W. Bartosz
Lac du Flambeau, Wis.

Motorboats were depicted on the front of the poster. The list of air pollution sources on the back of the "Where's the Air" was not meant to be comprehensive, though motorboats certainly would have been an appropriate addition. The poster pie charts showing nitrogen oxide emissions and volatile organic compound emissions have "slices" for non-highway mobile sources — which are clearly stated as being "emissions from engines not used on public roads, such as lawn mowers and motorboats." The "Taking action" section states in bold face that people should "reduce the use of gasoline-powered engines." And sailboats are listed under the "Solutions to air pollution" box.

PANFISH CYCLES

There has been a lot of talk about perch populations being

depressed in Lake Michigan and I have read that alewives eat most of the perch larvae. When you have a lot of alewives, you are not going to have perch, yet the DNR protects alewives to feed salmon. Despite this program, salmon stocks are down five percent from previous years. Can you explain this?

Dan Le Clair
Two Rivers, Wis.

As a commercial smelt trawler, Mr. Le Clair is aware of the alewife's cycle and efforts to limit its incidental catch when smelting. Alewife supplies are protected in Lake Michigan because the oily fish are an important food supply for salmon and trout.

Great Lakes biologists believe that abundant alewife populations can suppress yellow perch populations by eating eggs and competing for food. This was true in the mid-1960's when perch populations declined as alewives became abundant. It's not such a clear story now.

Though perch reproduction in Lake Michigan has been relatively poor, there are lots of dynamics affecting these fish, and alewives are only one factor. Lakewide population assessments by the National Biological Survey do not show marked increases in alewife populations corresponding to the drop in perch populations.

The lake has changed in other ways. Water clarity in southern Lake Michigan has improved, possibly from stemming pollutants and nutrients, possibly from growing numbers of zebra mussels. Another exotic species, the predaceous spiny water flea, was first found in Lake Michigan in the mid-80's and is now abundant.

Natural reproduction by perch is also highly variable reflecting year to year climatic changes. So the recent poor perch populations might simply

reflect bad luck with the weather. Clearly, no one cause has been identified.

THE NATURE OF BIOLOGISTS' WORK

Remarks about working field biologists ("The case for conservation biology," December 94) were way off base, in my opinion. The field biologists I work with in DNR have always had a broad, ecological perspective and have not limited their work to just game species. Our work in wetland acquisition and restoration, grassland restoration, surveys of nongame and game species, restoration of endangered and extirpated species, and our work in watersheds and natural areas show this.

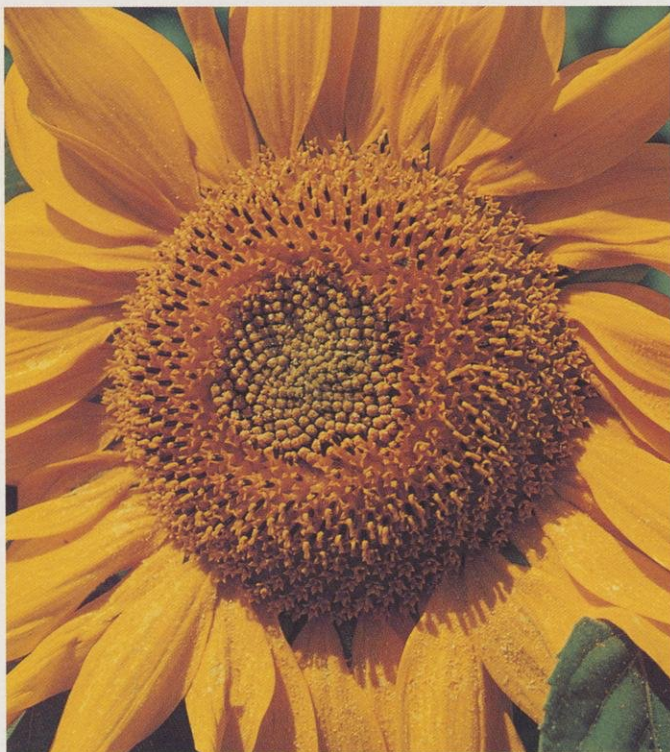
Sure, we spend a lot of time talking about and working with the species that the public pays to manage, but when the objective is to produce more ducks (or other species), the biologist must work with the habitat — whether wetland, grassland or forest ecosystem.

The educational system for wildlife biologists need not be changed to preserve biodiversity. Rather, the interests of economists and other business-related vocations need to be encouraged in conservation biology programs. The more general approach of conservation biology may be of more interest to the future developers, bankers, lawyers, teachers and legislators to convince them that it is in their best interest to act responsibly toward the environment.

Dale E. Katsma
Plymouth, Wis.

We believe the article encouraged social scientists to find common ground with biologists and also encouraged professional integration of ecological approaches in diverse fields of study.

WISCONSIN TRAVELER



Sunflower sun power!

Conservative fun

Recreation can consume an enormous amount of fuel (as in gasoline or calories) and energy (as in mental). This month, TRAVELER encourages you to conserve a little of both.

Start by letting someone else sit in the driver's seat – take a **Bus Tour of Milwaukee!** The four-hour excursion leaves at 12:15 p.m. from the Marc Plaza Hotel, 509 W. Wisconsin Ave., Monday through Saturday from June 30 to August 25 (no tours during the 4th of July holiday). You'll see the city's unique architectural features and attractive lakefront. The guided tour includes two stops: a stroll through the Mitchell Park Horticultural Conservatory, and a visit

to one of two major Milwaukee breweries...with refreshments, of course! \$10 adults, \$8 seniors and children under 12. Purchase tickets in the hotel gift shop. (414) 344-6711.

Here's another way to save fuel: Attend the **6th Annual Midwest Renewable Energy Fair** at the Portage County Fairgrounds in Amherst, June 23–25. Learn about the latest in solar, wind, wood and hydro power in workshops and demonstrations. See what you'll be driving in five or 10 years at the Alternative Vehicle Showcase. If you're remodeling

an existing structure or planning to build new, you'll find all kinds of ideas and methods to make your building more energy efficient. Enjoy entertainment, food and special workshops for

kids during the weekend event. \$5 adults; \$2.50 seniors and teens 13–17; free 12 and under. (715) 824-5166.

The demands of touring with a four-legged friend are enough to exhaust the most energetic of travelers. Stop bemoaning the canine restrictions and head to Waupaca for the **Dog Days of Wisconsin Summer Camp**, August 25–27 — a weekend of hiking, boating, swimming and loafing expressly for dogs and their owners. At Camp Helen Brachman you and your pooch can stroll down the Ice Age Trail, take a dip in Pickeral Lake and listen to professional dog trainers address the pack around the campfire.

Veterinary services will be available on-site. The \$200 fee covers all meals for humans and accommodations in dormitory-style cabins for campers and their canines. Dogs must bring their own chow. Registration is limited to the first 100 dogs. 1-800-CAMP 4 DOGS.

Planning a trip up North, but don't have time to work out the details? Relax! With a computer and modem, you can find out everything you need to know by connecting to the The Oak Leaf, an on-line travel and recreation bulletin board for northern Wisconsin. Sponsored by the **Cable Area Chamber of Commerce**, the electronic service features events listings, lodging information and details about local attractions, plus a conference area where you can

exchange notes with other northern travelers. The Oak Leaf is on-line from 5 p.m. to 8 a.m. Mon.–Thurs., 24 hours Fri.–Sun at (715) 798-4580.

Reminder:

Free Fishing Weekend!

Saturday and Sunday
June 3-4

State Parks Open House!

Sunday, June 4

Call before you go!
Dates and times may change.



Relax and discover

Enrich your visit to a Wisconsin State Park by joining in programs hosted by park naturalists. During guided hikes or twilight talks you'll learn about the wonders of nature each park holds. For a free copy of "Interpretive Programs in State Parks & Forests" write the DNR Bureau of Parks and Recreation, P.O. Box 7921, Madison, WI 53707-7921.



Sweet sou-ees abound in Dodgeville.

Swine song

If you never quite made it to the stage of the Metropolitan Opera, here's another chance to claim vocal laurels: Participate in the **Third International Hog- and Cow-Calling Contest** from 9 a.m. to 5 p.m. on Sunday, July 9 in downtown Dodgeville, Iowa County. Local dignitaries and area swine award trophies and prizes based on the creativity, range, timbre, depth of repertoire, and enthusiasm (especially enthusiasm) of the callers. (608) 935-9200.

