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On the go.

RUTH L. HINE
Bureau of Research

A rustle in the leaves, a quick movement in the grass, inch-wide tunnels mounding the snow — these are usually the only clues to the whereabouts of the short-tailed shrew, one of Wisconsin's commonest small mammals. Its scientific name is *Blarina brevicauda*.

This hyperactive bundle of dark grey, velvety fur has a stocky mouse-like body, pointed nose, tiny eyes and concealed ears. It belongs to the mammal group known as insectivores, insect-eaters. Also in this group are moles, readily distinguished from shrews by large front feet they use for digging and by rarely being seen above ground.

One of seven species found in Wisconsin, the short-tailed shrew occurs abundantly all over the state from dry sandy dunes to deep forest, but it prefers damp woods, marshes and the brushy edges of fields. Its runways zigzag every which way under the vegetative litter, and are often underground. They frequently intersect or overlap those of meadow mice. Nests are usually well beneath the surface.

You'll also find short-tailed shrews in your flower garden and yard — and in fall in the barn, basement or window well. My best observations have been in winter when I occasionally see them rooting around among hulls of sunflower seeds under my bird feeder. You can easily tell their tracks from mice because shrew tracks alternate while mice are paired.

Shrews are almost frantically on the go night and day, year-round, and keep up this pace apparently by alternating several hours of intense activity with several hours of sleep. They don't move far. Their lives for the most part are spent on about half an acre.

But within their domain, life is intense. Shrews have an unusually high metabolism, a heart rate of 760 beats a minute, and respiration rate of 164 a minute! They incessantly sniff out the next meal. Insects make up over half their diet. The rest consists of earthworms, snails, other soil invertebrates, vertebrates such as salamanders and mice and some plant material. They eat sunflower seeds in captivity (and perhaps under my bird feeder!)

In winter, they prey on meadow mice much more than at other times. This shrew is the only North American mammal with a toxic venom, which probably enables it to subdue prey larger than itself. On humans, the bite is almost ineffective, though soreness and burning may result.

Other mammals kill short-tailed shrews but seldom eat them because of a disagreeable odor from glands on the shrew's underside.

Very useful allies in the battle against insect pests, it's estimated that the army of short-tailed shrews in Wisconsin consumes the equivalent of two big truck loads of insects a day for each county in the state!

Contents

Features

Front cover:
"The Birch Line," white-tailed deer by Terry Redlin. Courtesy of The Wooden Bird, 8600 Kennedy Memorial Drive, St. Bonifacius, MN 55375.

Back cover:
North Country by Justin Isherwood. Illustration by Jim McEvoy.

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LOST HUNTERS!

JIM BISHOP, Public Information, Spooner

Getting lost in the woods can test you physically. It can be frightening and embarrassing. But without qualified search and rescue pilots like Bud Erickson, it could be fatal.

Bud Erickson tried to stretch in the confined cabin of his small, single-engine plane. It was almost three o'clock in the morning, and he'd been behind the controls for nearly five hours. Somewhere down below in the rugged, all-but-roadless Bad River Indian Reservation, a lone hunter was lost. The temperature outside the plane hovered well below freezing, in the low 20's. Occasional gusts of light snow obscured sight of the ground. It wasn't hard for Erickson to figure out that the hunter must be considerably less comfortable than he was. He redoubled his attention on the terrain below, searching for some sign.

It seemed ages since he'd settled back into his easy chair to watch TV at his home in Cumberland. That was the evening before when he'd been on search and rescue standby. With only one day remaining in the 1981 deer season he'd begun to hope that maybe this year would pass without having to mount a lost hunter search.

But, no dice! Somewhere in Price and Ashland counties, at that very moment anxiety was building. It was dark and two hunters had failed to return.

Michael Wirth, 64, had been hunting about 15 miles east of Park Falls in the Chequamegon National Forest in Price County. Earlier, he'd hit a buck and followed its faint blood trail for several hours. By nightfall he realized he was lost. On a high wooded hill he built a fire, made himself comfortable and prepared to stay put.

At nearly the same time, farther north, in the steeply hilled Bad River country around Ashland, Royce Bressette, 26, had also lost his way..

At home, Wirth's wife was worried. She called Price County Sheriff Mike Johnson around 7:30 p.m.. In questioning her, Johnson found out that Wirth was a good woodsman, but had a serious heart condition. It would be tough on him to spend a November night in the frigid north woods.

With three deputies, a state patrolman, a half-dozen local volunteers and DNR Warden Gerald Meronk, Johnson organized a search team. Soon they found Wirth's car parked along a dirt road. At first they tried to follow his trail, but lost it beneath a light coat of new snow. Johnson and Meronk decided to call in a plane.

Erickson received the call at 10 p.m. and took down as much background data on Wirth as possible. The pilot knew from training and experience that such information helps anticipate how a hunter will react to becoming lost. He tried to visualize how a mature, seasoned outdoorsman like Wirth might behave.

It was pitch black under a moderately low overcast sky when Erickson reached the airstrip near Shell Lake. He fired up the two-seater Beechcraft T34 and eased it into the cool night air toward Price County, 90 miles away. Less than 45 minutes after receiving the call, he'd established radio contact with Warden Meronk and homed in on the men waiting near Wirth's vehicle.

The warden switched on the red lights of the squad cars to pinpoint his location as the plane approached. Waiting with Meronk was a search team

DNR pilot Bud Erickson gets ready for a tough search-and-rescue mission. Photos by author.

A cold, disoriented hunter was lost somewhere down there in the rugged Bad River country.

of six of Wirth's friends. Until the pilot spotted Wirth, they would not be allowed to enter the woods. The situation was serious enough without also taking the risk of losing would-be rescuers.

Erickson banked the plane into ever-widening circles, returning to the flashing red lights of the squad cars on each pass. After only the third time around he spotted Wirth's fire. Over the plane's bullhorn, he told Wirth to remain there, help was on the way.

Now the ground team, under pilot Erickson's direction, was guided to Wirth's location, just two or three miles away. By 1 a.m. the rescuers found him. He was cold and tired, his pulse rapid and blood pressure high, but otherwise in good shape.

It had been a relatively easy rescue. Wirth himself had aided his situation greatly by staying put and building the fire that guided searchers.

The DNR pilot stayed in the area until all rescuers were out of the woods and accounted for. He was looking forward to home and bed, but for him the night was still not over. He was about to face one of the toughest air searches of his career.

While Erickson and his plane searched for Wirth, warden Meronk had kept tabs on still another hunter search over his radio. Now he passed word along to Erickson. A man was missing in the Odanah area on the Bad River Indian Reservation, approximately 50 miles to the north.

Low on fuel, Erickson put down at the Park Falls airport. Alerted by Sheriff Johnson, the airport attendant was waiting when the Beechcraft taxied in. Within 10 minutes the plane was refueled and again in the air.

As Erickson got closer to Lake Superior, snow squalls and lowering clouds began to decrease visibility. Somewhere in the murk down below—lost in 180,000 Bad River country acres of steep hills, dense forest and few roads—was Bressette.

Don Nimmer, Odanah-area Warden, had been called in on the hunt around 6 p.m. By the time Erickson arrived, Nimmer and a group of 15 to 20 searchers, most of them Bad River Indians, had hunted all the places they could reach on foot. The team had narrowed down Bressette's location to an area between a logging road and the Bad River. But many square miles lay in between.

Nimmer gave Erickson an update on the search's progress, complete with background on Bressette. He also put two squad cars, red lights flashing, three miles apart along the road. Using these as reference points, the pilot began the large, sweeping circles of the search pattern.

Bressette had at first built a fire after becoming lost. But later, he abandoned it, probably in order to keep moving and stay warm. As he walked, completely disoriented, he got farther and farther away from his rescuers. Without a fire or a visible signal, Erickson had little chance of spotting him. For several hours the pilot flew his search pattern.

At 3 a.m., Nimmer called off the search for a brief rest. Erickson was low on fuel and reluctantly turned the nose of the plane southwest for the 15 to 20-minute flight back to Shell Lake Airport. He was convinced that even without a fire the man could make it through the night. But he wondered if something hadn't slipped by him, a flicker of light or a movement by the river. The responsibility of finding Bressette, he knew, was mostly his.

Refueled with a full tank of gas in the plane and a good breakfast and hot coffee for himself, Erickson was in the air again by 5 a.m.

It was still dark when he resumed the search pattern. On one pass, he noticed a small blinking light. Standing on a small knoll amidst the trees was Bressette, holding a flickering cigarette lighter high in his hand. As Erickson passed, he saw the flame go out. He called out over the bullhorn, asking the owner of this light if he was the lost hunter. Bressette signaled back with the lighter for as long as he could. Because of its heat, he could only hold it for a short time before it burned his hands.

Off in the distance, Erickson could see two snowmobile lights. Rescuers were on their way. But in the Bad River country's rugged terrain, the machines soon broke down and the men had to proceed on foot in the graying dark of pre-dawn. With growing morning light, Erickson once again spotted Bressette, who had by now made his way to the east shore of the Bad River. But he did not remain there.

To The Pilot:

Thank you very much for your help in finding my son Royce, who was lost last Saturday night near Odanah. I was so happy when you called on the radio saying you'd spotted him.

God Bless You,

Beverly Bressette

While Erickson flew back to help direct the rescuers, Bressette decided to hike out on his own. When Erickson couldn't find the hunter on his return trip, he realized Bressette's intention. He began flying a new search pattern.

A half hour passed without visual contact. Erickson began broadcasting blind through the bullhorn, ordering the hunter to "go to the river." An hour later, cold and exhausted, the hunter reappeared at the river's edge and was met there by searchers.

When the rescue team was safely out of the woods, Erickson returned home. Worn out, he slept away the last day of the 1981 deer season.

Nimmer later related that the team was "real lucky to find Bressette in all that wilderness. It took the rescue party nearly two hours to walk out once they

Continued on page 29

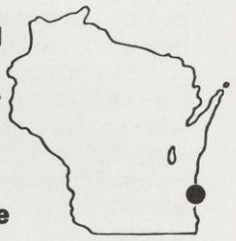
If you get lost

Even the most woods-wise hunter can get lost. Here are a few tips that will lessen your odds of spending a night in the woods if it happens to you:

- **If you plan to hunt alone, let someone know where you're going and when you'll be back.**
- **Carry a compass, knife, waterproof matches, a small flashlight and a good map of your hunting area. Matches are most important, for with them you can build a fire to stay warm and signal rescuers.**
- **Wear several layers of clothing so you can readily adjust to temperature changes.**
- **Keep in shape, know your limitations and stay within them.**
- **Do not attempt to hike out at night. You'll increase the risk of injury and lessen your chances of being found.**
- **Stay put and build a fire. If that's not possible, find a dry spot, stay out of the wind and prepare to spend the night.**
- **If lost during the day, sit down and listen. Most huntable land in Wisconsin is within earshot of highways, city sirens, trains or other human noises. Such sounds can help you regain your bearings and set you walking in the right direction.**
- **Above all, remain calm. Worrying just increases the stress on your body, which in turn uses up energy and clouds your thinking.**

Milwaukee's dear deer.

RICHARD F. ASHLEY, Director, Schlitz Audubon Center



A herd of deer running around Milwaukee county gets into mischief browsing down high-priced ornamental plants and scaring motorists. The Schlitz Audubon Center paid $100 an animal to tranquilize and move them off the sanctuary. It was worth it.

I was uneasy as the auditorium gradually filled. People were gathering in response to a special invitation. All were neighbors of the Schlitz Audubon Center in Bayside and were concerned about too many deer in the neighborhood. Some said, "Kill the deer;" others said, "Leave them alone." Many loved the animals. Others found them a real nuisance. It would not be easy.

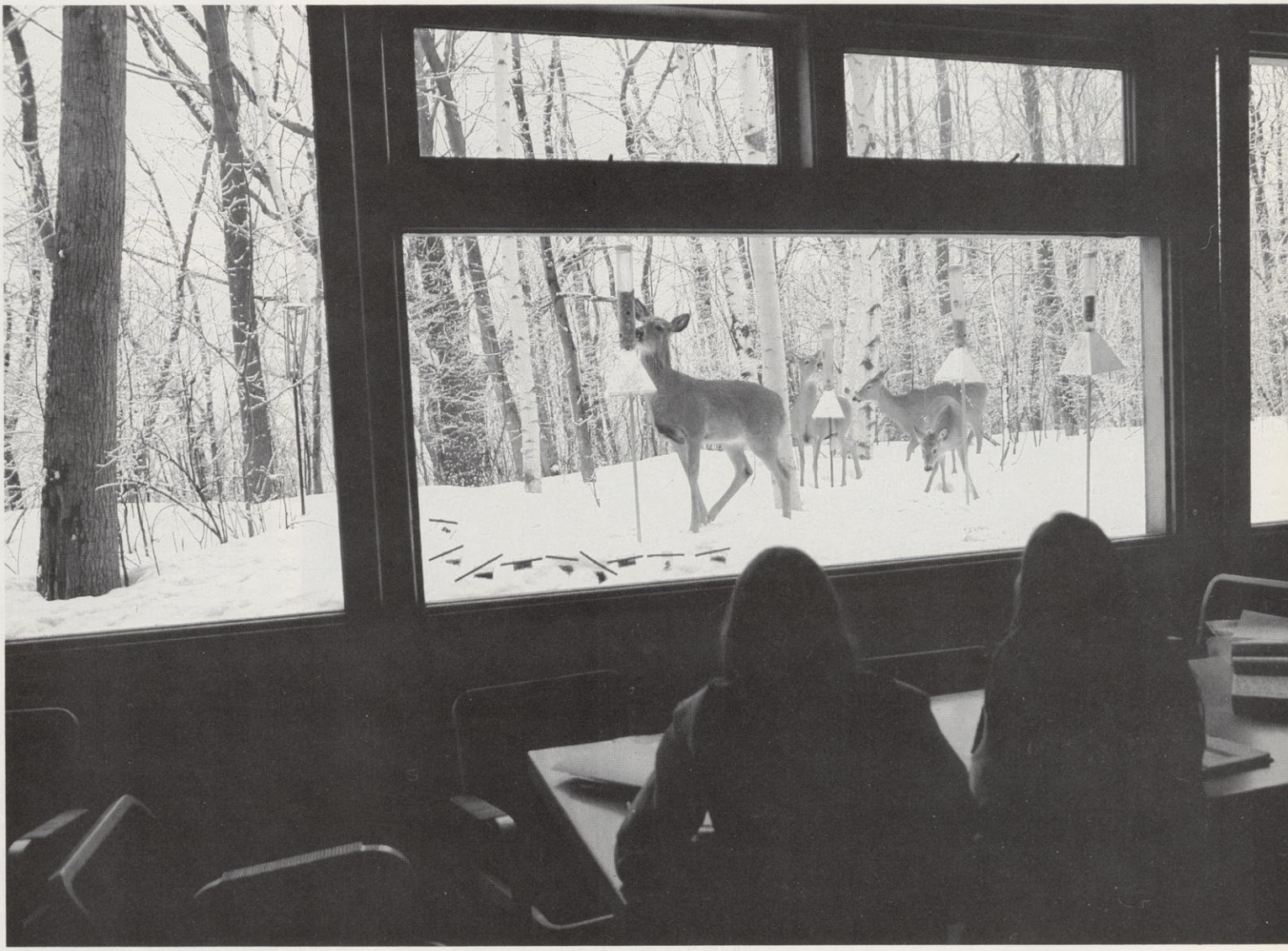
For the 185-acre Audubon Center, controlling deer to protect plants is both good conservation and good environmental education, two prime responsibilities. But the Center's major role in Milwaukee is to build awareness and appreciation of wildlife. What should the National Audubon Society do with too many deer on a sanctuary completely surrounded by homes with expensively landscaped ornamental gardens?

The most disconcerting opinion came from several community residents knowledgeable about natural forces. They recommended destroying the deer as most practical. After all, they pointed out, man has killed off all natural predators in Milwaukee; now he must assume responsibility for controlling the prey. While that made biological sense, the idea of shooting 30 to 40 deer, like so many fish in a barrel, bothered my sense of fair play and reverence for life.

This particular urban deer herd actually lives and feeds in the two villages of Bayside and Fox Point along Lake Michigan north of Milwaukee. Many bed down each day in the forested ravines that claw up into Audubon sanctuary land from the sandy lake shore. Each winter, they yard into two herds that are easy to count accurately. By a fortunate coincidence two volunteers, Scott Diehl and Tony Plicka, had been gathering research data on the herd for almost a year. Without their data, any well-planned control program would have been nearly impossible. They gave personal names like Pretzelhead, Houdini and Gimpy to all the animals and knew the exact number of does and bucks in the sanctuary. Their figures showed 27 fawns born the previous spring. After two easy winters in a row, the herd size in 1981 reached 50.

Main speaker of the evening was Leon Nielsen, executive director of the Milwaukee Humane Society. Nielsen is a seasoned field biologist with many years of wildlife management experience. He is also well versed in chemical capture techniques used to subdue wildlife in the city. Reducing the Audubon Center deer herd, he knew, was fraught with complicated emotional issues. Both the Humane Society and the Audubon

By summertime, the Schiltz Audubon Center's deer herd numbered 50 very healthy deer, including some nice bucks like this one. Photo by author.



The Schlitz Audubon deer are easy to study from the classroom.

Center depend on financial support from the community and the Bambi image of wild deer is still very much alive in the hearts of many Milwaukeeans. Under such conditions, being "cost effective" in removing deer can cause problems.

But the 100 neighbors present wanted to know what we intended to do about "our deer." In addressing the issue of kill or not kill, Nielsen pointed out to them that the cold, analytical approach does not always produce the best results. The most successful management programs are run by biologists who really care deeply about the resource. In keeping with this sentiment, Nielsen proposed a chemical capture program for the removal of the deer.

History of the herd using the sanctuary and adjoining villages showed it had jumped from 14 animals in 1971 to 50 in only 10 years. The winters of 1979 and 1980 had been extremely mild and many does gave birth to twins and triplets.

The large number of multiple births was part mystery. By all the rules of wildlife management, our 185 acres should support about a dozen deer. But 50 crowded onto the same acreage could no way produce many multiple births. Under such high density stress conditions, does often absorb embryos rather than give birth to twins and triplets. The answer came when it was discovered that Audubon neighbors had been feeding large amounts of corn and apples to the deer all winter. One corn crib was big enough to feed 12 animals at once! These neighborhood lunch counters pulled deer out of the sanctuary and made plant destruction in the villages even worse.

To get ready for chemical capture, Nielsen and I spent many early mornings watching the herd. The Center has an entrance road about a quarter-mile long and a gravel access road of about the same length. By slowly driving these roads at sunup, we became familiar with most of the deer, including the many fawns born that spring. We could approach the animals quite easily in the Center's truck because they were used to its shape and color. It would have been incredibly easy to fire a rifle from the vehicle and kill a deer. But while the first few animals could be taken easily, the rest would quickly become gun-shy and difficult.

We finally decided a feeding station baited with apples could attract most of the deer and located it 20 yards from a building on the north side of the property. Baiting began in October of 1981.

It turned out to be one of the most successful deer-relocation projects ever conducted in the state. Others that used tranquilizers commonly report a 30% mortality rate. Ours moved 15 animals without a single death. The project involved two paid staff and four volunteers at a total cost of almost $100.00 per deer — including wages, drugs, transportation, and depreciation on the equipment. Grateful neighbors contributed enough money to pay almost half the cost.

Too many deer on 185 acres of suburban sanctuary can raise havoc with vegetation and neighbors.

Plans call for removal of another 20 deer this December. In addition, an educational program for high school and college students will teach radio telemetry and chemical capture techniques used in the project. A large buck will be fitted with a radio collar, ear-tagged, and allowed to remain on the sanctuary. After learning the history of the deer problem and its solution, students will use the hand-held antenna to track down the buck. (Schools interested in taking part should contact the Center, phone 414-352-2880.)

All relocated deer have been marked with a green ear tag displaying a black number. If you see one, contact the Audubon Center and report the sighting. Deer that remain on the sanctuary will also be ear-tagged to bring in additional data on their movement on and off of the property. In the future, it will be possible to remove specific deer that have a tendency to wander into the neighboring villages. This should prevent some accidents because each year several are killed by cars on nearby North Lake Drive and Brown Deer Road. Ultimately, the herd will be maintained at a level that will allow the animals to live and feed on the sanctuary property without damaging its diversity of plants.

THE CAPTURE PROGRAM

Rifle

A New Zealand company, Paxarms of Timaru, makes the special dart rifle used to anesthetize deer. Fired by a blank .22-caliber cartridge, the dart can be adjusted for a velocity of anywhere from 30 to 700 feet per second.

Dart

The forward compartment of the syringe-projectile holds the drug. Behind it is a radio transmitter. Drug outlet is at the side of the needle. When the dart penetrates the skin, a small plastic collar is pushed back to uncover the needle hole and allow the tranquilizer to flow sideways into the tissue. This is better and more humane than other systems that use an explosive charge to expel fluid straight out the tip.

Transmitter

The tiny radio transmitter battery lasts 30 hours. Upon impact, the radio slides forward which increases the length of its antenna.

Drugs

Two drugs, either etorphine hydrochloride or xylazine hydrochloride, are used. They have a high analgesic potency so the animal feels no pain while the sedative and muscle relaxant take effect. Full effect takes place in 15 to 30 minutes. Immobilization lasts from one to two hours but depends on the dose.

▶ 1

▼ 5

2 ◀

4 ▶

Clockwise from top:

1 Taking the bait.

2 Checking a drugged buck's pulse.

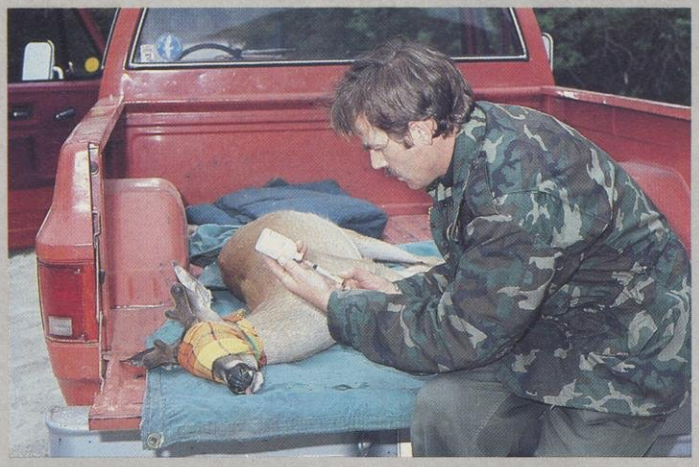
3 Researcher with receiver finds deer.

4 Dart with radio and antenna, ready for action.

5 Marksman loading the anesthetic dart.

3 ◀

Buck blindfolded to prevent eye damage.



Buck being injected with antibiotic to prevent infection.

Technique

Chemical capture of any kind of wildlife should never be attempted unless supervised by an experienced biologist.

Deer at the Audubon Center were attracted to a baiting station located 20 yards from a window. Darts were fired from the window either into the hip or shoulder. After being hit, many darted animals returned to the feeding station and continued to eat, evidence that the technique doesn't make deer gun-shy.

Animals were given at least 15 minutes before the capture team started pursuit. This was a precaution. If the animal took flight, it could produce enough adrenalin to counteract the drug. Also, body temperature of fleeing animals elevates and while drugged they lose the ability to control it. Malignant hyperthermia (high body temperature) is a common cause of death in drugged animals.

Using a hand held radio, the capture team located the darted deer. If the animal showed signs of alertness, more tranquilizer was injected into the hind quarter. A blindfold was immediately placed over the eyes to protect the retina from light damage because, while drugged, a deer's iris won't close. Each animal was then placed on a canvas tarp, carried to the nearest road and transported to a central point. There it was examined for heartbeat, respiration, body temperature and general condition (including a check for parasites). Measurements were made of all body dimensions and the animal was weighed. The dart was removed with a surgical scalpel and a special ointment forced into the wound to make it heal from the inside out. After an injection with antibiotic to prevent infection, the deer was transported 30 miles to a release site in Washington County.

At the release site, body temperature and respiration were again checked. Sometimes a respiratory stimulant had to be injected. Then, after making sure the animal was a safe distance from highways, marshes, rivers and other potential hazards, it was revived. An intravenous injection of a special stimulant generally brought the animal out in about five to 10 minutes. Following some grunting and snorting, the deer usually leaped to its feet, swayed back and forth a few minutes, then bolted off into the state-owned cornfield. The capture team followed for another half hour to be sure there was no trouble. Once the animal was feeding and walking normally, it was abandoned. All deer released during this project have a green ear tag with a number.

Research group monitoring drugged deer.
(Left to right: Nancy Frank, Leon Nielson, Don Quintenz and Tony Plicka.)

Groggy doe starts to regain footing.

Recently released 210-pound buck, alert and back to normal.

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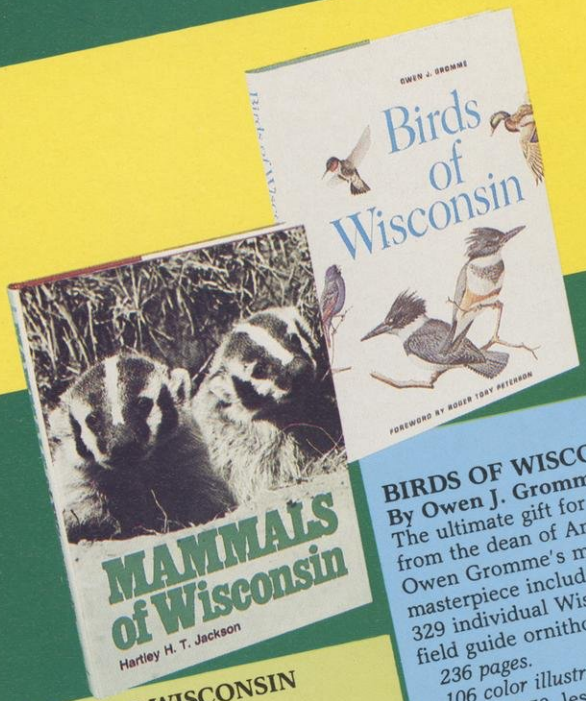

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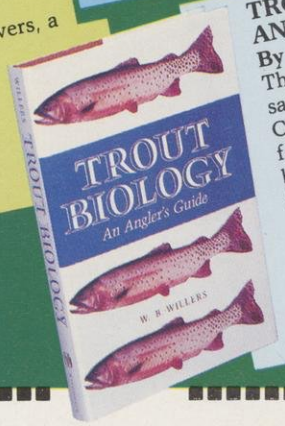

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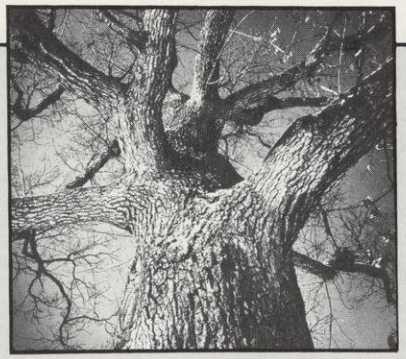

Excerpts from a new book, *Wisconsin's Famous and Historic Trees* by R. Bruce Allison and Elizabeth Durbin.

Wisconsin's famous and historic trees.*

Settlers from other countries often chose land that was wooded. They liked the security of the trees and availability of fuel.

For decades, Wisconsin was a chief furnisher of white pine lumber. White pine built many of the habitations and business buildings in the Mississippi Basin.

In addition to this great natural resource, the settlers were fond of planting dooryard trees to make their simple abodes more homelike. At other times, a tree was planted to commemorate a family happening — the birth or death of a child, or the passing of an older member of the family. Many of these trees will stand. Many were elms, of course, since the elm tree was viewed as sturdy and long-lived, and somehow was mystically connected with the sentiments of a good life.

Wisconsin's trees, both in forests and individually, tell the story of our state, how it has grown and changed from year to year.
Robert E. Gard

Trees humanize people. The shade, the warmth, the shelter and the nourishment they provide alleviate our discomforts and allow us to rise to higher, more human planes of thought and action. As a species, our evolutionary roots are in the trees. Our human development was profoundly influenced by tree environments and nurtured by forest resources. Each of us from birth to death is intimately connected with trees. On their beauty and longevity we hang our memories and beliefs, trusting trees to be symbols of our achievements and the things we hold dear.

Just as the ancients venerated and mythologized trees — from the Norsemen's great world tree, Yggdrasill, to the Greek's oracular oak of Zeus — Wisconsinites, too, have incorporated trees into history and folklore. Tree stories are part of the social history of the state and the personal and emotional history of the people. Affection for trees has influenced our behavior. Trees have served as anchors for time-honored family and community customs, as manifestations of ideals and as reminders of significant events.

People can exhibit great sympathy for trees as was demonstrated by the Brodhead woman was offered to pay any price to save a tree from the ax. Her efforts rebuked, she immortalized the tree and her cause with a poem. Such loyalty is not uncommon in Wisconsin. A farmer in Boscobel, fearing that future owners of his favored oak might not care for it as he did, bequeathed to the tree the land on which it grew. These people saw in their trees more than wood and chlorophyll. Trees to them were companions and friends.

Zona Gale, one of Wisconsin's great writers, explained it this way: "Trees have intelligence. Spirit is combined with them in some degree, in their life and their intelligence. See how they seek out their food, find water, turn to the sun ...there's a better explanation to this than the books make."

Wisconsin architect Frank Lloyd Wright simply stated, "I have mourned the loss of a tree more than a man." Mr. Wright designed his Spring Green home, Taliesin, around a majestic white oak called the Tea Circle Oak. Dignitaries and students from around the world gathered in the shade of this tree to listen and learn from the master. When Mr. Wright died, the tree, as foretold, was struck by lightning. Another oak, which had been stunted under the canopy of the original, grew rapidly, rising like a phoenix to become the new Tea Circle Oak.

Many trees have served useful purposes in the state, such as witness trees for early land surveyors. And not so useful purposes, such as hanging trees on which justice was circumvented, or at least unduly expedited. An example is the Janesville hanging tree on which a mob of incensed citi-

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zens strung up an accused murderer. The authorities had the tree cut down to discourage future lynchings.

Other trees marked less infamous historical events, such as the Fort Howard Elm, which was a landmark at the state's first permanent settlement in Green Bay; or the John Muir Locust on the University of Wisconsin campus in Madison under which Muir received his first botany lesson in 1863. A certain historical perspective and cultural humility is gained from the Indian trail marker trees. They are living reminders that other cultures passed this way.

Some trees are turned into green monuments to honor special people, such as the General Douglas MacArthur Pine in Forest County. Other trees, such as the Grant County Sycamore, are growing as memorials to departed loved ones. It was planted by a bereaved father who brought the tree back from Ohio as he was traveling home to Wisconsin with the body of his son, killed in the Civil War. Less tragic expressions of love can also be found in famous trees still growing in the state. The Rhodes Bald Cypress near Kenosha is an unusual species planted 100 years ago by a father to celebrate a reconciliation with his daughter, from whom he had become estranged after she married without his consent and moved to a southern state.

Wisconsin tree histories are human stories. As Lapham said, they increase our love of home and improve our hearts. They deserve to be told and remembered.

Remembered Elms

The black plague of Dutch elm disease found its way into Wisconsin in the early 1950s. The epidemic spread rapidly from street to street and from forest to forest. The full death count will never be known. In one year alone, the City of Milwaukee lost over 16,000 trees. Streets which had inviting canopies of green reverted to barren roadways. Urban parks lost the cooling shade of wide-crowned trees. Home yards no longer had the added architectural punctuation of the elm's graceful arch.

A Sawyer County elm, 15 feet 6 inches in circumference, which blew down in the Flambeau River State Forest in 1952, was 352 years old. It had started growing in 1600, before the first white men came to Wisconsin.

There were, and still are, many elms in Wisconsin over 100 years old; some started growing before Wisconsin became a state in 1848. The state record (in 1959) American elm was a tree near Gotham in Richland County. It had a circumference of 20 feet 7 inches.

The "most beautiful elm in Wisconsin" may still stand in a farmyard near Ripon in Fond du Lac County, though it is now dead. Its perfectly shaped and symmetrical branches made it a magnificent sight.

Elms planted in the 1870s on the University of Wisconsin campus in Madison do not have especially large dimensions, but those trees, as well as elms planted on the State Capitol grounds, have been there almost as long as Wisconsin has been a state.

At Lake Mills in Jefferson County was a very large elm (now taken down) that probably started to grow in 1821. This tree preceded the first settlers and was doubtless self-planted from a seed which blew there. The first settlers in the Lake Mills area arrived in 1836 when the tree was about 15.

Almost 100 years ago, near Neillsville in Clark County, Celia Reed and Julia Benedict were married. In honor of the occasion, the Rev. William Hendren, who performed the ceremony, twisted together two elm saplings, each smaller in diameter than a pencil, and planted them. In a living symbol of unity they grew up as one tree, now towering over 80 feet high. The marriage was also a success, producing five sons and a daughter.

People care about elms. Mount Mary College in Milwaukee had two enormous elms. They were given excellent care, braced to thwart high winds and ice storms.
Sister Mary Seraphia said that "We have no policy regarding the care of old, historic trees except a love of nature, because God gave it to us in his loving providence."

At Whitewater in Walworth County an elm so huge it shaded three lawns stood beside the home of C. H. Wellers. This tree, in 1952, was 96 feet tall and had a crown spread of more than 113 feet. Its circumference was 17 feet 6 inches. Wellers, who estimated that the tree was between 300 and 400 years old, spent a great deal of money in caring for the monarch and protecting it against Dutch elm disease. When he died and the house was sold, such care was no longer possible and the tree died in the late 1970s. Its loss was noticed and mourned by the entire town.

In Spring Green in a farmer's field below Taliesin stands a regal, open-grown elm. It's a landmark leading the way to the home of world-famous architect Frank Lloyd Wright.

Another huge elm, the General Grant Giant Elm, was located southeast of the intersection of Green Bay and Good Hope roads, at the site of Post Village Stage Relay Station, the Green Bay-Milwaukee-Chicago Post Mail route.

Last Elm on State Street, Madison, 1974. State Historical Society of Wisconsin photo.

A Disease-Resistant Elm

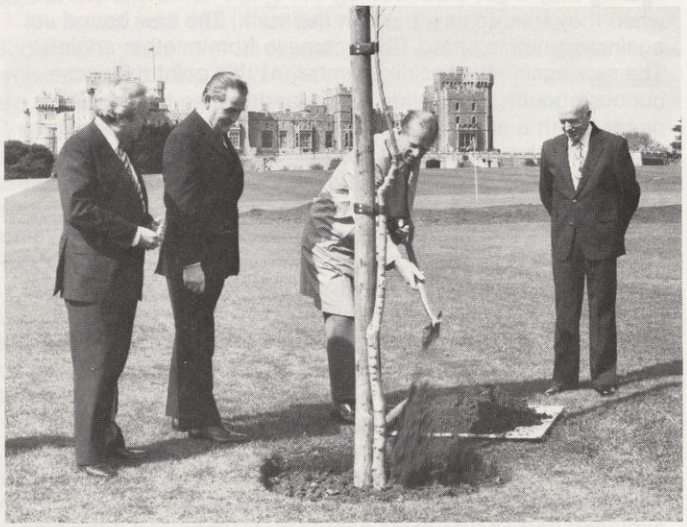
A Wisconsin elm hobnobs with royalty on the grounds of Windsor Castle in England. Prince Philip, husband of Queen Elizabeth, planted the young tree in April, 1980, using a silver-plated shovel, while its developer, Professor Eugene Smalley, of the University of Wisconsin-Madison, stood proudly by. The "Elms Across Europe" project was launched in 1979 by Pitney Bowes, an international business machine firm.

This elm, sometimes called a super elm, is gaining worldwide attention because it is the first elm resistant to Dutch elm disease that is being commercially developed.

Since it was discovered in the Netherlands in 1929, Dutch elm disease has killed more than 50 million elm trees on both sides of the Atlantic. Britain has lost more than most European countries and the beauty of its landscape has suffered accordingly. An elm tree that would resist the disease has long been sought.

Professor Smalley, after 20 years of collecting and testing elm seedlings sent to him from all over the world, developed a hybrid that would be generally disease resistant, cold-hardy and immune to Dutch elm disease. He named his tree Sapporo Autumn Gold because it grew from open-pollinated seeds collected from a Siberian elm growing in the Botanical Garden at Hokkaido University in Sapporo, Japan. The Hokkaido seeds had resulted from the natural hybridization of the Siberian elm — which was disease resistant, with a nearby Japanese elm — which had a pleasing shape.

A fast grower in its early years, the new Sapporo Autumn Gold is densely foliated and columnar with a vase-shaped crown. It reaches an average height at maturity of 60 feet. The tree has also been planted to replace dead elms on Madison's University of Wisconsin campus, Wisconsin State Capitol Park, at Harvard University and in the cities of Fort Atkinson, Milwaukee, Washington, D.C. and Minneapolis. It is being vegetatively propagated under exclusive contract by a Wisconsin nursery and will soon be available in larger quantities.



Prince Philip plants disease resistant elm developed by Professor Eugene Smalley (right) of UW-Madison. Fox Photos Ltd.

Durand Lynch Tree

An old oak tree on the lawn of Durand Courthouse in Pepin County figured in the lynching of Ed Williams back on November 19, 1881. Ed and his brother Lon — who specialized in stealing horses, but dabbled in other crimes such as bank robbery and murder — were sometimes compared to the James Brothers. The story was written up by Christine Klatt, an early Dunn County settler.

When two lawmen, ex-sheriff Charles Coleman of Pepin County and his brother Milton, who was under-sheriff of neighboring Dunn County, tried to arrest the two Williams brothers in Durand, the sheriffs were both shot dead on the spot before witnesses. The subsequent chase of Lon and Ed Williams ended in Nebraska with the capture of Ed. Lon escaped.

They brought Ed Williams back and jailed him in Menomonie, then took him to Durand for preliminary examination. When they debarked from the ferry at Durand, they found about 50 people waiting. The crowd muttered a few threatening remarks but no real trouble ensued.

At two o'clock the next afternoon, Ed Williams appeared in court. Men, women and children from nearly all parts of Pepin and adjoining counties crowded the room, anxious to get a view of the "notorious criminal." He gave his name as William E. Maxwell (Ed Williams was an alias), pleaded not guilty to the charges, waived an examination and was committed for trial. The officers started to lead him back to his cell. Then someone in the crowd yelled, "Hang the son of a bitch," and a dozen or more determined men tackled the officers.

"The officers made desperate resistance, and Maxwell fought like a tiger," but to no avail. A noose with a hangman's knot was slipped over his head, he was dragged out on the porch and across the lawn to the oak tree "and quickly suspended in the air, with his handcuffs still on and a heavy pair of shackles hanging from his left foot."

After about 15 minutes, the officers were able to get to the body. They cut it down, and it was later interred in the Potter's Field of the Durand Cemetery.

The community did a bit of soul-searching after the episode, debating the issue back and forth in the local newspapers. An item in the Eau Galle paper noted that "A more brutal affair never happened anywhere and ... it is reflected upon the morality and civilization of northwestern Wisconsin."

The Durand *Courier* attempted to put the case in perspective. "Finally, we think we can truthfully assert that Ed Maxwell was hung, not in the spirit of revenge for the crimes he had committed, not to show the bravery of the community ... but on future protection to this place and other communities. A man who not only boasts of his past misdeeds but expresses determination to continue on his evil course, and asserts that he will not allow any number of lives to stand between him and his liberty, is too dangerous a citizen to let live, and any man or number of men who wipe such a dangerous desperado from the face of the earth should be commended instead of condemned."

The hanging tree was cut down in 1977. Dying, it was considered a hazard to pedestrians.

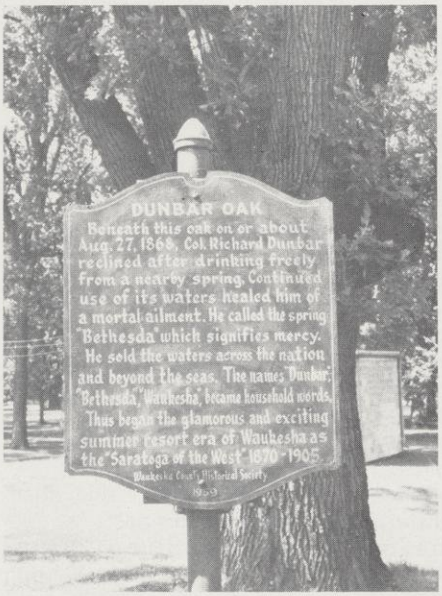
Durand Lynch Tree.
Photo by Melba Bauer.

The Parade Day Hanging Tree, La Crosse

On October 16, 1884, Frank Burton, a prominent La Crosse citizen, was marching at the head of a political parade in that city. Along both sides of the parade route hundreds of onlookers stood and watched. Suddenly, as the parade passed the intersection of Fourth and Main Streets, a man in the crowd, Scotty Mitchell, raised a gun, fired and shot Burton down.

The assassin was immediately seized, taken into custody and placed in the county jail a block away at Fourth and State Streets. Within hours a mob began to form, became increasingly unruly and forced their way into the jail. They dragged the assassin Mitchell outside and hung him from an oak tree on the south side of the Courthouse.

The tree, of course, was promptly dubbed the Hanging Tree, but the appellation was short-lived because the tree was ordered cut down almost at once. The city officials did not want the public to remember that mob rule had taken precedence over due legal process. Old-timers who heard the story from their elders, however, still recall the incident.



Dunbar Oak, Waukesha.

Photo courtesy Waukesa County Museum.

The Dunbar Oak, Waukesha

Desperately ill and convinced his death was imminent, Col. Richard Dunbar sank down to rest under a strong white oak in Waukesha County one August day in 1868. A diabetic suffering from insatiable thirst, he had just drunk six tumblers-ful of water from a spring beside the tree. He began to feel better. He continued to drink freely from the spring waters and soon the man doctors said would die within months felt completely cured. Dunbar lived 10 more years without a recurrence of his diabetes, and during this decade he made Waukesha, the spring waters and the "guardian angel" oak tree world-famous.

His faith in his own cure inspired him to offer the waters to others; his sharp business ability made it financially rewarding. The former engineer bought the spring, which he named "Bethesda," and the land around it, and actively began to promote the community. Waukesha soon became a haven for those seeking not only restoration of their health but also relaxation. Soon Dunbar was selling the spring waters all over the globe.

Other promoters entered into the picture and several more springs were developed, among them Hygeia, Arcadian and White Rock. To quote from the account of those times by Libbie Nolan of the Waukesha County Historical Society:

"Fancy ornate pavilions enclosed each bubbling spring .... Great hotels spring up .... Guests came from far and wide to drink from the springs, to relax, and to be amused. Among them were Mrs. Abraham Lincoln, President Grant, Vice President Adlai Stevenson, Supreme Court Justice Salmon P. Chase, Horace Greeley as well as governors, generals, statesmen and many many more.

"White Rock water became a fashionable beverage all over the world after it was carbonated in 1890, even making its way to the coronation of the King of England .... When Col. Dunbar died in 1878 (of a heart attack), the village was notified by the passing out of black-edged handbills. The fame and excitement of our Western Saratoga lasted nearly 40 years. Then it faded away as the century turned."

Now the Dunbar Oak, in the large park at Bethesda Spring, is marked by a plaque put up by the Waukesha County Historical Society in 1959. After noting Dunbar's first introduction to the waters, it ends with the words: "The names 'Dunbar,' 'Bethesda,' and 'Waukesha' became household words. Thus began the glamorous and exciting summer resort era of Waukesha as the 'Saratoga of the West', 1870-1905."

The Coffin Tree, Rusk County

A tale worthy of a Halloween telling involves a large, hollow basswood tree, a forest near Ladysmith in Rusk County and two loggers, Art Charpin and Walter Latsch, who were scared out of their wits on a February day in 1926. It was first told by a Rusk County weekly.

The day started out innocently enough. The basswood had been marked by a timber cruiser for cutting and Charpin and Latsch were wielding the saw. They noticed a large hole in the tree some 30 feet above the ground, but they felled it anyway, figuring they'd get a 20-foot log out of it. The trouble started when they tried to saw through the trunk. The saw bound up against something hard. They came in from another angle. The saw again hit a rocklike center. At this point they were curious about a rock inside a tree, and turning the log as needed with a cant hook, they managed to saw all the way around the "rock" and pull the end of the trunk away. The wrinkled face of a man stared up at them. Shaking, they high-tailed it back to town.

Eventually their story was believed and a party of four went into the woods to investigate. Sure enough, when the trunk was completely removed they found the body of a man, fully clothed in coarse homespuns and buckskin which fell away when touched. The head, covered with long hair, still wore a coonskin cap. With the mummified body the men found an old muzzle-loading flintlock rifle and a fancy muzzle-loading pistol. Pieces of paper found on the body at first seemed to identify the man as a Captain D'Artagon who had been with the Marquette-Joliet party seeking a route to the Pacific Ocean in 1673. This seemed totally implausible, however, as the exploring party never came near Rusk County, and if the man had been lost it is not likely that he would have continued to travel westward, away from the Wisconsin River.

The finders of the grisly surprise finally theorized that the man, whoever he was, had been pursued by Indians, had taken refuge in the hollow tree, and unable to get out again, had died there. The sap of the tree had acted to preserve his remains.

The body was supposedly shipped to the University of Wisconsin-Madison. The two loggers vowed never to return to the haunted forest near Ladysmith.

Catch-all

Ice age giants on display

Jim Bishop,
Public Information
Spooner

St. Croix Falls — John Dallman, UW-Madison Curator of Paleontology, visited Interstate Park's new Ice Age Interpretive Center recently and brought pieces of the area's glacial past with him.

The relics are plaster copies of bones from an extinct mastodon and a giant beaver that may once have lived in the Interstate area.

Dallman has discovered three of the four mastodon bones unearthed to date in Wisconsin. He dug them from a marsh near Deerfield, all that remains of an old glacial lake. Scientific tests show the bones are 11,500 years old.

The mastodon "humerus" corresponds to an upper arm bone. It is 28 inches long, five inches in diameter and weighs about 35 pounds. **Dallman presented the mastodon-bone replica to Park Naturalist Laurie Osterndorf at the dedication of Interstate's new, $270,000 Ice Age Interpretive Center. The bones will become part of the permanent display there.**

Dallman says mastodons disappeared because of climatic changes. They were elephant-like and browsed on spruce, beech and alder.

He also brought the skull of a giant beaver which may have lived in Wisconsin until 9,000 years ago. **The beaver weighed 500 pounds and was probably confined largely to water, where it ate plants such as cattail root.**

The center's permanent exhibit, now being put together by the National Park Service, will also include bones from an extinct giant bison which lived in the area some 6-7,000 years ago, after mastodons became extinct.

A number of bison bones were unearthed at Interstate in 1936, the only authenticated record in Wisconsin, according to Dallman.

The giant bison remains are now housed at the Milwaukee Public Museum.

Ancient relic

John Dallman, Curator of Paleontology at Madison, presents a replica of a mastodon bone to Interstate Park Naturalist Laurie Osterndorf. The plaster copy will become part of the permanent Ice Age display at the park. Mastodons stood some 10½ feet tall, weighed about eight tons and became extinct about 9,000 years ago. (DNR Photo)

Another groundwater threat

Larry Sperling,
Public Information

Madison — Groundwater contamination near a southeastern Wisconsin landfill is providing a textbook example of how difficult pollution-sleuthing can get.

Four private water wells south of the Muskego landfill are showing signs of contamination. The wells contain higher than normal concentrations of chlorides and conductivity, two common indicators of pollution caused by landfills. Chlorides measure the amount of dissolved salts while conductivity measures the ability of water to conduct an electrical charge. Neither are serious, health-threatening pollutants but they indicate a foreign substance may be dissolved in groundwater.

Since the contaminated wells are near a landfill, investigators suspect water may be seeping through buried wastes and mixing with groundwater. Local residents are pushing for quick action to find and stop the pollution source but investigators need many more water samples to pinpoint it.

The pollution may have originated in at least five other places:

•Two abandoned landfills are located between the present landfill and the contaminated wells. One was used 30 years ago, long before problems involving improper land disposal were understood.

•An old fill area is nestled between the landfill and railroad tracks that border the contaminated wells.

•A rendering plant just east of the landfill at one time accepted, rinsed and used barrels that may have contained chemicals. It also operates seepage lagoons on-site to dispose of its waste products.

•Some allege that road salting in winter could add to the problem. Dissolved salt could flow into softer road shoulders and seep into groundwater.

Pinpointing pollution sources will be difficult because no one has accurate maps of the direction and speed groundwater moves in the area. DNR investigators have sampled 25 wells to determine the quality of drinking water and monitor the spread of contamination.

Knowles honored

Grantsburg — The Natural Resources Board has renamed the St. Croix River State Forest to honor former Governor Warren P. Knowles. An avid conservationist, during his term as governor Knowles revitalized the Outdoor Recreation Act Program (ORAP). The program vastly expanded purchase and development of Wisconsin park, forest and wildlife lands. Knowles also served as chairman of the task force that developed the current program, ORAP 2000.

The newly named Governor Knowles State Forest occupies 30,000 acres along the western edge of Polk and Burnett counties.

Many chemicals in wastewater; some dangerous

Madison — Studies of waste discharge records required under current federal and state water pollution control laws have revealed more than 800 chemical compounds that could wind up in the effluents of industry along the Lower Fox River. The studies were done by two UW-Madison analytical chemists, Joseph Delfino and John Sullivan. They have been working on a way to identify all of the chemical contaminants likely to turn up in a given waterway.

In compiling the Fox River inventory, Sullivan and Delfino (now with the University of Florida) examined chemical use of more than 150 dischargers to the Lower Fox. **Ultimately, they identified 825 chemical compounds likely to turn up in the discharges from 64 private firms and six public wastewater treatment plants.**

The inventory indicates that effluents to the Lower Fox River may contain more than half of the 129 chemicals on the US Environmental Protection Agency list of priority pollutants — including benzene, chloroform, vinyl chloride, pentachlorophenol, cadmium, chromium, copper, lead, zinc, nickel and seven different kinds of industrial PCBs. This is more than three times the number of priority pollutants identified by previous studies. However, the inventory also indicates that the discharge levels of many of these compounds — PCBs, for example — are very low.

The studies by Sullivan and Delfino were done under the auspices of UW Sea Grant. The chemists are quick to note that their inventory does not include every chemical used in the Lower Fox River and that discharges may contain chemicals not listed in their inventory. And they add that it hasn't been proven yet — nor is it expected — that every chemical in the inventory is actually present in discharges to the river.

The study conclusions point up the need for special regulations that would require pre-treatment of industrial and other chemicals to prevent their discharge into lakes and streams. Such rules are currently awaiting action by both the federal Environmental Protection Agency and DNR.

Christmas trees

Madison — The next time you find yourself grumbling about price as you walk away from the corner Christmas tree lot, consider the background.

The average Christmas tree starts its journey to you from a nursery in central or northern Wisconsin. Little seedlings there take two years to get big enough to be replanted. After another five to 16 years of growth, they reach livingroom size, six to eight feet. Each year, each tree must be sheared, an extremely labor-intensive job.

Of the three major tree-growing states, Michigan, Wisconsin and Pennsylvania, Wisconsin ranks number two — 1.4 million trees were harvested here in 1981. At an average price of $4 to $5 per foot for a plantation-grown tree, the industry is of considerable importance to the Wisconsin economy.

Whether you're the type who goes to the corner lot or treks out to the Christmas tree plantations, (you'll need a receipt to transport it legally) a few tips on maintaining your tree will be helpful.

1. To keep it fresh, make a cut across the trunk and immerse the tree in water. Christmas trees need anywhere from two pints to a gallon of water per day.

2. Avoid letting the tree dry out from exposure to hot appliances or heaters.

3. Do not use combustible decorations.

4. Check for frayed electric cords.

5. Turn out lights when you leave home or retire.

"Spirit O' The North-Loon" — a limited edition print by artist Art Long. Sales of the print will fund population research by Project Loon Watch. The cost is $40. For information, contact the Sigurd Olson Environmental Institute, Northland College, Ashland, WI 54806.

Seven to nine-inch muskies do best

Jim Bishop,
Public Information
Spooner

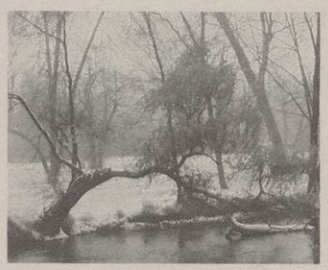
Spooner — An eight-year study of muskie stocking may mean more of the big game fish for anglers.

Between 1971 and 1979, DNR researched 40 experimental muskie-fingerling releases in seven northwest-Wisconsin counties — Bayfield, Burnett, Washburn, Sawyer, Price, Barron and Rusk.

The idea was to find out why so many young muskies die within five weeks of stocking — from 55 to 95%, by some estimates. The study found that attention to certain factors could raise fingerling survival to as high as 85%. Researchers found that:

- Seven to nine-inch fingerlings survive nearly as well (87%) as nine to 11-inch fish and the smaller fish offer substantial savings in food and transportation costs.
- Virtually all two to three-inch fish died or were eaten by predators soon after stocking.
- Fingerlings survive best in 60 to 65-degree water, making late August and September the best times for stocking.

Incorporation of these findings into DNR's stocking program should save dollars and mean more muskies in state lakes.



One of two first-place winners in a Marathon County Park Commission contest was this photo taken by Gloria Hermanek called "Picnic Island." Arlene Siewert was the other winner with a watercolor called "Girls Feeding Ducks."

Catch-all

Spawning Mississippi walleye travels, moves 65 miles through three locks and dams

Dave Weitz,
Public Information
Eau Claire

La Crosse—Earl Stanley Gardner might have called it "The Case of the Wandering Walleye."

The mystery was which areas of the Mississippi River are most vital to spawning walleyes. Jim Holzer, DNR Mississippi River Biologist here, set out to unravel the mystery by tracing walleyes tagged with miniature radio transmitters. Radio monitors in boats, airboats and aircraft were used.

During mid-October, 1981, Holzer and his crew tagged 12 females and two males in various locations near La Crosse in Pool 8 of the Mississippi River. The fish were taken from different places to determine habitat use and see if they would return to original locations.

Pam Thiel, La Crosse, working with Holzer tracked the fish through October and November. She found that, generally, they stayed near the spot where they were tagged, or moved downstream.

One of the fish went four miles downstream to winter in a side channel of the Mississippi near the mouth of the Black River. The rest were traced when the ice broke up in March. Spawning time spurred wanderlust.

Eventually, five walleyes gathered near the Dresbach Dam north of La Crosse, then split up on April 10. Two headed north. "They'd been there for about 10 days and all of a sudden just took off," said Holzer.

After 48 hours, one northbound fish was located at Trempealeau some 14 miles upstream. Two others were picked up on the monitor at Lock and Dam 5 near Buffalo City, after having traveled some 36 miles from the tagging site.

Fish manager Pamela Thiel about to release a walleye implanted with a radio transmitter. One such fish traveled from near La Crosse almost halfway to Minneapolis in under three days.

One walleye moved downstream from the Dresbach Dam about five miles to a backwater on the Minnesota shore called Target Lake. Electrofishing there showed walleyes spawning among flooded timber with a modest water flow and abundant reed canary grass. Several days later, another walleye was traced to similar habitat near Brownsville.

But the two wandering walleyes that went north hadn't been accounted for. Finally, one was located. "We started tracking it below Lock and Dam 5 and all of a sudden it left and went upstream traveling 15 miles in 24 hours," Holzer said. The fish stopped at the Alma dam for several days, then forged northward once more through Big Lake and under the State Highway 25 bridge to Wabasha, Minnesota. Holzer tracked it from a boat until it swam into an area of flooded timber where he couldn't follow.

Two days later, flying over the area, Thiel heard the walleye in the Nelson bottoms. It had traveled 65 miles past three locks and dams. After a few days in the bottoms where it probably spawned, the fish started southward. It was traced to Big Lake, north of Alma, before the signal was lost.

The other walleye that went north to spawn has now returned to its original habitat in Pool 8 where it was first tagged.

Holzer said the radio tagging project will help in fish management by finding prime walleye spawning habitat, determining the importance of high water in allowing fish access through dams, and establishing the best water levels for spawning success.

Hair-um — scare-um deer

Harrisburg, PA — Shrubs, trees and crops can be protected against deer damage by human hair. A Pennsylvania study shows that deer will avoid even a much-loved salt block if it's protected by human hair. When researchers there tied bundles of hair every three feet around the perimeter of salt licks, the deer stayed away for more than four months.

For those who want to try it, human hair can be obtained at little or no cost from beauty parlors and barber shops.

Barge fleeting rules

Madison — The Natural Resources Board has adopted rules to regulate barge fleeting on the Mississippi, Wisconsin and Black rivers. Fleeting areas are places where barges are put together or broken apart in preparation for towing up or downriver. The rules provide that:

•The operator must own, lease or have permission to use the shoreline.

•Barges cannot be moored to trees, rocks or other shoreline features without property-owner approval, except in an emergency.

•Barges must be properly lighted to prevent navigation or safety hazards.

•Fleeting area must not hinder public rights to navigation, economic development, hunting, fishing, swimming or scenic beauty.

•No harm may be done to threatened or endangered species, commercial clamming or fishing, or any wildlife habitat.

•DNR may limit the number of barges in the fleeting area on environmental or navigational grounds but may not base a permit on the industry's need for fleeting capacity.

•Operators must notify DNR at the beginning and end of each shipping season, as well as about plans to discontinue use.

•Fleeting areas unused for two years face permit cancellation.

•Where barges are washed or cleaned a discharge permit is required for any waste dumped in the river. Permits run for up to 10 years and are renewable.

•Bank erosion must be held to a minimum.

Rules will be effective December first following legislative review.

Coulee bass threat

Greg Matthews
Public Information
Madison

Dodgeville — DNR biologists think a combination of soil erosion, pesticide and barnyard runoff poses a potentially devastating threat to aquatic life in Coulee Region smallmouth bass streams.

Suspected are the organophosphate and carbamate groups of pesticides, used to combat such crop damaging insects as corn rootworm, corn borer and cutworm.

Areas potentially hurt by the pesticide/soil erosion problem are not only coulee regions of southeast Wisconsin but also northwest Illinois, northeast Iowa and southeast Minnesota. Topography in these locations features rugged hills, deep gulches and ravines that harbor streams and rivers.

DNR biologists focused on the large number of "unexplained" fish kills that began in the area around the late 1960's and continue through today.

"Some (fish kills) were traced to point source pollutants, such as discharges from liquid manure storage facilities, cheese factories, canneries and municipal wastewater facilities, along with stored liquid manure. But a large number still remain unexplained," points out Gene Van Dyck, DNR Dodgeville Area fish manager.

Van Dyck said they "generally occur from mid-June through early July and take place after intense, localized rainfall."

There are 821 miles of existing and potential smallmouth bass streams in southwest Wisconsin.

In the past, this region was nationally recognized as one of the finest smallmouth bass areas in North America but this is no longer the case.

Smallmouth are now reduced in number or absent in places where they were abundant 15 years ago.

Possible solutions to the problem include conservation tillage to keep valuable topsoil and associated chemicals in the fields and out of the streams; methods of pesticide application which minimize amounts transported to streams during heavy rainfall; and appropriate manure collection facilities.

No either sex hunt at Camp McCoy

Fort McCoy — A correction on deer hunt rules for this fall has been issued by Ft. McCoy. Earlier, *Wisconsin Natural Resources* reported an either-sex hunt there this year on November 6 and 7. This was incorrect. The season will be for muzzle-loaders and bucks only. A hunter's choice permit for unit 55 will be required to take a doe or fawn.

Other muzzle-loader hunts will be held during the regular season this year at the following parks: Governor Dodge (Unit 70C), Blue Mounds (70D) and Perrot (61A). Only hunters holding hunter's choice permits will be admitted.

Bird damage up

Washington, D.C. — Bird damage to US corn crops has more than doubled in the past decade, according to a Fish and Wildlife Service report. Culprits are mostly redwing blackbirds and grackles. Total loss in the top 10 corn-producing states last year was nearly 195 thousand metric tons. **Wisconsin ranked seventh with an 18,000-ton loss. Neighboring Illinois ranked first, losing more than 35,000 metric tons.** A metric ton equals 2,200 pounds.

The Fish and Wildlife Service estimates that overall, the birds ate $34.8 million in corn at 1981 prices.

But corn isn't the only crop to suffer bird damage. Robins consumed half to three-quarters of the ripe grapes in one field at Wollersheim Winery near Sauk City this fall. The field represented half of the winery's producing vineyards and loss amounted to about four tons, according to owner Robert Wollersheim.

The Fish and Wildlife Service speculates that the rise in bird damage may be attributed to increased herbicide and insecticide use that reduces the amount of weed seeds and insects available to the birds. The service says reduced acreages of other small grains, hayfields and noncultivated lands may also be a factor.

Campsite preference to residents

Madison — Next year Wisconsin residents can register for campsites a full month before nonresidents. Under a new law, residents may ask for reservations starting January 3, 1983, while February 1 is the nonresident date. Reservations can be made for any time between May 1 and September 30, except at Peninsula State Park where they run through October 31.

Applications will be accepted only on official campsite reservation forms available at department offices. They should be sent directly to the park or forest at which campsites are requested. Neither telephone applications nor those postmarked prior to the first day allowed by law will be accepted.

Of a total of 5,188 campsites located on 29 state properties, 1,961 are set aside for reservations. The remaining 3,227 are available on a first come-first served basis.

For information on specific properties, procedures and regulations, see the Campsite Reservation Application form or contact the Department of Natural Resources, Bureau of Parks and Recreation, Box 7921, Madison, 53707.

Coming attractions . . .

January-February:

***Columbia County recycling
***Wisconsin iceboats — fastest of the fast
***Thoreau in Wisconsin
***New-style wood-duck houses
***Toxic air
***Woodcutting for fun and fuel

The Delavan Founder's Oak

One of Wisconsin's early pioneers, who kept a daily journal, recorded in it that on the night of July 2, 1836, he slept under a large bur oak tree. At the time he was on an exploring trip in what became Walworth County. A few days later this man, Samuel Faulkner Phoenix, established a sawmill on Lake Delavan and founded the city of the same name. The next year Phoenix, a New Yorker, brought his family back to Wisconsin. He died here at the age of 42 in 1840.

The tree under which he slept is now estimated to be 400 to 410 years old. It was a favorite roosting place for passenger pigeons from 1830 until 1870 when the birds became extinct. Now 10 feet 4-1/2 inches in circumference, its symmetrical branches extend over a circle 85 to 90 feet in diameter. Because of its huge size, spread and symmetry, it dominates the park-like grounds (next to 509 North Terrace Street) and its fellow conifers and ornamental with kingly majesty.

Famous Apple Trees

Johnny Appleseed probably never visited Wisconsin. But since apple seeds were easily carried in a small bag, many early settlers brought them to the state and planted them on their homesteads. In 1936 the *Wisconsin Agriculturist and Farmer* asked its readers to send in nominations for the oldest apple tree. Fruit trees do not have a particularly long lifespan, and 60 years of age is considered hoary. Some remarkably long-lived trees were reported, however.

A man in Racine wrote that several trees planted in a small orchard on his land in 1844 were still bearing fruit after 92 years. A West Allis correspondent reported trees 86 years old and others told of trees 54 years old or older.

Mark Nachtwey, from Maribel, recalled that his mother, the first white woman married in that area, planted a small orchard from apple seeds in 1842. One tree, a crab, was left, still bearing fruit in 1936, 94 years later. The tree stood at the east end of the Town of De Pere in Brown County, eight miles east of the city of De Pere.

It was not until 1891 that the Wisconsin Horticultural Society, 20 years after its founding, first planted trial apple orchards comprising 56 varieties. Most of the early varieties are no longer grown but two are still popular. Northwestern Greening, originated near Iola in Waupaca County in 1872, is favored for its uniform size and adaptability for freezing and canning. The Wolf River variety — described as "large, red, tender and of good flavor" — appeared in 1875 and was mentioned in the Wisconsin Horticultural Society Annual Report.

In southwestern Wisconsin, eight or 10 apple growers along the Kickapoo River, a good apple growing area, exhibited their fruit for the first time at a Wisconsin State Fair in 1905. Gays Mills is famous today as the center of more than 1,200 acres of apple trees.

Bayfield also saw early beginnings of the apple industry. Its port was accessible by boat so transportation to markets was no problem even before the railroad came in 1883. The Wealthy variety, and more recently the McIntosh, have been widely grown on the Bayfield Peninsula, the northernmost commercial fruit-growing area in the United States. In Door County, too, early horticulturists discovered the thumb extending into Green Bay had a climate remarkably suited to growing fruit, and commercial apple orchards were planted, as well as cherries and plums, in the last decade of the 19th century.

The weather along Lake Michigan from Sheboygan to Kenosha is also clement enough for fruit trees. Some families in this part of the state have been growing apples for five generations

Delavan Founder's Oak. Photo by R. D. Durbin.

The Rhodesdale Bald Cypress, Kenosha County

A bald cypress, a tree normally found in the semi-tropics, has achieved record size in Wisconsin because of a man's penchant for the unusual. Over 100 years old, it still stands in the yard of the family farm in Kenosha County. Phil Sander, a conservationist and naturalist, rediscovered the tree and ferreted out the story.

Clarence Rhodes, who with his brother Frank owned the farm until it was taken over by the Bong Air Base, said his grandfather, John Rhodes, planted the tree near the house, along with at least 14 other unusual species of trees, because he liked unusual things. The tree produces round cones instead of oblong ones.

John Rhodes, whose father Abraham had bought the land for $1.25 an acre back in the 1840s after sailing to the United States from Liverpool, England, obtained the tree when he visited his daughter, Mary Hoyt, in Estherwood, Louisiana. Possibly the tree symbolized the healing over of the rift that developed when his daughter married young Hoyt, contrary to her parents' wishes.

The tree, which now stands over 60 feet tall and measures 10 feet 9 inches in circumference, is the largest of its species in the state. Typically, strange nubbins, called knees, shoot up from the roots of cypress trees. It is recorded by John's son, Clarence, that the knees were a nuisance and had to be continually cut away so the lawn could be mowed.

The tree revealed its preference for warmer climes by audibly suffering through the cold Wisconsin winters. The Rrhodes family, inside the farmhouse on nights of bitter cold, would often hear the tree give a mighty crack. In the morning they would find a crevice in the trunk big enough to put a mittened hand in. The cracks healed over, though, forming protrusions on the trunk, and the tree lived on.

Cypress trees are known for their ability to attain a singular age, and for their importance in history and in the Bible. Perhaps those were the associations that appealed to John Rhodes when he brought the tree back from the south and planted it on his farm. Four generations lived there. The bald cypress and its unusual fellow trees, including a white ash, an Austrian pine, and a ginkgo, are now part of the Bong Recreation Area.

Indian Trail Marker Trees

Its hard to imagine Wisconsin, a tourist state, without its ubiquitous highway signs of every shape, size and description. But even early peoples living in the wilderness needed help to get where they were going. Indian marker trees were their roadsigns.

Trees marked trails and pointed out river fords, burial grounds and other places of interest just as surely as the metal or plastic signs of today. An article in the *Wisconsin Archaeologist* in 1965 by Phil Sander, a naturalist and conservationist, explains that most permanent markers were made from selected living trees, usually hardwoods such as oak, hickory, maple and elm, because of their flexibility and strength.

Sometimes the tip of the sapling was buried in the ground. Or the tip was tied to a stake by twisted vines or strips of hide. As the tree continued to grow the tip would die off and the trunk would assume a bent position. Usually a new upright trunk formed from the old tip. As the tree matured it took shape as a "living road sign that could be easily recognized and would last the life of the tree."

Naturalist Phil Sander and the Twin Lakes Indian Trail Marker Tree.

One such trail tree stands at Twin Lakes in Kenosha County near the top of a high ridge overlooking the northeast bay of the lower lake. Oriented south, it points to the land bridge separating the two lakes and the site of an old village and cemetery. The tree is probably 300 years old.

Sander discovered another trail tree in Adams County in 1977. Located in Springville Township, it is a few miles east of the Wisconsin River bridge on the south side of Highway 82, in a picnic area. It "points" west.

At Green lake, on the Victor Lawson estate, bent trees indicated the old trail passing through those grounds.

Two fine examples of Indian-bent trees marking trails may be seen in the Horicon Marsh area. One, at the west end of Horicon, is a large oak with a massive branch bent to point the way. Just west of Highway 28 on a farm is a large bur oak, possibly upwards of 200 years old, with interesting branches twisted to indicate direction.

Southeast of Brodhead, near reconstructed Highway 81 alongside Skinner Road, stands an Indian marker tree—a white oak—that dates back to pre-settlement days. Like most marker trees, the old bent shape indicates that the tip of the tree was tied at ground level and a new terminal shoot grew upward at right angles to it. This tree helped Indian runners mark the way from the Great Lakes to the Mississippi River, a trail that is now followed by cars on Highway 81 between Beloit and Monroe. Myron Olson, who grew up near Skinner Road, recalls playing on the marker tree as a youngster. His grandfather operated a blacksmith shop nearby. Another marker tree at Bluff View Park came down some years ago when a new road went through.

A still-living trail marker is an oak in the yard of the Walter Atwood home in Indian Hills, Madison, just a short distance from the golf course at the Blackhawk Country Club. It marks the trail Black Hawk and his followers used to flee toward the Wisconsin River in 1832. A trail tree also once stood in what was then called Mercer's Addition in Madison (near West High School) . A hickory, it marked the crossing of two trails, and its branches, rather than its trunk, were twisted to point in four directions.

Another vanished tree was an Indian-carved beech that used to stand near the corner of Wells and Thirteenth Streets in Milwaukee. Into the trunk was cut an Indian figure with a bow in one hand and an arrow in the other. The arrow pointed to the Menominee River.

The Lunde Chestnut Trees, Trempealeau County

The American chestnut — undoubtedly one of the nation's most loved species of tree, enhanced by folklore, nostalgia and literary allusion — is commonly thought to be as extinct as the dodo because of the chestnut blight introduced from Asia in the very early years of this century.

It is true that most of the country's chestnut stands, certainly those in the eastern part of the country, were completely wiped out before 1940. This total destruction of a native tree species was something never witnessed before that time. But contrary to what most folks believe, chestnuts are alive and well and living in Wisconsin. They make up a significant portion of the genetically pure American chestnuts left in the world.

A large grove of them, many nearing the hundred-year-old mark, is thriving in western Wisconsin, on the farm of Einar Lunde, three and a half miles east of Trempealeau. The largest one — holder of the state record — is 10 feet 7 inches in circumference. There are also small groves of fruiting chestnut trees in Green Lake and Sauk counties and single chestnut trees are scattered from Kenosha to Bayfield.

These Wisconsin trees are outside the chestnut's native zone of 20 eastern states. During the years of the blight's scourge, they were protected by the effective barrier of 500 miles of open country. Prevailing westerly winds also helped keep the fast-acting and fatal fungus, for which no cure is presently known, out of Wisconsin.

The trees on Einar Lunde's farm provide more than just esthetic enjoyment, though the sight of them covered with snowy-white catkins around the first of July is a thrilling one. Their copious harvest of nuts is gathered both for delicious eating and for use by forest researchers in efforts to breed a blight-resistant chestnut.

Chestnut trees have received frequent mention in the annals of Wisconsin history. Increase Lapham, the state's first scientist, recommended over a hundred years ago that chestnuts be planted because of the value of their nuts, favored by man and beast alike. There is evidence that early settlers brought the chestnut to Wisconsin because they cherished not only its fruit and the beauty of its flowers, but also its all-round usefulness for fenceposts, shingles, poles, ties and charcoal.

In 1859, it is recorded that a farmer named Jacob Lowe from Columbia County won a prize from the State Historical Society for the first chestnuts produced by his young trees.

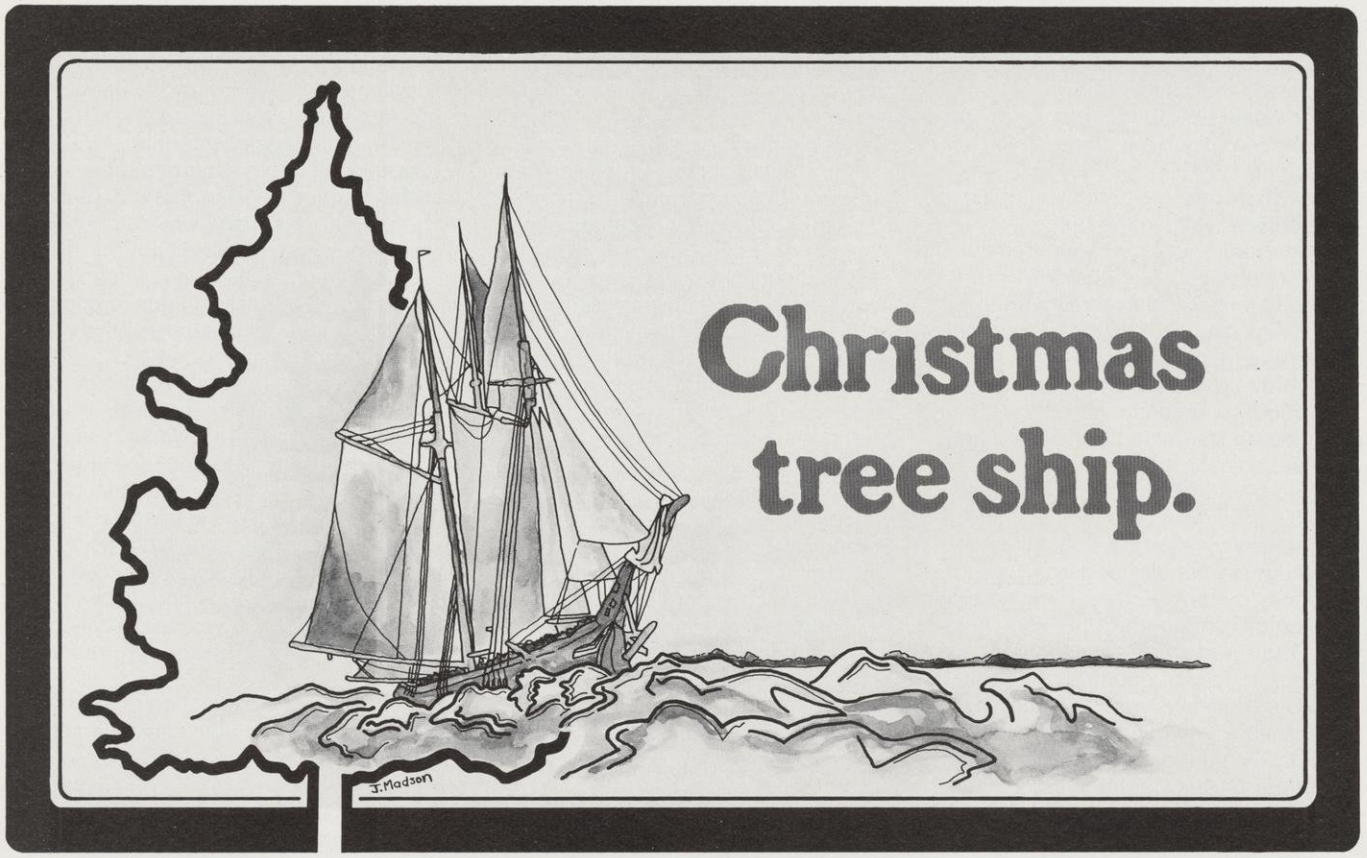


Illustration by Jeff Madson.

DWIGHT BOYER, GREAT LAKES AUTHOR

A note from the Captain of the schooner *Rouse Simmons* was found in a bottle on the beach at Sheboygan in November of 1913. It said: "Friday...everybody goodbye. I guess we are all through. During the night the small boat was washed overboard. Leaking bad. Ingvald and Steve lost too. God help us."
Herman Schunemann

There is an old saying that sailors are not good businessmen, otherwise they wouldn't be sailors. Captain Herman Schunemann was an exception to the rule. In an age when steam and propellers were rapidly relegating sailing craft to boneyards, he always managed to keep [his] old schooner [the *Rouse Simmons*] on the move and making a profit. A deckload of boxed apples from Green Bay to Chicago, fence posts from Manistique to Port Huron, shingles from St. Ignace to Detroit, or salt from Amherstburg to Milwaukee, it made little difference to the Captain so long as the ship earned a few honest dollars. Her canvas was old and patched, her cordage frayed and knotted and her galley perpetually understocked, but the valiant old three-sticker sailed on long after newer and bigger schooners were snaked into lonely and polluted backwaters to rot away.

The Captain's Christmas-tree haul was a seasonable but highly remunerative operation typical of his enterprising spirit. It was a choice plum to be plucked before ice and snow ended the freshwater shipping season.

When big timber operators moved westward after denuding the Upper Peninsula of choice timber, they left behind a gold mine in five, six, seven and eight-foot stands of second-growth pine and balsam. Quick to see the possibilities, Captain Schunemann set about turning nature's bounty into ready cash. Low water-transportation costs and available cheap labor to cut, bundle and haul the trees to his dock enabled him to undersell Wisconsin and Minnesota growers obliged to ship their trees to Chicago by rail.

The 1913 season was a disastrous one for Great Lakes vessel operators. From November 8 to 12, the worst storm in a century had mauled the shipping lanes. Ten big freighters disappeared with all hands, and a score more lay broken and stranded on the beaches. All along the lakes, shorelines were littered with masts, lifeboats, spars, bodies and ruined cargo. Four hundred seamen perished in those four terrible days and lake cities were buried under record snowfalls.

It was entirely in keeping with the shrewd Captain's character that he was able to turn these excesses of nature to his own advantage. Deep snow in the tree farms made it impossible for men and horse-drawn rigs to reach cutting plots. Frantic wholesalers in Chicago were already clamoring for trees, and only Herman Schunemann was in a position to deliver.

So while other companies were still totaling their losses in ships and men, the Captain had every available woodsman in the bush cutting trees. A steady stream of haulers dragged cut trees down to trails, and horse-drawn bobsleds brought towering loads to Schunemann's dock at Thompson Harbor, just south and west of Manistique.

Part of the schooner's crew bundled trees and tossed them into the hold, where others jammed them into every available inch of space from keel to deck beams. From bow to stern, the aged *Rouse Simmons* was crammed with fragrant cargo.

When the hatch planking was lashed down and most of the laborers dismissed, she was well down to the winter loading-line but carried her cargo with the trim dignity and grace of a well-built ship.

But the woodsmen had worked fast and efficiently. When the hatch tarpaulins were battened down, hundreds of trees were still piled on the dock, worth nothing there but representing a tidy fortune in Chicago. The thrifty Captain must have mentally calculated their marketable value, for just as the cook was about to announce dinner he rounded up first mate Charles Nelson.

"Get some of the men back," he ordered. "We're going to take a deck load!"

The weary sailors and dock hands relayed more bundles aboard. Row upon row, they pyramided trees the length of the deck. From bowsprit to stern cabin, the *Rouse Simmons* sagged under her burden. So little freeboard was left that her outer bobstays were submerged. They finished trimming her by lantern light, lashing the deck load as best they could. Earlier the Captain had contemplated two trips because of the unique market conditions, but the extremely cold weather and likelihood of early freeze-up indicated only one would be possible. But that one would probably be the most profitable he had ever undertaken!

At noon on November 25, in the face of a rising gale that sent other vessels beating frantically for shelter, the *Rouse Simmons* spread her patchwork canvas to hungry winds and swung on an east-southeast tack into surging rollers on Lake Michigan. Split by downward lunges of her martingale and bobstays, mounting green seas on the open lake lathered up over her bow to spend their foaming fury in the matted bulk of Christmas trees stacked under her fore-sail boom.

The steam tug *Burger* with the schooner *Dutch Boy* in tow had safely rounded Seul Choix Point and was rolling rails under as she neared the shelter of Manistique when Dennis Gallagher, her master, first sighted the downbound schooner off his bow. His excited hammering on the pilothouse floor quickly brought the rest of his crew to his side.

"Mother of God, look!" he screamed above the howling wind. "That crazy Dutchman's going out in this, an' him with every inch of canvas up!"

Unbelievingly, they peered out port windows between sheets of water that shot over the tug's bow to sluice the upper rails and pilothouse glass. Awestruck by the sight of the gray-sailed old schooner butting into the rising seas, they shook their heads and went wordlessly back to the steamy, clanking belly of the tug, each convinced that Captain Schunemann had taken leave of his senses!

Keeping the vessel headed east-southeast just long enough to be certain of clearing Wiggins Reef and shoals off Point aux Barques, the Captain then swung her west-southwest for Chicago.

The mounting gale, blowing west-southwest, whistled over Wisconsin, gathered new strength over the tossing wastes of Green Bay and thundered on over Lake Michigan. Rolling almost undeterred through passages above St. Martin Island and Rock Island, the giant seas caught the *Rouse Simmons* on her starboard beam as she left quieter waters in the lee of Point Detour and Summer Island.

Caught now in the stunning force of winds that screeched onward at 60 miles per hour, the schooner heeled far over to port as the storm-taut canvas pulled at her topmasts. Protesting, her ribs and deadwood groaned as the weight of the seas fell on her weathered deck planking and tore at her bulwarks. White water covered her port rail almost continuously while seas boarding over the bow hammered unceasingly at her lashed deck cargo.

Huddled in the small stern cabin and lower deck bunks while Captain Schunemann fought the wheel, 16 crewmen listened to the wild, discordant, shrieking gale as it played an agonizing symphony in the time-worn rigging up top.

Above the gurgling rush of the seas they heard the brash strumming of the gale laboring at the big sticks. Blocks, stays, wire, rope and chain each gave out its own peculiar snarling chant audible above the anvil chorus of the mast hoops, each clanking and chattering a different eerie dirge against masts and booms.

Below them they heard the tortured moaning of the mizzenmast laboring in her oaken steps. Forward in the hull, the fragrant pine and balsam cargo deadened the sound of joints working and whining in chorus.

Sometime during the night, as some of the sailors were checking lashings, a tremendous sea swept over the ship. With a sodden, scraping rush, many bundled trees went over the port side, taking two sailors and the small boat for good measure.

Freed of some of her burden, the *Rouse Simmons* shook like a punch-drunk fighter and waded into the rearing greenbacks off Porte Des Morts.

Lashed together near the wheel, its violent thrashings now claiming their combined efforts, Captain Schunemann and first mate Nelson saw a glimmer of hope in the situation.

"We might save her now," the Captain shouted. "Give me a little daylight and, by Godfrey, I'll get her into shelter at Bailey's Harbor!"

There are some who believe the Captain might have made the harbor safely but for a sly caprice of Mother Nature. Just at dawn, when first ghostly light would have enabled the Captain to get his bearings, the wind suddenly swung into the east and now brought with it a furious snowstorm and a breath-taking drop in temperature.

The seas still swept over the gallant old schooner, but now when they rolled onward they left a thin, white coating of ice, a sheath that thickened with each succeeding wave. By eight o'clock the *Rouse Simmons* was helpless. Her torn sails and lower rigging were a rigid formation of ice, her white-rimmed masts jutting up like frosted church spires. Huge knobs of ice grew alarmingly on each tackle block, cleat, lanyard and chock.

Held down by mounting tons of ice built up on her bobstay chains, martingale rigging and bowsprit, her bow sloughed into the surging green hills with a beaten, almost-subservient spirit. Water cascading into her hold through battered hatch covers fell upon the bundled trees, and soon water and cargo were turned into solid ice.

At noon on the 26th, during a temporary lull in the snowstorm, surfmen of the old United States Lifesaving Service spotted the *Rouse Simmons* from the station tower at Sturgeon Bay. Flying distress signals, she was low in the water but apparently being driven swiftly along by the gale.

Ringing the alarm bell, the surfman ran to the tower steps and shouted down, "Three-masted schooner in distress off the ship canal!"

After a hurried conference between officers and men, they decided it would be impossible to catch the storm-driven ship with their small surfboat. The news was telephoned to the Kewaunee station, some 25 miles to the south. There, lifesavers immediately launched a large surfboat and rowed outward, attempting to intercept the distressed schooner.

For two hours they searched the heaving seas without success. Suddenly there came another lull in the storm, and someone cried, "There she is!"

A sorry sight she was. The remnants of her topsails flapped furiously like a forgotten flag on a courthouse steeple and her cordage swung in frozen knots. The hull — burdened down by hundreds of tons of ice — had barely enough freeboard to keep her afloat and each rushing comber took her down still farther.

Desperately the lifesavers pulled

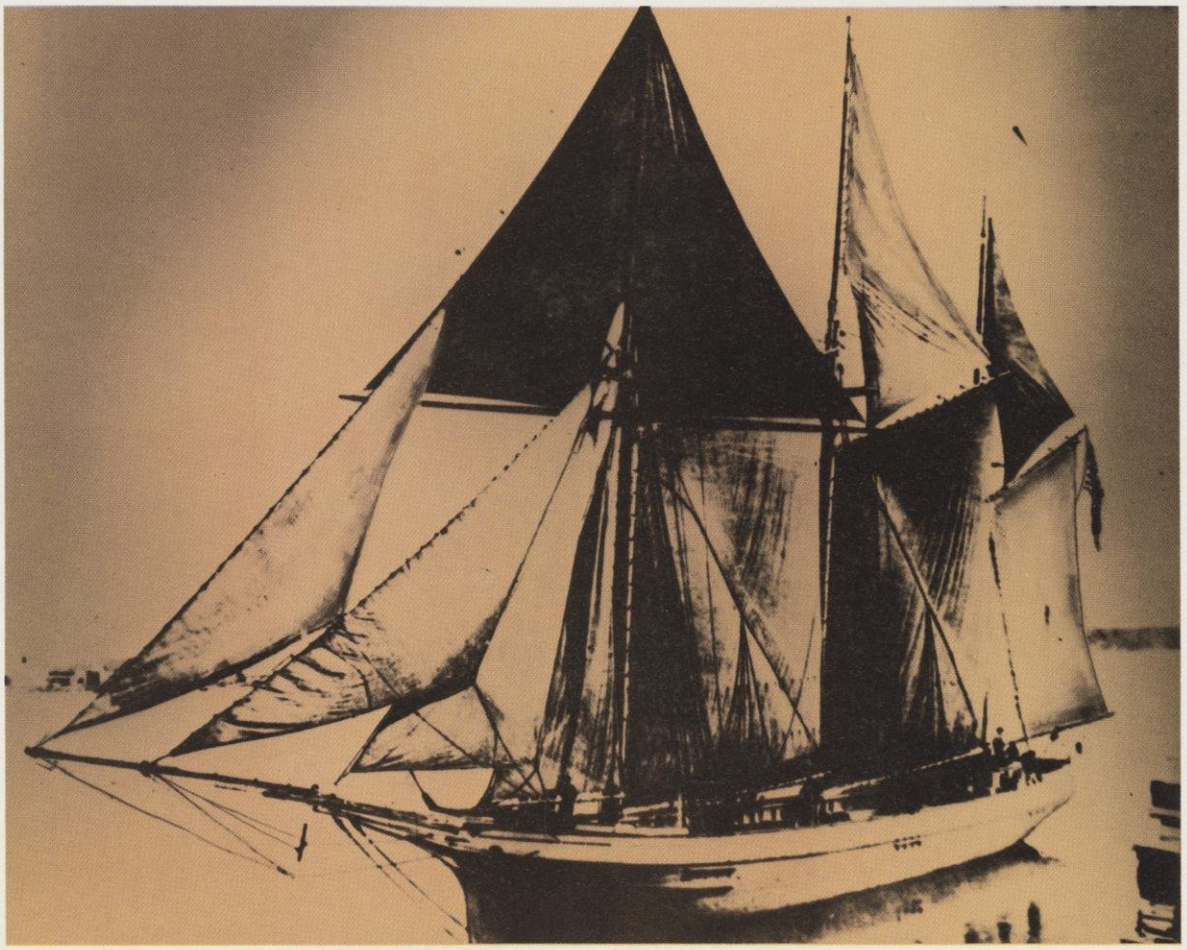
toward her, but before they could cover a fraction of the distance the smothering blanket of snow returned and the schooner vanished from sight like a phantom derelict.

No living person ever saw the *Rouse Simmons* again.

There was a shortage of Christmas trees in Chicago that year, but not along the Wisconsin shore. On December 12 and frequently thereafter, commercial fishermen from Two Rivers Point reported bitterly that they found their nets clogged with Christmas trees — hundreds of them!

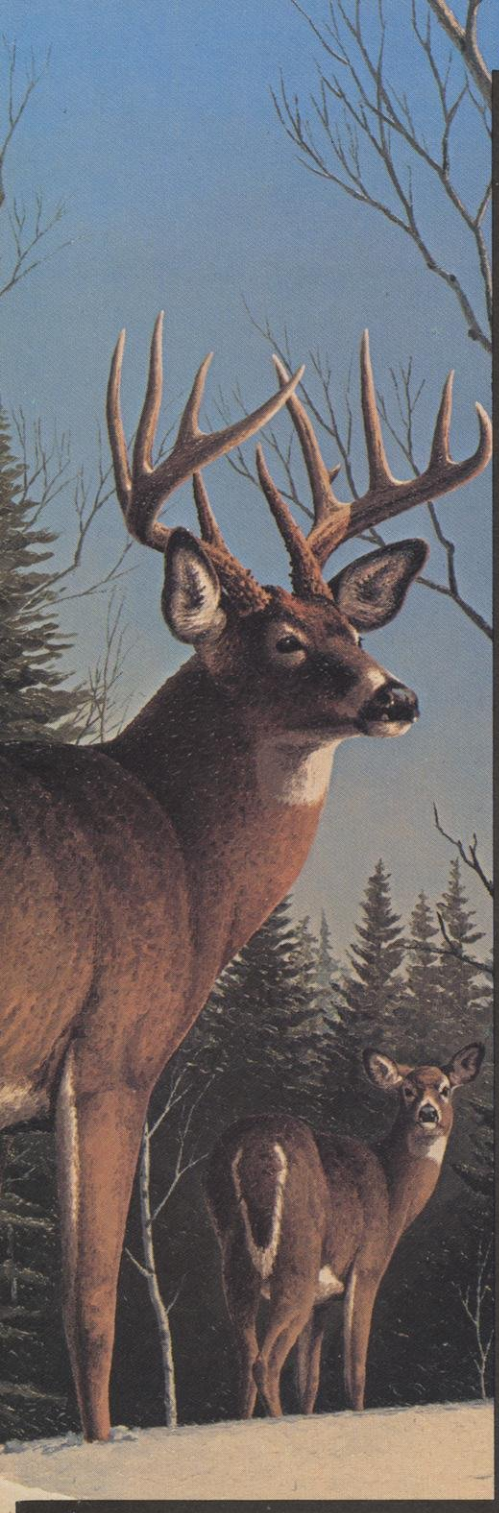
From *Great Stories of the Great Lakes* by Dwight Boyer. Copyright 1966, Dodd, Mead and Co.; 79 Madison Ave., New York, N.Y. 10016.

Captain Schunemann's friend, Pegleg Claude Winter, leader of a wayward work force of waterfront derelicts waited at the dock on the morning of November 27, 1913. But the *Rouse Simmons* never arrived. By then she already lay on the bottom of Lake Michigan off the Kewaunee Harbor. Illustration by Mardelle Ayres.



Rouse Simmons, the Christmas Tree Ship.

Photo courtesy of the Manitowoc Maritime Museum.



"Someone has said that we are all islanders shouting lies at each other across oceans of misunderstanding. He might very well have been speaking of farmers and city sportsmen in nearly any settled agricultural community. In old settled communities, the farmer and the sportsman are at war, great oceans of misunderstanding roll between them and lies are hurled back and forth like shells from battleships."
***Outdoor Magazine*, 1901.**

Hunter-Landowner

Hunters and landowners in Wisconsin are not natural antagonists. They are really quite close. Thousands of landowners hunt and vice versa! But like any close relationship, irritations arise and can sometimes rub pretty raw. For many years they've involved crowds, property damage and ethics and for many years proposed solutions have gone round and round. Today, however, some real solutions may be at hand. Hunters recognize that a limited amount of wildlife lives on private land. At the same time they see their own numbers growing while acres open to hunting shrink.

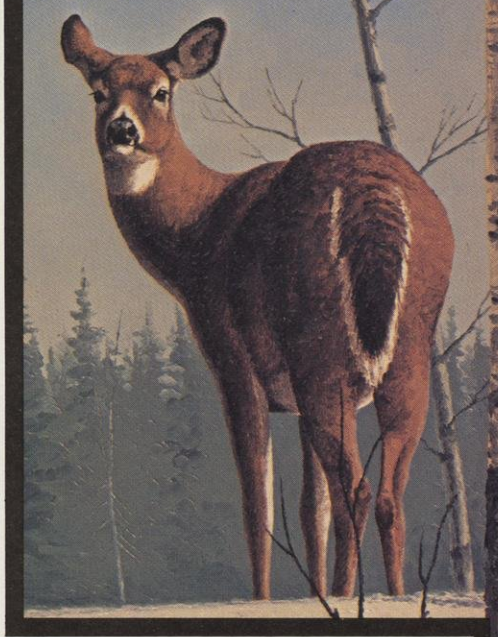
To deal with the problem, the Natural Resources Board has set up a Hunter-Landowner Steering Council. It grew out of a "Deer Hunting and the Landowner Conference" at UW-Stevens Point last spring. Landowners, sportsmen and government personnel were equally represented.

Together they came up with a number of possible solutions to ease the problems and encourage property owners to leave their land open for recreation.

Right now, they are all strictly ideas to chew on, but conference participants have agreed on the following objectives:

- Trespass laws in Wisconsin should be decriminalized so that they can be enforced as a citation system, like traffic tickets.
- Liability should be legally reduced if a landowner authorizes recreational use of his property.
- DNR should expand and improve its hunter education program.
- Hunter education should be required for all hunters.
- All land should be protected from trespass without a posting requirement.
- DNR wardens should be empowered to enforce trespass laws.
- Direct fee hunting on private land should be a private transaction between the hunter and the landowner. The state should not be involved.
- Indirect fees should be pursued by the state through additional hunting fees (to lease land for hunting).
- DNR should improve public relations between the landowner and the hunter.
- DNR should provide assistance to landowners for wildlife habitat development.
- There should be a system of landowner preference for hunters choice permits.
- Written permissions should be required for all hunters to hunt on private lands.
- Legislation to restore wildlife crop damage payment to landowners should be explored and developed.

The Natural Resources Board's Hunter-Landowner Steering Council is charged with carrying out these broadly-stated objectives. Already the Council has endorsed in principle the concept of changing the trespass law and reducing legal liability for landowners who permit recreational use of their property.

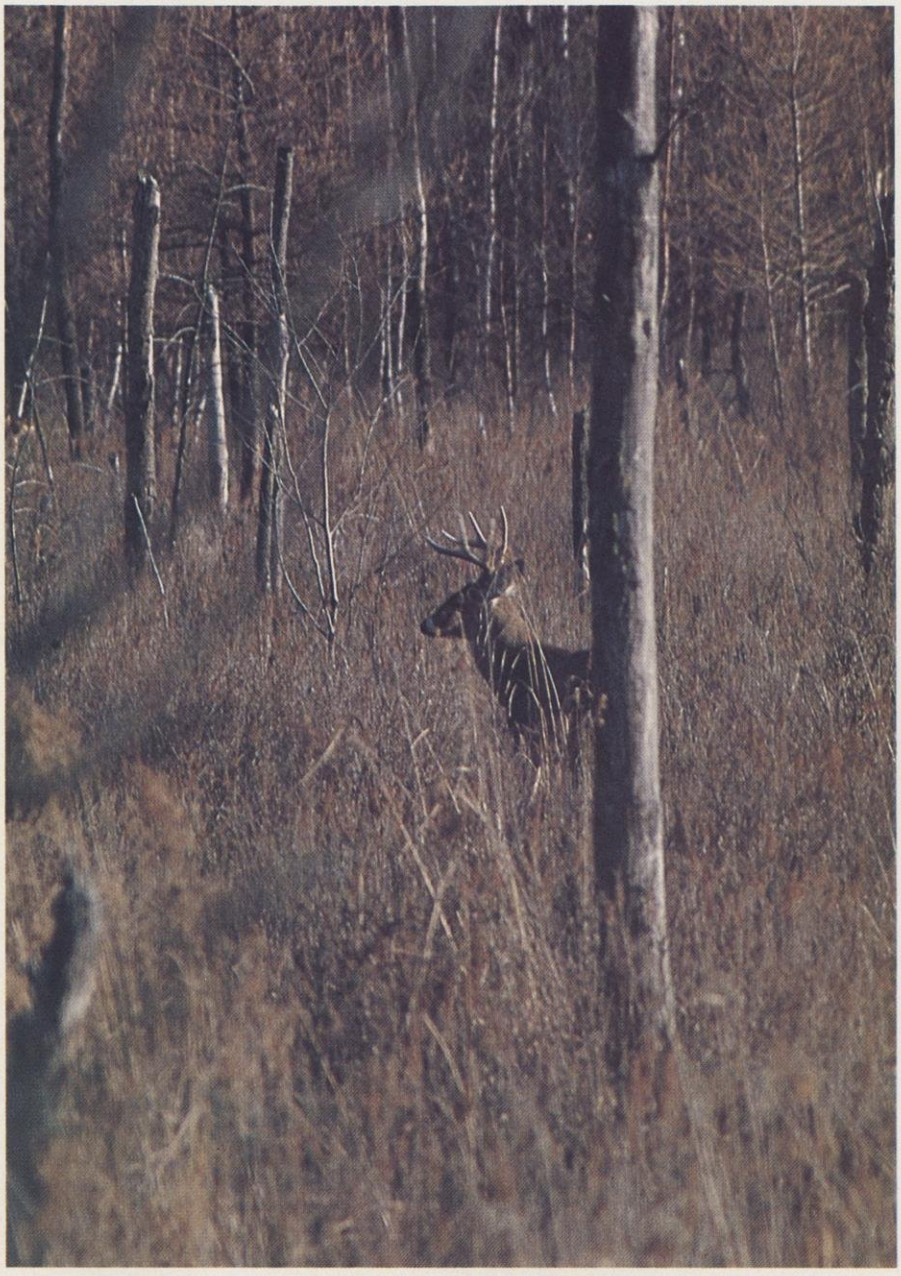


The committee is made up of 10 members. They are Chairman William J. Horvath, Stevens Point, Regional Representative, National Association of Conservation Districts; Otto Christopherson, Wisconsin Dells, dairy farmer and town board member; Anne Fancher, Crivitz, Secretary, Wisconsin Bowhunters; Representative David Helbach, (D) Stevens Point; Doug Johnson, Milwaukee, past president of the Wisconsin Wildlife Federation; Daniel P. Meyer, Wisconsin Rapids, Director of Public Affairs, Consolidated Papers, Inc. and past Vice-Chairman of the Governor's Council on Forest Productivity; Francis W. Murphy, Portage, Chairman, Wisconsin Conservation Congress; John Piechowski, Red Granite, farmer and gunshop owner; Allen Riese, Oregon, grain farmer; and Representative Tommy G. Thompson, (R) Elroy.

Sandhill can grow big bucks.

DNR wildlife managers had a good chunk of deer range. For a couple years, they carefully controlled season length, hunting pressure and the buck-doe-fawn bag. Pretty soon there were a lot of big trophy bucks. Hunters loved it.

JOHN F. KUBISIAK, DNR research project leader, Sandhill Wildlife Area



More than 65% of the bucks taken at Sandhill carried eight-point racks or larger. Nearly a third weighed at least 160 pounds. Photo by author.

With just the right combination of open and closed seasons, Wisconsin's central sand counties can produce the kind of big trophy bucks hunters dream about. That fact came on strong in the popular experimental hunt at the Sandhill Wildlife Area last year and dispels the myth that the sand counties can't produce big deer.

On the first day of a special three-day season, 120 hunters took 56 deer — a 47% success rate. There were 44 bucks, 40 with forked horns. One was the largest deer ever taken at Sandhill, an 11-pointer that weighed 200 pounds. Other records showed 29 racks with eight points or more and 14 animals that weighed in at over 160 pounds.

Needless to say, a management plan that can produce so many bucks of this stature has aroused plenty of interest. It's expected that the future will bring demands to expand the experiment to other localities.

Sandhill is located in central Wisconsin near Babcock. It comprises 14-1/2 square miles of prime deer range enclosed by a deer-proof fence. On the first day of the hunt last year, animals of any age or sex were legal targets. In the remaining two days, bag was restricted to antlerless deer only as part of the management strategy to prevent an over-harvest of adult bucks. The hunt was held one week prior to the regular 9-day gun deer season.

Hunters were chosen in a random drawing and a phenomenal 4,400 individuals applied for the 125 permits issued on the first day. Another 225 were drawn for the antlerless hunt that took place on the second day. On the third it was first-come, first-serve. Applicants sent in from throughout the state. Some 46% were from more than 100 miles away, compared to 29% within 50 miles. About 51% of the permits actually issued went to people who drove more than 100 miles. Two came from Pennsylvania.

The 280 hunters who participated took 90 deer in three days, including 44

◀Painting by artist Gary Sorrels, Courtesy of Wild Wings, Lake City, MN 55041

On the first day of the special three-day Sandhill season, hunters were allowed to shoot antlered bucks for the first time in three years. The result of this delayed harvest was some splendid bucks like this one. Photo by Joe Haug.

Restricting the hunt to antlerless deer on the second and third days allows a young buck like this spike to grow to maximum-size as a four or five-year-old. Photo by author.

adult bucks, 28 adult does and 18 fawns.

The number of deer killed but not recovered amounted to only 9% of total season mortality. Included were four adult bucks, two adult does and three fawns. In addition, three adult bucks were shot illegally and four fawns were shot and left untagged.

Most hunters expressed a high degree of satisfaction. They saw deer, particularly adult bucks, or they had shooting opportunities. The first day, 79% saw one or more bucks and 51% saw one or more the last two days. They enjoyed the natural surroundings and appreciated the lack of competition. There were never more than 10 hunters per square mile and crowding was minimized. Hunters were distributed throughout four compartments which cover three to four square miles each.

The profile to application questions revealed through answers showed 60% of the hunters were between 21 and 40 and 14% were under 21. Only 5% of those applying were over 60 years old. The group had a broad range of opinions as to what constituted a "trophy" deer. For 78%, a buck bearing a six-point rack or better would qualify, while for 59% it took eight or more points and

The author weighs in a Sandhill trophy.
Photo by Don Johnson.

36% preferred 10. The remainder suggested various combinations, including bucks with antler spreads exceeding 20 inches, or bucks weighing more than 200 pounds. Some considered any buck or any deer a trophy. Other data showed 68% were applying to hunt Sandhill for the first time while 22% had hunted deer there before. Only 8% had bagged deer during previous Sandhill hunts. Sixty-nine percent planned to use a center-fire rifle, 11% a muzzle-loader and 9% shotguns.

The idea for trophy buck management at Sandhill was put together in 1979 by a special committee determined to refute the area's reputation for producing small deer and bucks with inferior racks. The committee knew that in the central Wisconsin country dominated by aspen, oak and jack pine, adult bucks are harvested at a high rate and few survive beyond their second year. They don't live long enough to become prime-aged four- to five-year-olds capable of developing large body size and exceptional racks. But the committee designed a management plan to let this happen. The group recommended a conservative harvest of only antlerless deer in both 1979 and '80. This increased the herd and protected adult bucks in preparation for the 1981 hunt.

Trophy-buck management followed two special either-sex muzzle-loader hunts in 1977 and '78. Some very respectable deer were taken then, verifying Sandhill's big buck-producing capability. Of 119 adult bucks taken by muzzle-loaders, 58 had racks with eight points or more, while 20 exceeded 170 pounds, field dressed, and six were in the 190-pound-plus class. One of the largest weighed 193 pounds and had a 13-point rack and another 10-pointer weighed 195 pounds. These deer grew to trophy-size after four years of closed seasons at Sandhill.

The resident herd was completely removed in 1972. But deer reentered after beaver made a hole in the fence. Occasional unlocked gates let in others and by the fall of 1977 the herd had increased to more than 350. Since then, fall deer populations have reached 425 to 450 animals.

Because trophy buck management at Sandhill has been so successful and because hunters have endorsed it, the program will be continued. A hunt similar to 1981 will be held this year. In subsequent years, there will be a graduated harvest schedule designed to maintain a better-than-average number of trophy bucks in the herd. And if all goes well, similar management will be expanded to other localities.

Lost hunters! *Continued from page* 5

found him." He said the young man's mother, worried and fearing for her son's safety, waited the entire night at the command post. It was a tearful moment when her son was found.

Neither hunter suffered ill effects from their brief stay in the wild, authorities say. To this day, Erickson has not met either man. Both would just as soon forget that the incidents happened. Bressette's mother, however, sent a special note of thanks to all those who helped rescue her son.

Later the following month, Sheriff Johnson presented Erickson with a special law enforcement "Certificate of Recognition" for his outstanding work in the search.

Erickson is a veteran of 1,000 hours of professional flight time and 25 search and rescue missions. A retired Navy flyer with 40 year's experience in the air, like most DNR pilots he practices search and rescue techniques while flying hours and hours of routine night missions, checking for fish and game violators.

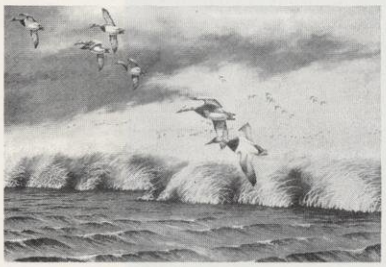
Also like other DNR pilots, he's been trained in the skills that make up successful search and rescue. He gets a good physical and psychological description of the lost hunter, keeps alert for the tiniest light or slightest ground movement and flies transects and search patterns. He also uses his bullhorn and landing lights to direct searchers or victims on the ground.

Erickson says that, in many ways, night rescues are easier than daytime ones, when other hunters in the same general area can confuse the search for one who is lost. Even though he believes his airplane is an extremely useful search tool, he credits good cooperation between state and local law enforcement officials on the ground for much of the machine's success.

Each year thousands of experienced and inexperienced hunters go afield. When some fail to return home on time, air searches prove highly valuable.

Two hunters in northern Wisconsin will vouch for that.

The Readers Write...



You slipped up in your September-October issue. Prints from two paintings, "Approaching Storm" by John Peterson and "Into the Wind" by Gregory C. Caron are available only from Northwind Publications. The printhouse to which you attributed them doesn't handle either artist.

WAYNE KRAUSE, Northwind Publications, P.O. Box 249, La Crosse, WI 54602

You published a letter about farm owners and the damage done by deer to their crops. But, what about the damage done to deer by a lot of these farmers' dogs, which are allowed to run loose all over other people's property?

If you live in the city and own a dog, it must be tied and have a collar, license and rabies tag. But when you move out in the country and buy 40 acres on which to live and enjoy wildlife, every dog for miles around comes onto your land. The dogs rarely have a collar or any means of identification on them.

Even if you catch a dog in the act of running down deer, you can't shoot it for fear of being sued by its owner. You are supposed to call a warden and have him take care of the dog. But by the time a warden gets there the dog is miles away.

Don't think I am a dog hater. I have a dog and love her. But I do not expect my neighbors to put up with my dog running on their land. And by the way, my dog does have a collar and tags — even though she never leaves our property.

What can a person do to get legislation passed to control these dogs? If owners don't care enough about their dogs to put a collar and identification on them, then they shouldn't have dogs at all. Dogs that run wild are not to blame — the people who own them are.

MRS. RUTH WILLIAMSON, Coleman

Wardens report that dogs chasing deer are one of the most frustrating of all calls to answer, for the very reasons you mention. By the time they get to the scene the dogs are long-gone, perhaps leaving only a bloody, disemboweled but still living deer to deal with. Yet rarely is the problem severe enough or the pack of domestic-dogs-gone-wild large enough to merit mounting an expensive full-scale attack against them.

If you think the situation merits legal attention, contact your local legislator or Conservation Congress member. They might be willing to sponsor a new law or rule dealing with the problem.

Just a note to say that *Wisconsin Natural Resources* magazine is really great, the articles super. Keep up the good work.

PAUL PETROSKI, JR., Glidden

"Who's a hunter?" in "Hunter's Almanac '82" (September-October), really raised my back hairs!

You stated that "in the past, many individuals — *especially nonresidents* — have taken part in hunts by spotting, tracking and driving game or handling dogs without ever actually carrying a gun or shooting anything" or buying a license.

I own a residence and several parcels of land in northern Wisconsin. Although I use my home there only a small percentage of the year, my taxes are based on full residential use. However, when I purchase my hunting and fishing licenses I'm considered a nonresident, and I must pay the nonresident price. Fine!

I have been deer hunting in Wisconsin for over 30 years. In all those years, never has a nonresident adult in our camp not possessed the proper license. True, on some occasions a father has taken his young son along to teach him the vagaries of deer hunting prior to joining us at camp for the hunt. But virtually *every* year we have seen residents, armed with one or two resident tags, invade sections of the woods we hunt — with assorted wives, girlfriends, sons, daughters, cousins and sometimes even the family dog driving deer.

I sometimes wonder how the DNR gathers information, and whether the department really has any sense of fair play.

DR. E. F. KAMINSKI, Chicago

Thanks for the reminder that Wisconsinites have no monopoly on virtue, afield or anywhere else.

I intend to move to one of nine northern Wisconsin counties: Douglas, Bayfield, Ashland, Iron, Vilas, Oneida, Forest, Florence or Marinette.

What can you tell me about poisonous or dangerous plants, insects, reptiles and animals in these counties?

RONALD DAVINROY
Belleville, Illinois

Wisconsin is home to both Massasauga and timber rattlesnakes, but there are none in any of the far northern counties you name. The state has no other poisonous or dangerous reptiles of any sort, north or south.

Probably the most-poisonous insects are common bees and wasps, which are only mildly so. Although all spiders have some sort of poison, none here are dangerous. Of course, someone allergic to a specific insect toxin could be in trouble if stung or bitten.

Better try a good field guide for information about plants.

The article written by John Beth titled "Spot and plot for trophy fish" was excellent. I have fished these streams in spring and fall but never with flies.

I would like to know a commercial source where the flies mentioned in the article can be purchased.

MARK C. VOSKUIL, Green Bay

Author John Beth says that the Babine Special is not a common fly, but that any good tackle shop catering to fly fishermen should stock or be able to order them for you. If you don't have luck elsewhere, Beth says to try Dan Bailey Flies and Tackle, Box 1019-Z, Livingston, Montana 59047.

He also says they're particularly simple to tie, once you know how. Beth himself makes an equally workable facsimile by threading or tying soft-plastic imitation salmon eggs onto a sharp hook.

The Readers Write...

Your article on hunter's choice permits shows that you think you are dealing with a really dumb public and that you can get away with anything that suits your purposes. It is true that many do not get permits because of the small number given out compared to the larger total number of applications. But some will also not be successful because of the inadequate awarding method. This should have been stated.

Only a one-year preference is being used. Those that did not get a permit in either of the past two years have no better chance of being successful this year than those that got one in 1980. Only those that got a permit in 1981 will be excluded. If this method is continued, it will be possible for a few to get a permit every other year, while some can apply every year and never be successful.

The discussion of all the people that paid fines because they lied about receiving a permit the year before is a sham. If the awarding was done as it should be, all this would be unnecessary. Those not eligible would be found in one computer pass over the applications. Those that never got one could be awarded first, followed by those with the longest elapsed time. The effort expended on finding all those who lied on the application could have been more wisely applied doing the job as it should have been in the first place.

Your readers deserve an apology. I don't buy the explanation that this is being done as the legislature specified. The legislature merely endorsed the DNR recommendation. The blame should be placed where it belongs. The situation should be corrected before the 1982 drawing.

The truth will ultimately surface. This is a fact that your bureaucratic existences will acknowledge eventually. You can't fool all of the people all of the time. Everybody will eventually know the truth about your handling of hunter choice permits.

LAWRENCE KRAK, Gilman

You're right that it's theoretically possible to keep track of who has received or not received hunter's choice permits over an infinite period of time, then award the licenses to those who go longest without getting one.

But the computer system and the input time for doing so would be horrendous — at least five times more than now being spent, according to some estimates. That cost would either have to be added onto the price of deer licenses or filched from the operating budgets of game farms, hatcheries or other wildlife management programs.

But you're wrong that the preference system was DNR's idea. The preference idea was tacked on in the legislature, not recommended by DNR. DNR had drawn up a system under which every hunter took an equal chance every year.

Here's the law: (Sec. 29.108) "the department shall give first preference in drawings to residents who applied for but were not issued permits in the preceding year, and 2nd preference to all other residents."

I just finished reading the new publication "Hunter's Almanac, 1982." This is one of the best publications I've seen produced. It is very factual, clear, easy to understand and informative. In addition, the author was able to integrate some environmental philosophy into the articles giving them both an informative and an educational purpose.

My compliments. You did an excellent job conveying complex and involved hunting information to the citizens of Wisconsin.

DANIEL O. TRAINER, Dean
College of Natural Resources
UW-Stevens Point

Your magazine deserves an outstanding award of appreciation for making the endangered and threatened plant identifications available to us. You sure do some informative work in this DNR magazine. I am proud to be a Badger — and proud of our Wisconsin as a state!

How well we protect and appreciate our living wild plants surely requires that each and every one of us be aware of the problem of destroying their habitats and environments. Too few people give a hoot these days for anything that bears resemblance to humanity and environment. Such a loss to our nation! I am thankful to each and every one who cares!

Thank you ever so much for the "flora."

JEAN TARMAN, Turtle Lake

I am writing in regard to your small article on white pelicans a few issues back. I happened to observe 11 white pelicans while muskie fishing on Silver Lake near Laona in Forest County on June 10. This was late for such a sighting and made me wonder if these great birds might be nesting in our fine state.

Needless to say, the pelicans were the highlight of a muskie-less day.

MARK J. MUSIAL, Green Bay

Like many other Americans, I have put in a wood burner to supplement my furnace. Also like many Americans I found that without a steady supply of wood I cannot use the wood heater. Of course, there are sources from which to purchase split firewood, but the cost overrides any savings gained by burning wood.

Can you supply me with a list of state lands on which a person can collect or cut dead wood for use in the home? I understand such land is available and that there is now a cost for this wood.

RICHARD LOKKEN, Beloit

Fuelwood is now sold by bid like other timber sales. For information, contact your local DNR office and ask to be put in touch with the area forester.

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Wisconsin's magic Madstones.

Hunters stopped looking for madstones when the magic disappeared. But they're a rarer trophy than a 10 point buck.

GAYLE STEINER, Freelance Writer, Madison

Folk medicine grew out of the frightful need of people for cures to sometimes horrible, bewildering, often fatal diseases. Many of the remedies derive from ancient magic, based upon the efficacy of some rare and exotic artifact. Such was the fabled unicorn horn, believed by popes and princes to be the infallible antidote for deadliest poisons. Though any cure was sheer chance, it seemed miraculous and worked often enough to become engrained in many cultures.

Close second to unicorn magic was the bezoar, a stonelike accretion, rare as moondust, found in the forestomach of certain ruminants including deer. Belief in the curative powers of bezoar stones goes back to the middle ages and ancient Persia where early travelers saw them used to draw the poison from snake bites. "Bezoar" comes from a Persian word that means "against poison." The stones were reportedly cleansed for reuse by being soaked for 10 to 12 hours in milk, preferably woman's milk. They were found in the rumens of the bezoar antelope in India and bezoar goats in Iran. Mideasterners believed these animals produced the stones as a natural defense against the many poisonous snakes that lived there.

By the 16th century when the magic of the bezoar had filtered into Europe, they were thought to be a nearly universal antidote for any poison. But in England and the colonies, bezoars developed a particular affinity for curing hydrophobia and hence were named "madstones." Governor John Winthrop of the Massachusetts Bay Colony owned one. He used it to treat his pilgrims and bequeathed it to his son, who did the same.

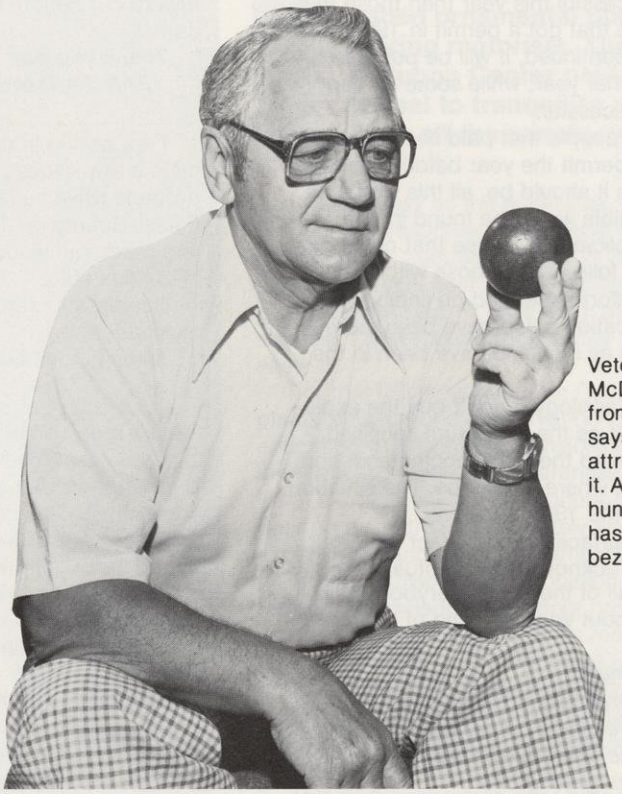
Before modern medical science, hydrophobia was so dread a disease, victims often preferred immediate death to its agony. Until Louis Pasteur developed anti-rabies inoculations in 1885, a madstone was the only treatment.

Folklore historian and author Robert Gard described its use in his book, *Wisconsin Lore:*

"Madstones were used by pioneers in the 1830's to cure dog and snake bites. They were gray-brown and about the size of marbles. The stone was applied to the wound to which it adhered tightly until supposedly full of poison, when it would drop off. Then it was soaked in warm fresh milk or lukewarm water until poison came to the top in little bubbles. The madstone was applied repeatedly to the wound until no poison was left. When the wound was thoroughly cleansed, the stone dropped away. An early settler, Wash Ellis, had a madstone. He charged $25.00 a treatment and did a thriving business. People came from miles around and Ellis kept more than busy. (Deer madstones are best.)"

Sometimes the treatment went on for hours. In Texas in 1875, W. M. James was bitten by a mad dog and rode immediately to a madstone in the next county. The madstone clung to his bite for 31 hours, letting loose its grip four times to be soaked in milk. The madstone owner charged a grand total of three dollars for three days of care for both James and his horse, including those intensive 31 hours.

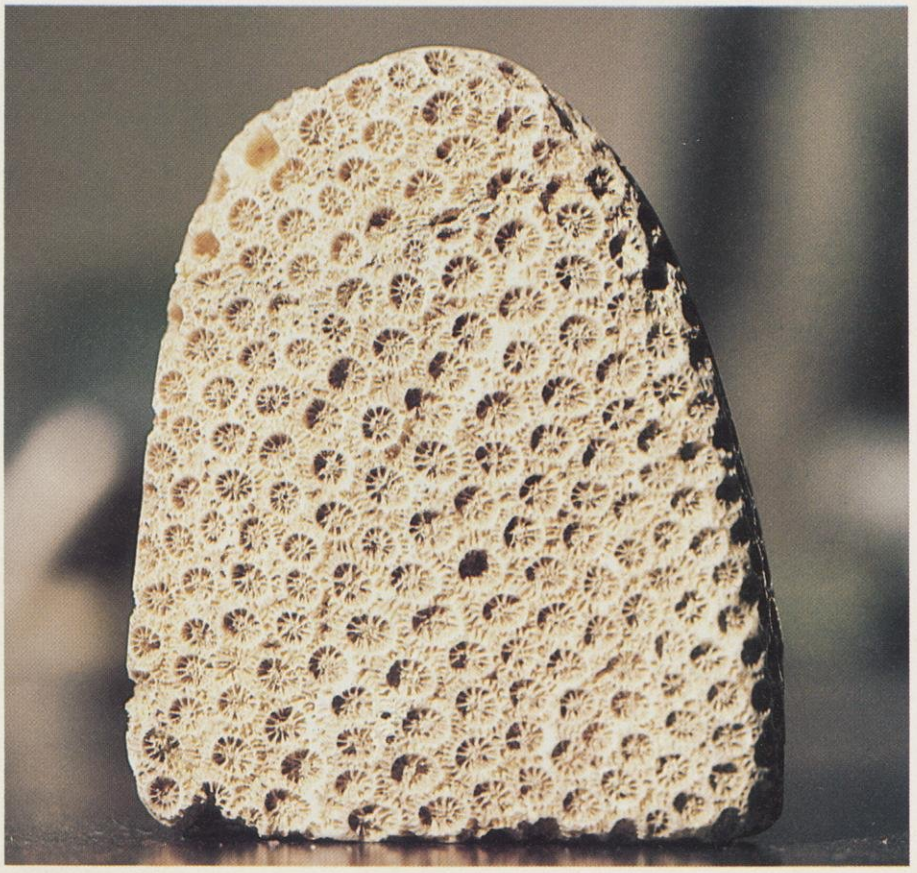
Two madstones are on display in Wisconsin at the Fort Crawford Medical Museum in Prairie du Chien. At one time they belonged to James Nelson Borah of North Lancaster. The museum says they came from the stomach of a deer and "in the mid-1800's were used to draw poison from mad dog bites in the Boice Prairie country. Boice Prairie country is on the road to Dubuque in Grant County." A foundation of the State Medical Society owns the museum which inherited the two bezoars from Lela Smith, an artist from the Borah side of the family. Both are polished and a drilled hole in one suggests it may have been worn as a charm.



Veterinarian Dr. A.M. McDermid holds a bezoar from the rumen of a cow. He says it's a hairball and attributes no magic powers to it. Although he has dissected hundreds of deer, McDermid has never found a deer bezoar. Photo by Dean Tvedt.

▲ Wisconsin madstones. The large one on the left is from a cow. The two at the top are the Borah madstones from North Lancaster, and the one split into three pieces at the bottom is from the Geology Museum at the U-W Madison. Photo by Dean Tvedt.

A calcareous Kentucky madstone. Different from the smooth, spherical bezoars, this type is apparently not found in the rumen and may actually be a kidney or gallstone. Photo by John Wilson, Courtesy of Kentucky *Happy Hunting Ground*. ▼



The Geology Museum at UW-Madison has had a bezoar for about 10 years. It came from Wendell J. Beckwith, Jr., a graduate student who obtained it from his father. When Beckwith and Museum Director Klaus Westphal cracked the stone open, they found it had formed around what appears to be a moose tooth. From what is known about bezoar origins, this seems typical of one kind. It builds up in a ruminant's stomach around a foreign object, much like a pearl in an oyster. The nucleus may be wood, metal, hair, bone or some other material not ordinarily ingested. Another kind of madstone is a sort of honeycombed accretion, much different in texture from the smooth, spherical rumen type. These look something like the cuttlebone hung in cages for birds to sharpen their beaks on and are probably either kidney or gallstones.

Beckwith said his father may have obtained the Geology Museum stone from the Ojibwa Indians in Central Ontario, about 150 miles north of Lake Superior. In his book, *The Deer of North America*, Walter P. Taylor says Native Americans did indeed use bezoars. According to Taylor, they were called

"beazle" stones and believed to come from the deer's esophagus. Taylor says that when a beazle stone was "found thrown up by a deer wounded by a hunter, it was carefully preserved and worn around the neck next to the skin for its presumed curative value in rheumatism or heart trouble."

Probably no one in Wisconsin today ever saw a madstone used, but a few residents in the Rosholt area still remember Edwin Erickson, an "unofficial veterinarian" who saved bloated cows with his knife and carried bezoars in his bag. Kenosha resident Alfred Miller recalls that madstones were used in his native Oklahoma and claims, "They worked!" He remembers one man who took no chances. The man insisted on the rabies vaccine and the madstone, too, "just in case." Erickson says people began making fun of madstones and their use died out.

In the southern states, records of madstone use for rabies are as recent as the 1930's and 40's. A story last summer in Kentucky's fish and wildlife magazine, *Happy Hunting Ground* tells that during the Great Depression a boy named Paul Curry was bitten by a mad dog at Columbia, Kentucky. He was taken to the "Jim Dulworth" stone. The stone stuck to the wound three times and "each time turned the milk green." Curry is alive today. But the Dulworth stone, and most others, had their ups and downs. The story goes on to say that Floria and Presteen Fogg were tying their shoes one day "when a rabid cat bit her on the hand and her husband on the finger. He put his finger in his mouth and he had a bad tooth." The Dulworth stone cured her, "but he died with rabies." A bezoar found near Dassel, Minnesota, sometime prior to 1895 was used only once in Kentucky but apparently not in time, "for the woman died of rabies." Kentucky also reports on the Edmunds madstone, obtained in the 1800's by Edmund Edmunds who traded a cow for it. A reader told the Kentucky magazine, "My mother, born in 1913, can remember when people would come by the house asking the way to the madstone." She told of a man who reached the madstone too late and died in agony.

But many madstones were renowned for their cures. Records kept by owners of the famed Nelson Madstone of Savannah, Missouri go back 100 years and detail places, names and dates on more than 1,500 persons it treated. According to the ledger, all but one recovered. Other renowned bezoars belonged to Virginia plantation owners and many family histories there record hundreds of applications, most of which were successful. In Wisconsin, the author was able to turn up only the Ellis and Borah madstones and not much about their use. More doubtless exist.

The most fabled bezoar of the western world was the one immortalized by Sir Walter Scott in his novel, *The Talisman*. It's actual name was the "Lee Penney," so called after the country place of its owner in Clydesdale. According to legend, during the Third Crusade, Scottish Sir Simon Lockhart took an Arabian commander of high rank as prisoner. The commander's mother brought a ransom to buy her son's freedom. But as she removed the money from her purse, a small pebble accidentally dropped to the ground. Seeing her exceptional concern, Sir Lockhart demanded the stone as part of the ransom. Reluctantly, the Arab woman relinquished it and at the same time explained its medical use. Her bezoar had magic powers that cured not only mad dog bites, but also many other dread diseases of both people and animals. Instead of being applied directly to a bite or powdered and consumed, the Lee Penney was soaked in water for the afflicted to drink. It was so powerful, residents of Newcastle sent for it to use against the Plague. In the 18th century, the Presbyterian Assembly at Glascow condemned a number of amulets but took no action against the Lee Penney because words "such as sorcerers use" did not accompany treatment and because it had "pleased God to give to stones and herbs a special virtue for healing of many infirmities in man and beast." The dark red, triangular stone, set in what appeared to be an Edward First shilling was credited with cures for some 600 years after its capture and for untold years while it was still in the mideast.

For centuries, bezoars were kingly gifts, sometimes worth 10-times their weight in gold. The Shah of Persia gave Napoleon three in the early 1800's, but when Napoleon found out they came from an animal's stomach, he burned them. Other early historic records show many bezoars given as gifts — in 11th century Chinese courts, to Pope Gregory XIII in the 16th century and to the Archduke of Tuscany in 1682.

But even in olden days, doubters arose. In the 1500's, Charles IX of France was presented with a bezoar he proudly cherished. However, his progressive physician, Ambrose Pare' insisted it was hokum. So the king tried it out on a convicted criminal. A cook who had stolen two silver plates and was to be hanged next day gladly agreed to try poison and a chance at life. The condemned man was given a drink of bichloride of mercury followed by ground-up bezoar stone. After an excruciating seven hours of retching, cold sweats, and bleeding from the ears, nose and mouth, the poor soul died. Strangely enough, Charles IX ordered the stone burned, not because he thought bezoars were a fraud, but because he thought this particular one to be a counterfeit. Bezoars commanded such a high price counterfeiting was frequent. During the reign of Charles I in England, a goldsmith was prosecuted for selling counterfeits for 100 pounds.

As early as 1775, England's famed curmudgeon, critic and dictionary author, Dr. Samuel Johnson, noted that

When cracked open, the Canadian bezoar ▶ from the U-W Madison Geology Museum was found to have formed around a moose tooth. Bezoars build up in the rumen around a foreign object much like a pearl in an oyster. Photo by Dean Tvedt.

◀ Madstone formerly owned by artist Lela Smith. It was used to treat mad dog bites in the Boice Prairie country in the mid-1800's. The hole in the top suggests it may also have been worn as a charm. Photo by Dean Tvedt.

Bezoars or Madstones ▶ from a deer (a white deer was best) were soaked in warm milk then applied to the wound left by the bite of a rabid animal. In folk medicine they were reputed to draw out the poison and were sometimes used on snake bites too. Photo by John Wilson, Courtesy of Kentucky *Happy Hunting Grounds*.

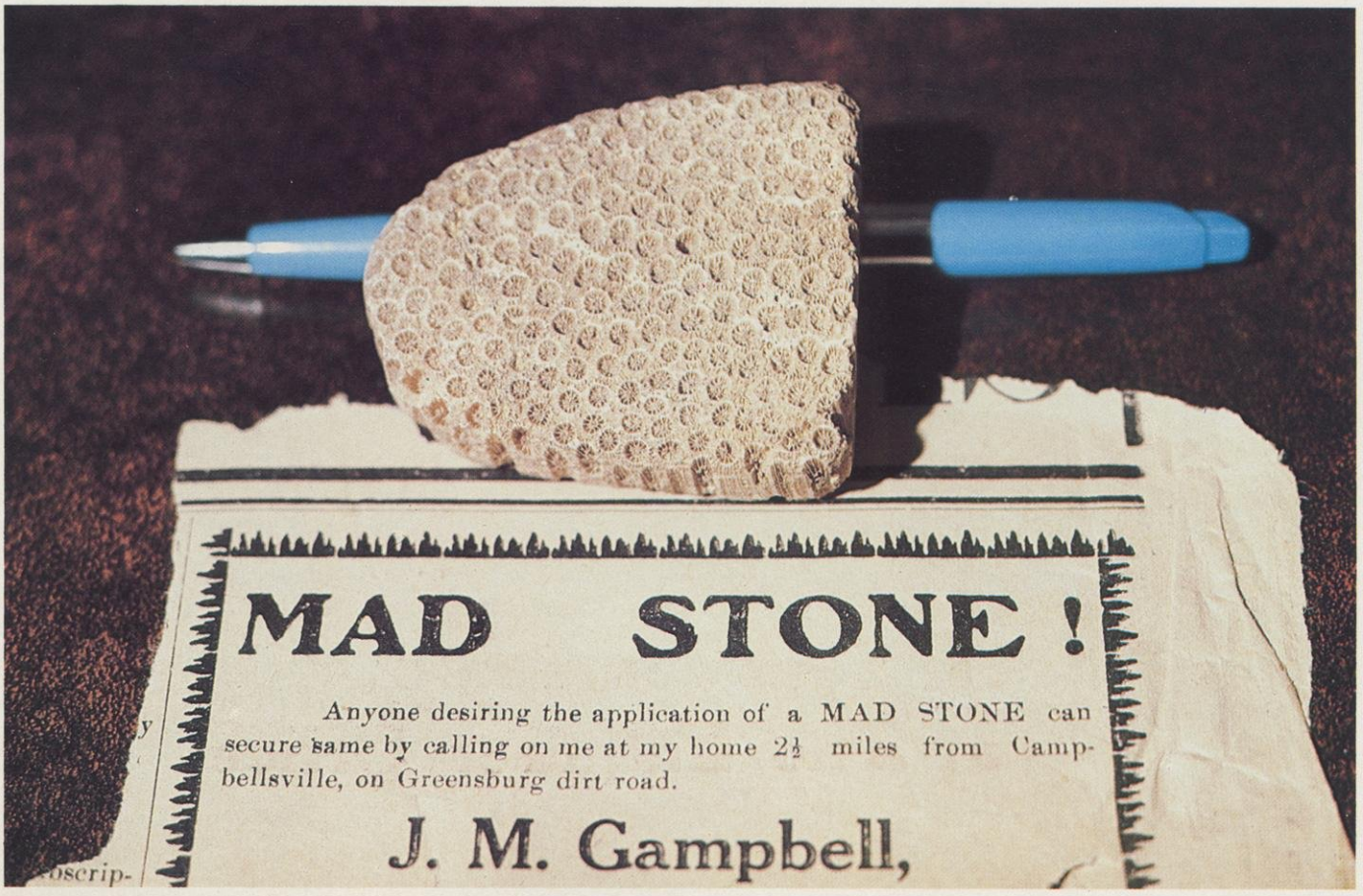
the medical profession was beginning to see bezoars as entirely without efficacy. Still they continued to carry enough popular credence that an English physician conducted controlled experiments with them in 1903. The results were negative.

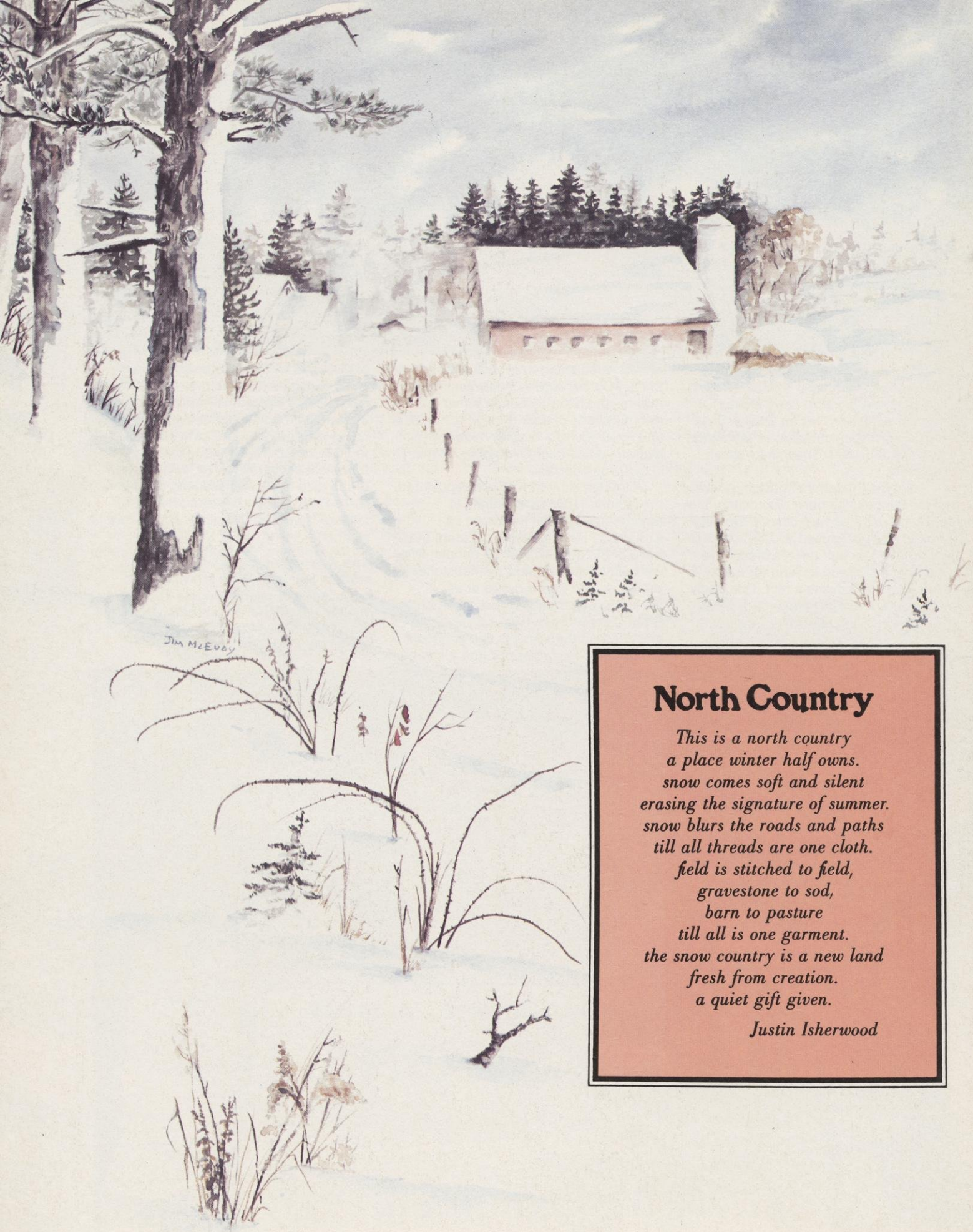
Today, although the medical prowess of madstones has been discredited, they still have value as rare historic artifacts. An Illinois man refused $4,000 for his in 1976. Even though deer hunters have long since stopped looking for them, their scarcity remains a fact. One study in Georgia found only one madstone in 500 deer rumens. Another in the southeast, found only one in 1500.

Dr. A. M. McDermid of Middleton, a retired veterinarian who once worked for the old Conservation Department, says that he and his veterinarian father autopsied hundreds of deer during their careers and never found a bezoar. However, McDermid has found a number of them in cattle as hairballs.

Although science has now repudiated the bezoar, how can centuries of recorded successful treatment be explained? First, it seems apparent that most of the animals that bit people who were afterwards treated by madstones, probably didn't have rabies at all. Bill Kurth, head of the Rabies Unit at the State Laboratory of Hygiene, says that only 13% of the tests his unit conducts are positive. He points out that a number of diseases, such as distemper, sometimes mimic rabies, and may have led early victims to assume their attacker was rabid. In addition, not everyone bitten by a rabid animal gets rabies. Up to 50% don't. So the old madstone treatment probably had at least a toss-of-the-dice chance of seeming to affect a cure. That, plus faith, is the essence of folklore. And that's what madstones are all about.

Any more madstones? Magazine readers are invited to share their knowledge of madstone use in Wisconsin. Write: Madstones, DNR Magazine, Box 7921, Madison, WI 53707.





North Country

This is a north country
a place winter half owns.
snow comes soft and silent
erasing the signature of summer.
snow blurs the roads and paths
till all threads are one cloth.
field is stitched to field,
gravestone to sod,
barn to pasture
till all is one garment.
the snow country is a new land
fresh from creation.
a quiet gift given.

Justin Isherwood