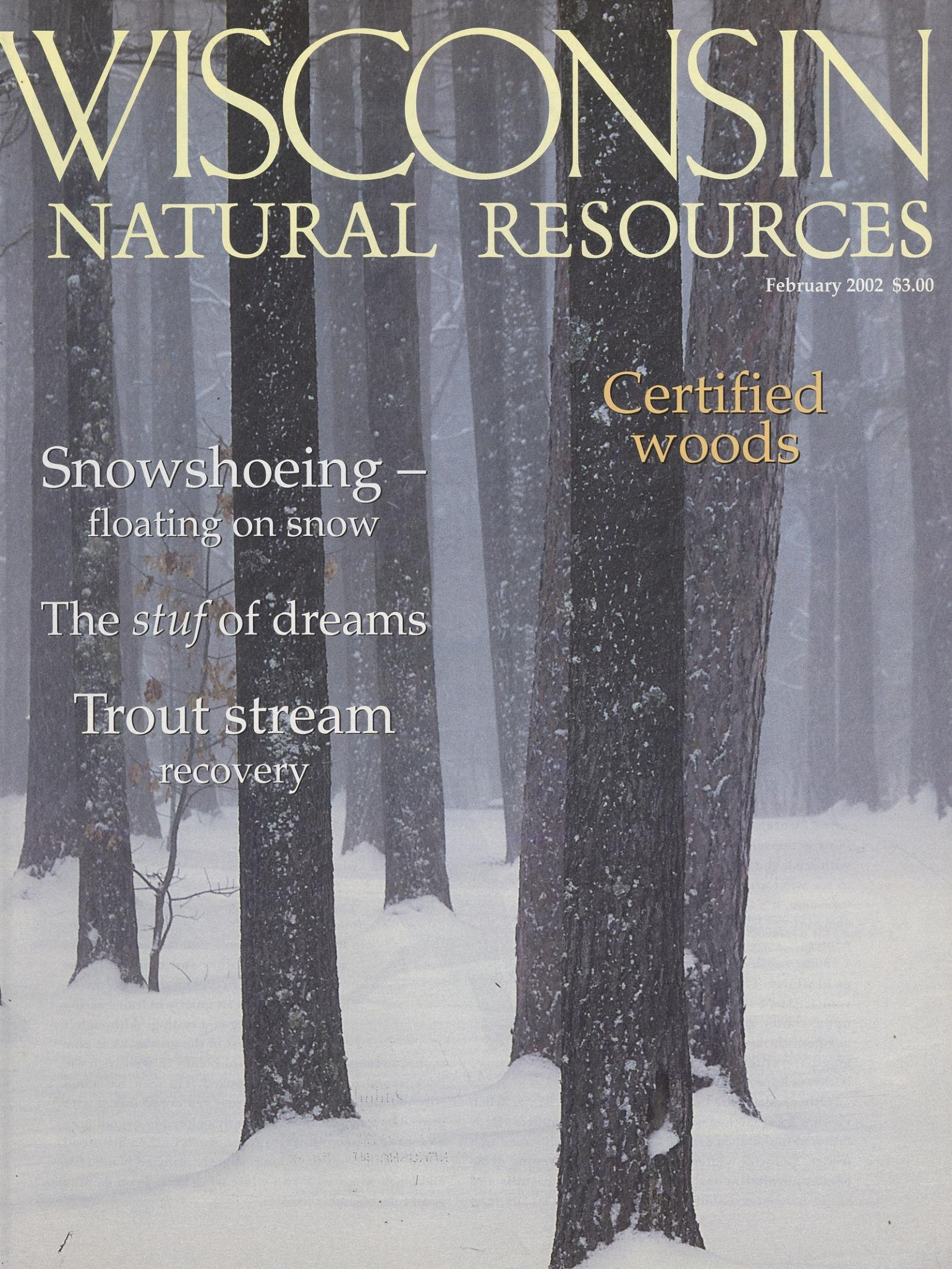
Wisconsin natural resources. Vol. 26, No. 1 February 2002

[Madison, Wisconsin]: Wisconsin Department of Natural Resources, February 2002

WISCONSIN NATURAL RESOURCES

February 2002 $3.00



Certified woods

Snowshoeing – floating on snow

The *stuf* of dreams

Trout stream recovery

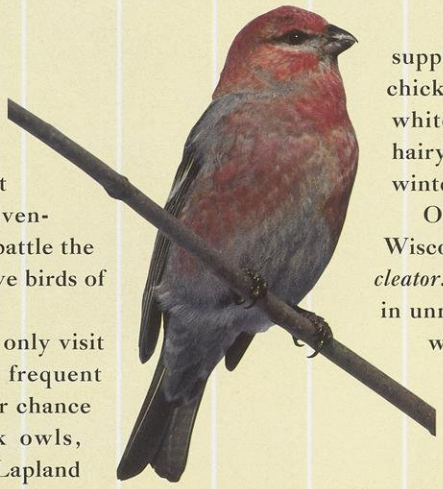
STEPHEN J. LANG *(BELOW)* SCOTT NIELSEN

A female pine grosbeak eats a favored food, ripe crabapples. *(below)* The male sports brighter colors.

Quiet winter visitors

Pine grosbeaks are big, shy northern guests.

Anita Carpenter



Winter is upon us. It's cold and snowy, but bird-watchers don't despair. Now is the season to stock feeders with seeds and suet, and patiently wait to see what arrives. For the more adventuresome, it's time to bundle up and battle the elements to search for the more elusive birds of winter.

Some north-of-the-border nesters only visit us in winter. Common redpolls may frequent your feeder, but you must seek out or chance upon snowy owls, northern hawk owls, northern shrikes, snow buntings and Lapland longspurs. Often the chase is futile, but there is always hope.

Other species are only seen statewide in winter when visitors from farther north bolster their numbers. Red-breasted nuthatches and dark-eyed juncos will come to a feeder. Colorful winter finches including evening grosbeaks, purple finches, pine siskins, red crossbills and white-winged crossbills are also drawn to a steady food supply. These nomads mingle with resident chickadees, blue jays, cardinals, goldfinches, white-breasted nuthatches, and downy and hairy woodpeckers to add color and life to a winter scene.

One of the rarer winter finches to visit Wisconsin is the pine grosbeak, *Pinicola enucleator*. It is a gentle, retiring species that slips in unnoticed. It doesn't announce its arrival with flashy colors and noisy chips as evening grosbeaks do. Pine grosbeaks often sit quietly in fruit-bearing trees, eating and resting. Although it is the largest of the grosbeaks at nine inches in length, the plump bird blends in well with the background and is easily overlooked. The male has a dull rosy red head and back, and a rosy red breast mixed with gray. The female is more somberly colored in overall gray except for the yellowish-green wash on her head and rump. Both sexes have long, slightly notched black tails and black wings with two white wing bars. Juvenile pine grosbeaks resemble females.

continued on page 29

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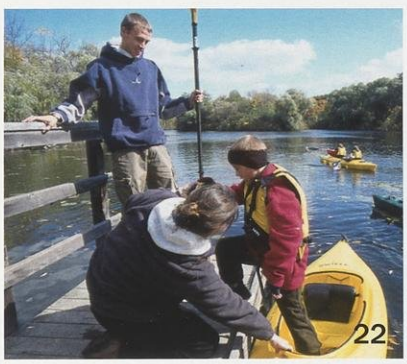
ROBERT QUEEN

PATRICK LISI



ROBERT QUEEN

FRONT COVER: Blizzard in a northern Wisconsin forest. Enjoy our story on how certified woods sustain forests, p. 16.
RJ & LINDA MILLER, La Crosse, Wis.

BACK COVER: The Mukwonago River winds through the Lulu Lake State Natural Area, Walworth Co. For a map or more information, contact the State Natural Areas Program, Bureau of Endangered Resources, DNR, P.O. Box 7921, Madison, WI 53707.
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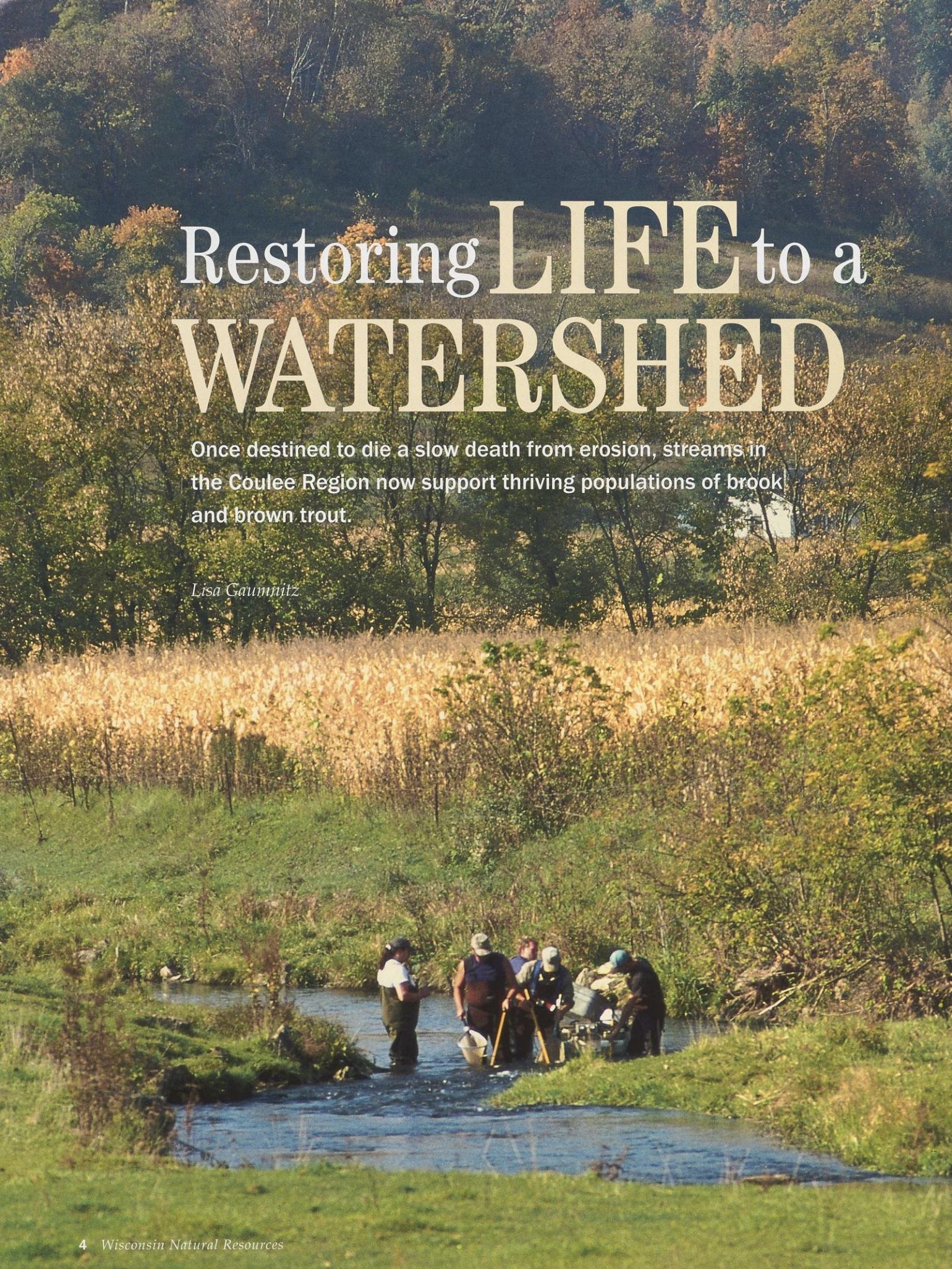
PUBL-IE-012
ISSN-0736-2277

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, P.O. 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.**



Restoring LIFE to a WATERSHED

Once destined to die a slow death from erosion, streams in the Coulee Region now support thriving populations of brook and brown trout.

Lisa Gaumnitz

ROBERT QUEEN

NATURAL RESOURCE CONSERVATION SERVICE FILE WIS-338A

"Coulee Region streams are in extremely poor shape because of the watershed management problems, and it is probable that the habitat conditions will continue to be degraded. Because of this fact it is also likely that trout stream fishing in the Coulee Region may practically disappear in the future."

—JOHN BRASCH, 1958

More than 40 years after his predecessor declared Wisconsin's coulee streams all but dead, David Vetrano is witness and conspirator to a remarkable recovery.

Improvements in farming practices, changes in land use, and habitat projects the fish biologist has pursued with partners are recovering battered but promising stream segments. Their actions have helped heal the valleys south of La Crosse.

The streams are returning to a condition not seen for more than 150 years. Trout — and trout anglers — are following in a big way.

Recent fish surveys have revealed trout in 250 miles of streams that a generation ago carried only chubs, suckers and the like. More than 901 miles of streams in Crawford, La Crosse, Monroe and Vernon counties are now classified as trout waters.

Streams in the Timber Coulee Watershed have evolved into marquee, self-sustaining fisheries that draw more than double the number of anglers of just five years ago, and also supply brood stock for the state's wild brown trout stocking program.

This year, Vetrano will reach another important milestone in managing these streams. DNR fisheries crews will transfer adult and juvenile brook trout from Seas Branch Creek to other southwestern streams that have sufficiently recovered to support this sensitive native fish, revered by many as the most beautiful of all freshwater fish.

"It's pretty amazing," Vetrano says. "Here we are 40 years after that report, and we're putting pretty brookies back into the streams. Some people question whether you can make enough changes in land use to make a positive difference and you obviously can."

It's a story being played out across

(left) **DNR fisheries crews collect wild trout for brood stock. Decades of soil conservation on surrounding farmland and stream habitat improvements have vastly improved water quality and conditions for trout populations.**
(above) **The nation's first soil conservation/erosion control program started in the Coon Valley of southwestern Wisconsin in 1934. On this Chaseburg farm in Vernon County gullies were lined with brush bundles to slow erosion and let both soil and streambeds recover.**

(BOTH PHOTOS) ROBERT QUEEN

(left) **Fish Manager Dave Vetrano and crew collect wild brown trout to breed for subsequent stocking.**
(right) **The sex, age and size of each fish is collected. Research over the last seven years shows these wild strains of fish can be reared in hatcheries for restocking. The wild strains survive 1.3 to 4.5 times better than domestic hatchery strains one year after they are raised and released; 4–42 times better survival after two years.**

Wisconsin, although most vividly in the steep hills of the state's Driftless Area in the southwestern and west central regions.

Last year, DNR fisheries biologists statewide submitted requests to upgrade 810 miles of restored stream as trout water based on the results of recent fish and water quality surveys, according to Larry Claggett, DNR's coldwater fisheries ecologist.

That boosts to 10,371 the total number of stream miles clean enough to feed and support trout, with the biggest gains coming in Class I streams that can now sustain native trout populations without any supplemental stocking.

Class I mileage increased 17 percent, from 3,536 miles in 1980 to 4,136 miles today, while Class II waters, those able to support trout from one year to the next with the help of stocking, increased 401 miles. Class III waters decreased as a result of the upgrades, Claggett says.

The re-classifications will appear in the Wisconsin Trout Stream book scheduled to be released this year and also available online. To protect the gains, the upgrades will trigger changes in fishing regulations as well as potentially stronger pollution controls, and new habitat improvement projects.

"It's a great story, particularly in southwestern Wisconsin," Claggett says. "We're seeing that what we do on the landscape makes a difference for our streams and on everything else. We're seeing increased license sales, increased recreational opportunities, economic effects. The whole package makes a great story that ends, hopefully, with happy anglers."

Land conservation succeeds in Coon Valley

Nowhere is the story of the trout stream recovery more dramatic — or better documented — than in Coon Valley, a 92,000-acre watershed south of La Crosse. Here, the federal government, along with desperate, but willing, landowners and farsighted bankers, launched the nation's first watershed project in the mid-1930s, an era when dust bowls and horrendous flooding reigned nationwide.

They sought to save their soil, their farms and their communities from the ravages of 80 years of intensive farming. Their collective plan employed a bold, holistic approach that harnessed private initiative, government technical know-how and resources. Along the way, they saved the trout.

Brook trout had been plentiful in Coon Valley Creek when the first white settler arrived in the region in 1849. Buffalo, deer, elk and wild turkey roamed what was an oak savanna maintained by the fires Native Americans periodically started or allowed to burn, according to Jim Radke, National Resources Conservation Service (NRCS) district conservationist in Viroqua.

Glaciers that carved much of Wisconsin's topography bypassed this area. Silt blown from the glacial retreat 10,000 years ago left a dusting of debris that over time became a rich, thin layer of topsoil particularly vulnerable to erosion from ridges that rose to 500 feet above the valley floor.

Waves of settlers arrived, lured by favorable economics: with wheat selling for 50 cents to $2 per bushel and land selling for not much more, settlers could pay off their farms quickly. "By the 1870s, this area basically was settled, cleared, and the land suitable for farming was put to plow, causing tremendous erosion," says Radke.

Farmers grew corn and hay in straight rows up and down the hills, and used plows that broke up the protective grass cover over the topsoil. Neither practice allowed much rain to soak in. Instead, it ran off in concentrated channels that eventually carved great gullies on the landscape.

The farmers pastured their cows in the remnant woodlots and alongside the creeks, compacting the soils and exacerbating erosion problems. Flash floods

two to three times a year washed out roads and bridges and sent silt into the bottomlands by the hundreds of tons.

With pasture no longer as productive, farmers suffered feed shortages, decreases in milk productivity, and resulting financial hardship. By 1931, nearly one-third were delinquent in their taxes. A drought in 1934 added to the burden.

"It was a watershed destined to die," Radke says. "It was in terrible shape. From 1849 to the 1930s there were no conservation practices used and the soils were pretty well depleted."

Help arrived that year when the fledgling Soil Erosion Service, a predecessor to today's NRCS, chose Coon Valley as a testing ground to deploy a team of agricultural, natural resource and economics professionals to work cooperatively with farmers on land conservation plans.

"It installed on farms a recognized system of land use, in which not only soil conservation and agriculture, but also forestry, game fish, fur, flood control scenery, songbirds or any pertinent interest were to be duly integrated," Aldo Leopold wrote in an essay on the project.

It was the kind of ecosystem management approach Leopold would become famous for while a game management professor at the University of Wisconsin. Leopold, who was involved in the Coon Valley project from its inception, succeeded in lobbying to add a wildlife specialist to the project staff.

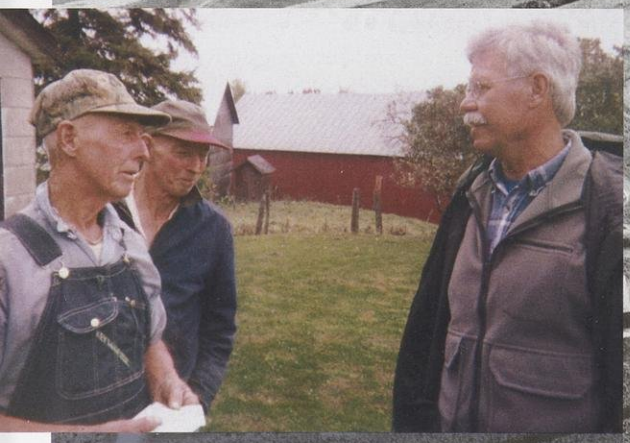
The plans considered each farm's soil and slopes, and then arranged land use accordingly. The steepest slopes (more than 40 percent) were considered woodlands, left in trees and fenced to keep cows out. Fields with slopes of 20 to 30 percent were put into managed pasture. Slopes under 20 percent were considered croplands; slopes under 10 percent were put into terraces, and lesser slopes (under 3 percent) were planted in alternating strips of hay between corn or wheat along the contour to prevent erosion. Sometimes terraces and contour stripping were used in combination. Crops were rotated from year to year.

John Haugen was among 418 of 800 Coon Valley farmers to agree to a plan by 1937. On a recent, drizzly fall day, his sons, Ernest and Joseph, pulled out a sheaf of yellowed maps and papers they've treasured since their father signed the contract on March 19, 1934.

Their neighbors wouldn't sign up,

To save soil, steep slopes on the Vernon County farmstead were set aside as woodlots. More moderate slopes were terraced and strip farmed to slow water flow, retain soil particles, reduce sediment and let streams recover.
(inset) **The Haugen brothers discuss the early days of soil conservation with NRCS Soil Conservationist Jim Radke.**

NATURAL RESOURCES CONSERVATION SERVICE



"We didn't know what contour stripping was. We did not know how to control soil erosion before 1934."

ERNEST HAUGEN

worried the government was going to take their land away, the brothers recalled. But their father was eager for the free technical help, free fertilizer and lime, free alfalfa seed, free firewood and free work by the Civilian Conservation Corps. He also was eager to stop the relentless erosion.

"There were a lot of gullies," says Ernest Haugen. "I helped bury a horse in the gully."

"They put the grain bundles in the gullies to drive over so they could get the crops out of the field," Ernest says. "We didn't know what contour stripping was. We did not know how to control soil erosion before 1934."

"Soil does not run away now," Joseph chips in shyly.

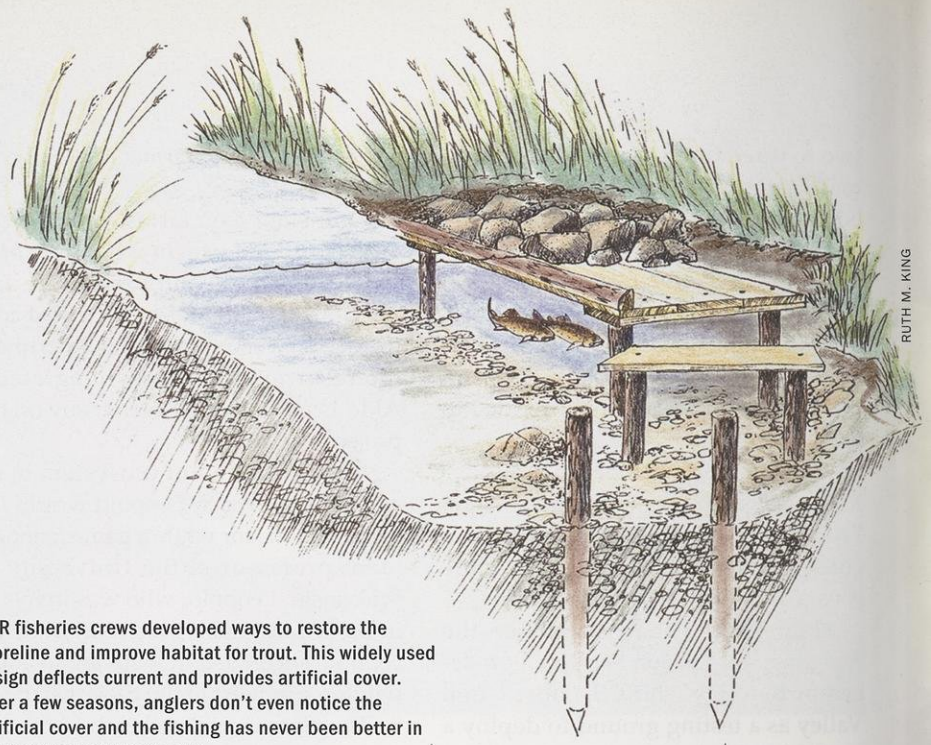
CCC crews became a fixture on the farm — and a curiosity — as they built 11 terraces, fenced in the woodlot, and helped draw out contour strips. The young brothers would return home from school and follow the CCC men as they used a new Caterpillar tractor and a grader to make the terraces. People wandered over from a baseball game to see those terraces. "Some thought they were awful," Ernest Haugen says.

But to the brothers, everything the watershed project achieved was good — so much so they built additional terraces and have kept the original CCC improvements intact over the last seven decades, with the exception of the fence around the woods.

The improvements came quickly for the Haugens and others. "The barn got full of hay afterward," Joseph Haugen says.

Farmers had extra feed within two years, the butterfat content in the cows' milk increased, and farmers could convert steep cropland to pasture because they were getting more crops from less steep croplands, Radke says. Perhaps most importantly, attitudes were changing.

Farmers who admitted they had signed up for the program expecting to convert back to the old ways at the end of their five-year contracts now embraced the new ways. By 1938, 70 farmers who hadn't signed up were using some of the conservation farming practices, mostly contour strips.



RUTH M. KING

DNR fisheries crews developed ways to restore the shoreline and improve habitat for trout. This widely used design deflects current and provides artificial cover. After a few seasons, anglers don't even notice the artificial cover and the fishing has never been better in these southwestern streams.

Benefits beyond the farm

In the following decades other benefits have been documented, partly the result of continuing improvements in agricultural practices, and partly due to the conversion of cropland to recreational use, as low commodity prices squeeze dairy farmers out of business.

Researchers have found significant decreases in erosion in the Driftless Area, and in more recent years, have explored the effect on floods and groundwater in the area. Both are critical factors; groundwater is the lifeblood of Wisconsin's trout streams, and frequent, devastating floods can inundate the gravelly pools where trout lay their eggs.

Warren Gebert, District Chief for the U.S. Geological Survey in Middleton, and colleague William Krug examined records from as early as 1916 showing the annual low flows in southwestern Wisconsin streams.

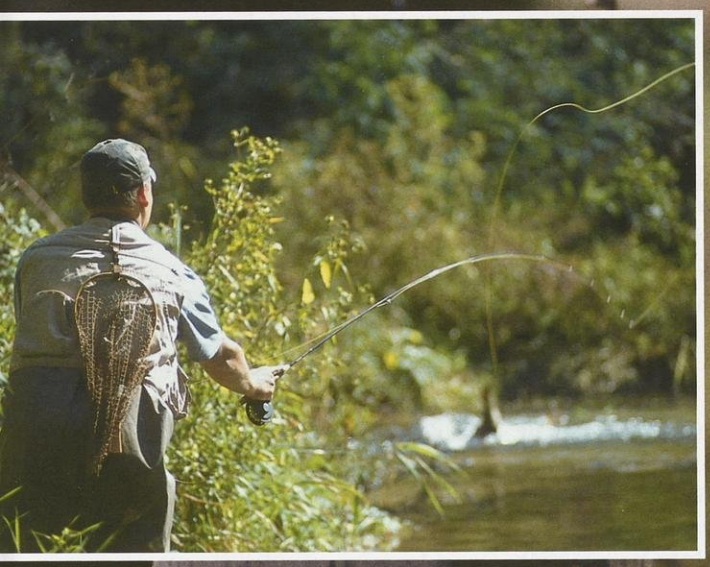
The changes in farming practices increased infiltration of water into the ground, raising groundwater levels and increasing base flow and the annual seven-day low flows, Gebert says. Another study Krug conducted found that the changes in farming practices have also cut the annual flood peaks in southwestern Wisconsin.

In short, southwestern Wisconsin streams now receive more water and colder water. The streams more closely resemble their condition before statehood. That's particularly good news for brook trout, a cold-water species that doesn't tolerate wide swings in daily or seasonal temperature. Groundwater-fed streams stay between 48–52°F year-round, keeping trout cool in the summer, and keeping their eggs warm enough over the winter before they hatch.

Water quality and habitat improvements on some stream segments aim to add cover overhanging the stream. This shade moderates water temperature swings and provides cover for insects, birds and a host of aquatic food sources. "You get many, many positive benefits just from increasing cover," Dave Vetrano says. "We've been able to get 1400 to 1500 percent increases in trout density along certain segments by doing trout habitat work."

Fine tuning the fishery

Every year Vetrano and other DNR fisheries staff and partners, such as Trout Unlimited, work on habitat improvement projects on three to five miles of stream. Through 2001, fisheries crews statewide had completed 580 miles of habitat since the Trout Stamp was started in the late 1970s to provide funds for that purpose.



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Fish managers in each region of the state build structures to provide artificial bank cover uniquely designed to suit each stream's needs. The projects differ according to a stream's gradient and particular problems, but they all aim to narrow the stream, increase water velocity, scour pools, and recreate floodplains as well as provide the cover adult fish need to rest and feed.

John Bethke, western Wisconsin regional vice chair of Trout Unlimited, sees the results of the improved habitat and water quality in his catches. He's been fishing the area for 25 years, and he relishes the memory of pulling large brown trout from little-fished southwestern streams in the early 1970s.

Brown trout, a species native to Germany that was brought to the United States in the 1880s for stocking, has since become acclimated to Wisconsin. Browns can prosper in streams with higher temperatures, lower oxygen levels, and higher loads of sediment and other pollutants. Browns will also eat small warmwater species such as some minnows for food.

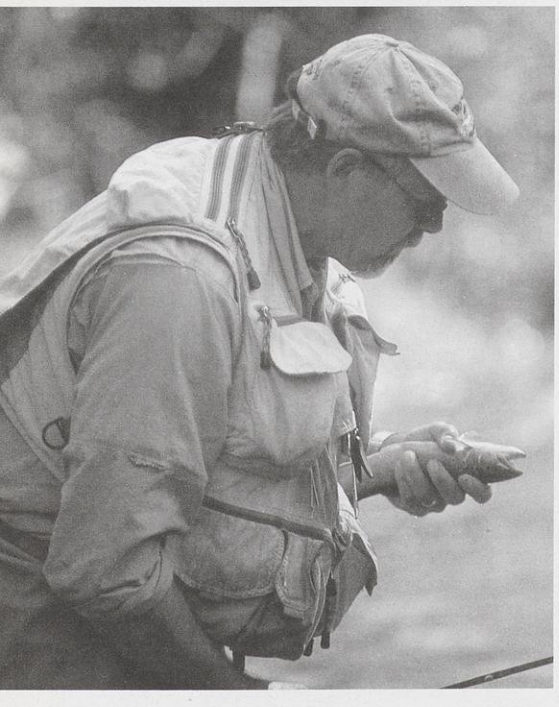
With groundwater flows contributing more water to the streams, the temperature is dropping, the food sources are less diverse and the browns are smaller. "Now, we have more trout, but fewer large trout," Bethke says. That state of affairs isn't to everyone's liking, but it is to his. Bethke has moved away from bait fishing to fly fishing over the years. He now enjoys the solitude and beauty he finds in some of southwestern Wisconsin's smaller, less well-known streams, and is perfectly happy to catch and release 12-inch brookies all day.

As the instructor of a University of Wisconsin-La Crosse course on fly-fishing, Bethke appreciates the increased opportunities delivered by the larger trout populations and the permanent early trout season, which he helped design as a member of a group charged with the task.

As a resident of an area where the economy has not kept pace with the rest of the state and farmers are increasingly calling it quits, Bethke is happy for the economic boost trout fishing has brought to the area. A recently completed study by University of Wisconsin researchers found the number of anglers on streams surveyed in the popular Timber Coulee Region and along the West Fork of the Kickapoo River doubled from 4,000 in 1994 to 8,800 in 1999. Two-thirds of the anglers came from outside the region and new anglers spent an additional $1.2 million.

Yet Bethke admits to feeling somewhat conflicted. Twenty-five years ago, he was skeptical about the future of trout fishing at the turn of the 21st century. Now, he gets a feeling that "the very thing you're promoting is being loved to death."

Improved streams are good for tourism and the local economy. More than twice as many trout anglers tried their luck on these streams between 1994–99.



ROBERT QUEEN

Stream renewal in the west

Marty Engel, a DNR fisheries biologist in Baldwin, sees improvements in the western Wisconsin streams in Dunn, Pepin, Pierce and St. Croix counties. One measure of that success is reflected in the number of cars parked along access points to the Kinnickinnic River, the Rush River and other streams. Another successful project will continue this year on Cady Creek in Pierce County where DNR crews have stabilized, shaped and seeded 2.5 miles of streambanks.

In the 1950s, many of the area's streams had only remnant brook trout populations in the headwaters and the main stems where they were stocked. A few brook trout hung on in isolated feeder creeks.

"Now, we're finding more reproduction further downstream and higher densities," Engel says. "It doesn't mean the streams are 100 percent healed, but they're getting to the point where you're seeing profound changes."

The renaissance is occurring for many of the same reasons as in southwestern Wisconsin: changes in land use and farming practices, and recovery from the erosion and streambank destruction suffered during early logging in the area. Other factors, including flood control projects in headwaters have decreased the frequency and severity of floods, and increased annual precipitation since the 1950s.

Fish surveys of waters in those counties revealed trout populations, and 179 miles of streams were newly classified as trout waters. Another 134 miles of streams already classified as trout waters were upgraded last year.

Perhaps most encouraging and most profound is the decreased reliance on stocking. Engel has been able to reduce the number of stocked streams from 50 to 20 since the surveys revealed self-sustaining trout populations in waters not previously thought to contain them.

"It's a money saver, and it's a success story when wild species are coming back," he says.

"Some of the streams we have will always be degraded and require stocking," Engel notes. "But for the majority of my area, the overall goal is reducing our dependence on stocking and restoring wild fisheries. We're already heading that way big time."

Lisa Gaumnitz writes about outdoor issues and environmental policies for DNR's Water Division.

FLOATING ON SNOW

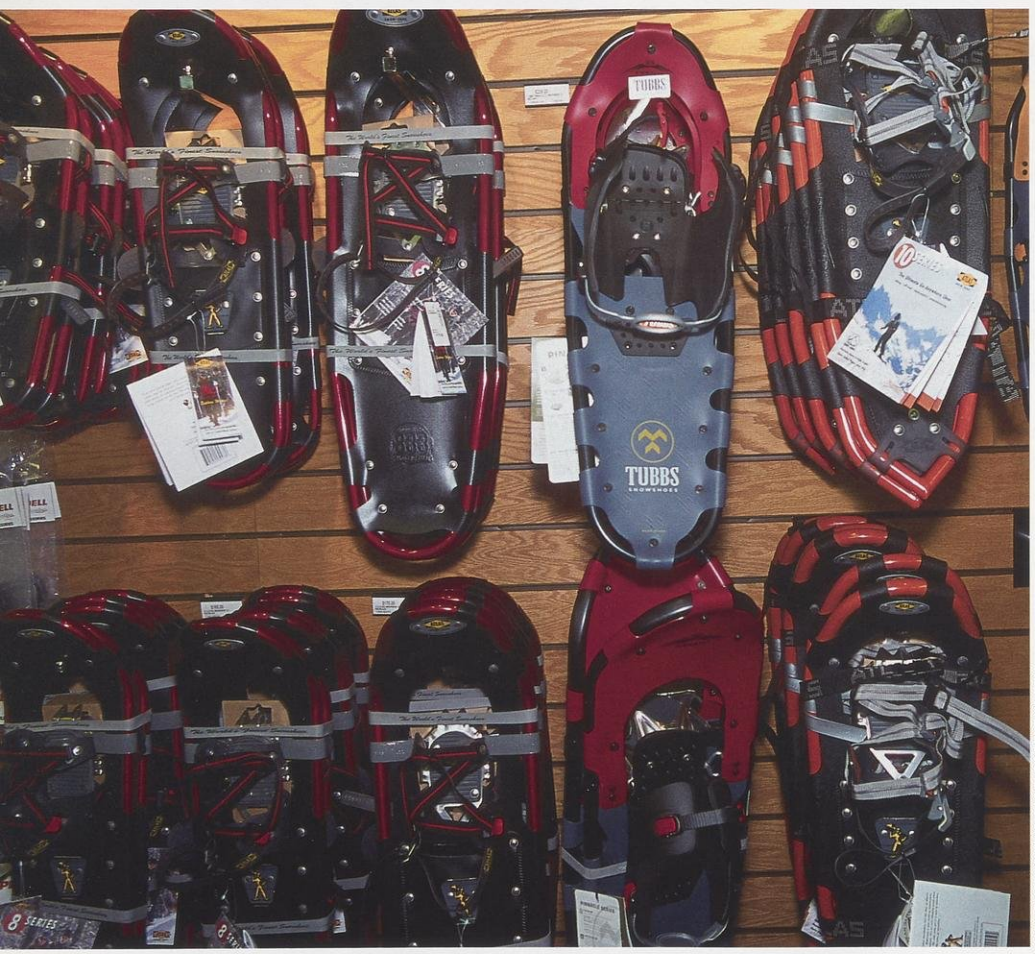
Lighter materials and varied designs offer snowshoers new twists on an old-fashioned way to get around.

Patrick J. Lisi

Out of necessity, I became an adoring fan of snowshoeing in the early 1990s when I moved to Washburn to assume the post of conservation warden. Bayfield County gets a lot of snow. Depths can easily reach 150 inches by the end of a winter season, and "lake-effect" snowfalls near Lake Superior will typically add 25 to 50 more inches just to make things interesting.

When I arrived midway through the winter of 1994, I was greeted to every bit of 125 inches of glittering white stuff blanketing the landscape, and the forecast called for a few inches a day, it seemed, right through March.

To a game warden working in true snow country, a pair of snowshoes is an invaluable tool. My boss let me take a couple hundred bucks from the station budget for a set of Tubbs, a popular brand of snowshoe, and I was ready to tackle the meanest, toughest blizzards Mother Nature could possibly throw my way! Soon, I was walking almost on top of the snow instead of plowing through waist-high banks and drifts, trying to get closer to someone ice fishing or to a set of traps along a creek.



(ALL PHOTOS THIS PAGE) ROBERT QUEEN

Many times I would spot a fisherman out on the ice from the highway, then don my Tubbs and ease through a woodlot to close the distance. Sometimes I would carry a white plastic pail with a couple of jigging rods hanging over the edge, then simply walk towards a suspect fisher on my snowshoes at a pace that allowed me to get to him or her before they could take in that fourth, illegal line.

After bragging to my wife, Marjorie, about how much fun it was to walk atop deep snow instead of slugging through it and creating an awful sweat (This is a *great* workout by the way!), she soon convinced me to dip into our savings so she could have some Tubbs, too. This was her first experience with snowshoes, and I dare say she is hooked for life. Now, we spend as much time as we can in the winter hiking most anywhere we can find suitable snow to 'float.'

Floating is the essence and the thrill of snowshoeing. It's almost akin to cross-country skiing. The most common technique to work your snowshoes is to schuss-schuss-schuss along, feeling light and gliding as you create a new track in the fluffy flurry.

Different strokes for different folks

In the world of snowshoes, there are many styles and brands to choose from. And some people choose to carry a ski pole or poles. I opt for one pole for balance, while Marjorie just likes to swing her arms for that purpose. The shoes you choose should depend on the type of snow you are shoeing, how far you want to go, and how fast you need to get there.

The old-fashioned long-tailed wooden snowshoes still work well, and they have their champions, but now there are many options in lightweight, aluminum framed snowshoes as well.

The traditional wooden snowshoes

(top) **Traditional snowshoers still craft pin-tailed snowshoes by steaming and shaping hardwoods that are then woven and lashed with rawhide strips.** *(left)* **A host of lightweight snowshoes made from strong aluminum tubing, synthetic webbing, nylon strap bindings and hinged cleats are also available.**

DNR PHOTO FILE

(left) **Not so long ago, snowshoes were mainly popular with wardens and trappers for winter work and nature lovers seeking quiet walks.**
(below) **Now racers consider their specialized snowshoes just another form of footwear to beat feet in competitive runs.**

RJ & LINDA MILLER COURTESY OF WIS. DEPT. OF TOURISM

have a frame made from varieties of soft or hardwoods that have been steamed and bent to a particular shape. The webbing is woven from deer hide or rawhide, and the strapping where the feet go can be made from strips of hides or anything else that's handy to bind the wearer's boots to the shoe. Early snowshoes were "long-tailed" (let's call them pin-tailed, like the duck) at the rear which made the shoe more stable in deep snow.

The toe was similar to the modern day snowshoe with a tip that curves upward to keep the shoe from digging into the snow and help the wearer flatten the path with each step. Some staunch snowshoers cling to the pin-tailed design to retain the tradition of the sport, much the same as many archers prefer to stay with a recurved bow or longbow as opposed to the compound bow.

Today's snowshoes come in an assortment of sizes, shapes, colors and materials. Enthusiasts select snowshoes by the type of recreation they have in mind. An easy way to choose what style of snowshoe to use is to gauge the depth and rigidity of the snow you intend to conquer. A hard-surfaced, shallow snow blanket can easily be tread wearing smaller, round-shaped snowshoes; deep or powdery snow requires a larger, oval-shaped snowshoe for easier travel. Some folks buy several pair to fit their every whim.

There are even special designs for snowshoe racers. With a little practice, they actually sprint across the frozen tundra in several wintry marathons held across the United States.

Snowshoes for small kids commonly use a bear paw design, though they make bear paws for adults, too. In kids' sizes, bear paws are cute little snowshoes, almost round, with simple, fine bindings for petite feet. Competitive snowshoers often use bear paw style snowshoes too, as they are very light and easy to maneuver.

There are many brands to chose from, though Tubbs and Sherpa seem to dominate the industry at this time. They are costly. Expect to pay $225–$450 for Tubbs or Sherpa, and only half that much for lesser-known brands in adult sizes. My personal snowshoes are made by Atlas, for which I paid $100 at a little shop in Iron River, Mich. Another great brand to consider, the Yakima, is priced a little higher than Atlas, but less than the top brands.

Sound expensive? Marjorie and I figure it's a lot less of an investment than a snowmobile or downhill ski package, and we get a much nicer, quieter workout with our snowshoes.

One foot in front of the other

So, you have a pair of snowshoes. How do you use them?

This isn't as silly a question as you might think.

Using pin-tailed snowshoes, you will definitely be schussing and gliding your way down the trail, especially if you are breaking-in fresh trails after a snowfall. Expect to sink 6–10 inches into new snow if you weigh more than 150 pounds excluding your winter clothing.

Your technique will mainly be sliding one foot and then the other, almost like cross-country skiing, but without as much hinging with your feet. Pick up the toe of your snowshoe a couple inches with each step, allowing your heels to contact the snow underfoot. The tapered tail of the shoe will cut a groove

behind and will help keep you and the snowshoes from slipping side to side.

Warm up before you set out

I predict you will feel soreness in your thighs and calves the next morning after your first couple of times on snowshoes. You need to walk somewhat bow-legged, especially if you are using pin-tailed or large framed snowshoes. To avoid tender muscles, do at least 15 minutes of careful stretching before engaging in snowshoeing or other outdoor winter sports. Here are a couple of suggested stretches you might try:

To work the calf muscles, stand facing a waist-high countertop with your feet slightly apart. You want to stand far enough away to simulate doing a standing push-up by keeping your arms straight to the edge of the counter with your hands resting on the edge. Now, back your feet away from the counter so your body slants at a 45-degree angle. The key now is to keep your feet flat on the floor and then slowly bend your arms and lower your torso almost to the edge of the countertop. If this is too much stretch at first simply reposition your feet closer to the counter, and then try to work them farther away as your calves stretch out.

A great way to loosen your thighs is to do a series of "quad stretches." Stay at the countertop, place a hand on the edge for balance, and then bend and lift the opposite leg back so you can grasp your ankle with your free hand. Bring the heel of that foot straight up from behind until it touches your backside. Hold this position for 10 seconds and then exercise the other quadriceps muscles in the same way.

There are numerous other ways to stretch out the muscles that will get worked during your snowshoe activities. It is very important to take a few minutes to stretch both before *and after* engaging in any outdoor sports, especially in the winter.

I suggest you wear as light a boot as possible for pin-tailed snowshoeing, and that you wear socks made from a wicking material as a first layer to keep perspiration from freezing to your skin on your rest stops. Wear a warmer pair of socks on top of these.

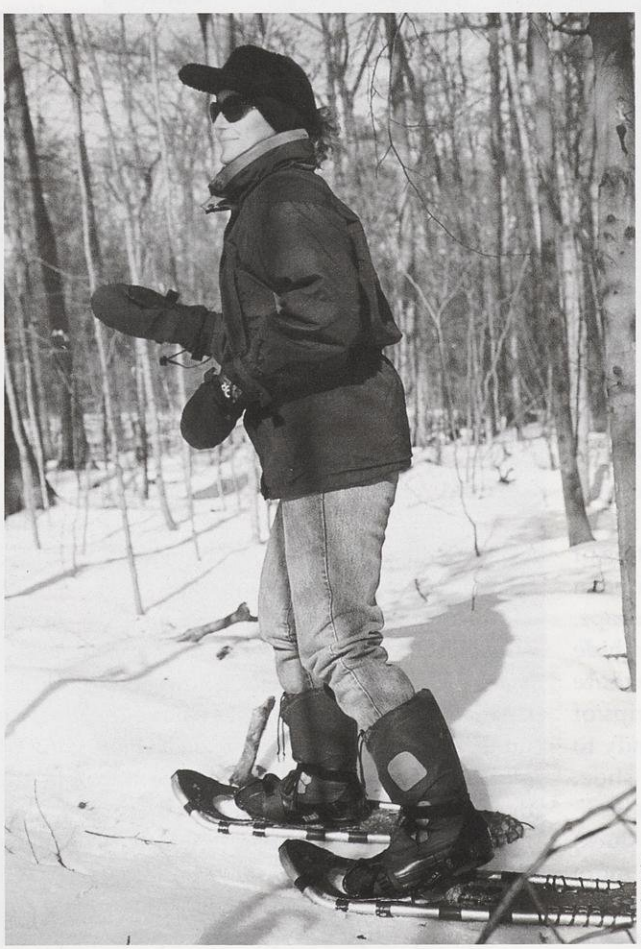
In deep snow, a two-mile hike provides one heck of an exercise. On hard snow, where you might only sink a couple inches, you can go for the day, but don't overdo it on your first few outings.

Let's move on to the 21st century snowshoe. The biggest difference between then and now is the bindings. Notice in these photos that my wife's feet are working a hinged axle as she simply walks on the snow. It's almost that easy...just walk. You need to keep the toe of the snowshoe up somewhat so it won't nose-dive into the snow, and there is a certain amount of schussing, but the axle allows her to use her feet as they were designed — one in front of the other with a full, normal range of motion.

Bindings on snowshoes come in various configurations. You will find everything from simple rawhide lacings to quick-snap connectors fitted on nylon wrappings for ease when donning your snowshoes. My wife and I prefer the latter. The disadvantage is we have to spend a few minutes readjusting the strap lengths whenever we wear a different style of winter boot, but that's a minor inconvenience. Rawhide bindings are simply tied like you would cinch and knot regular shoes or boots. Your bindings need to be secured as tight as possible to prevent your feet from working the straps loose as you walk, which results in side-to-side slipping.

Choosing boots to bind to your snowshoes also takes a little care. Shop for flexible, warm boots sized large enough for you to wear a thin sock that absorbs sweat and a thicker, wool sock for warmth. Heavy boots like Sorels and Icemens are poor choices for this sport; they are bulky and heavy, your feet slip in them and you will find yourself constantly adjusting your bindings.

Even casual hikers can appreciate that lighter weight snowshoes offer snow-gripping cleats and flexible bindings so you can walk more naturally across the white blanket.
(right) Snowshoes provide the means to comfortably and gently explore woodlands where there are no trails or established paths.



PATRICK LISI

Making the right moves

Maneuvering any style of snowshoe can be tricky at times. For example, if you decide to turn 180 degrees and go back where you just stepped, you will have to complete this mission with short, baby steps if you are wearing pin-tailed snowshoes. With a style like Marjorie's Tubbs, she can complete this turn in half the time since her shoes are shorter and do not have a long, trailing tail. Bear paws are easy to turn around in — two steps and you're heading in the opposite direction!

DNR PHOTO FILE

MARJORIE LISI

CHRIS DRIES COURTESY OF WIS. DEPT. OF TOURISM

A group snowshoe hike offers a pleasant diversion to quietly watch and listen for signs of winter wildlife. *(top)* **The author sidesteps up a hill with the help of ski poles.**

Going up or down hills is fun in snowshoes, but it takes some finesse to stay standing. A technique to use going uphill is to turn sideways to the hill and then sidestep as you inch your way along. This is when I find a ski pole extremely handy as a brace against the downhill side while I take my steps.

You can almost use your snowshoes as skis when coming downhill, especially if you are wearing pin-tailed shoes. If you want to avoid coming down the hill too quickly, bend your knees and lower your center of gravity so you are just about sitting on your snowshoes, then slowly descend.

Places to go

The first ingredient, of course, is great snow. You'll be happier if you can find an area that has at least 18 inches of snow so you get the sensation of floating. Otherwise, you might as well put on your Gortex hiking shoes and just hit the trail. Theoretically, the farther north in Wisconsin you venture, the more snow you'll find.

Marjorie and I used to live in snowshoe heaven in Bayfield County. Now we are in Calumet County, and we're lucky to see a total of 40 inches all winter. Therefore, we travel for our winter sports activities. Door County is an obvious place for us to look first, so we end up doing most of our snowshoeing in the state parks and along rivers there.

Snow-covered ice on rivers and lakes can provide excellent snowshoeing. Wide-open spaces provide an easy environment for learning how to use your snowshoes; there are very few obstacles on a frozen lake to manipulate around. However, if you use ice-covered areas as your classroom please use extreme caution. I never consider ice to be completely safe.

State and county parks north of a line drawn east to west across Wisconsin's Highway 29 will typically provide snowshoeing opportunity. Watch for entry fees at public parks into these areas and don't snowshoe beyond posted boundaries.

My wife and I love to photograph waterfalls, which is a wonderful excuse to grab the snowshoes and camera gear, and head up to Marinette, Iron or Florence counties for some adventurous trooping through the snow. We love to be the first ones to break a snowshoe trail, which we find pretty easy to do in the more remote forests and river systems that we seek in the winter.

Many golf courses in Wisconsin allow snowshoeing and cross-country skiing. Sometimes, this is a great solution when time is short and all you need is a chance to work those legs, then get back home to a warm cup of tomato soup. Please check first with your local golf course to learn which portions may be open to snowshoeing or skiing.

Private property is also a fantastic option when you are out looking for areas to snowshoe. Most folks are quite receptive to families that want to try a silent sport on their lands, so long as you leave fences, vegetation and everything the way you found it when you entered. Again, please ask permission before venturing onto private lands.

We find snowshoeing to be a super way to spend a wintry day outdoors. Rent or borrow some. Try several designs. Buy a set you like. Practice with them, then plan a nice day hike with your family. You too, will become a convert to a sport that lifts your body and spirit above the snow.

Conservation Warden Patrick J. Lisi is the recreational safety specialist for DNR's Northeast Region.

DNR Service Centers

Antigo
DNR Service Center
223 E Steinfest Rd
Antigo, WI 54409
(715) 627-4317

Baldwin
DNR Service Center
990 Hillcrest Ste 104
Baldwin, WI 54002
(715) 684-2914

Black River Falls
DNR Service Center
910 Hwy 54 E
Black River Falls,
WI 54615
(715) 284-1400

Dodgeville
DNR Service Center
1500 N Johns St
Dodgeville, WI 53533
(608) 935-3368

Eau Claire
DNR West Central Region
Hdqrs/Service Center
1300 W Clairemont
Box 4001
Eau Claire, WI 54702-4001
(715) 839-3700
(715) 839-2786-TDD

Fitchburg
DNR South Central Region
Hdqrs/Service Center
3911 Fish Hatchery Rd
Fitchburg, WI 53711
(608) 275-3266
(608) 275-3231-TDD

Green Bay
DNR Northeast Region Hdqrs/
Service Center
1125 N Military
Box 10448
Green Bay, WI 54307-0448
(920) 492-5800
(920) 492-5812-TDD

Hayward
DNR Service Center
10220 N St Hwy 27
Box 2003
Hayward, WI 54843
(715) 634-2688

Horicon
DNR Service Center
N7725 Hwy 28
Horicon, WI 53032-1060
(920) 387-7860

Janesville
DNR Service Center
2514 Morse St
Janesville, WI 53545
(608) 743-4800
(608) 743-4808-TDD

La Crosse
DNR Service Center
3550 Mormon Coulee Rd
La Crosse, WI 54601
(608) 785-9000

Ladysmith
DNR Service Center
N4103 Hwy 27
Ladysmith, WI 54848
(715) 532-3911

Madison
DNR Information Center
101 S Webster St
Madison, WI 53703
(608) 266-2621
(608) 267-6897-TDD

Milwaukee
DNR Southeast Region Hdqrs/
Service Center
2300 N Dr Martin Luther King
Jr Dr
Box 12436
Milwaukee, WI 53212
414-263-8500

Oshkosh
DNR Service Center
625 E County Rd Y Ste 700
Oshkosh, WI 54901-9731
(920) 424-3050

Park Falls
DNR Service Center
875 S 4th Ave Box 220
Park Falls, WI 54552
(715) 762-3204

Peshtigo
DNR Service Center
101 N Ogden Rd
P O Box 208
Peshtigo, WI 54157
(715) 582-5000

Plymouth
DNR Service Center
W5750 Woodchuck Ln
Box 408
Plymouth, WI 53073
(920) 892-8756

Poynette
DNR Service Center
W7303 Co Hwy Cs
Poynette, WI 53955
(608) 635-8110

Rhinelander
DNR Northern Region Co-Hdqrs/
Service Center
107 Sutliff Ave
Rhinelander, WI 54501
(715) 365-8900

Spooner
DNR Northern Region Co-Hdqrs/
Service Center
810 W Maple St
Spooner, WI 54801
(715) 635-2101
(715) 635-4001-TDD

Sturgeon Bay
DNR Service Center
110 S Neenah Ave
Sturgeon Bay, WI
54235-2718
(920) 746-2860

Sturtevant
DNR Service Center
9531 Rayne Rd Ste 4
Sturtevant, WI 53177
(262) 884-2300
(262) 884-2304-TDD

Superior
DNR Service Center
1401 Tower Ave
Superior, WI 54880
(715) 392-7988

Wausau
DNR Service Center
5301 Rib Mt Rd
Wausau, WI 54401
(715) 359-4522

Wautoma
DNR Service Center
427 E. Tower Dr,
Suite 100
Wautoma, WI 54982
(920) 787-4686

Wisconsin Rapids
DNR Service Center
473 Griffith St
WI Rapids, WI 54494
(715) 421-7800

Woodruff
DNR Service Center
8770 Hwy J
Woodruff, WI 54568
(715) 356-5211

WISCONSIN
DEPT. OF NATURAL RESOURCES

CERTIFIED WOODS






Ingraining sustainable forestry

The seed of forests' future

What's behind the certification label?

Concern about worldwide forest destruction has created a demand for products that stem from well-managed forests.

We want it all: sustained wood supply, jobs, healthy forests that support diverse plants and animals, and produce clean water, clean air and recreation. We want forests that meet present needs without compromising the ability to meet future needs.

While sustainable forestry is evolving in practice, most people think of sustainability as "well-managed."

Darrell Zastrow, chief of the DNR's Forestry Sciences Section, says the vastness of forest resources combined with a varied ownership in Wisconsin makes it challenging to manage woodlands to ensure there will be healthy and productive forests for the future.

Forested land covers 16 million acres of Wisconsin's 34.7 million acres — 46 percent of the total — with an estimated 9.8 billion trees.

While 84 percent are hardwoods — maple, basswood, aspen, birch, oak and hickory — there are significant softwoods, especially in the north, including white pine, red pine, jack pine, black spruce, northern white cedar and balsam fir.

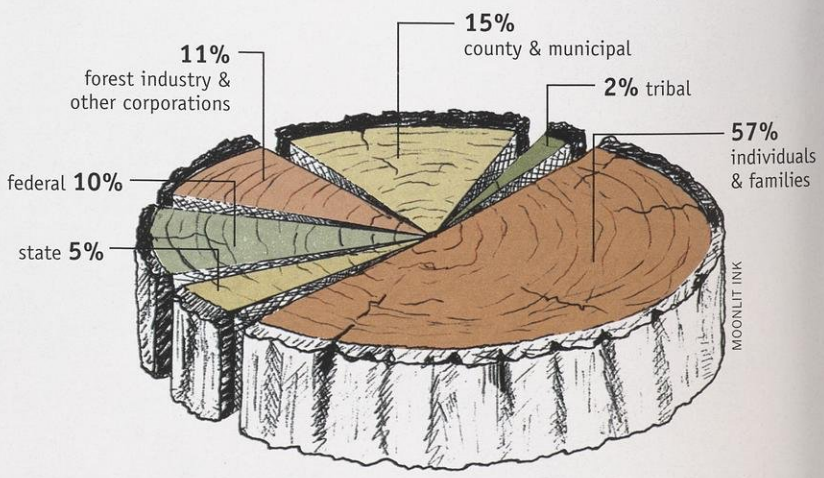
Unlike some parts of the world, Zastrow notes, Wisconsin has been gaining forest acreage, not losing it. Since the 1930s, much marginal crop and pastureland has been planted with trees and forests naturally invaded these lands so that the state has more forested acres now than at any time since inventories began in 1936.

In Wisconsin, as around the world, forests are shaped by human needs and values. Tradeoffs are inevitable. Since we live in a global ecosystem, it's in everyone's best interests to encourage all nations to practice sustainable forestry — meeting as many of today's and tomorrow's demands as possible. Forest and timber certification is one tool to help reach that vision.

With forest ownership comes responsibility.

Rules and regulations don't apply uniformly to every parcel, Zastrow says. Most government and industry owned land is managed according to written plans specifying environmental protections, insect and disease control, recreational uses and wood production. Foresters encourage the quarter of a million individuals who own nearly 60 percent of the forests in Wisconsin to also have professionally prepared woodland management plans.

One state program offers property tax credit in exchange for certain forest stewardship practices. Other state and federal programs share costs with landowners to implement these practices.

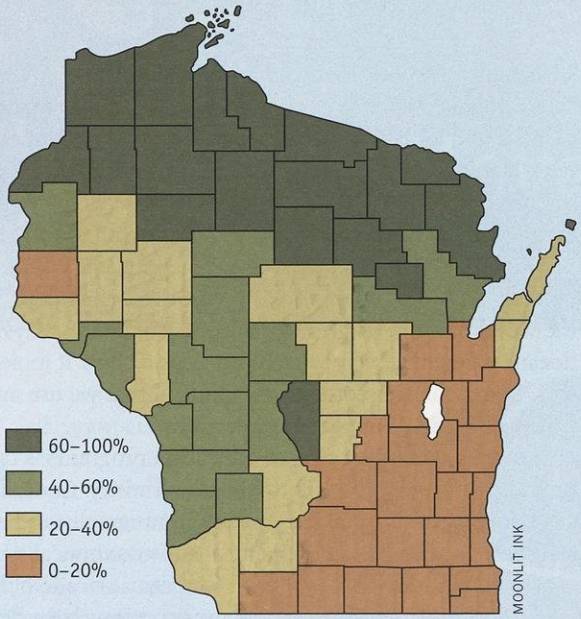


MOONLIT INK

ROBERT QUEEN *(CENTER)* STEPHEN J. LANG

ROBERT QUEEN

(above) **Distribution of timberland in Wisconsin by owner (1996)** *(left)* **Forests are home to over 85 percent of all species on earth, stabilize the world's climate and provide many products and services. Certification documents that forestry practices are socially acceptable, environmentally responsible and economically viable.**



Percent of forest cover by county

Just over 29 percent of the world's land area is forested — the largest concentration in the former Soviet Union and Americas. Tropical rain forests cover just six percent of the planet but hold two-thirds of its species. Some environmental groups see certification as a tool to promote sustainable forestry practices in these sensitive areas.

At home, about 46 percent of Wisconsin is covered with trees, totaling 16 million forested acres. This map shows forest cover concentration in Wisconsin. A complex woodland ownership pattern creates challenges for sustainable forest management.

Zastrow says Wisconsin's demographics also show an increase in second homes and nonresident landowners, resulting in more forest owners with smaller parcels. Between 1984 and 1997, the number of Wisconsin's nonindustrial private land owners increased 20 percent to about 262,000 landowners. Every year about 3,385 new parcels are carved out of the state's forests. Managing the puzzle that results is complex.

As development progresses, forest fragmentation concerns grow. Some ecosystems and many species require management to protect them and certification is one way to help sustain quality woodlands.

Certification

Forest certification is a voluntary, marketplace approach to encourage responsible forestry. Some products from certified forests are tracked from seedling to final product and those products are labeled so customers know they came from a well-managed forest.

"I'm getting more interest from home builders for certified products," explains Lou Host-Jablonski, an architect for Design Coalition in Madison who discusses using certified products with clients early in architectural planning.

Among the projects, certified birch was used to make the entryway staircase and stairs at the annex to the Arbor House, a bed-and-breakfast in Madison whose owners insist on resource and energy efficient design.

According to a Society of American Foresters' 1999 report, there are several reasons why interest in certification has sprouted from the forest to the home floor. Some forest owners are committed to forest stewardship. Others expect a premium price for certified wood.

Colonial Craft, a hardwood product manufacturer with a molding division in Luck, became the first U.S. mill to gain "green certification" from the SmartWood Program in 1994. Colonial says certification "protects and preserves raw material while ensuring long-term availability of wood resources."

Algoma Hardwoods in northeastern Wisconsin manufactures wood doors for commercial use and sells some certified products. Henk Wolst, vice-president of sales and marketing, says the company receives more requests for quotes than jobs using certified products, but he expects that to change.

"Right now, the lead times are longer and the cost is higher because it is more expensive to produce certified products, and the wood has to be segregated at the plant," Wolst says. "It doesn't change the way we make a door or how it looks in the end. It just changes some of the material that we use and the way people feel about the final product."

A significant aspect of all certification programs is they are non-regulatory approaches to improve forestry. Certification evaluates if forestry practices are environmentally and ecologically responsible, socially beneficial and economically viable.

Timber and forest certification is about a decade old. In this short time, a variety of organizations have developed certification schemes. This new field is still very much in flux and only time will tell which systems survive. But in this publication we introduce the concepts, the current systems in the United States and how they are being applied in Wisconsin. ●

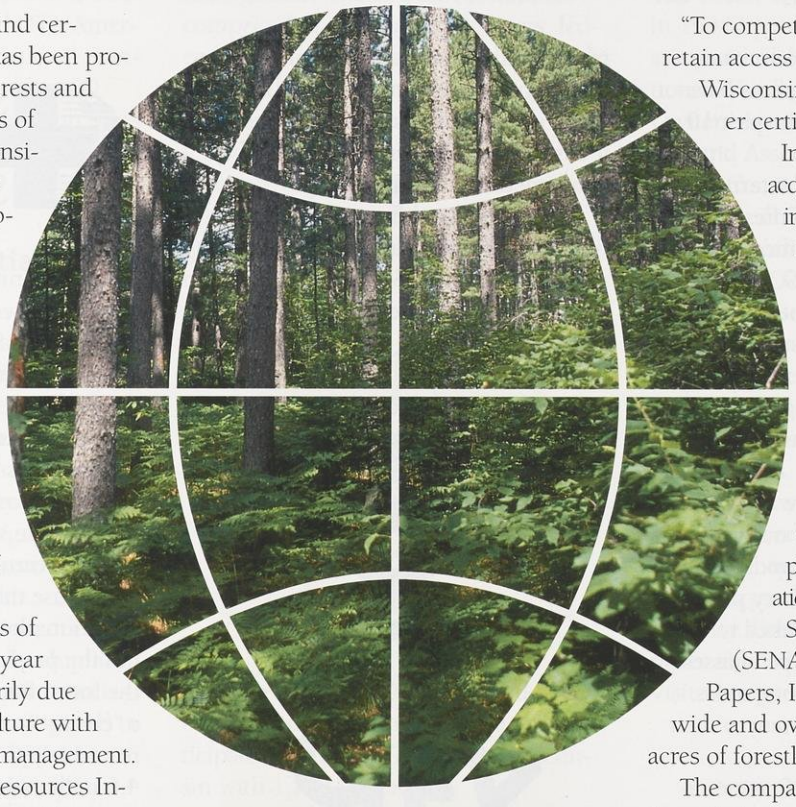
FOREST PRODUCTS LABORATORY

Certified wood products are not better than uncertified, but they answer 'Where did this wood come from?' and assure the consumer that it originated from a well-managed forest. Wood is one of the most environmentally friendly building materials. Producing a ton of lumber requires 70 times less energy than producing a ton of aluminum, 17 times less than a ton of steel and three times less than a ton of cement.

Movement abroad

Certification is a global topic.

A driving force behind certification efforts has been protecting tropical forests and meeting the needs of Europe's environmentally sensitive markets, explains Mark Rickenbach, an assistant professor in the University of Wisconsin-Madison Department of Forest Ecology and Management and co-author of "An Introduction to Forest Certification."



Satellite technology used in the United Nations Food and Agricultural Organization (FAO) 1987 global forest assessment showed that 27 million acres of forestland were being lost a year largely in the tropics, primarily due to converting land to agriculture with some loss from poor forest management. Ten years later, the World Resources Institute confirmed growing forest loss — about 36 million acres a year.

The loss contrasts with growing wood fiber demand. Our planet must support another 84 million people every year. Most of this population growth will be in developing countries where it places tremendous pressure on the forests for fuelwood and agriculture. Currently 56 percent of all wood produced in the world is fuelwood for cooking and heating. The other 44 percent is used to make lumber, paper and wood products.

Wood is a global commodity and managing forests in any major producing nation impacts market conditions and affects producers worldwide. Yet, differences exist between deforestation causes in developing and developed countries, and the environmental consequences of forest practices are just as variable.

Movement is afoot worldwide, though, to promote sustainability and create markets for certified products to ensure there is enough forestland to meet future demand. Europe has been an early adopter of forest certification, Rickenbach says.

(LEFT, ABOVE) ROBERT QUEEN

The 1987 Brundtland Commission and the 1992 Earth Summit set the stage for other sustainable forestry initiatives. Efforts to achieve and document sustainability have emerged worldwide.

"To compete in a global market and retain access to some of these markets, Wisconsin landowners may consider certification," Rickenbach says.

In Wisconsin, foreign firms are acquiring paper mills and looking for companies with a history of sustainable forest management. Stora Enso, a Finnish-based company, is an example of the world coming to Wisconsin. Stora Enso is a major global forest product producer and holds world-leading positions in magazine paper, newsprint, and packaging plus extensive sawmilling operations.

Stora Enso North America (SENA) (formerly Consolidated Papers, Inc.) operates mills nationwide and owns and manages 330,000 acres of forestland in Wisconsin.

The company is a forerunner in the forest industry in adopting environmental management systems and certification under ISO 14001. More than 80 percent of the company's pulp, paper and board production is certified. In 2000, SENA's forest resources group certified its management and wood procurement through the Sustainable Forestry Initiative® program (SFI℠).

"For SENA, the advantages of certification far outweigh the disadvantages," says Fred Souba, vice-president of Forest Resources. "The certification process helps us to better document our programs to sustain forests. It also provides us with the opportunity to identify areas for improvement."

A copy of the public audit summary for SENA's certification is available by calling (715) 422-3789. ●

Types of certification

What does it take to earn the 'good wood' stamp of approval?

A number of complementary certification programs have developed over the past 10 years.

Overseeing much of the international certification process is the Forest Stewardship Council (FSC) certification and labeling program and the ISO 14001 Environmental Management System. But others — including the Sustainable Forest Initiative program, American Tree Farm System and Green Tag —were specifically developed for use in the United States.

Programs differ in nature and scope of their assessments. Some are systems-based, relying on general standards that conform to sustainable forestry principles. Often times, they're linked to the ISO 14001 process. This type of assessment is valuable to larger companies since they can tailor the system to their situation.

Performance-based certification requires landowners to meet standards that are independently set and use specific measures to monitor on-ground performance.

Other programs are hybrids of systems and performance-based programs.

Another difference Mark Rickenbach, assistant professor in the University of Wisconsin–Madison Department of Forest Ecology and Management, notes is who certifies that an operation meets forest standards. Verification may be first-, second-, or third-party. First-party, or self-verification, is conducted within an organization by its staff.

An affiliated group, such as a trade association, conducts second-party verification.

An independent group or consultant that has no financial interest in the firm being audited conducts third-party verification. This is widely regarded as the most credible and objective form of certification, much as independent CPAs verify sound business practices, because it ensures that the forest assessment is conducted objectively.

Programs also differ in the way participants communicate that they are meeting standards. Some award certificates; others note the certification on company letterhead, annual reports and public communication. Still others provide a sign, logo or label that indicates the product comes from a certified forest.

FSC

Forest Stewardship Council (FSC)

The Forest Stewardship Council (FSC), an international nonprofit body, has accredited certification organizations since 1993. FSC applies to forests worldwide and its principles and criteria are general, intended as a framework for developing national or regional standards.

SMARTWOOD Certified Forestry

SCIENTIFIC CERTIFICATION SYSTEMS®

In the United States, the FSC covers two accredited certifiers — Scientific Certification Systems (SCS) in Oakland, Calif., and SmartWood headquartered in New York.

Certifications are generally awarded for five years. A Great Lakes states working group has drafted regional guidelines that include Wisconsin forests.

Once certified, a landowner is entitled to use the FSC logo on products and in marketing. FSC certification verifies the products have been tracked from the forest floor to the sales floor much as a "chain-of-custody" documents legal records. FSC certified acreage comprises 4.6 million acres in the United States; approximately 25 million acres internationally. Call (877) 372-5646 or visit www.fscus.org on the web.

ISO 14001

The International Standards Organization (ISO) formed in 1947 and promotes worldwide standards, international consistency and world trade. ISO 14000 standards were developed to support the objective of sustainable development discussed at the 1992 "Earth Summit" of the United Nations Conference on Environment and Development. ISO 14001, adopted in 1996, does not establish performance requirements or specific criteria that define sustainable forestry. The ISO standard establishes a system for auditing, monitoring and improving environmental performance within a company to determine if the organization is

achieving its stated environmental policies and objectives.

It also allows organizations to self-declare (first-party) they are conforming to standards. Since it is not a labeling program, no chain-of-custody certification is conducted. The American National Standards Institute also approves the ISO 14001. There are about 1.3 million acres enrolled in ISO 14001. Visit www.iso.ch/iso/en/isoonline.frontpage.

Sustainable Forest Initiative® (SFI℠) program

The Sustainable Forest Initiative (SFI) program was built on practices used by many in the forest and paper industry that long recognized the need for sustainable forestry. The SFI program is a system of principles, objectives and performance measures that integrate the perpetual growing and harvesting of trees with other forest benefits.

The SFI program was adopted in 1994 as a condition of membership in the American Forest and Paper Association (AF&PA). In 1998, it was opened to others when its principles, objectives and measures became an industry standard.

Education and promotion are key to the SFI program.

AF&PA members and SFI program licensees can conduct formal self-verifications, work with a second party or seek third-party certification.

The Conservation Fund, a nationally respected conservation organization, was the first nonprofit organization in the United States to become a licensee. As of December 2001, the SFI program had an enrollment of 105 million acres with 37.8 million acres third-party certified. To learn more call (202) 463-2700 or visit www.aboutsfi.org.

American Tree Farm

The American Tree Farm program started in 1941 to recognize good forest management. A Tree Farm committee comprised of industry, landowners, federal and state agencies, and others modernized these standards in 1998. Property owners with more than 10 acres of forestland must have a management plan, actively manage the forest, protect it from fire and insects, protect water quality, and provide for wildlife and recreation.

Currently, 68,000 private landowners owning more than 26 million acres participate. Of these, 3,726 are in Wisconsin with 1,742,069 acres.

Certification involves a site visit by a professional forester who volunteers to evaluate the five and 10-year plans. Forests are recertified every five years. Visit www.treefarmsystem.org or call (888) 889-4466.

Green Tag

The Green Tag program was developed in 1998 by the National Forestry Association with the National Woodland Owners Association and Association of Consulting Foresters. The program for nonindustrial, private forest owners is based on Forest Stewardship Council procedures and recognizes six U.S. forest management regions.

Certified woodland owners are awarded a certificate and may display a Green Tag sign and Green Tag labels on products produced from the certified property. Green Tag certification comprises about 2,100 acres in nine states. Visit www.greentag.org on the web. ●

Many landowners practice sustainable forestry, measure performance and have the results verified. The American Tree Farm System is one program that helps small landowners, like Don and Rachel Jordan of Dodgeville, do this.

ROBERT QUEEN

Why get certified?

Certification is a fact of life in some woods, sawmills and stores.

The Certified Forest Products Council (www.certifiedwood.org) is a North American 'buyers group' that is creating demand for certified products. It is one of 14 buyers groups worldwide, whose membership includes some of the world's largest environmental organizations.

It can be argued that America's forests don't need certification. Many are well managed without carrying a label. Federal and state government programs already encourage private nonindustrial forest landowners to protect the resources and are assisted by cost-sharing grants, deferred property taxes and landowner recognition programs.

While certification is voluntary, landowners and manufacturers see it as a way to stay efficient, find new markets, remain credible and identify areas for improvement.

Some consumers feel good about buying certified wood. A recent Purdue University study found that 68 percent of the people surveyed would pay more for furniture from a sustainably managed forest. About 34 percent said they would pay 6 to 10 percent more; 23 percent would pay 1 to 5 percent more.

"Today's logging and forestry practices in North America are generally good from an environmental standpoint," notes Dave Tormohlen, a resource manager for Louisiana-Pacific in Tomahawk. "But we can do even better if we adhere to the Sustainable Forestry Initiative program. We can make forests healthier and more productive, while protecting soil, air and water quality and providing the other important forest amenities. Continuous education of the general public, landowners, loggers and foresters is crucial to that improvement."

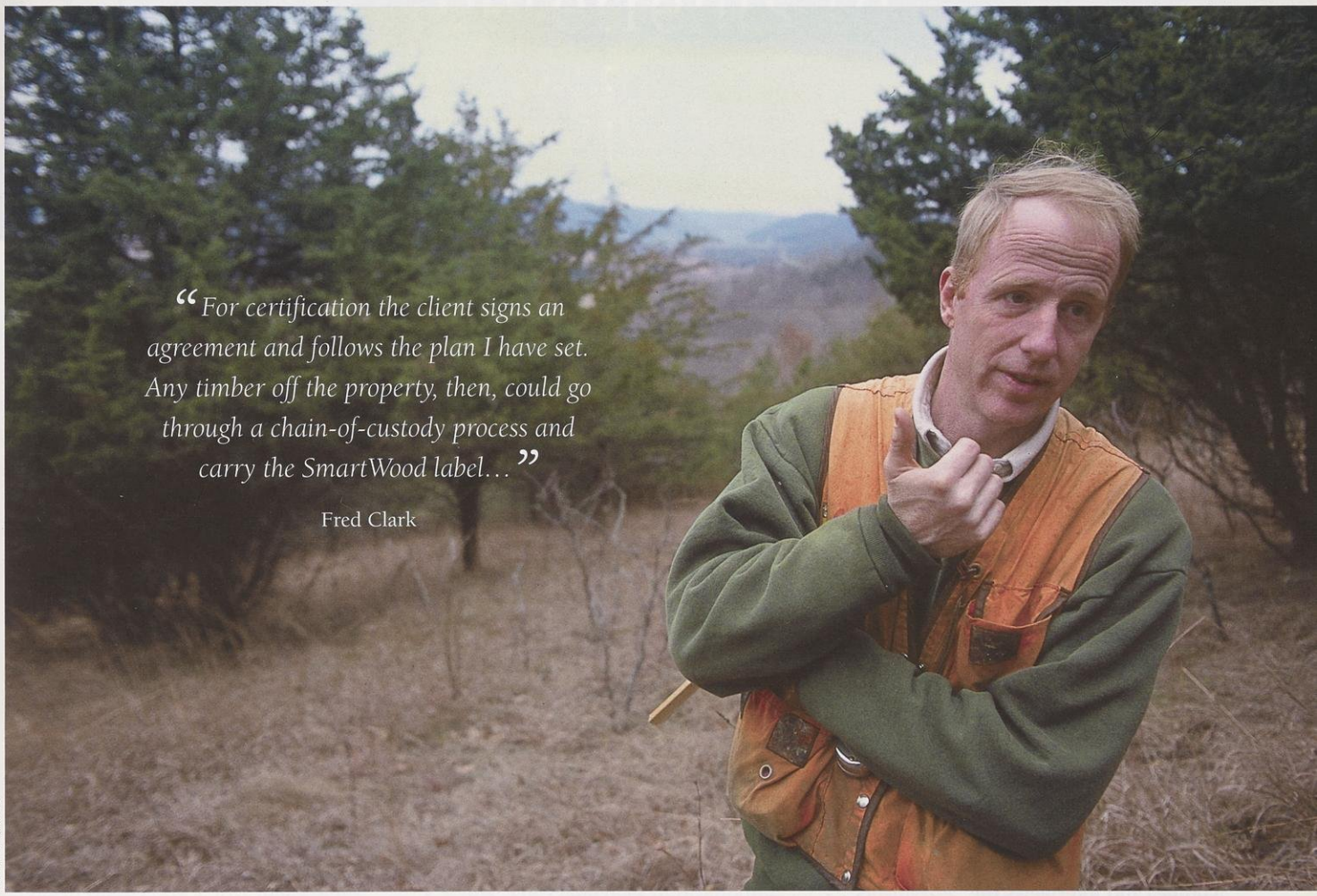
Being certified adds credibility to a business' claim to sustainable management and that is a key issue for consumers and businesses alike. Marketing wood as certified also can lead to increased market share and new customers. Some manufacturers are banking on a growing consumer market for "green" label wood products just as recycled products and organic foods have become more common in the marketplace.

But we are not quite there yet.

Most demand for certified products comes from industrial and retail companies. The Home Depot, Colonial Craft and Anderson Windows purchase Forest Stewardship Council-certified products.

Certified timber is increasingly specified for building purposes. A leading Scandinavian construction company, JM, built the world's first FSC-certified apartment building in August, 2000. More than 70 percent of the wood used was certified.

The Body Shop sells some bathroom products (wooden combs and shaving brushes) that originate from certified forests. Some printers and publishers are signing up for certification. In December, 2000, *BBC Wildlife Magazine* became the first consumer magazine to carry the FSC logo. Wisconsin lumber and paper industries are being purchased by foreign business that sell globally and are keenly aware of international standards and demand. ●



ROBERT QUEEN

Why one forester supports certification

Certified foresters can lower the cost of cerification to small landowners.

Sustainable forest management combines planning and management with professional advice.

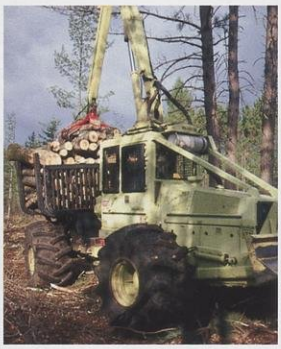
Fred Clark, president of Clark Forestry in Baraboo and a consulting forester certified through the Forest Stewardship Council's SmartWood program, takes sustainable forest management one step further. He supports certification as a way to show long-term commitment to land management.

Because SmartWood certifies him, Clark may extend certification to the property owners if they wish.

"For certification the client signs an agreement and follows the plan I have set," Clark says. "Any timber off the property, then, could go through a chain-of-custody process and carry the SmartWood label eventually winding up on the shelves of a retail outlet like The Home Depot."

To become certified, SmartWood evaluated Clark's operation, manage-





(ALL PHOTOS THIS PAGE) ROBERT QUEEN

Foresters prepare management plans based on the landowner objectives and the forest's capabilities using a wide range of tools such as the Natural Heritage Inventory. Another aspect of certification is low-impact logging methods.

ment plans and documentation. They interviewed him and his clients.

One of Clark's recent projects? Developing and implementing a management plan for 400 woodland acres on the Taliesin property in Spring Green, the former estate of famed architect Frank Lloyd Wright.

Clark and his crew begin by "cruising," conducting an on-ground evaluation of the forest and its current and historical management. Clark measures and ages trees, notes vegetation and wildlife habitat, cites exotic species, records "snag" trees (standing dead trees of no economic value that may house wildlife) and interviews the landowners about their goals for the property.

Clark also reviews maps and DNR aerial photos of the forest area and gets his arms around a lot of trees as he takes measurements.

"I try to get an idea for what kinds of wildlife a property is able to support and note things like eagle nests," he says.

Clark will visit a property throughout the seasons.

Walking into a stand of white pine seedlings, he gets an idea. This stand might be groomed for wildlife habitat and high quality timber by using selection harvesting. In another area he'd recommend prescribed burning to bring back prairie that was native to the area and will aid fire-dependent tree species like oak.

"These woods can continue to be a forest, but if we want to return the stand to a historic prairie, we might try to turn back the clock and open the canopy," Clark says of the Taliesin estate.

While some foresters think certifying woods will provide a premium for wood prices that will filter back to the landowner, Clark says he's not seeing that yet.

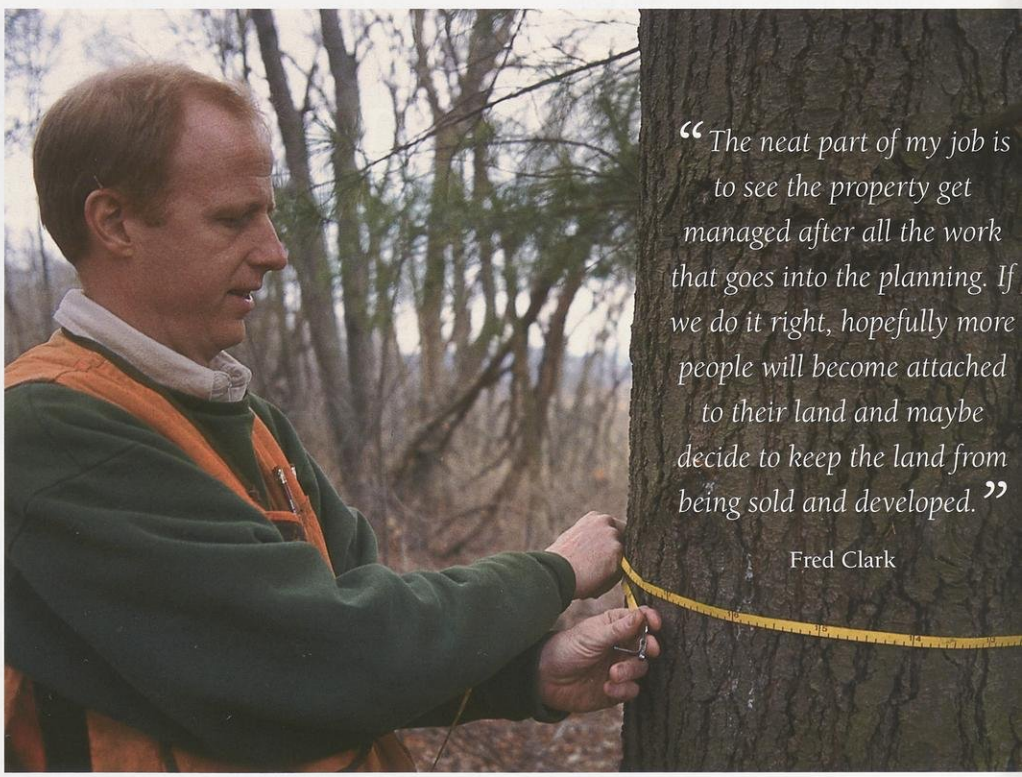
"It's still a niche market and financial gain is almost a secondary concern for us," Clark says. "We are certified because it is good for the resource and because our clients are interested in sustainable management and good land stewardship."

It can take six months or more to complete a management plan before harvesting can occur.

In many cases, a logging contract is drawn up between landowner and wood purchaser to specify which trees will be removed and in what way. Clark helps the landowner decide on logging techniques that range from clear-cutting to seed tree harvesting, thinning, selection harvesting and salvage harvesting. Different harvesting methods create different conditions.

"The neat part of my job," Clark says, "is to see the property get managed after all the work that goes into the planning. If we do it right, hopefully more people will become attached to their land and maybe decide to keep the land from being sold and developed." ●

Certification is one tool used by professional foresters to reach the vision of sustainable forestry. About 125 DNR foresters and another 100 consulting and industrial foresters are available to advise Wisconsin landowners.



"The neat part of my job is to see the property get managed after all the work that goes into the planning. If we do it right, hopefully more people will become attached to their land and maybe decide to keep the land from being sold and developed."

Fred Clark

Deterrents to certification

Why isn't certification for everyone?

Given the current social and economic climate, forest certification isn't for every landowner. Here are some reasons why.

- Cost: The certification process can be costly. The forest owner pays for planning and implementing sustainable forestry. The logger invests in training and equipment to minimize harvesting impacts. Consumers absorb these costs when they buy forest products. Certification cost ranges from less than 50 cents per acre to several thousand dollars total. Audits cost 5 to 20 cents per acre. Large landowners can spread these costs across many acres, while small, nonindustrial landowners do not have that advantage. One way to keep certification costs lower for small woodland owners is to certify all the land managed by a trained consultant or land manager. Group certification also is offered by the Forest Stewardship Council and allows several small forest properties to be certified together to reduce costs.
- Demand: Thus far, U.S. sales of forest products have not financially rewarded businesses that sell certified lumber, unlike the European market, which generally accepts and to some degree demands certification and "green" labeling of consumer products.
- Credibility: Some critics question the credibility of standards that do not require a third-party audit. Others fear that a system that seems right for one landowner today, might not meet needs or provide benefits in the future. Costs for growing and tracking certified products, and antitrust laws are shying some landowners and wood producers from certification.
- Scope: The challenges of promoting good forest practices across all segments of forest economy and ownership are enormous. Managing the size of certification programs also is a challenge. For example, the Tree Farm program certifies nearly 68,000 woodland owners nationwide and these lands have to be inspected every five years.
- Chain-of-custody: A distinct feature of Forest Stewardship Council certification is that labeled products must be tracked from seed to final product to prove every step from growing, to harvesting and processing was well-managed. Tracking chain-of-custody is expensive and logistically difficult, though. Techniques used include paper audit trails (invoices, receipts and bills), mechanical methods (barcoding, imprinting and painting certified wood so it is visually differentiated) and physical product sorting (segregating certified from noncertified material).
- The law: Complexity of state, national and international laws present challenges for forest professionals and businesses. Antitrust laws and regulations constrain how green marketing can limit marketplace access. Even with lofty goals, there are limits on constraining international trade. The United States Federal Trade Commission guidelines require that any marketplace claims — or label — clearly communicate product attributes to the public. "Green wood" may not be a better product even though it was grown, harvested and handled in a sustainable way. Explaining the value of conforming to certified standards remains a public challenge. ●

(BOTH PHOTOS) ROBERT QUEEN

Worldwide, less than one percent of the annual harvest comes from certified forests. Price premiums for 'green' wood products are currently small or nonexistent. Both of these conditions are expected to increase.

Move over Paul Bunyan

Loggers chin up to the rising bar of the trade.

The role of loggers has evolved to parallel movement in sustainable forestry and even certification, and logger certification has raised the level of professionalism and credibility among loggers.

Modern forestry and wood production are evolving together. Technology provides opportunity to use more of each tree and reduce waste. Moreover, wood harvests are being balanced with other forest uses.

Don Peterson, a member of the American Loggers Council and the Wisconsin Professional Loggers Association, agrees that the forest products industry has changed dramatically especially in the past decade. He contends professional loggers need training to keep pace with companies that are certifying and managing their lands as sustainable.

In September, 1999, the American Loggers Council took a hard look at the future of the national logging profession. About 17 months later, the Professional Logging Contractors of Maine hosted a summit to ask: "Will we be logging in 2001?" and as loggers in Maine reassessed their position, Peterson says loggers in Wisconsin did the same. They created the Wisconsin Professional Loggers Association.

Participants in the summit took to heart the words of Lloyd Irland, a forest economist and certifier for the Sustainable Forestry Initiative and the Forest Stewardship Council. He told them, "Be good at what you do. Have a way to prove it. And organize."

Within a month of the summit, Maine drafted a Master Logging certification program with support from the American Loggers Council. This program creates a higher performance bar for the profession. The voluntary program assesses 12 areas of performance and sets standards that are coordinated with similar programs across the United States and Canada. Among them, standards to certify that harvest practices enhance water quality, honor forest ecosystems, support soil productivity, assure future timber resources and manage forest aesthetics.

ROBERT QUEEN

Since less than 20 percent of landowners selling timber use professional forester services, training Wisconsin loggers in areas like water quality protection is necessary to ensure that sustainable practices (designed by professional foresters) are implemented in the woods.

The program bolsters but does not replace existing state logger training programs. Wisconsin is one of four states with an American Logger's Council approved template for Master Logger certification. ●

The Home Depot

The Home Depot, with headquarters in Atlanta, Ga., is the world's largest home improvement retailer with over 1,000 stores and expectations to have as many as 2,300 stores in America by the end of 2004.

In 1999, the company reported sales of $38.4 billion and in February, 2000, it was listed in Fortune magazine's "Top Most Admired Companies." Faced with pressure from a media campaign designed and implemented by the Rainforest Action Network, Home Depot also became the first home retailer in the United States to adopt Forest Stewardship Council (FSC) certification principles.

The home improvement giant is using its purchasing power to encourage sustainable forest management worldwide. In Home Depots, consumers may find Royal Mahogany doors from a certified forest in Costa Rica and FSC-certified dimensional lumber from Canadian suppliers.

Menominee Tribal Enterprises, Inc.

The Menominee tribe has managed its northern Wisconsin forest for more than 145 years. Today, the Menominee reservation area comprises 220,000 acres of woodlands and is an international stewardship success story.

Menominee Tribal Enterprises (MTE) was formed to log, manage and reforest tribal land as well as to manufacture, sell and distribute forest products. MTE's origin dates back to 1908 when the sawmill was built in Neopit.

Marshall Pecore, MTE forest manager, explains that the majority of stockholders are tribal members who are proud that the Menominee forest is one of the finest examples of forest management in the Great Lakes states. The Menominee markets Green Cross and SmartWood certified products and is the first business in the United States to obtain both certifications.

"Certification was a natural progression for us," Pecore notes. "We thought we might get recognition for it and maybe some economic gain for our long-term commitment."

During the past 145 years, the Menominee have harvested more than 2½ billion board feet from the land, which is the equivalent of cutting all the standing timber on the reservation twice over. Yet, standing volume of timber today on the land is greater than it was in 1854 when the Wolf River Treaty defined the reservation.

Today, about 1.7 billion board feet are in reserve and about 75,000 cords of pulpwood and 14 million board feet of sawtimber are harvested annually. MTE markets the wood nationally and internationally, and the product mix includes lumber, veneer and pulpwood.

Pecore says MTE is waiting to see large economic gain for its certification efforts. In fact, while all of the Menominee forests are certified, Pecore says only about 5 to 10 percent is sold to customers seeking certified wood.

Still, the Menominee's achievements are paying off through market niche sales and by winning the 1996 President's Honors Awards for Sustainable Development.

The Menominee reservation also attracts thousands of visitors annually who learn more about sustainable forest management, manufacturing and marketing. The forest is home to bobcat,

Certification gives consumers a way to support responsible forestry. It also can set Wisconsin-produced timber apart from timber that may be produced cheaper in third-world countries without regard for sustainability.

MICHAEL SCHUESSLER *(CENTER, RIGHT)* ROBERT QUEEN

Certification testimonials

Wisconsin statutes define sustainable forestry as 'the practice of managing dynamic forest ecosystems to provide ecological, economic and social and cultural benefits for present and future generations.'

ROBERT QUEEN

Menominee Tribal Enterprises is one of over 1,800 timber industry companies in Wisconsin that employ a total of more than 157,000 people.

bear, eagles, 400 miles of rivers and streams, and more than 123 lakes. The cornerstone of MTE's forest management is sustained yield, which means forest growth should balance all removals over time. This includes tree removal due to harvesting, wind, fire, insects and disease. Foresters monitor and measure changes in the forest timber volume and growth. An annual allowable cut is developed in 15-year cycles.

"The tribe has a main forestry objective," Pecore says, "to maximize quantity, quality and diversity."

His biggest challenge? Pecore says it is marketing and educating about the need for sustainable forestry management.

For more information call MTE at (715) 756-2311 or the Menominee Forestry Center at (715) 799-3896, or visit www.menominee.edu/mte/MTE-HOME.html.

Forest owner associations, cooperatives and land trusts

Cooperative resource management has a strong heritage in Wisconsin.

The Wisconsin Woodland Owners Association (WWOA) was born in 1979 through a state grant and is a leader in landowner education with 2,236 members and 13 chapters.

"WWOA is an organization where you will meet people with similar interests, while learning about the latest in woodland management practices," says woodland owner Norma Belliveau of Tomahawk.

Over the past several years such grassroots enthusiasm for sustainable forest management has spread in new ways. Forest owner associations, local landowner cooperatives and land trusts are helping private forest owners improve land management.

E.G. Nadeau, coordinator of the nonprofit Wisconsin Forest Owner Cooperation Initiative, helps these organizations get on their feet with leadership teams and action plans.

Forest owner co-ops are owners of nonindustrial private forestland who work together to improve management practices on their land. Depending on a group's goals, some jointly market timber while others have their own sawmills and lumber drying kilns.

Community forest owner associations are nonprofit, service organizations. They focus on neighbors sharing information and helping one another.

Land trusts are another forest owner group. Trusts are formed to accept some rights a landowner may wish to donate or sell. The rights that transfer may include development rights or control over how timber is managed or harvested. Wisconsin is home to over 40 land trusts that protect and manage about 80,000 acres.

Nadeau notes that what all these groups — co-ops, associations and land trusts — have in common is a focus on local communities and strength in working together. A number of them have formed with various sizes and amenities.

These cooperatives also are a way to learn about the ecosystems that extend beyond their own property. Nadeau notes that many of these groups advocate forest certification programs in addition to meeting the DNR forest stewardship requirements to assure that sustainable management techniques are being employed.

Call (608) 262-0705 or visit www.wisc.edu/uwcc to order a copy of a guide, "Balancing Ecology and Economics: A Start-Up Guide for Forest Owner Cooperation."

Forest tax law

Overcutting of woodlands prompted the state in 1927 to start enacting forest tax laws to provide incentives to encourage sustainable forest management on private lands. These laws form binding agreements between the state and the private landowners, explains Ken Hujanen, DNR forest tax law coordinator.

Lands entered under forest tax laws have management plans that include harvesting and thinning timber, tree planting, erosion control and wildlife measures, and more. Landowners follow certain aspects of these plans or are penalized.

In 1986, the Managed Forest Law (MFL) replaced the Forest Crop Law (FCL) and Woodland Tax Law (WTL) programs by a legislative act to simplify forest tax law administration and increase landowner benefits. Today, over 2.5 million acres of Wisconsin forestland are managed under forest tax law programs and the Department of Natural Resources has agreements with about 26,000 landowners.

Hujanen says the four key advantages of the MFL are that it reduces taxes, recognizes the landowners' objectives, includes a management plan that ensures good forest stewardship, and offers the landowner the choice of opening or closing all or a part of their land to the public.

"The law is meant to maintain forestland and discourage people from breaking up parcels," Hujanen says. "Following the Managed Forest Law gets people thinking about sustainability and may lead to certification for some as they take it one step further."

For details of the Wisconsin DNR forestry program, visit www.dnr.state.wi.us/org/land/forestry on the web. ●

Lead by example

Certifying state forests

ROBERT QUEEN

ROBERT QUEEN

Wisconsin's public forests are well managed, but formally recognizing that the land meets certified standards would help increase public confidence and build the green-certified wood supply.

While Wisconsin's state forests are managed for sustainability, they are not certified. But Gene Francisco, DNR's chief state forester, contends there's value in the state starting that step.

"Pennsylvania, Michigan, Minnesota and other states have elected to certify some or all of their public forestlands under one of the several certification systems," Francisco notes. "There's opportunity to certify Wisconsin's state forests in a similar fashion. We manage our forests consistent with the principles that are the basis of the certification programs. Pursuing certification would allow us to clearly demonstrate to the public that we are doing so."

Wisconsin state forests encompass over 490,000 acres of publicly owned forests. These forests are governed by statute: "The Department shall assure the practice of sustainable forestry and use it to assume that state forests can provide a full range of benefits for present and future generations." In concert with this goal, state forests also are managed for recreational opportunities, timber management and harvest, aesthetics, watershed protection, biological diversity and wildlife habitat.

Preparing to revise the state forest master plans, the DNR forestry program assessed the northern state forests from 1996 to 2000, considering biological diversity, ecological community restoration and old growth, recreational supply and demand, socio-economics, regional ecology and more. Data from these studies is being integrated into discussions and decisions on state forest management.

Francisco says the state forest program will be further monitoring a variety of indicators associated with sustainable forestry criteria.

"Certification of our state forests would communicate our sustainable forestry practices," Francisco says. "We want to be credible and we strive to be a model for how we ask others to behave." ●

Produced by the Wisconsin DNR Forestry Division
Website: www.dnr.state.wi.us/org/land/forestry
Design: Moonlit Ink
Written and edited by Natasha Kassulke and Kirsten Held
Cover photos by Robert Queen and Kirsten Held
Section head photos by Kirsten Held

Publ-FR-198-2002

CP FOR OUR PATRONS
NEWS FOR CONSERVATION PATRON LICENSE HOLDERS AND POTENTIAL PATRONS

Wisconsin CONSERVATION PATRON

Four ways to purchase

It's time to renew or buy your hunting, fishing or Conservation Patron license

Hunting and fishing licenses expire each year on March 31st. The Wisconsin Department of Natural Resources offers three quick ways to conveniently buy hunting licenses, fishing licenses, Conservation Patron licenses or Sports licenses:

1 Buy online

Buy online. Most hunting, fishing and trapping licenses and stamps can be purchased and printed online. Just pull up **www.wildlifelicense.com/wi** and follow the four steps to purchase and print a large variety of licenses. Online orders need to be billed to MasterCard or Visa credit cards for an additional $3 handling fee. Make sure your computer is hooked up to a printer before purchasing your licenses. State park admission permits and stickers are not available online.

2 Call us

Call us. Purchasing a license by phone is a snap. Call toll-free 1-877-WI LICENSE (1-877-945-4236). Phone orders can be billed to either Visa or MasterCard for an additional $3 handling fee. At the end of your transaction, you'll receive an authorization number that provides immediate license privileges during open seasons other than during the deer hunting season.

3 Visit us

Visit us. Licenses can be purchased at any of 1,500 sporting goods stores, merchants or resorts that sell outdoor licenses as well as at DNR offices. Don't know where the nearest license agent or DNR Service Center is located? A list of Service Centers is included in this insert. Visit **www.dnr.state.wi.us/org/caer/cs** and click on the "ALIS Sales Locations" for a list of agents in a specific county or city.

4 Buy by mail

Buy by mail. For Conservation Patrons who still prefer to renew their CP license through the mail, fill out the form on the reverse side, mail it to: DNR—Attn: Conservation Patron Renewal Coordinator, P.O. Box 7924, Madison, WI 53707-7924. Be sure to include the $3 handling fee in your check made payable to DNR or pay by MasterCard or Visa credit card. Allow 4-6 weeks to process mailed applications for CP license renewals.

Reserving a new backtag number—Conservation Patron and Sports License holders can reserve a four-digit backtag number for a $5 fee by calling the Patron/Sports License Coordinator at 608-266-7030. Legislation pending at our press time may change this from an annual fee to a one-time fee. Updates on the status of the pending legislation are available at this same telephone number.

If you reserved a number last year, that number is still being reserved for you. If you would like to reserve a backtag number for the first time, be aware that numbers are assigned on a first-come, first-served basis and your first choice may not be available.

Attention current CP customers

Please choose one of these four options to renew your CP license in 2002. You will not receive a separate mailing to renew your CP license.

Wisconsin Department of Natural Resources
Attn: Conservation Patron Renewal Coordinator
P.O. Box 7924
Madison, WI 53707-7924

www.wildlifelicense.com/wi

1-877-WI LICENSE (1-877-945-4236)

Wisconsin Conservation Patron Renewal License Application

Form 9400-35R Rev 1/02

DNR—Attn: Patro
P.O. Box 792
Madison, WI 53707-792

Resident – $110.00 **Non-resident – $575.00**

Notice: This form is required for any application filed pursuant to Chapter 29, Wis. Stats. Information collected may be used for participation in surveys, eligibility for approvals, law enforcement (including child support and tax delinquency enforcement) purposes and other secondary purposes. Credit card information will be kept confidential and will only be used to process this license request.

❑ Check here if you want personal identifiers collected on this form withheld from disclosure on any list of 10 or more individuals that the DNR is requested to provide to another person. (s. 23.45, Wis. Stats.)

Name (Last-First-Middle) (Please print or type) DNR Customer Number Required*

City, State, Zip Code County of Residence Daytime Telephone Number

Date of Birth (Mo-Day-Yr) Eye Color Hair Color Weight Height Sex (M-F)

Answer the following questions: (circle your answer)

Yes No 1. Do you wish to make a contribution to the Fish & Wildlife Fund? If yes, enter amount $ _____.

Yes No 2. Do you intend to hunt **any** migratory birds? If yes, you must complete Section A — HIP Certification (required for questions 3 and 4 below.

Yes No 3. Do you want an Early September Canada Goose Permit?

Yes No 4. Do you want to hunt the Regular Canada Goose Season? If yes, choose **one** of the following:

- ❑ Exterior Goose Zone (permit will be received with Conservation Patron license)
- ❑ Horicon or Collins Zone (complete the application in your Fall mailing)
- ❑ Undecided (complete the application in your Fall mailing)

Yes No 5. Do you want a Sturgeon Spearing license?

Yes No 6. Do you intend to trap? If yes, indicate which of the qualifications you meet:

- ❑ Trapper Education graduate
- ❑ Previously purchased a license which authorized trapping prior to 1992
- ❑ I actively engage in farming (per s. 102.4(3), Wis. Stats.)

Section A—HIP Certification

Circle the quantity of birds bagged last year (circle one for each species):

	Quantity Bagged			
Ducks	0	1-10	11-30	31+
Geese	0	1-10	11-30	31+
Woodcock	0	1-10	11-30	31+
Rails/Gallinules	0	1-10	11-30	31+
Coots/Snipe	0	1-10	11-30	31+

Conservation Patron License:	$	_____
Fish & Wildlife Contribution:	$	_____
Reserved Backtag Fee ($5.00):	$	_____
Handling Fee:	$	3.00
Total Amount Due:	$	_____

Payment: See reverse side for mailing instructions. Credit card information will be kept confidential and will only be used to process for this license request.

Make checks payable to ***"DNR"*** or please charge my ❑ Visa ❑ MasterCard Expiration Date: _____

Card Number __ __ __ __ - __ __ __ __ - __ __ __ __ - __ __ __ __

I hereby certify that I have maintained my permanent residence in Wisconsin for the previous thirty days and that my license privileges are not otherwis revoked. I have complied with all of the laws regulating the issuance and purchase of this license.

Signature of Applicant Date Signed

IMPORTANT—COMPLETE, DETACH AND RETAIN THIS INTERIM RECEIPT
Conservation Patron License

DNR Customer Number _____ Date Application Mailed _____

Interim receipts are only valid for Conservation Patron renewal applications.

Off the rack

Our picks for a good read and a little diversion.

David L. Sperling

So here we are, staring down winter and vacillating between the exhilaration of a winter walk and the "thrill" of skating across the icy driveway. The sunsets are glorious...at 5 p.m., but there are still lots of tocks on the clock between dusk and dawn. Our recommendation? Dry off your boots, throw a log in the fireplace and settle down with a good read. We've found several books that are well worth your time.

If your shack could use a little sprucing-up or you just want to dream about the getaway you'll never go to, may we recommend *The Cabin* by Dale Mulfinger and Susan E. Davis, The Taunton Press, Newtown, Conn.

Long-time readers may recall our October 1996 article "That Special Place," in which our readers described how their family cabins preserve a sense of family identity, relaxation and hospitality. This book captures some of that spirit with eloquent examples of what's possible when a homeowner and an architect share their visions for a rural refuge. These are great cabins, and six of the 37 homes visited are in Wisconsin.

The Cabin is a visual treat that respects the enduring beauty of small cottages and larger spaces. The photography is spectacular, beautifully lit

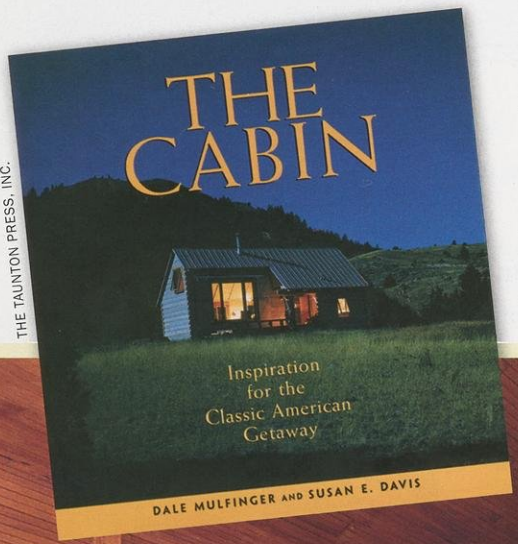
and displayed in rich colors on silky, matte paper. The images take both a wide view and a close look, showing cabins in their settings at different times of day as well as zeroing-in on artistic features. Readers like me who enjoy what they see, but can't figure out exactly why they like it, get some life lessons in architectural design. Site plans and simplified floor plans for each cabin aid the reader in pinpointing those attributes that make the cabins seem "right" for you.

Even if you don't aspire to build a palace in popples, you are sure to find an architectural idea or clever use of space you can incorporate in your own modest diggings. Readers get a look at rustic cabins, renovated places, traditional designs and very modern affairs. There are Wisconsin examples at both ends of the spectrum. My taste runs more toward the wooden cottage on Lake Chetek than the all-glass cube cabin along the Wisconsin River, but you'll surely find plenty here to inspire you. One of the highlighted cabins is a place you can rent and savor for a few days — the Seth Peterson Cottage at Mirror Lake State Park in Lake Delton.

Reveling in the road less traveled

As long as we've got you up and wandering about Wisconsin, may we suggest a worthwhile guide to add diversity to your travel kit? *The Great Wisconsin Touring Book* by Gary G. Knowles, Trail Books, Black Earth, Wis., opens options for day trips, weekend jaunts or those rare moments when the weather is just right and you can justify playing hooky. I'd keep this book in the car just in case a camping trip gets a bit too wet or the wind takes the joy out of a long bike ride.

Others don't need an excuse. They love taking car rides, motoring the back roads and exploring the byways. The author is clearly in that camp. Knowles grew up in a family that took Sunday drives and the slow, wiggly roads to Gramma's house. He headed the Communications Bureau for the Division of Tourism for 14 years, so he's visited a lot of state attractions, lodges and eateries. Knowles is also a devoted gearhead who sets up auto tours for roadsters who drive convertibles and cruisers. He



THE TAUNTON PRESS, INC.

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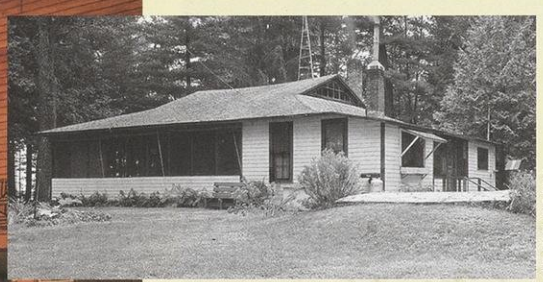
The Cabin gives you a good look inside, outside and around some great getaways. This beauty has been on the shore of Lake Chetek in Barron County for 100 years.



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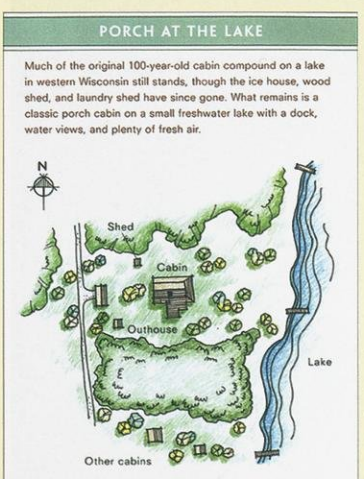

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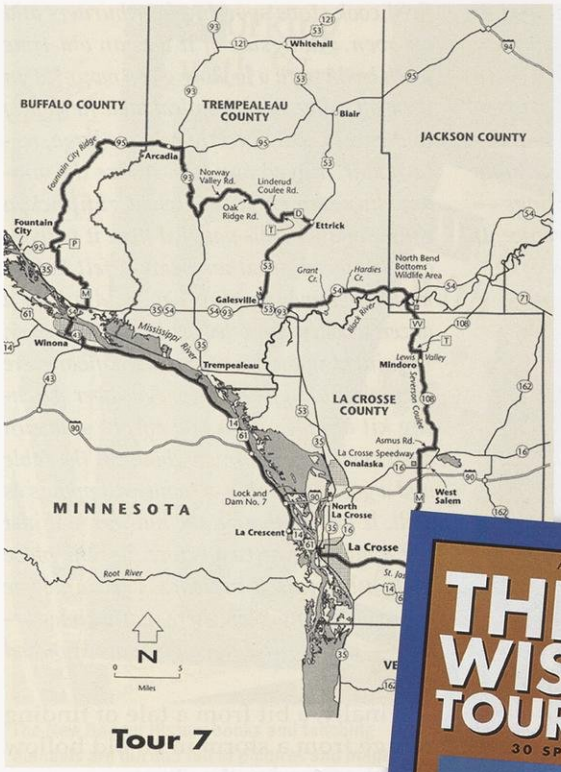
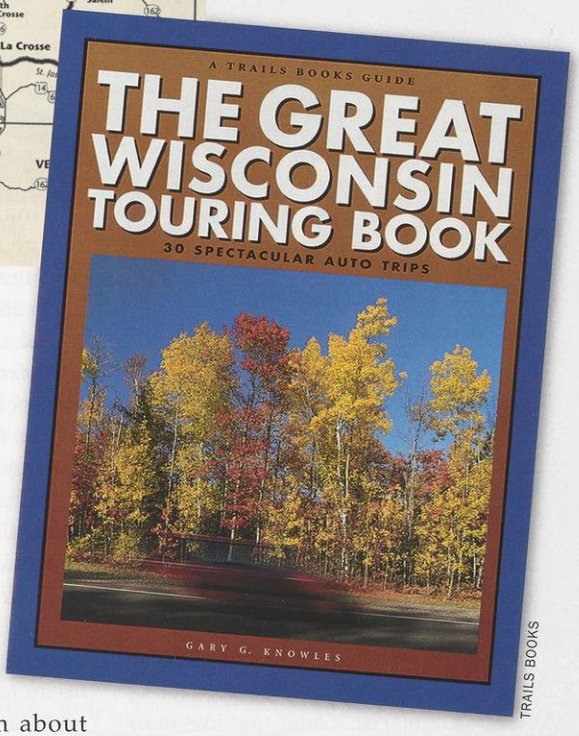


This 127-mile trip meanders the upper reaches of the Mississippi River, bluff and Coulee Country. Clearly marked maps and directions make the book a welcome travel companion.



also enjoys the outdoors, and the book encourages the casual travelers to throw away their watches, slow down, visit state parks, stop for hikes, take their bike off the car rack and try the trails.

The book presents 30 road trips statewide varying from about 60–300 miles in length, but the relaxed style encourages you to savor these stretches one piece at a time. Full-page maps accompany each trip with big print (for the bifocally challenged). Detailed instructions in bold type note every turn down county roads and smaller routes. You won't get lost, even though the author considers that part of the fun.

The book provides great companionship on the journey as Knowles succinctly and congenially suggests attractions, shops, restaurants and interesting stops. The text is sprinkled with such diverse Wisconsin side stories as the Oorang Indians NFL team, the 85-mile garage sale along the Mississippi River, the Central Wisconsin Pumpkin Weigh-In (the first Saturday in October), the 140-acre Highground memorial to American war veterans, Wisconsin's only onyx cave near Blue River, and the historic statues of Waupun. I learned that Chief John Big Tree, the model for sculptor Earl Fraser's *End of the Trail* statue, was also the model for the face on the buffalo nickel and the old Pontiac automobile emblem.

I enjoyed Knowles' argument that cows and rail barons played an instrumental role in making Wisconsin a great state to explore. Because farmers needed to move perishable milk products to market twice a day, they insisted on a good system of paved roads wiggling their way well into the hills and coulees. These milk routes formed a veined network of secondary and tertiary roads connecting to highways. The abandoned rights-of-way from rail barons and lumber barons now form the bulk of our state bike trail corridors. The winding, twisty milk routes are perfect fun for car tours and the flat, even-graded bike trails make for easy, enjoyable pedaling through fabulous scenery.

A giant step back into the woods and swamps

Speaking of others who have spent a good part of their lives off the beaten path, I was curious to read the stories in *The Last River Rat: Kenny Salwey's Life in the Wild* by J. Scott Bestul and Kenny Salwey, Voyageur Press, Stillwater, Minn. Salwey is an anachronism. A child of the 1940s and a teen in the '50s, from an era when television, electronics and computers would become household standards; when the Cold War came and crested; when suburbs, malls and fast food spread faster than wildfire across the landscape. Yet he spent close to three decades as a reclusive riverman eking out a living by hunting, fishing and trapping the swampy backwaters of the Mississippi River less than a hundred miles from the Twin Cities metro area.

When an old-time DNR river warden, Jim Everson, convinced him to give a nature talk to a bunch of Wabasha, Minn. schoolteachers, the reclusive Salwey accepted the challenge for the money and the food. But the actual experience of sharing his knowledge, Salwey recalled, "would change my life forever."

He has subsequently earned a reputation for skillfully sharing his stories, artifacts and experiences with educators and students. His talks remain well attended and enthusiastically received.

The book crafted here with Scott Bestul, a regional editor for *Field & Stream* magazine, takes the reader through the year with this backwoods river rat. From April through March, the monthly chapters engage in the seasonal exploits of river life. It's a somewhat romantic look compressing highlights from years past, but it's entertaining — tromping the shallow ridges, paddling the sloughs, hopping into the canoe with Salwey's dogs and hearing old family stories.

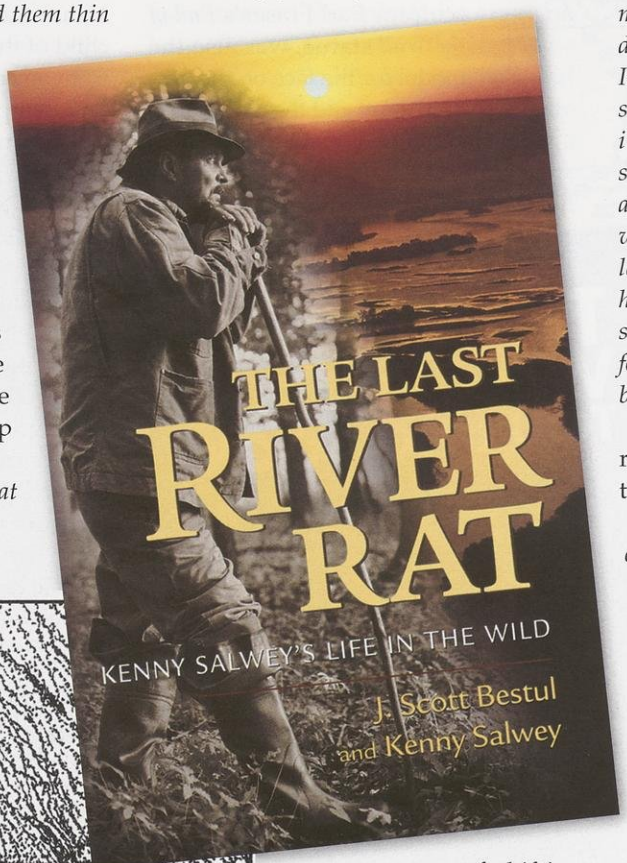
Here are a few. As a six-year-old, Salwey was forever asking his family to explain natural happenings:

"Pa, what's making that smoke up in the woods?" Pa never cracked a grin. "Why that's because the rabbits are cooking coffee today." My eyes grew wide as I thought

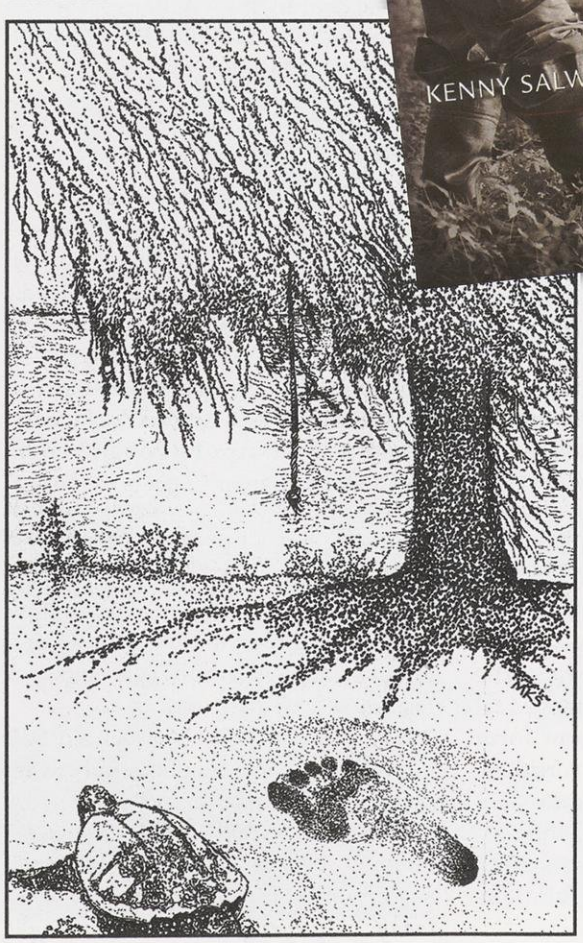
over that piece of information for a moment or two... "Naw, rabbits don't start no fires do they?" Pa chuckled a bit, then confessed, "Guess they don't, my boy, but that's what my Pa told me and his Pa told him. All us hill folks say that because it looks a lot like the thin smoke from a small campfire is rising out of the hollows...It only seems to happen after it's rained for some time. When it lets up or quits altogether and them thin wispy streams of 'smoke' start to rise up from the wooded hollows in the hills, you can pretty well bet your boots it'll rain again that day and most times quite soon as well."

Then there's this description of an old trapper's shack that Salwey venerated. It was given to Salwey and was used as one of three base camps he established in the sprawling Whitman Swamp south of Cochrane, Wis.:

The shack was built to combat the nature of the terrain in which it stood. It was a dark, rectangular building that measured about a canoe-length and -width square. The shack stood on top of a dozen barrels, which served as a floating foundation in case the waters of Whitman Swamp rose high enough to lift it off its footings — which was indeed a common occurrence. It was a lovely place, a place of shifting winds, no trees yet lots of marsh, a land that was more water than earth.



Travel through time and the swampy backwaters.



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Inside, a medium-sized, wood-burning stove sat quietly in one corner with its stovepipe chimney extended perhaps eight feet straight up through the front-to-back slanted roof. Next to the stove was a pile of dry firewood, ranked up in short rows, neat and well cared for. Along the east wall were four wooden-framed bunks; each held a bedspring with a small mattress resting on it with some blankets, quilts, pillows and such to top them off. Against the south wall stood an LP-fired cook stove sporting four burners and an oven. Alongside of it was an old-time wash basin with a looking glass mounted on the wall above it. A drop-leaf table fit tightly to the west wall, directly below a large, rectangular, hinged window. Above the window hung an empty, notched gun rack; a couple of duck calls dangled from it with an old, battered, weather-beaten, felt hat. A mouse-chewed burlap bag held a half a dozen wooden duck decoys in the far corner. Imprinted upon the rough plank floor were several muddy footprints. A rubber patching kit along with a few empty shotgun shell casings lay strewn about on the table and a goodly number of mouse droppings as well. It was as though the hunters had just left a moment or two before, yet the place hadn't been used in years. I felt an eerie sense of having been there many times before — and I guess in a spiritual way I had been.

Finally, a bit from a tale of finding refuge from a storm in an old hollow tree, the Grandmother Tree:

In about a half an hour, that huge black cloud was directly over us. Thunder boomed loud and deep, and lightning struck all around us. It began to rain hard. The wind began to blow harder. The rain changed to sleet. From sleet to heavy, wet snow, the kind of sticky stuff that sticks to everything, even the canoe paddle and the sides of the canoe. The water was cold and it began to slush up. The harder I paddled, the less headway I made. There were whitecaps on the narrow slough...I began to look for a place to pull the canoe out on the bank. Then I realized I was close to the Grandmother Tree. I maneuvered the canoe onto the bank, hauled Spook and myself out, quickly tied the canoe to a nearby tree, and turned it upside down...We crawled inside the old tree. We stretched out and I lay with one arm under my head. I listened to the storm and I rested. I thought it wouldn't be too long and the sun would come out, the wind would stop blowing and we could go on home. But that didn't happen.

When darkness came on, I realized we were going to be staying there because the storm wasn't going to be stopping any time soon. It was a little cramped to be sure, but I guarantee you one thing, when morning came I was mighty glad I'd found the Grandmother Tree. As we climbed out of the

The New Badger History books and teaching manuals are fun and full of pictures and maps.

trunk at daylight, Spook and I couldn't believe what we saw. Everything was white: The swamp was sunk under the snow and completely frozen over. I probably would have frozen to death had it not been for the Grandmother Tree. I owed her my very life and that of my dog's as well.

I enjoyed this look at river life, but the mystery for me remains how a man survived in the 1970s and '80s leading a lifestyle that had largely faded from the Wisconsin scene more than a hundred years earlier.

A rendezvous with Wisconsin history

For parents who struggle to interest their children in Wisconsin affairs and history, consider picking up books in The New Badger History Series, published by the Wisconsin Historical Society Press. I was particularly taken with the third volume in the series *Working with Water: Wisconsin Waterways* by Bobbie Malone and Jefferson J. Gray, published in 2001. Malone heads the Office of School Services at the State Historical Society of Wisconsin and Gray is the State Underwater Archaeologist.

The book series is designed for fourth-graders getting their first taste of Wisconsin history, but if you forget all that and just open the book, you'll have fun. Each page has photos, graphics, maps and an engaging narrative that presents a mix of science, personalities and events that shaped our past and our current water issues. Even if you tackle the book in brief 15-minute segments, you'll find something new to discuss. I particularly appreciate the pronunciation guides and explanations of new vocabulary words.

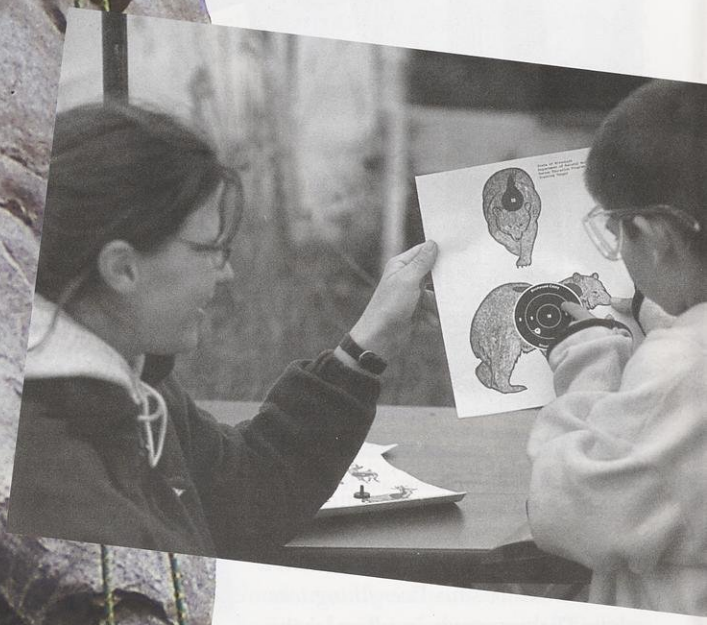
Working with Water takes the reader on a journey that begins with the glaciers. We then paddle with native people and fur traders, and follow settlers bursting westward as canals and locks linked waterways and formed communities. We set sail as schooners ply the Great Lakes and dive deep to unravel the mysteries of shipwrecked boats that perished on the journey. Readers meet those who made a living on the water by fishing, harvesting wild rice, raising cranberries, pearling and clamming. We see how Wisconsin's founding fortunes in lumbering, milling, papermaking, tanning, brewing and meatpacking all relied on a steady supply of fresh water. Finally, we join vacationers who found relief at Wisconsin's water spas, touring the Dells and fishing the lakes.

Two earlier titles in the series — *Learning from the Land: Wisconsin Land Use* and *Digging and Discovery: Wisconsin Archaeology* — further encourage students to explore. Instructors and home-schoolers may want to pick up the excellent teacher's manuals that provide additional readings, more drawings, activities, project ideas, references and pre-made lessons to accompany each book.

If you want to delve deeper into Wisconsin history with students, take a look at *Wisconsin's Past and Present*, a wonderful historical atlas published by The Wisconsin Cartographers' Guild in 1998. The Historical Society's Office of School Services also produced *Mapping Wisconsin History* — a collection of teaching guides and student materials to accompany the atlas.

David L. Sperling edits Wisconsin Natural Resources *magazine.* The Last River Rat *excerpted with permission of Publisher. Voyageur Press, Inc. 123 North Second Street, Stillwater, MN 55082. 1-800-888-9653*

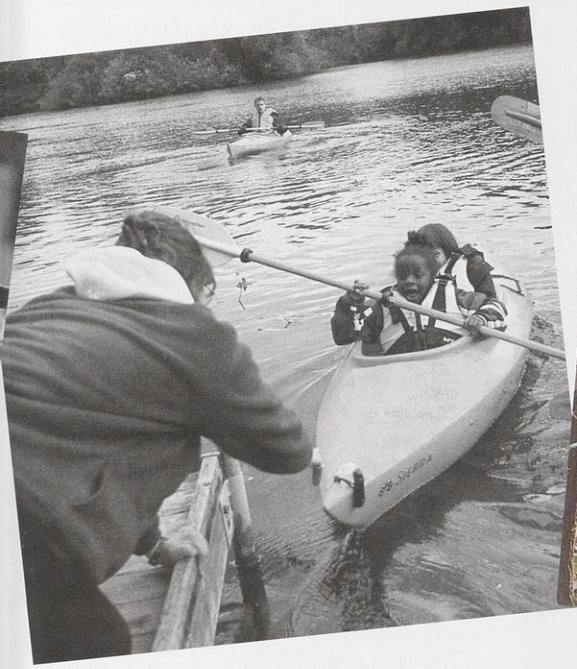
A window to



Our TV show is expanding its horizons by encouraging kids to try new things and learn new outdoor skills. *(right)* Cast members attend the workshops to share the fun of outdoor exploration.

Into the Outdo

the outdoors



In its second year, our Emmy-winning TV series leads kids outside "the box" to great experiences.

Wendy K. Weisensel
Story photos by Robert Queen

"Into the Outdoors," our television program that encourages grade school and middle school students to enjoy outdoor experiences, is riding the crest of the airwaves. The program is a hit with kids and adults alike. In its first broadcast year, the show has earned an Emmy award from the National Academy of Television Arts and Sciences for Outstanding Achievement for Children's Programming — Children's or Teen Series.

Last year, viewers came along as hosts Annie and Henry showed it was cool and fun to learn outdoor skills, explain how nature works and try hands-on craft projects. The show traveled by plane above Wisconsin to track wolf packs, dug underground to watch hibernating bears, took a kayak trip, trained bird dogs, searched for salamanders in the forest duff and rounded up geese.

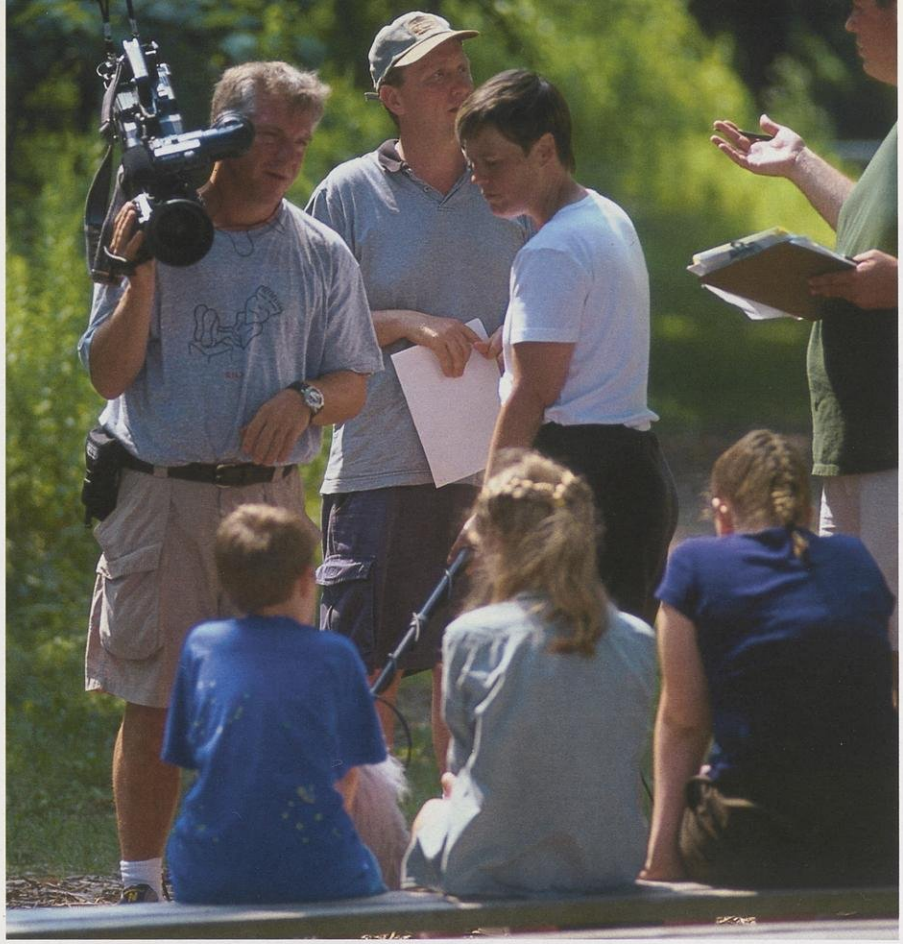
This TV season, viewers will go dog sledding, visit frozen waterfalls, and tag along as the show takes a close look at porcupines and tundra swans, whoops it up with cranes, canoes the Horicon Marsh, gathers wild rice, visits a butterfly garden and crawls the rocks looking for wild rattlesnakes. The number of story segments per show will be reduced from four to three this year, but each segment is longer.

"We found we could explain natural resources topics geared for kids more completely by adding a little more time to each segment and cutting the number of segments," explains educator Joel Stone, the DNR project manager for "Into the Outdoors."

"This year we also are featuring more stories told from a kid's point of view," Stone adds. "There's also more information in some of the stories about careers in natural resources, such as fish disease specialists, forest technicians and hydrologists."

The show's most popular features will continue. Annie and Henry will return this year, and chat by computer in the beginning of each show to take viewers along on the stories of the day. Teen-aged Mac will continue explaining scientific concepts, and Henry's younger sister, Patsy, will play reporter by sharing interesting news about nature and the environment. Two new characters, Karena and Maggie have joined the cast.

Brief newsy or humorous items will still be interspersed between each segment to keep the pace lively and provide young viewers with lots of interesting information.



The Discover Wisconsin Production team and Department of Natural Resources were honored with an Emmy for Outstanding Achievement in Children's Programming for the first year's programs for "Into the Outdoors." *(below)* **The DNR Steering Team for the show:** *seated front row (l to r)*: **Darrell Bazzell, DNR Secretary; Susan Sylvester, Water Administrator; Joel Stone, Team Leader; Steve Miller, Lands Administrator;** *back row standing (l to r)*: **Carrie Morgan, *EEK!*; Gene Tiser, Division of Land; Bill Engfer, Division of Enforcement & Science; Greg Swanson, Division of Air & Waste; Genny Fannucchi, Division of Forestry; Sheena Carey, Customer Assistance and External Relations;** *missing:* **Gretchen Benjamin, Division of Water**

Two adults also are back — Richard the naturalist and Amelia, who shows children how to make fun things using nature as a theme, such as paper, frog origami or leaf-printed T-shirts.

The Department of Natural Resources and its partner Discover Wisconsin Productions will also encourage kids to get outdoors and learn outdoor skills by co-sponsoring several Into the Outdoors Adventure Days. Last year, the program took part in Ducks Unlimited's Great Outdoors Expo in Oshkosh in August and sponsored a skills day at the Wehr Nature Center in Franklin in October. At Wehr, free activities for the whole family included rock climbing, bird watching, archery, casting, shooting BB guns, canoeing and outdoor crafts. Stars from "Into the Outdoors" joined in the fun.

"The adventure days give kids a chance to actually try outdoor activities, which is especially important for urban children who often have fewer opportunities to get out and enjoy nature," Stone says.

As always, kids can find out more about show topics online through two websites:

- *Environmental Education for Kids! (EEK!)*, the DNR's award-winning site for children and teachers. *EEK!* features a special section where TV show viewers can "Go Deep Into the Outdoors" to find more information on stories that have aired.
- *www.intotheoutdoors.org*, a Discover Wisconsin Productions website supporting the television series. This site offers more information on the series including its stars.

Air times have changed in some of the television markets broadcasting "Into the Outdoors." Start your weekend early by joining us before you gear up for an outdoor adventure.

- Milwaukee — WITI, Ch. 6, Saturday, 10 a.m.
- Madison — WKOW, Ch. 27, Saturday, 6:30 a.m. and Sunday, 7 a.m.
- La Crosse — WXOW, Ch. 19, Sunday, 7 a.m.
- Eau Claire — WQOW, Ch. 18, Sunday, 7 a.m.
- Superior — WDIO, Ch. 10, Sunday, 7 a.m.
- Wausau — WAOW, Ch. 9, Sunday, 9 a.m.
- Eagle River — WYOW, Ch. 34, Sunday, 9 a.m.
- Green Bay — WGBA, Ch. 26, Sunday, 7:30 a.m.
- Hibbing, Minn. — WIRT, Ch. 13, Sunday, 7 a.m.
- Cedar Rapids, Iowa — KFXA, Ch. 28, Saturday, 6 a.m.
- Dubuque, Iowa — KFXB, Ch. 40, Saturday, 6 a.m.

Wendy K. Weisensel is chief of the DNR's Education and Public Affairs Section.

The *stuf* of dreams

The chance to unearth a rare life form proved irresistible.

David L. Sperling

In these days of heightened mail awareness, I suppose the hand-written envelope sealed with tape, thick with papers and something heavy inside should have been a clue.

The contents slipped back and forth as I tilted the letter. It was early October, the correspondence had a return address and it was adorned with cheery stamps including two one-centers of colorful kestrels. How bad could it be?

I slit open the letter and out poured a three-page single-spaced typed letter, what looked like a hand-drawn treasure map and six bright color photos. Here's the tale Wayne Sage of North Prairie laid before us:

"I'm tempted to say it looks like something out of a bad science-fiction movie such as 'The Stuff from the Deep Dark Woods'... I'm going to refer to it as 'stuf.'"

Dear Sirs:

"Enclosed you will find six photographs of something I hope you can identify. As a subscriber to your magazine, I'm hoping that perhaps you may know of someone within the DNR (or elsewhere) who can make an identification of what appears in the photos.

"I'm tempted to say it looks like something out of a bad science-fiction movie such as The Stuff from the Deep Dark Woods. *If I had to venture a guess, I would say it's some type of fungus, but I'm not a mycologist, I don't really know what this stuff is, so from here on out I'm going to refer to it as* 'stuf.'"

There was no mistaking that our reader had found something odd. The photos showed big, brightly-colored blobs of something in a big mound that I couldn't readily identify. The photos had been taken earlier in the year in June, but this was not our writer's first encounter with the *stuf.*

"The stuf *is located in the Southern Unit of the Kettle Moraine State Forest. Over a year ago, my wife and I were hunting for wild asparagus, and I spotted the* stuf *from a distance of roughly a hundred yards. At that time, that's as close as I got to it, and mentally I wrote it off as some type of garbage that had been dumped there. I thought it an odd place to dump something, though, because the spot is not near any road or trail.*

"This year, again in May sometime, we were gathering wild asparagus and wandered much closer to the stuf. *Curiosity got the better of me and I went directly to the* stuf *to investigate.*

"What I found growing (?) amongst a small patch of sumac was a large multi-colored patch of stuf *measuring roughly 14 feet by 11 feet with a hump of the same* stuf *in approximately the middle of the patch. The hump measured about three feet or so in height and diameter. The colors when viewed live could only be described as 'electric' — the colors in the photos are more muted and not as brilliant. These pictures were taken after an extended period of rain, and that may explain the washed-out look at the time the photos were taken."*

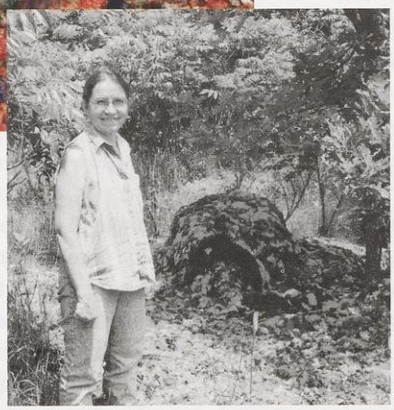
Now I was really hooked as Mr. Sage laid out a detailed description with scientific precision, numbered photographs and a diagram. This was looking more and more like a well-crafted field observation:

- The *stuf* looked like dried cotton candy; a fibrous, almost woven or wound texture, especially when viewing the underside of a patch. Mr. Sage touched it and said the *stuf* felt like a cotton ball, sort of soft, dry and fibrous.
- There was no detectable odor from the *stuf,* just the normal early summer smells of growing vegetation.
- *Stuf* was "growing" near the bottom of a gentle slope with southern exposure.

DONNA KRISCHAN

In nature, vibrant colors often warn of fungi that are poisonous. This fading scarlet waxy cap *(Hygrophorus miniatus)* has even more brilliant colors than the *stuf*.

WAYNE SAGE



WAYNE SAGE

The stuf appeared to grow over the stump of an old oak and the main body spread over an area about 13–15 feet long and 10–12 feet wide.
(inset) The author's spouse provides scale to judge the size of the overall patch. Many fungi spread considerable distances as rhizomes slowly grow underground. The Humongous Fungus in Oregon extends several miles covering portions of 2,200 acres in one continuous organism.

- It was unclear why there was a great hump of *stuf* that appeared to be growing over an old tree stump.
- There were other signs of past human activity in the area including some old pieces of rusting metal and decaying lumber. Most of it was long since covered with vines.

One of the photos showed "migrating" *stuf* — rough patches about 12–18 inches across that appeared irregularly extending 15–20 feet from the main blob of material.

Mr. Sage also enclosed a sketch that provided a sense of the size and spread of the material.

"I've hiked, tramped and explored much of Wisconsin and the Midwest," he wrote. *"I've done the same in many other areas of this country and in rainforests in several different countries. I've seen many wondrous, beautiful, amazing and, yes, weird things of nature. However, I've never seen anything like the* stuf *or anything close to it. So my curiosity has been raised greatly."*

So was mine.

I had visions that the site would prove to be one of those great botanical finds like the Humongous Fungus in the Malheur National Forest of eastern Oregon — a massive mycelium *Armillaria ostoyae* that extends 3.5 miles across 2,200 acres. Its shoestring-like filaments form an underground hairy network of rhizomorphs three- to nine-feet-deep that spread unnoticed for an estimated 2,400 years, sucking the life from tree roots.

Or perhaps the colorful fruiting bodies would contain heretofore-unknown chemical compounds that would hold the key to a cancer cure or a natural means of digesting toxic wastes.

Unearthing alien life?

I was on a mission as I shuttled the package down to Kelly Kearns in DNR's Bureau of Endangered Resources. A native plant biologist, Kelly works on rare plant conservation and coordinates efforts to control invasive plants. Moreover, she has written for this magazine about alien plant species. I teased her and asked if DNR had sort of a botanical "X-Files" work unit up for a little detective work.

Actually, they are accustomed to such visits from me. One of my favorite tasks here in the agency is stopping by the biologists with an unidentified slide of a bird, insect or plant asking them to "Name That Critter" so we don't misidentify species for our readers. Kelly looked at the photos. She scratched her head. She read the letter and looked again. She'd never seen anything like it.

Kelly was reasonably skeptical and thought it unlikely that we were looking at plant material, but she had certainly come across fungi in vivid colors in her day, so she e-mailed a short note to Ron Kurowski, the DNR naturalist at the Southern Unit of the Kettle Moraine State Forest (SUKMSF) based in Eagle:

RE: Strange colorful blob in SUKMSF.

"We have reports of a very strange occurrence that a visitor photographed and reported...The "thing" is a large hump (unknown what is in it) in the woods, approximately three feet high by five feet in diameter. It is covered with a soft fibrous very lumpy mat with intermingled patches of very bright orange, red, green, gray and brown. As the material spreads on the ground, the lumps

"what I found growing (?) amongst a small patch of sumac was a large multi-colored patch of 'stuf' measuring roughly 14 feet by 11 feet with a hump of the same 'stuf' in approximately the middle of the patch... the colors could only be described as 'electric.'"

"I've hiked, tramped and explored much of Wisconsin and the Midwest... I've seen many wondrous, beautiful, amazing and, yes, weird things of nature. However, I've never seen anything like 'stuf' or anything close to it."

become lighter orange. The close-up photos look like the fiber could be either a type of very odd moss or fungal mat, or more likely a refuse pile or an artistic use of very brightly dyed felt! Apparently it has been there at least two years. No one in our office has ever seen anything like this and we suspect it is not any kind of plant growth, but are all curious as to what it could be. We are hoping that when you are in the area, you can search for it and figure out if it is, indeed, a living organism, a piece of wildlands art, or some odd refuse pile!"

Kurowski responded two hours later: "Sounds like something that should be on 'Unsolved Mysteries.' I'll go check on it, but I hope that I won't be abducted by some alien spaceship."

We waited. A week went by. Then two.

I was wondering if we would get a report that Ron had come down with some weird ailment.

Then an e-mail came from Ms. Kearns: "It looks like your colorful blob in the SUKMSF mystery has been solved."

I quickly opened Kurowski's message. "I found the spot and it is some fibrous material similar to pink fiberglass insulation, but painted different colors. I suspect it was used as a backing for gun or bow target practice."

He said that the property managers would see to it that the *stuf* was properly collected, moved and disposed of. And his message ended: "Darn, and here I thought we had something for the *National Enquirer*."

I sighed, picked up the phone, had a nice conversation with our writer, Mr. Sage, and thanked him for forwarding a detailed account, quality photos and a genuine mystery.

What we find in the fields

I got curious and made a few inquiries around the agency to determine how often DNR property managers find that someone has used public spaces as a dumping ground. I was pleased to discover that this is a relatively rare occurrence. Most property managers find the occasional bag of refuse, and the odd bit of metal junk, but by and large, public lands are not used as dumping grounds.

The bigger cleanup costs have come when the state made big land purchases that either included former dumping grounds or included undeveloped property that had been vacant for a long time and received relatively few visitors. For instance, Copper Culture State Park in Oconto included portions of a closed landfill and a paper company dump; Havenwoods State Forest in Milwaukee naturally contained some waste as portions of the property were formerly a municipal dump, Nike missile base and railroad dump; portions of the Hank Aaron State Trail are built in an old railroad yard in an industrial corridor. Surely major purchases like the Dells property, the Big Addition, lake flowages and major Stewardship Fund purchases include abandoned developments and vacated parcels used as dumping grounds. But that is a story for another day. I still relish the hunt for endangered insects, giant hibernacula, ancient bacteria and the unfound fungus amongus.

David L. Sperling edits Wisconsin Natural Resources *and occasionally hunts the edible mushrooms that are easy to identify.*

Humongous Fungus fun facts

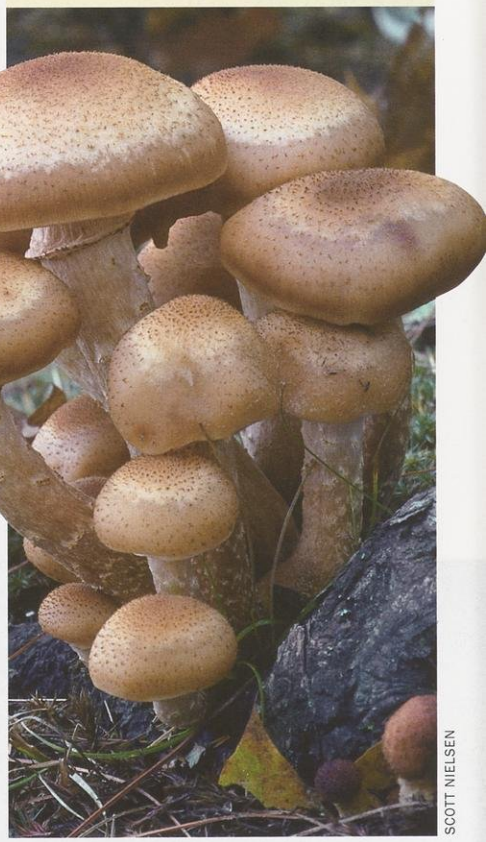
The Humongous Fungus weighs about as much as...

- 13 African elephants
- half the Statue of Liberty
- 1 blue whale
- a Boeing 757-300 airplane

The Humongous Fungus is as large as...

- 28 football fields

Honey mushrooms *(Armillaria mellea)* **found in Wisconsin are closely related to the huge fungus in Oregon and a similar large fungal mass spreading in a northern Michigan forest.**



SCOTT NIELSEN

continued from page 2

Though called a grosbeak, its beak does not dominate its face like the thick, efficient, seed-cracking bill of the other big-beaked winter finch, the evening grosbeak. A pine grosbeak's black beak is short, rounded, but still good-sized and ideal for eating berries.

Pine grosbeaks can be confused with the similarly colored white-winged crossbills that are shorter (six to seven inches long), have shorter tails and have less chunky profiles. Also, white-winged crossbills are unlikely to feed on fruits for their crossed bills are adapted for extracting seeds from cones.

Pine grosbeaks often travel in small flocks searching for the fruits and berries they prefer to eat. Juniper, winterberries, bittersweet, mountain ash berries and crabapples are favorites, as are the seeds and buds of maples, birches, alders and cedars. The grosbeaks feed quietly in trees or may gather on the ground and roads to feed on scattered seeds. These birds are relatively tame and seem slow to react to passing cars. Pine grosbeaks probably will not come to feeders unless really stressed, but they may visit yards replete with a good fruit and berry supply.

As their genus name *pinicola* implies (*pinus* is Latin for pine and *col* means to dwell), pine grosbeaks live in the spruce-fir (boreal) forest of Canada where they prefer woodland edges, streamsides and brushy clearings. Nesting begins anytime from May into June. Females lay two to six blue-green eggs in a bulky stick nest lined with mosses, which is placed either low to the ground in a thick shrub or as high as 30 feet on an evergreen branch. Incubation is believed to last 13 to 14 days, and the young leave the nest when they are three weeks old. The pine grosbeaks only raise one brood per year given the short northern summer.

Pine grosbeaks rarely leave their nesting areas, so it's an unexpected joy to see them here. Although I search for them every winter, more often than not, I am unsuccessful. Someday I hope to hear their soft, melodic warbles on their home turf, but that will require a trip to the boreal forest in June. Perhaps it's time to retire!

The pine grosbeak has a longer tail and chunkier appearance than the similarly colored white-winged crossbills.

SCOTT NIELSEN

Anita Carpenter walks the roads, fields and forests near her Oshkosh home exploring for signs of winter birdlife.

Your fine story on "Sawing a cleaner slice of history" (October 2001), makes reference to the Kohler Foundation, the State Historical Society and the Wisconsin Conservation Commission, later the DNR, involvement in the Wade House property. In October 1999 we photographed the historical marker at the Wade House referring to it as "Old Wade House State Park..." Going back further, Jim Umhoefer in his "Guide to Wisconsin's Parks," says the Old Wade House site is part of the state park system although "owned and operated by the State Historical Society."

Could you please clarify for us the status of this property, both past and present as a state park?

Louis W. and Dorothy E. Buffham
Racine

The elegant inn in Greenbush was built in 1851. It became a welcome stagecoach stop in the mid-1800s on the plank road connecting Fond du Lac to Sheboygan. The inn was vacant and had fallen into disrepair when purchased by the Kohler Foundation in 1950. The property was deeded to the State Historical Society opening on June 4, 1953 in a ceremony that included an appearance by Carl Sandburg, according to the site's website.

The restored building and surrounding 260-acre park was operated by the State Historical Society under a joint agreement with the Wisconsin Conservation Department and the Kohler Foundation. It carried the title Old Wade State Park until 1998. At that time the property formally transferred to the historical society and is now referred to as a historic site.

COUNTRY LIVING

I think [your reader who responded to a letter in the October issue] should take a refresher course in Western Civilization. People fled the city to the suburbs not to be with the flora and fauna. They were escaping the slums with their poor environment and overcrowding.

The pastoral scenes were promotional devices. Turnabout is fair play, though. It is ironic how my neighbors near my isolated woodlot in northern Wisconsin work full-time jobs in "the city" even if it means "a commute of hours."

Frederick C. Brechler
Jacksonville, Fla.

SHORELAND BUFFERS

It's good to hear that people are establishing a buffer zone of native trees, shrubs, grasses and wetland species around lakes.

Here are some ideas for people who still want to keep nice lawns around a lake. Instead of using lawn fertilizers, consider mulching grass or cut, bag and collect lawn clippings to make into compost. After the compost is done, sift it and put it on the lawn. Compost helps lawns keep in moisture and less watering leads to less erosion.

Instead of using chemical insecticides, use beneficial insects like the praying mantis, fly parasites, red worms, trichogramma, green lacewings and ladybugs to control pests. Instead of using herbicides, we pull weeds by hand.

Ben Goss
Menomonie

LEARNING FROM OUR WEBSITE

Your magazine website (www.wnrmag.com) is very informative. I have just started a new job as a program coordinator for the Team Leadership Center in Sturgeon Bay. My first task was to start an environmental education program. Your site helped me gain a better understanding of Wisconsin environmental education history and current practices ("Learning to grow," February 2000 and "The ABCs of EE," October 1997).

Vinni Hancock
Sturgeon Bay

COMMENT ON A STORY?

Send your letters to Readers Write, WNR magazine, P.O. Box 7921, Madison, WI 53707 or e-mail letters to sperld@dnr.state.wi.us.

SWAN SHOOTINGS

I really enjoyed Don Blegen's article on tundra swans and their yearly migrations ("The swans of autumn," October 2001). I'm not a waterfowl hunter, and thus I'm curious to learn more about a comment he made in the article.

When discussing mortality rates of the swans, he made the comment… "Even in states where [tundra swans] are completely protected, like Wisconsin, hunters (accidentally or otherwise) kill swans. Hunters sometimes shoot swans claiming to mistake them for snow geese. This is a pretty weak argument, as a swan is enormous compared to a goose. It is also all white, without the distinctive black wingtips of a snow goose. Nevertheless, hunters in Wisconsin shoot tundra and trumpeter swans each year."

I understand Don's feeling about how one couldn't possibly mistake a swan for a goose, but for the non-hunter he makes it sound like it is a common practice. Is it?

Scott Johnson

No. It's a rare, but regrettable occurrence. DNR waterfowl biologists say at least 117,000 and as many as 129,000 people have hunted waterfowl each year since 1995.

The recent records of swan shootings that we could dig up showed three swans shot in 1997 and three in 1999, mostly trumpeter swans, a very small number compared to the number of waterfowlers afield. The number of swans shot is very low, indeed, but it is still unfortunate.

Don Blegen's incredulity is based on the fact that both the tundra swan and the trumpeter swan are so much larger than geese, their markings are so different, their calls are so different, and their flight patterns so different that it's really difficult to believe they'd be shot at all. Swans have a seven-foot wingspan, are four-feet tall and weigh up to 30 pounds. Obviously, almost all of the waterfowl hunters recognize that as well.

Waterfowl hunters, as a rule, become much more expert in identifying potential prey on the wing than other hunters given the strict nature of state and federal harvest regulations. Still, DNR issues warnings each season to remind waterfowlers to be crystal clear of their target species before pulling the trigger since we have lost a few of these rare birds, and our efforts to recover their small populations will take many years, if not decades.

CRANE COVERAGE?

The short article on the "Chihuly Over Venice" exhibit (October 2001 Wisconsin Traveler) was great, but I had to read the New York Times to learn something much more in tune with the great outdoors — how endangered whooping cranes less than six months old are building up strength for an unusual migration from Wisconsin to Florida.

Mary Ellen Trottner
Milwaukee

Our agency, of course, has been covering this project extensively providing news releases, photo opportunities and updates from the time plans were announced to reintroduce whooping cranes three years ago. We thoroughly covered last year's tests to see if sandhill cranes would imprint on an ultralight-led migration, through this season's introductions of the first whoopers.

We held off providing magazine coverage until we knew that Wisconsin would receive federal approval to reintroduce whoopers, that the birds would adapt to the breeding grounds at Necedah, that the flock could similarly be led to a wintering site and it appeared they would make their first migration back to Wisconsin. The first transplants reached their wintering grounds in early December, and the information specialist who is closest to the story is crafting our story now. It will appear as a full-length feature in the April issue about the time the first transplants are expected to arrive back in central Wisconsin.

The Wisconsin Traveler page intentionally covers a mixture of natural resource, cultural and historical events statewide that we believe will make interesting day trips or weekend jaunts for our readers. We know that our readers have broad interest in natural and cultural affairs here, and we try to offer a wider variety of travel ideas to feed that curiosity.

UPDATE

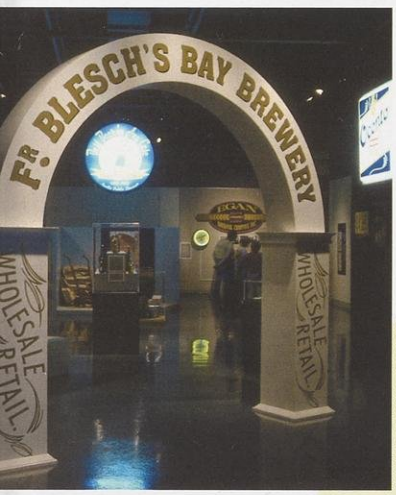
Since our October story on wildlife diseases to watch for, Colorado officials had to make the sad decision to destroy more than 1,500 elk from captive game herds that tested positive for chronic wasting disease.

Officials told the Associated Press that only one of the suspect elk was imported into Colorado and 245 elk from these ranches were shipped to 15 other states, including Wisconsin. Those animals have been quarantined and have been tested. Some or all of those animals may have to be destroyed to stem the chance of spreading this disease.

Follow your muse

What we choose to save, to showcase, to explain or to honor reveals much about how we see ourselves — and there's no better way to get a good look at who we were and who we are today than at one of Wisconsin's 200-plus museums.

From small but exquisite tool collections at county historical societies to great displays of art treasures in our major urban centers, Wisconsin's museums house much wonder and surprise. They are also repositories for those delightful eccentricities and obsessions so integral to the Wisconsin psyche. How else can we explain the Mount Horeb Mustard Museum or The Chalet of the Golden Fleece in New Glarus?



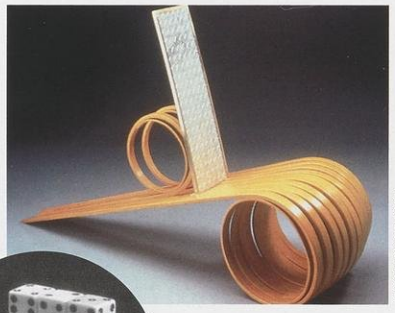
NEVILLE PUBLIC MUSEUM

Enjoy history and whimsy at the Neville's exhibit on beermaking *(above)*, **the Woodson's Chair Show 4 (Casino Chair and Spring Chair shown** *above right*) **and the Milwaukee Public Museum surROUNDed exhibit** *(right)*.

The bleak days of late winter, when inspiration sags like a gutter blocked with ice, are especially good candidates for a rejuvenating museum visit. Here are a few recent exhibits you may find intriguing:

The **Madison Art Center's** *ExtraOrdinary: American Place in Recent Photography* presents the work of photographers exploring how the built environment has altered America's natural landscape. Surreal and sublime photos of suburbia, Las Vegas, freeways and halls of government spark questions about the physical and psychological makeup of the American landscape. The photo exhibit is open through February 24. Every three years, the center hosts the *Wisconsin Triennial* — an exhibition featuring emerging and established artists from around the state in a variety of media. The *Triennial* runs from March 10–May 19. Madison Art Center, 211 State St., Madison. (608) 257-0158. Free admission.

Quench your thirst for knowledge at the **Neville Public Museum's** 2,500 sq. ft. homage to Wisconsin's second most exalted beverage (milk being the first, of course). *Best Beer in Any Case: A History of Brewing in Northeast Wisconsin* tells the story of the brewing industry in the region. Visitors in the know will savor memorabilia from Green Bay breweries of yore: Blesch, Shantytown, Hochgreve, Rahr, Hagemeister, and Van Dyke. Those less intimate with the intricacies of barley pop will appreciate the interactive model showing how beer is made. And if you call yourself a true Wisconsinite, you'll easily recognize the features in the diorama depicting the interior of a typical local tavern from around 1950–1960, including lighted signs and other nostalgic items. Open through February 10. Neville Public Museum, 210 Museum Place, Green Bay. (920) 448-4460. Admission is free.

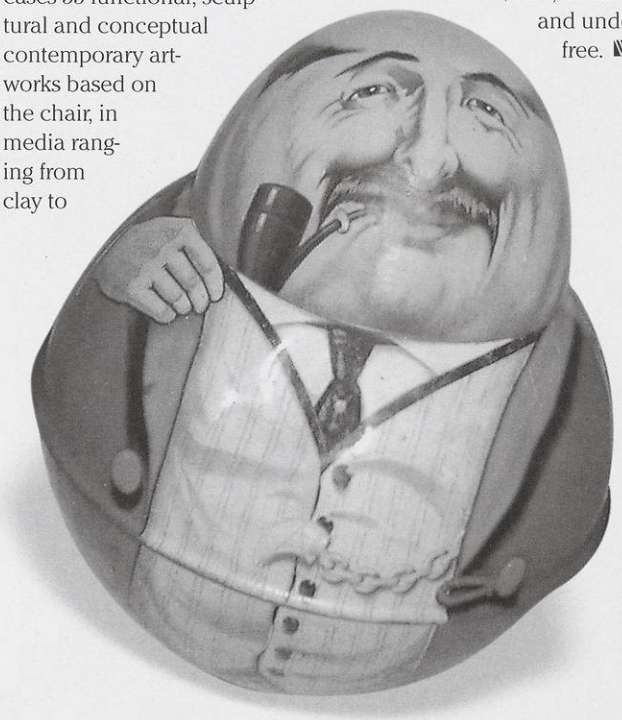


MITCH RYERSON

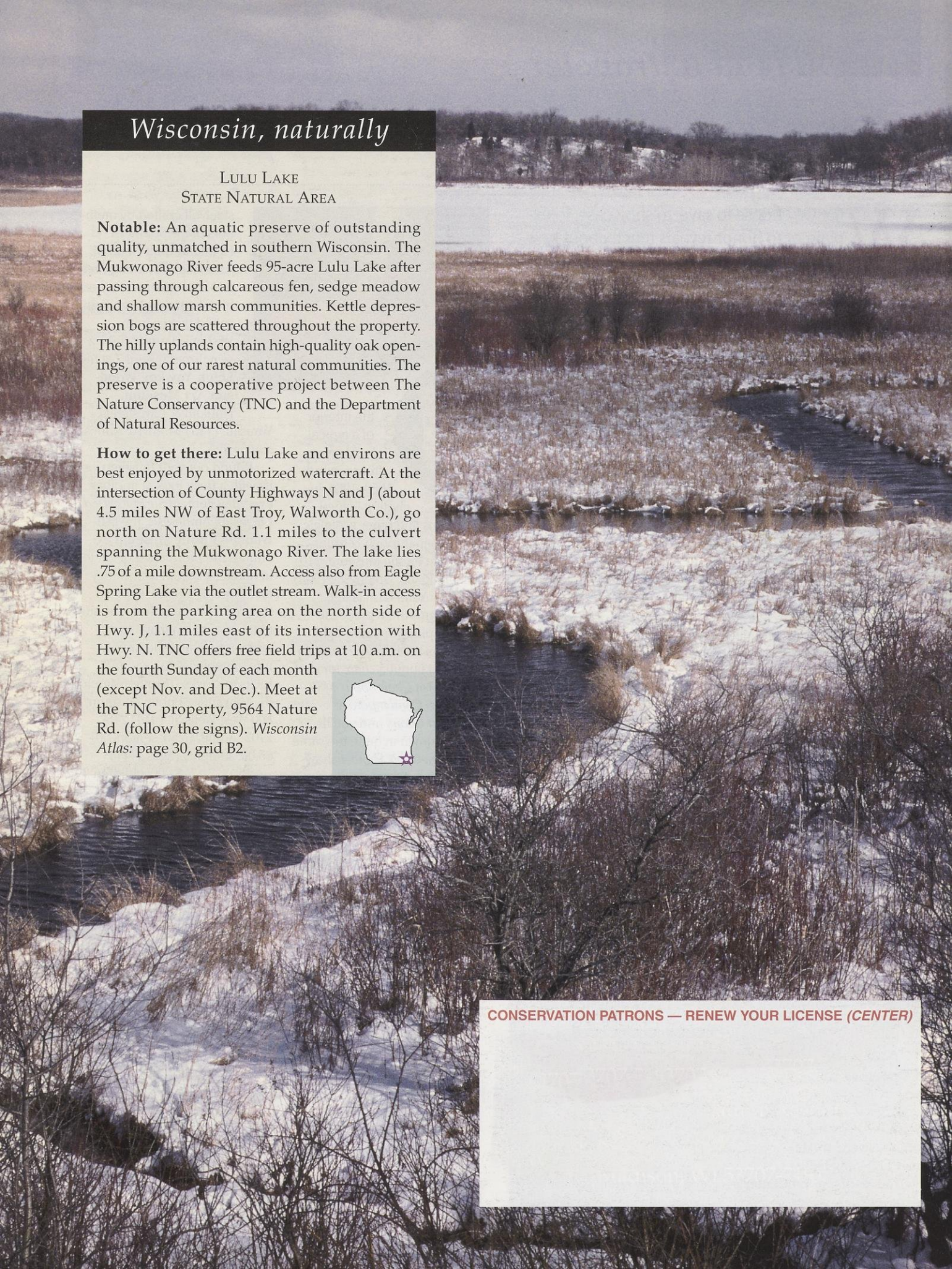
RICK MELBY

Museums often place the commonplace in a new light. When was the last time you really thought about a *chair,* for instance? Visit *Chair Show 4/Sitting Pretty: Contemporary Wisconsin Chairs* and you'll never sit down in quite the same way again. *Chair Show 4* showcases 35 functional, sculptural and conceptual contemporary artworks based on the chair, in media ranging from clay to steel, all crafted by members of the Southern Highland Craft Guild of Asheville, NC. *Sitting Pretty* is a complementary exhibit featuring 12 chair-inspired pieces from Wisconsin artists. Take a seat through April 7 at the **Leigh Yawkey Woodson Art Museum,** Franklin & 12th streets, Wausau. (715) 845-7010. Admission is free.

Round out your museum visits with a fresh look at another everyday item. In *SurROUNDed! Circles All Around Us,* the **Milwaukee Public Museum** examines the prevalence of circles in nature, religion, technology and popular culture. Explore the world of circles from the sun to the moon, language to religion, prayer beads to architecture, timepieces to toys, and rocks to clocks. Through March 31. Milwaukee Public Museum, 800 West Wells St. (414) 278-2702. Adults $6.50; seniors 60+ $5.00; students (ages 4–17) $4.00; children 3 and under, free.



LITHOGRAPHED IRON TOBACCO TIN, MILWAUKEE PUBLIC MUSEUM



Wisconsin, naturally

Lulu Lake State Natural Area

Notable: An aquatic preserve of outstanding quality, unmatched in southern Wisconsin. The Mukwonago River feeds 95-acre Lulu Lake after passing through calcareous fen, sedge meadow and shallow marsh communities. Kettle depression bogs are scattered throughout the property. The hilly uplands contain high-quality oak openings, one of our rarest natural communities. The preserve is a cooperative project between The Nature Conservancy (TNC) and the Department of Natural Resources.

How to get there: Lulu Lake and environs are best enjoyed by unmotorized watercraft. At the intersection of County Highways N and J (about 4.5 miles NW of East Troy, Walworth Co.), go north on Nature Rd. 1.1 miles to the culvert spanning the Mukwonago River. The lake lies .75 of a mile downstream. Access also from Eagle Spring Lake via the outlet stream. Walk-in access is from the parking area on the north side of Hwy. J, 1.1 miles east of its intersection with Hwy. N. TNC offers free field trips at 10 a.m. on the fourth Sunday of each month (except Nov. and Dec.). Meet at the TNC property, 9564 Nature Rd. (follow the signs). *Wisconsin Atlas:* page 30, grid B2.

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