



# **Wisconsin natural resources. Vol. 18, No. 1**

## **February 1994**

Madison, Wisconsin: Wisconsin Department of Natural Resources,  
February 1994

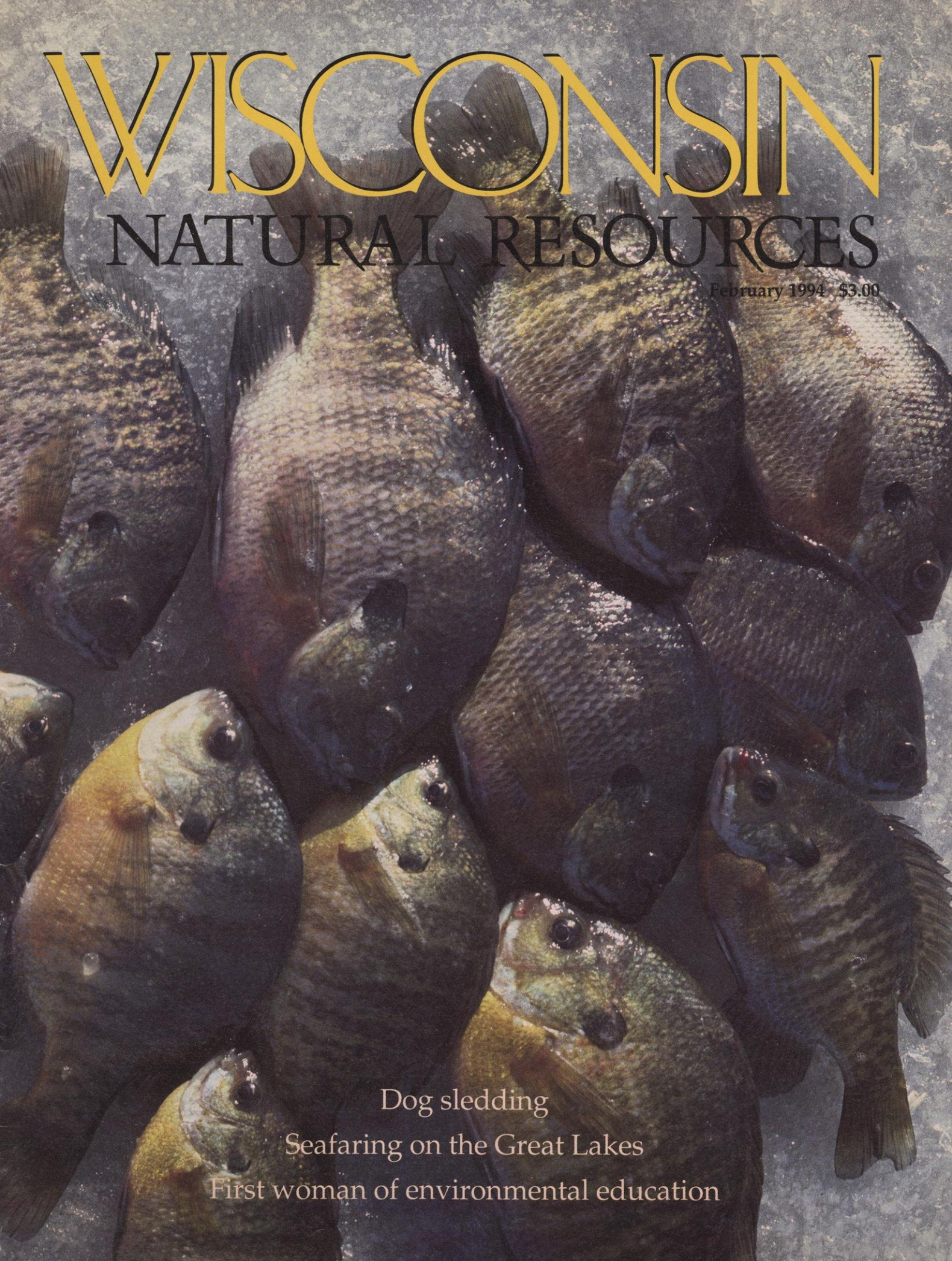
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# WISCONSIN

## NATURAL RESOURCES

February 1994 \$3.00

Dog sledding  
Seafaring on the Great Lakes  
First woman of environmental education



# EARLY RETURNS

*When the horned larks arrive, it might as well be spring.*

Anita Carpenter



Winter, in all its refreshing glory, maintains an icy, armor-like grip into February. The days are longer but still cold and crisp. Bone-chilling gusts still sweep across the land. Wind-driven snow dances over the earth, constantly contouring the snowy landscape and shaping snow-drift sculptures.

Fortunately, there are noticeable chinks in the solid white armor. On a clear day, northern cardinals whistle *cheer-cheer-cheer* from treetops, breaking winter's silence. A warm sunny day tricks a mourning cloak butterfly into thinking it's spring. It flits along snow-covered woodland trails only to return to a secure hiding spot when the temperature drops. Tracks in the snow reveal where a raccoon took an early nocturnal stroll.



Horned lark.

EDWARD PRINS

A more permanent sign that winter's days are numbered is the return of the first avian migrant, the horned lark (*Eremophila alpestris*). Some horned larks may overwinter, especially in southern Wisconsin, but their numbers increase dramatically throughout Wisconsin in February.

Horned larks are ground dwellers — birds of open dirt

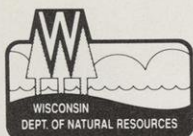
fields. If the landscape is snow covered upon their return, which is likely, horned larks retreat to plowed roadsides to search for seeds. Here the seven-inch, brown-backed, slender birds are visible to anyone making the time to look.

These are true larks of the family *Alaudidae*, kin to the Eurasian skylark of Shelley fame. The more familiar meadowlarks are actually members of the blackbird family.

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PUBL-IE-012  
ISSN-0736-2277



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*Wisconsin Natural Resources* magazine (USPS #34625000) is published bimonthly in February, April, June, August, October and December by the Wisconsin Department of Natural Resources, 101 S. Webster St., Madison, WI 53702. The magazine is sustained through paid subscriptions. No tax money or license fees are used. **Subscription rates** are: \$6.97 for one year, \$11.97 for two years, \$15.97 for three years. Second class postage paid at Madison, WI. POSTMASTER and readers: **subscription questions and address changes** should be sent to *Wisconsin Natural Resources* magazine, P.O. Box 7191, Madison, WI 53707. Toll-free subscription inquiries will be answered at 1-800-678-9472.

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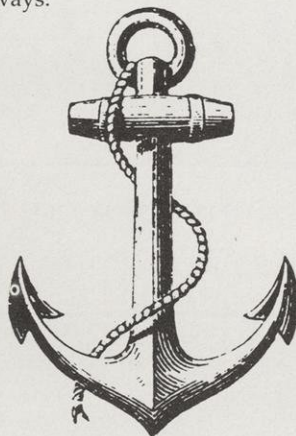
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## SEAFARING DAYS

*David L. Sperling*

These ships moved the nation's goods when the inland seas were our highways.



DNR PHOTO

## 16 IT STARTED WITH FIRE

*Maureen Mecozzi*

A burning desire to return trees to their rightful home sparked

Wisconsin's  
forestry  
profession.

## 10 PAW PRINTS ON THE TRAIL

*Walt Brockman and*

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Sled-dog racing is picking up speed in Wisconsin.



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Cutting the nutrients flow to lakes.

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DON BLEGEN, SPRING VALLEY, WIS.

BACK COVER: Frost on northern white cedar branches.  
SCOTT NIELSEN, SUPERIOR, WIS.





# Seafaring Days

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An exhibit of Great Lakes shipping recounts the role of the inland seas as our highways.

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David L. Sperling

In the days when getting from here to there meant going by water, people flocked to the harbor to “see the new models,” get news from abroad, move their goods to market, and shop. As the Midwest developed, road and rail replaced the water routes as the chief avenues of commerce. Great Lakes shippers adapted and specialized in moving the bulky items that were more economically transported over sea than over land.

A fascinating exhibit at the Milwaukee Maritime Center revisits the days when Wisconsin’s major exports were its natural resources and Great Lakes vessels linked trader to market.

Ship models, paintings, photographs and artifacts fill the center’s scenic exhibit space on the Milwaukee lakeshore. Visitors will appreciate both the history and artistry on display in four small rooms. There are also some surprising lessons on the nautical nature of Wisconsin business.

From the start, boats were specifically crafted for Great Lakes trade. Hollowed logs called *pirogues* and birch bark canoes were the earliest boats of commerce, but the *bateau*, sawed from red cedar planks and fastened with wooden pegs and iron rings, was the first craft tough enough to survive rocky rapids and big enough to hold three tons of furs. The Mackinac Boat, a wide, flat-bottomed boat made of white oak planks was towed barge-fashion behind rowed boats.

Sailing craft large enough to hold a load of cargo had to be specially designed for the Great Lakes. Shallow harbors and narrow locks dictated ships with flat sides and centerboards. The centerboard — often 10–15 feet long, 6–10 feet wide — was a thick oak plank weighed with lead. In the shallow harbor it was raised into a watertight box to cut the ship’s draft. Out of port, the board was lowered to stabilize the ship loaded with cargo.



STATE HISTORICAL SOCIETY OF WISCONSIN

Launching the *Griffon*, the first European ship to sail the Great Lakes. It was built for the French explorer La Salle in 1679.





E.D. BANGS, COURTESY OF STATE HISTORICAL SOCIETY OF WISCONSIN



STATE HISTORICAL SOCIETY OF WISCONSIN



STATE HISTORICAL SOCIETY OF WISCONSIN

(top) A schooner loads lumber on the Milwaukee River 1870–80. The sleek sailing craft were the mainstay of the Great Lakes cargo and lumber trade until steam engines were streamlined in the late 1800s. Great Lakes schooners were designed with centerboards that could be lowered for stability at sea and raised for shallow draft in our shallow riverine harbors.

(right) 1875–90 — the transition from sail to steam. From left to right, the *Lasota* that ferried between Duluth and Superior, the schooner *Marquette*, the passenger propeller steamer *Northern Light* and smaller lumber schooners.

(left) Tugboat *Meyer* pull a steamer near ore docks. Great Lakes tugs were the first to enclose an above-deck house and provide heated work space for commercial fishing in frigid weather.





VERN ARENDT PHOTO COURTESY OF STATE HISTORICAL SOCIETY OF WISCONSIN

"Grab a line." Port Washington, January, 1963. November gales and frigid winters still make it perilous to push the winter shipping season. Great Lakes Coast Guard ships with rounded ends and custom props set the world standard for ice-breaking equipment.

Nowadays, it's difficult to appreciate that the Great Lakes were landlocked from the coast until the 1830s. The Erie Canal allowed ocean-going vessels to travel up the Hudson and across New York on a 363-mile serpentine route through rivers, lakes, 118 aqueducts and 83 locks to Lake Erie. Only boats less than 142 feet long, 26 feet wide and 10 feet high could make the trip. On the other hand, it was faster than negotiating the canals on the St. Lawrence River and a lot safer than going over Niagara Falls! The Welland Canal and locks, which first opened in 1829, circumvented the falls and con-

nected lakes Ontario and Erie, but could only accommodate ships 100 feet long, 22 feet wide and 8 feet high.

The heyday of wooden sailing ships on the Great Lakes, 1840s–1880s, saw thousands of beautiful schooners plying the waters carrying white pine, cedar, oak and agricultural products from Wisconsin to big city markets and returning with loads of manufactured goods like plows, nails, wheels and cloth. The 90–110 foot schooners — ships with two or more masts where the fore mast is smaller than the mainmast — could be sailed with a crew of six or seven people, far fewer people

than the crews needed to run a square-rigged ship. The schooner's sleek design and angular sails made it more maneuverable and faster than other craft. Thousands were built at shipyards along the Great Lakes coast. As many as 30 a day used to dock and load at Milwaukee.

Steamships were developed concurrently, but their large, clumsy engines were heavy and took up most of the cargo space in the hold. Thus, the schooners were primarily used to haul lumber and coal. Steamships, which were not dependent on the wind, could keep a tighter schedule and became more important for passenger travel.

Competition from the railroads in the 1870s drew passenger service from the Great Lakes steamers, but many beautiful ships provided elegant voyages through the turn of the century.

Elegance came at a price. Great Lakes travel in late fall has always been treacherous and those who risked crossings into November often ran out of luck. The changing weather, cold water temperatures and shifting winds claimed many lives in November. In 1871, after 214 people died within view from shore in winter navigation accidents on the Great Lakes, the U.S. Life Saving Service established 29 stations along the most dangerous coastal points. The stations were equipped with special surf boats, life boats, life line cannons and other life saving devices to assist rescues from shore.

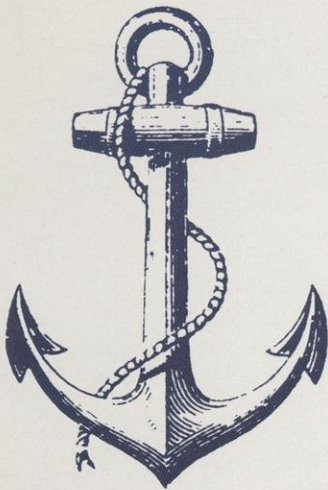
To counter the violent, turbulent weather, Captain Alexander McDougall developed a unique Great Lakes craft in the 1890s. His ship was designed to offer minimum resistance to high winds and rolling seas. "Why build tall bluff bows to keep back the seas? Welcome them aboard and they will help steady the ship," McDougall believed. The cigar-shaped, watertight metal hull looked a bit like a surfaced submarine floating low to the water. Cargo areas were below sealed hatches, the bridge and cabins were set on turrets that extended above the convex deck. McDougall called the sleek design a "whaleback." The crews that worked them called them "pig boats."

The design was never especially sea-





The exhibit at the Milwaukee Maritime Center includes paintings, models, photos and artifacts from 150 years of Great Lakes history, even the hefty fog bell from the Port of Milwaukee.



worthy. The blunt, spoon-shaped bow pounded heavily in any headwind. The working conditions were cramped and soggy. Forty whalebacks were launched in the Great Lakes through the 1920s. One, the *Christopher Columbus*, was designed as a pleasure boat. Most were scrapped long ago but one whaleback, the *Meteor*, has been preserved as a museum at the Barker's Island harbor in Superior, Wis.

The late 1800s brought other impor-

tant innovations for specialized cargo carriers: large ferries were designed that could carry railroad cars across Lake Michigan. The concept was later modified to ferry automobiles across the water to avoid the congested routes through Chicago and Milwaukee. The discovery of rich iron deposits in the Mesabi range of Minnesota and the developing copper mines of Michigan created another opportunity. Large lake carriers hauled ore to steelmaking centers in Chicago, Gary and Detroit.

Steamships of the early 1900s carried colorful designs and names that attracted ship watchers the way the airplane would attract a following a generation later. Steamers that hauled coal, stone and salt were nicknamed "rabbits;" lumber haulers were called "hookers;" old schooners whose masts had been removed were towed as barges and called "lighters." Add the whalebacks, passenger liners, railroad ferries, ore tankers, and the covered Great Lakes fish tugs, and you can appreciate the variety that ship watchers saw.

The size and capacities of the mod-

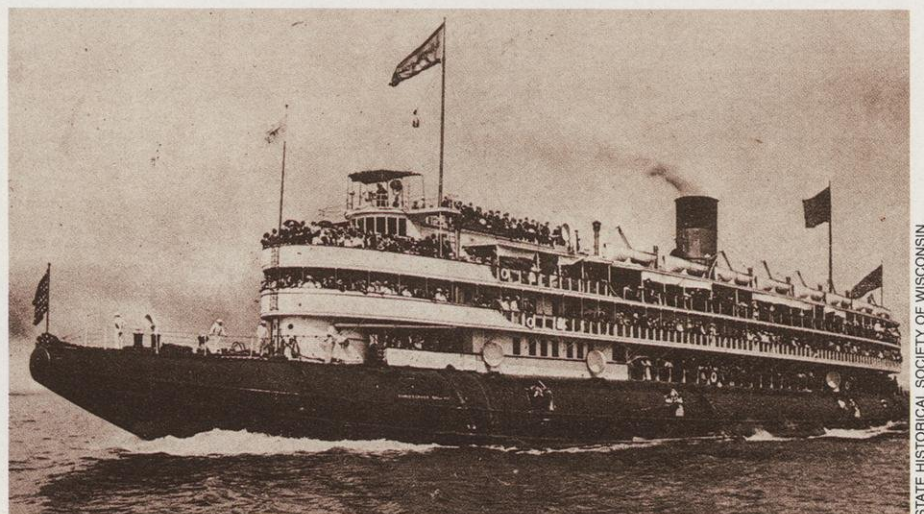


Outmoded ship designs never last long on the Great Lakes cargo circuit. This WWI troop tug was converted for short line hauls between Chicago and Sturgeon Bay. In this 1928 shot, a load of new Nash automobiles from Kenosha is unloaded in Sheboygan.

ern Great Lakes fleet are truly astounding. Through the 1940s, cargo "lakers" were typically 600 feet long and held 14,000 tons. Today, carriers are commonly 730 feet long and carry more than 40,000 tons; the "super carriers" are 1,000 feet long and can carry 60,000 tons of goods. The vessels now are "self-loading" and unloading through series of conveyor belts. Small wonder there is still a strong market for the 400 or so vessels in the Great Lakes cargo fleet whose main stock in trade is moving iron ore, grain, coal, stone, cement and limestone.

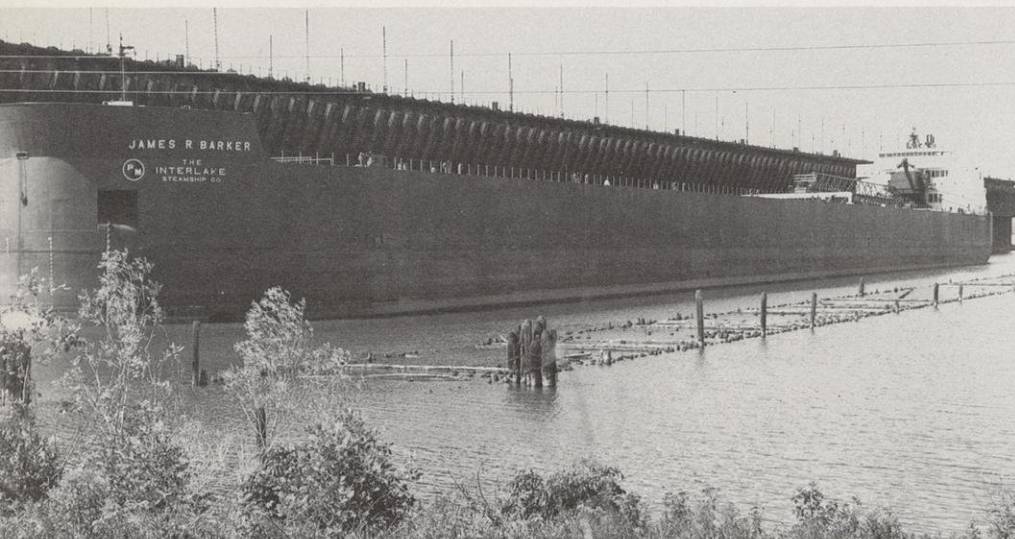
A host of other innovations on Great Lakes ships are depicted in the exhibit. The outboard motor was developed here. Icebreakers to extend the shipping season into December were per-

The *Christopher Columbus* was the only whaleback designed for hauling passengers rather than cargo. She ran popular day trips each summer between Chicago and Milwaukee.



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One of the 1,000-foot super carriers, the *James R. Barker*, waits for a load at the old Soo Line ore dock. This huge super-laker can haul as much as 59,000 tons of taconite pellets or 52,000 tons of coal. The 250-foot self-unloading boom can move 10,000 tons per hour of taconite up the conveyor.

fectured on the Great Lakes: An extra propeller in the front of the ship sucks water out from under the ice; the thick, unsupported pack ice crushes under its own weight. Rounded bows and

sterns can ride up over the pack floe and slowly crush a path wide enough for large carriers to follow. The Great Lakes fish tug was designed with an ark-like hull that has extended topsides

A once familiar sight at the Port of Milwaukee, the *Milwaukee Clipper* ferried passengers and cars between Milwaukee and Muskegon, Mich. Car ferries date from the turn of the century when railroad cars loaded with cargo shuttled among the Midwest ports in Wisconsin, Illinois and Michigan. One passenger ferry still operates between Kewaunee, Wis. and Ludington, Mich. The *Milwaukee Clipper* was retired from service and now serves as headquarters for a yacht club in Hammond, Ind.

and a roof. It was the first fishing tug in the world designed to offer extra deck space and heated working space for foul weather fishing.

So grab your mates, pack your kit and saunter on down to the Milwaukee Maritime Center before the end of February. You'll learn of our ties to the open seas and admire the skills of the model makers and painters. You'll also appreciate how shipwrights skillfully used the materials at hand to craft the vessels that moved the freight of the times they served.

The exhibit is open from 1–5 p.m. on Fridays, 10 a.m.–5 p.m. Saturdays, and 1–5 p.m. on Sundays for public viewing through February 27th. Groups may register in advance for guided tours Tuesday through Thursday. □

*David L. Sperling edits Wisconsin Natural Resources magazine.*



ROBERT QUEEN



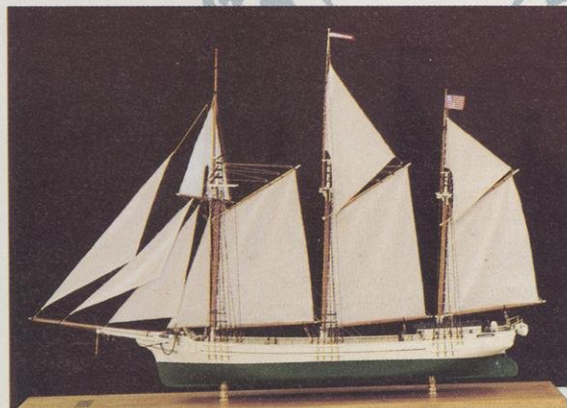
## Reviving the thrill of tall ship travel

It's a tall order, but landlubbers and seadogs alike seem committed to the task. The Milwaukee Lake Schooner, Ltd. plans to build a three-masted Great Lakes schooner like those that plied the Great Lakes from the 1840s through the 1880s.

The project, three years in the making, is taking shape on the shore of Lake Michigan at the Milwaukee Maritime Center, 500 N. Harbor Drive: the site of the former Port Authority Building and terminal that ferried cars from Milwaukee to Muskegon, Michigan. The lakefront office and berth are adjacent to a restaurant with a nautical theme, the Milwaukee Art Museum and expansive city parks that run along a beautiful stretch of shoreline.

The schooner would have a 140-foot main mast, two smaller masts and a 100-foot-long deck. Project managers want to build the ship in the open so the public can participate and watch as shipwrights craft the keel, ribs sides, masts and decking.

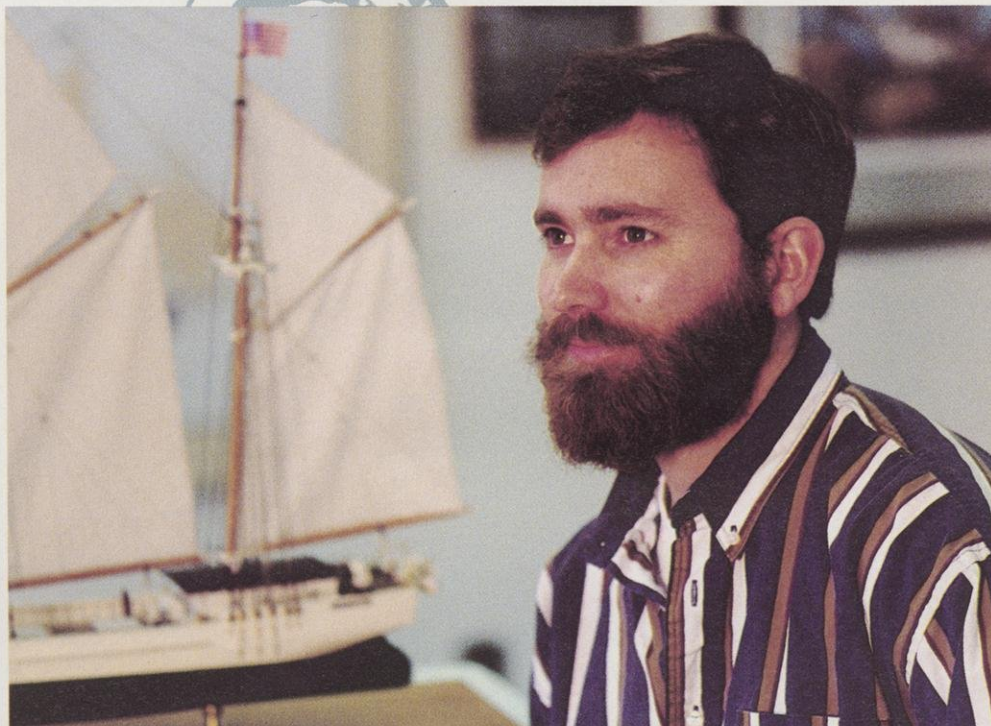
The three-masted schooner in Milwaukee would be designed like the *Lucia A. Simpson*. Shipwrights expect to craft the 100-foot vessel during the next two years in Milwaukee.



ROBERT QUEEN, MODEL BY JACK GODDEN

"That's an important part of our mission", says David B. Falzetti, the

project's executive director. "Every part of the project aims to help people rediscover and appreciate the rich maritime



ROBERT QUEEN

Captain David B. Falzetti directs the Milwaukee project to build a full-sized reproduction of a Great Lakes cargo schooner.

history that developed with Great Lakes communities." The project's tri-fold mission includes rekindling interest in maritime education, promoting Great Lakes conservation, and using the tall ship as a focal point and ambassador to promote city and state tourism.

Construction will let visitors see shipbuilding skills that were common in the region 150 years ago. Teams of carpenters, skilled workers and designers are projected to take two years to craft the ship.

A lot of people don't realize that Wisconsin remains one of the premier wood shipbuilding centers in the country, Falzetti said. The state has major

shipyards in Sturgeon Bay, Marinette and Neshkoro and a host of firms design and build smaller watercraft.

"We have a great location and enthusiastic support from Mayor Norquist and Governor Thompson," Falzetti said. "The talent is here, the tall pine, cedar and oak resources are here, the shipbuilders are here, other skilled workers are here. We have the know-how and a great place to launch such a project."

Project managers are working to raise \$1.5 million during the next two years to build the ship. In-kind donations of wood, tools, heavy machinery and services are sought. "We want to build a partnership, a truly cooperative project with trucking companies, equipment companies and storage firms to build a symbol of the community and a unique attraction for the state," Falzetti said.



# PAW PRINTS



The closeness of spectators and competitors adds to the excitement of sled-dog racing.

MARK S. WERNER

## on the trail

As quiet travel and fast-paced competition, dogsledding is gaining speed on Wisconsin's wintry trails.

*Walt Brockman and Jim Fandrey*



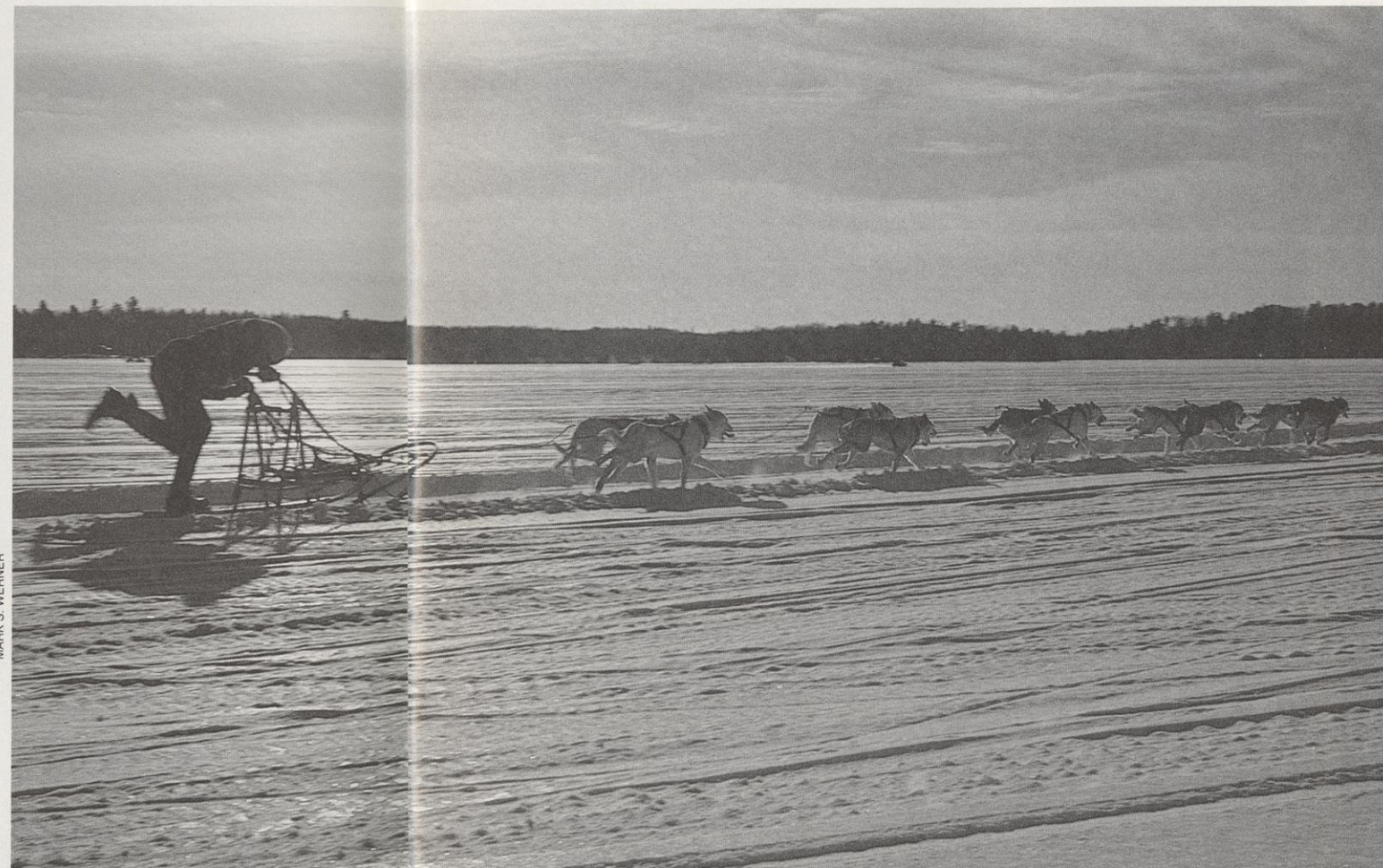
JIM FANDREY

In northern climes, and we mean the northern fringe of the United States, Canada, and the Arctic, the relationship between humans and dogs went beyond friendship to survival. Along the northern

of fish, beaver and other animals that were readily available.

Mail used to be delivered by dog team on a regular basis right here in Land O'Lakes, Wis. Minnesota's John Beargrease Sled-Dog Race recreates the

Sled-dog races are a focal point of these community celebrations. A typical festival will include dog team races, sled-dog weight pulls, children's sled-dog races (often called "mutt races") and skijoring — wherein a cross-coun-



Mid-distance sprint races run every weekend in Wisconsin from January through the first week of March.

frontier, sled dogs were essential in settling and maintaining communities. They provided reliable, efficient winter transportation, opened the wilderness to trapping and connected isolated settlements during long, snow-filled winters.

Dogs were the draft animals of the north for practical reasons. Growing and storing hay, other forage and grain for horses was uneconomical. Caching food stockpiles along winter trade routes was impractical. Dogs could thrive on a high-fat, high-protein diet

540-mile monthly mail run a Chippewa Indian took up the Lake Superior coastline from Duluth through Grand Marais to Grand Portage and back. These mail contracts were longer lived, but less remembered than the Pony Express riders.

Today, winter festivals have revived this connection with our sled-dog past. Like harvest festivals farther south, the winter rendezvous celebrates the common culture of small villages and towns in Alaska, Canada and northern Wisconsin.



Unlimited Class races allow a musher to run as many dogs as he or she can comfortably handle.

try skier and harnessed dog are tethered by straps hooked to a carabiner or a quick release. The dog can comfortably pull the skier 20 miles or more. At a lively festival you might also find a snowshoe race, a Mushers Ball, and concessions sell-

ing Indian fry bread and maple snow candy.

Television coverage of Alaska's Iditarod, the most prestigious of the North American long-distance races, has brought the sport recognition. Races of several hundred or 1,000 miles are plentiful in Alaska, Canada and as far south as Northern Michigan, but Wisconsin is gaining a reputation as a quality destination for mid-distance and sprint sled-dog races.

The biggest is our Headwaters Classic, which was just held in Land

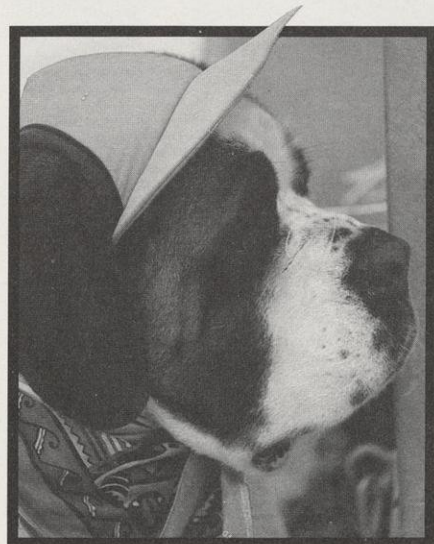
JOSEPH BUTSICK



O'Lakes February 5th and 6th, but dog-sled races have been also been held in Sparta, Shawano, Green Bay, Ashland, Webster, Solon Springs, Elton and Green Lake.

A "sprint" is normally less than 35 miles. Drivers compete with four, six, 10 or sometimes unlimited numbers of dogs in the team. The same teams run on two or three consecutive days. Typically sleds pull a 180-pound driver and a light racing sled of 27 pounds. Distance racing sleds might weigh 40-50 pounds if drivers need to pack survival gear.

In Unlimited Class races, the traditional form of sled-dog racing, the musher can run as many dogs as he or she likes. That's why there is no handicapping in sled-dog racing for weight, team size or past performance. In Canada, nine-dog teams used to be standard. In Alaska, even at the turn of the century when some well-organized, lucrative races like the Alaska Sweepstakes were run, 22- to 24-dog teams were common. The Iditarod teams are



A pink hat and other natty attire are part of the fun at weight pulls and mutt races.

limited to 18 dogs as a safety matter. Each racer must act responsibly for his or her dogs — supplying food and water and tending to injuries promptly.

Getting that many dogs together is risky. It's a bit like running a day-care center where the "kids" can pass colds and viruses. On the trail, dogs have to weather through those illnesses, but

# The Headwaters Classic

The race in Land O'Lakes is fashioned after the championship races in Alaska. We're really in an ideal



Reigning champion Doris Prefontaine competes in the Headwaters Classic.

location just a few miles off U.S. Highway 2, which is one of the major east-west routes on the circuit.

The Classic attracts both racers and spectators who enjoy the mix of competitive races and specialty events designed for fun and laughter.

A few mushers and teams arrive as early as few weeks ahead of time if they've come from a distance or if they're following the racing circuit. This gives people living near Land O'Lakes a lot of opportunity to see teams training. Most other racers come to town on the Thursday or Friday before the race and leave Sunday night so they can get home and go to work on Monday morning.

The teams travel in trucks

equipped with adequate kennels. Some drivers house their dogs in individual boxes, but most dogs like company. Compatible dogs are comfortably housed together.

The day of the race, the dog trucks park on both sides of Main Street. Visitors can walk around and talk with the drivers as the teams are harnessed. The dogs are usually kept close to the truck on drop chains while they are preparing for the race, so you can get pretty close to the action.

The Headwaters Classic attracts 1,500-3,000 spectators.

Last year we had about 14 teams in the six-dog class races. We added this class so the racers who also run larger teams could run young dogs and backup dogs. It also gives other members of their family a chance to drive the teams. Last year, five of the top 10 racers worldwide in this class competed in this race, includ-

ing Doris Prefontaine, the reigning Class Champion from Winnipeg, Manitoba.

The six-dog class race starts between 10-11 a.m. Teams start at one-minute intervals. These dogs are REALLY cruising. On average it takes the better teams about 18 minutes to complete the race.

We run the race on County B right through the heart of the business district for about three quarters of a mile. Then the trail cuts between the library and the hospital clinic, runs down a snowmobile trail, through U.S. Forest Service roads and on through private lands in a 7.2 mile loop.

The Unlimited Class races start in the early afternoon. Two heats are run during the weekend. Each team starts at two-minute intervals and runs an



Race day offers a mix of competition, carnival and old-fashioned rendezvous.

honest 20-mile course. The top teams finish in under 70 minutes. Ours is the longest Unlimited Class trail in the lower 48 states for speed racing and the course is exceptionally well maintained.

The Headwaters has a good reputation because our volunteers do an outstanding job of preparing for the event. The snowmobile club donates the time to groom our trail and the groomer is a real artist; in our first four years, no teams had any injuries attributable to the trail conditions. Other volunteers direct traffic at different points on the race course, help drivers who may have trouble with a dog team, or run a concession. It's really a community effort — the enthusiasm and skill of our residents attracts more volunteers each year.

It's very exciting. We get excellent competition and the Headwater Classic is early enough in the season that a spectator can see a wider variety of teams. Later in the racing season the top performers move on to the bigger Alaskan races.

Spectators get maps and can choose their vantage points. It's exciting to watch the teams go off. People like to see the commotion, anticipation and antics that the dogs exhibit before starting the race. The dogs bark, scream, yelp and paw at the ground. They're

going nuts waiting to go.

But that's a stark contrast to what the sport is about and what drivers really enjoy when they are out on the trail. As soon as the dogs are released at the starting line, the race is almost completely silent. In fact, as drivers get more and more educated, they realize that their dogs do much better if they don't say anything to them at all. It's a bit like disciplining kids: The more you holler at them, the less they listen.

Once the dogs leave the starting line, they are so focused and concentrated on running that they make little sound at all. Sometimes you can hear their feet in the snow. Spectators standing on the side of the trail can hear the dogs breathing and the schussing of the sled runners, but it's extremely quiet.

After the big races, we run a "mutt race" in a tent near a public address

system. Children hook up pet dogs that they've been training. The dogs are turned loose at one end and they might run 40 yards or so. It's done for fun, but the first three youngster-dog teams in each age group win savings bonds from the local Lions Club. It's a funny race because many of the dogs aren't trained sled dogs. You'll see people doing all sorts of crazy things to get their dogs to run and the dogs just sit there and watch.

Other tents downtown house arts and crafts, plenty of food concessions, and live music. On Saturday night, we host a Mushers Ball; on Sunday, a banquet after the races end. For more information please contact Jill James at the Land O'Lakes Chamber of Commerce at 1-800-236-3432.

Some dogs train for distance running, others for strength. In a weight pull, a winning dog might haul more than a ton for a short distance.





veterinarians are available at checkpoints to tend to the sick.

How often the teams rest depends on the driver and the athletic abilities of the dogs. The tendency within the last five-10 years is to move dog teams faster and then rest longer. The old teams that ran a race like the Iditarod in Alaska used to trot about six mph for 12-14 hours. Today, the top teams trot and lope 12-13 miles an hour and then rest longer.

Unlimited Class races in the lower 48 states have developed a season or circuit, much like the golf circuit. People travel from Alaska or western Canada and may start the season in late December in New York, run a few races in the Upper Midwest and work their way back to Alaska. They're in Wisconsin in late January and early February. Then they travel to Winnipeg for the Winter Carnival. That Winnipeg race is one of few Canadian races for Unlimited Class teams. Then it's on to western Saskatchewan, British Columbia and the Northwest Territories to find sprint races of the 20-22 mile range. The season ends about the third weekend in March after 14 weekends of racing.

## Sled dogs as athletes

The dogs are amazing athletes and are often of mixed breeds. Dogs bred for this kind of work love to run, and they can run very far, very fast under extreme conditions. Pound for pound, working dogs are the world's most efficient draft animals. They can drag 2 1/2 times their weight for an indefinite period of time. Those that are trained as long-distance athletes can run 100 miles a day, 12 days in a row in sub-zero weather.

Most huskies, Alaskan or Siberian,

don't go much over 80 pounds (females can be as small as 32-35 pounds; large males weigh 60 pounds).

Bigger dogs have problems maintaining 13-20 mph over time, but there are special events just for them. In weight pulls, just like tractor pulls or horse pulls, individual dogs are given a set time to pull a weighted sled about 40 feet. Weights are added progressively until no dog can pull the sled. The dogs pull in different weight classes — under 60 pounds, 60-90 pounds and over 90 pounds. Amazingly, some of the 60-pound dogs might pull up to 2,800 pounds!

While long-distance racing has its stars like Susan Butcher and Martin Buser, sprint racers like George Attla, Eddy Streeper and Don Bland in the Unlimited Class and Doris Prefontaine in the six-dog class are gaining a following. These sprint dogs and drivers are truly the best of today's best.

Wisconsin is home to some well-re-

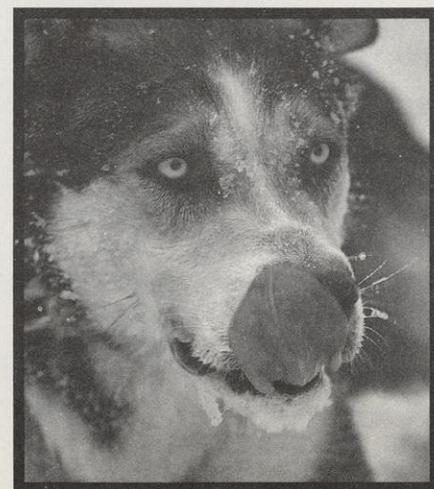
spected racers. Rhinelander's Doug McRae was a world champion in 1984. That year, he raced 14 of 16 weekends in the eight-dog Class and the Unlimited Class. He won every eight-dog sprint race that he entered and won all but three of the Unlimited Class races,

"Pound for pound, dogs are the most efficient draft animals in the world," Brockman said.



(above) Spectators line the sidewalk as the teams unload and rig up for the race. It's a great time to strike up a conversation with drivers and their families.

(right) Dogs yelp and paw the ground waiting for the race to begin. Like other athletes, sled-dogs concentrate during competition and typically run the race silently.



JOSEPH BUTSICK

JIM FANDREY  
JOSEPH BUTSICK









Dog-tired sled dogs. Trained teams can average 12–13 miles per hour for several hours. The top teams complete the 20-mile Headwaters Classic course in under 70 minutes.

including the North American Championship in Fairbanks. Gary Eddinger from Kennan Township in southwestern Price County, also won the World Championship.

### More sled-dog teams sharing the trails

As interest in the sport grows in Wisconsin, mushers and other winter enthusiasts are meeting face-to-face on trails. Most dog teams are run on snowmobile trails. To their credit, snowmobilers are not only tolerant, but are very interested in meeting and seeing teams training. As dog teams become more common, snowmobilers have extended tremendous courtesy to the sport — helping with race trails, taking excellent care of the trails and sharing the routes. For example, a small dog-sled club in Webster (Burnett County) has worked with local snowmobile clubs

to share the trails that run through county forests. Snowmobilers who use the trails know they may encounter dog teams.

Dog-sledders and cross-country skiers don't meet often, but they need to reach working arrangement. Skiers are often not aware of the possibility of encountering a dog team. The teams are so quiet that skiers can get quite startled as a dog-sled team comes up behind them and whisks by. Since the encounters are infrequent, skiers don't know if the sledders expect them to pull over or if the team will stop. Most sledders try to get skiers' attention long before they pass them to make the encounter more positive. Some skiers also get a bit upset if sledders cross their tracked trails. Frankly, the conflicts over tracking between regular skiers and skate skiers is much more strained than the relationship between skiers and sledders, especially as more skiers ap-

preciate the joys of working with a dog when skijoring.

Fortunately, this revived sport is off to a good start with both spectators and the general public. We've been helped by Hollywood and newspapers. A number of excellent children's movies have interpreted the Jack London stories and cast wolves in a positive light. The reintroduction of timber wolves in Wisconsin is also bringing an appreciation of wild canids. It has certainly helped people accept and enjoy the close ties between humans and animals that are captured in sled-dog racing. □

*Walt Brockman lives in Conover, Wis. and is an Unlimited Class sled-dog racer with more than 17 years experience. His Sled Dog Adventures offers rides and driver/dog team training in the Eagle River/Land O' Lakes area. Jim Fandrey is a special events publicist from Land O'Lakes, Wis.*





LABUDDE FAMILY COLLECTION

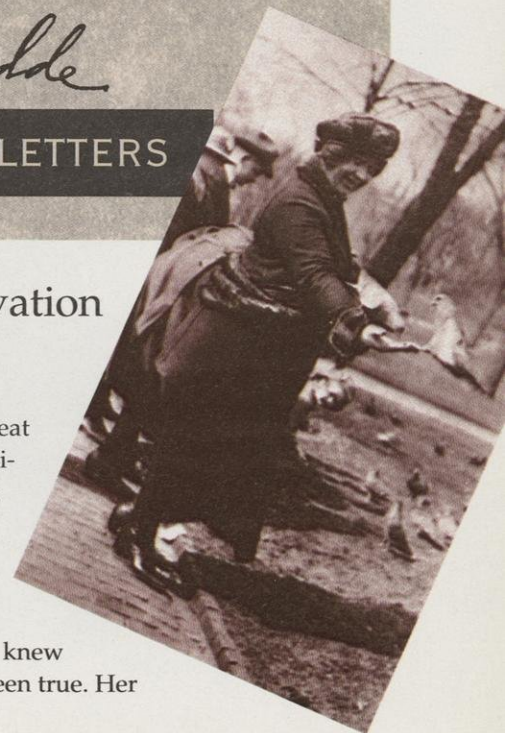
*Wilhelmine LaBudde*

CONSERVATION ADVOCATE, LADY OF LETTERS

Fiesty determination brought conservation education to the classroom.

*Christine L. Thomas*  
*Editor's note:*  
*Our second look at the*  
*individuals, concepts and*  
*issues that shaped our*  
*conservation heritage.*

I was privileged to spend the summer of 1989 with a great woman. Actually, I spent the summer at the State Historical Society with her personal papers. Day after day, page after yellow page, the correspondence of Wilhelmine Diefenthaeler LaBudde drew me closer to her. Academic interest evolved into personal involvement, till finally Mrs. LaBudde came to life and I looked forward to each day in the archives with passionate intensity. Those who knew her described her personality as magnetic. It must have been true. Her 60-year-old letters still draw attention.









For me, Mrs. LaBudde's work still lives through the fruits of ideas she planted during a quarter century of environmental activism. Touching the fading documents that she touched decades earlier, I let her words reach across the years and guide me on a tour of the golden years of Wisconsin conservation history.

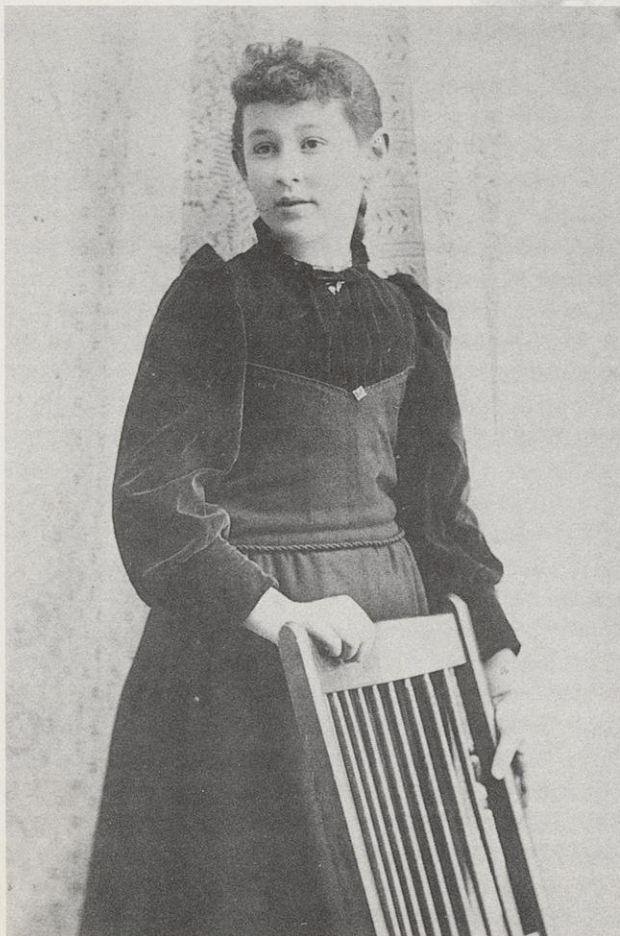
That tour began with her involvement in two "save the marsh" projects in the closing years of the 1920s. Louis "Curley" Radke of the Izaak Walton League enlisted LaBudde's help to restore the Horicon Marsh. Through the seven years that Radke struggled with legislators over this issue, she support-

ed his positions. LaBudde chaired the Conservation Committee of the Milwaukee County Federation of Women's Clubs. She rallied the club women to lobby their legislators in support of Radke's efforts. Similarly, LaBudde's letters show that she was likely the individual who interested Charles Broughton, then editor of the Sheboygan Press, in mounting his campaign to save the Sheboygan Marsh.

proud when she became the first woman elected to the Conservation Congress, impatient when she tracked off onto some foolhardy tangent (which she was prone to do), and exhausted when one of her political campaigns ended in defeat or illness (she was given to fragile health). In retrospect, one of her successful

(left) Kindergarten classes explore a managed forest at the Madison School Forest in Verona. In the 1930s and 40s women's clubs were strong lobbyists for establishing such teaching forests and incorporating resource conservation in school courses.

(below and right) Wilhelmine "Minnie" Difenthaler in adolescence. She was college-educated at Grafton Hall in Fond du Lac. Family interests included wildflowers and music. She married her neighborhood sweetheart from Elkhart Lake, Edward LaBudde.



PHOTOS THIS PAGE - LABUDDE FAMILY COLLECTION

Through her letters I made the acquaintance of many of the "greats" of Wisconsin conservation history: Harley MacKenzie, Owen Gromme, Pearl Pohl, Fred Schmeckle and Aldo Leopold, to name a few. Our trail crisscrossed the major resource management issues of the day — forest restoration, marsh restoration, highway beautification, predator protection, soil conservation, pesticide use and Civilian Conservation Corps projects.

Along the way, I shared her triumphs and failures. I was

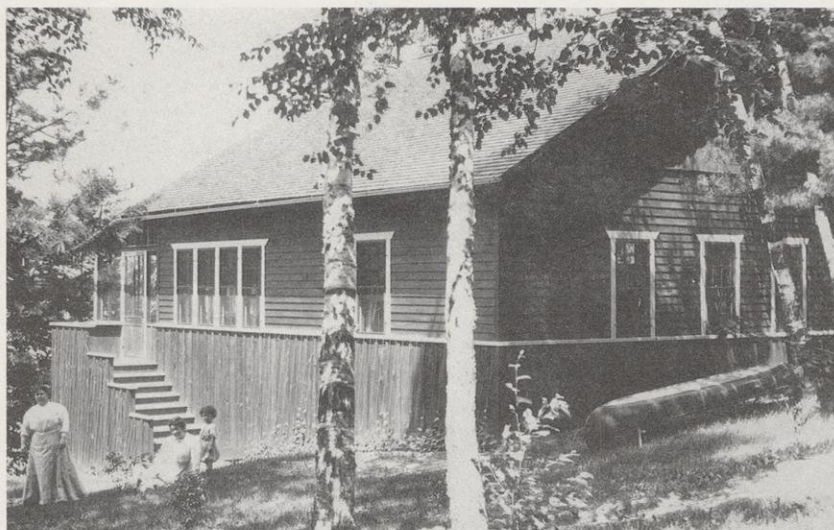
campaigns had the farthest reaching consequences for the citizens of Wisconsin: the establishment of conservation education as part of the public school curriculum.

The first evidence in her letters of an interest in outdoor education surfaced in a 1929 correspondence to Governor Walter Kohler. She wrote:

*"Now that both houses have passed the bill providing such a generous budget for conservation (and, of course you will sign it), we women feel that enough funds are available for our long felt need of an education program.*

*"As you know we want a woman to act as the assistant to the director of conservation; who will go into the public schools as visiting instructor, who will speak in summer schools, at farmer's institutes, at all other official and voluntary groups as the occasion demands.*





PHOTOS THIS PAGE FROM LABUDDE FAMILY COLLECTION

(above) The LaBudde family home on Pine Point of Elkhart Lake.

(right) Family shots with Mrs. LaBudde's two oldest children George and Margaret ("Totsie"). Once the children were raised, Mrs. LaBudde campaigned for human rights, education and conservation causes.

(opposite) Mrs. LaBudde was both accomplished pianist and composer. The LaBudde parlor became popular as they owned one of the only pianos on Elkhart Lake.



*"In short she is to go up and down the length and breadth of the state, and preach the love of nature and outdoor beauty to young and old — only so will it get into the hearts of our citizens."*

LaBudde was advocating establishing an information specialist within the Conservation Department. She wanted the specialist to be a female, I suspect due to her friendship with Margaret March-Mount, a public information officer with Region 9 of the U.S. Forest Service. March-Mount was a liaison to the women's clubs and the schools. The school children called her the "tree lady." Perhaps LaBudde viewed the position as a model for the Conservation Department.

Not satisfied to attack this issue on one front only, LaBudde started political activity on three other approaches. In 1930, she began a campaign for wide-

spread observance of Bird and Arbor Day in Milwaukee. She attempted to convince the Milwaukee County Board to establish a conservation high school in Milwaukee at Boy's Technical School. Third, she began a movement to place conservation education on the agenda of the State Teachers Association annual meeting.

This last strategy represented a change of heart. In her early letters, LaBudde despaired that conservation education would likely never be administered through the Department of Public Instruction because the school curriculum was already crowded.

In 1932, LaBudde was involved in forming the Wisconsin Association for Conservation Education. The group's executive committee consisted of 21 of the state's prominent figures in conservation, including Judge Henry Graass

of Green Bay, D.C. Everest of Rothchild, and H.J. Parmley of the Boy's Technical School of Milwaukee. Their purpose? To encourage conservation education in all public schools. They began by writing letters to 500 school districts statewide to solicit ideas and to assess interest in conservation education.

In 1933, the Conservation Division of the State Federation of Women's Clubs launched a statewide campaign to broaden the system of school forests across the state. These locally-owned and managed forests provided accessible outdoor laboratories to teach children about forestry. The LaBudde letters indicate that the La Crosse Women's Club was the first to succeed (not the first school forest, but the first secured by the women's lobbying effort). Four hundred and fourteen school forests thrive across the state as a result of



these efforts.

By 1935, the campaign to introduce conservation education in the schools intensified, and Wilhelmine LaBudde was in the thick of it. In January of that year, Conservation Department director Harley MacKenzie met with conservation-minded individuals in Milwaukee to discuss drafting legislation. By February, MacKenzie had written to E.J. McKean of Tomah, president of the Wisconsin Teacher's Association, advocating that McKean try to obtain the services of Jay "Ding" Darling, Chief of the Biological Survey, to speak as the annual teacher's convention. MacKenzie believed an inspiring speaker would help build support among the teachers. [Darling's famous political cartoons had advocated resource conservation for decades.]

Early in April, State Senator G. Erle Ingram introduced Bill 319S to require the teaching of conservation of natural resources at the state teachers colleges, normal schools and high schools. The bill's provisions had been drafted by members of the conservation community, and they began an intensive lobbying effort.

In an ironic twist, the State Federation of Women's Clubs did not endorse the bill. Apparently the vice president of the Federation, Lucia R. Briggs of Milwaukee-Downer College, spoke against the bill at the Federation's state board meeting in February. Her position as an educator must have swayed the other board members to side with her. LaBudde continued to lobby for the legislation in her capacity as executive committee member of the Wisconsin Association for Conservation Education. Still, she was rebuked by some of the Federation women and her activities caused some dissension in the group. Haskell Noyes of the Milwaukee Chapter of the Izaak Walton League, a group which supported the bill, offered the following if LaBudde's troubles with the Federation could not be cleared up:

"...you can resign from your committee and I will see to it that you are made an honorary member of the Milwaukee Chapter (of the Ikes) and you will then have the distinction of being



LABUDDE FAMILY COLLECTION

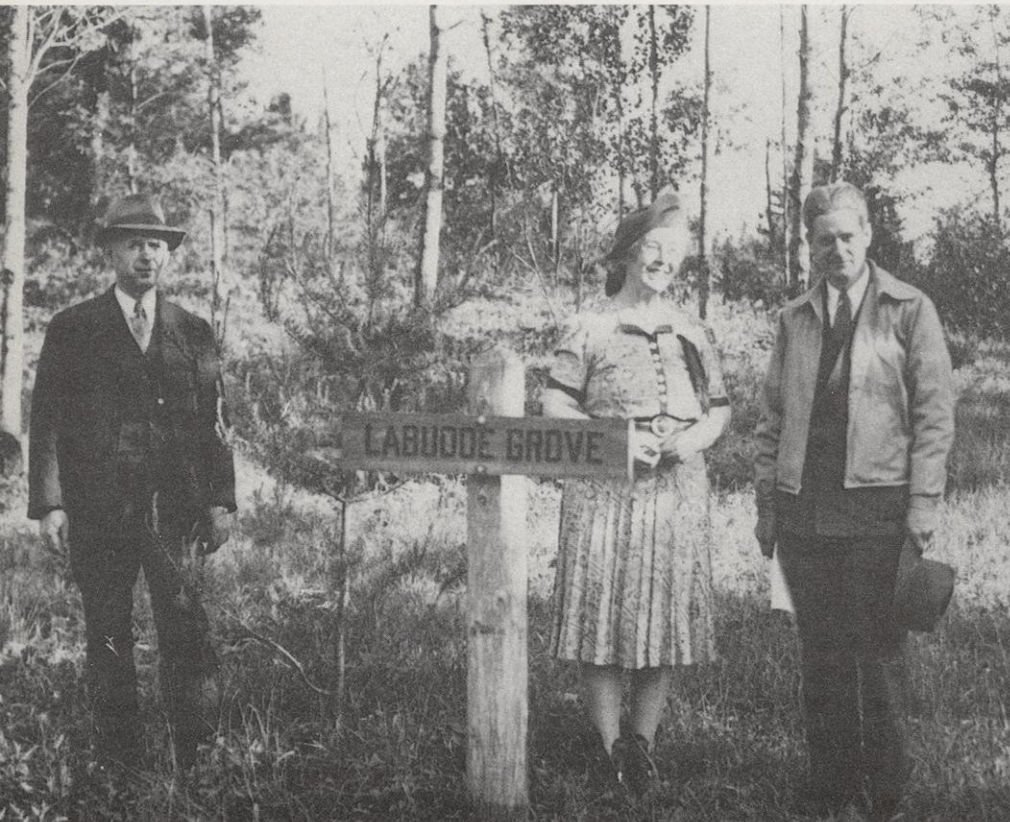
*... we want a woman to act as the assistant to the director of conservation; who will go into the public schools as visiting instructor, who will speak in summer schools, at farmer's institutes, and all other official and voluntary groups as the occasion demands.*

*In short she is to go up and down the length and breadth of the state, and preach the love of nature and outdoor beauty to young and old—only so will it get into the hearts of our citizens.*



*... Long after many other laws have been forgotten posterity will look back to the time when a state of these United States first took cognizance of the fact that it was important to create a conservation consciousness for its citizenry, and that it lay within the power of the institution of learning to inculcate into the public mind an awareness that a state, country, or nation's health, happiness and social security depends directly and entirely upon the proper use of its natural resources.*

Mrs. LaBudde dedicates the LaBudde Grove, a forested tract in the Nicolet Forest east of Eagle River. It was planted in the 1930s when club women raised funds to reforest many areas during the George Washington Bicentennial (1932).



*the one and only female member in its history."*

Of course, LaBudde would not have been nearly so important an ally to the Ikes had she had not been affiliated with the women's clubs. Fortunately the resignation did not become necessary, but the Federation never endorsed the legislation.

During July and August, the bill ground through legislative committees. It passed both houses late in the summer and Governor Philip LaFollette signed Chapter 445 Laws of 1935 on September 16. In her "thank-you" letter to the governor, LaBudde wrote:

*"We conservationists feel that this is probably the best bit of legislation ever passed by our state legislature. Long after many other laws have been forgotten posterity will look back to the time when a state of these United States first took cognizance of the fact that it was important to create a conservation consciousness for its citizenry, and that it lay within the power of the institutions of learning to inculcate into the public mind an awareness that a state, country, or nation's health, happiness and social security depends directly and entirely upon the proper use of its natural resources."*

Even as she enjoyed the victory, LaBudde's thank-you letter lobbied the governor on another of her myriad issues. That was typical. LaBudde was determined to make the most of every opportunity.

Over the course of the summer and fall of 1990, I continued my study of LaBudde's 30-year involvement in the resource management issues. As I progressed to the file folders of the 1950s, her letters became fewer in number. Her health and energy began to wane. When I read the last page in the last file of the last box, I fought back a tightening in my throat. As I closed the file, I sat quietly in the archives and felt very much alone. She was gone, and I grieved her passing.

Yet, Wilhelmine LaBudde is not really gone. Children all over the state still enjoy school forest outings. Budding teachers learn how to incorporate environmental education into their curricula. Elementary and high school students gain insight that help them make





JEAN B. MEYER



LABUDDE FAMILY COLLECTION

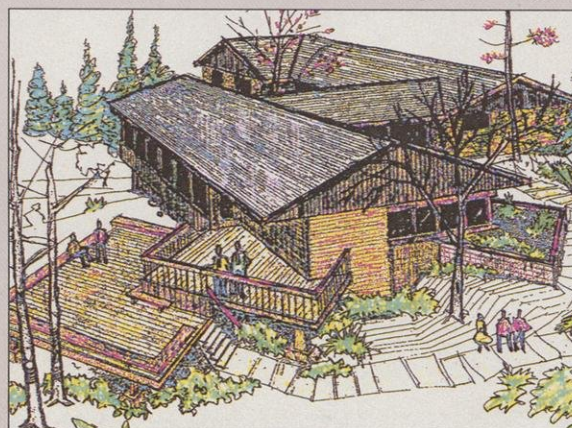
(top) Students mix art and science by making rubbings with natural plant dyes. LaBudde encouraged such activities to bring "a love of nature and outdoor beauty to young and old."

(above) In the fifties at her Pine Point home.

better personal environmental decision. These opportunities have been made available by the acts of various legislatures and governors, but they have their roots in the acts of a few conservationists of the 1930s, Wilhelmine LaBudde among them. □

*Christine L. Thomas, associate professor of resource management at the University of Wisconsin-Stevens Point College of Natural Resources, is national secretary of the American Society for Environmental History. Her research on Mrs. LaBudde was funded by the UW-Stevens Point Professional Development Committee.*

## Remembering the great ones



Architectural concept for the Wisconsin Conservation Hall of Fame.

In a wooded setting just off Highway 51 in Stevens Point, a small cluster of stylish buildings and decks provides a relaxing setting to learn about the men and women who built a conservation heritage in Wisconsin. Here, foresters, writers, researchers, lawyers and educators are honored for their lasting contributions to science, public policy and public understanding that natural resources warrant protection.

The 21 people enshrined in the Wisconsin Conservation Hall of Fame since 1985, including Wilhelmine LaBudde, came from different backgrounds and different walks of life. Their diverse interests, like natural diversity, rebuilt lands, wetlands and waters that were ravaged only 100

years earlier.

An expansion from the original hall of fame building will eventually house 1,200 square feet of exhibits and displays. Visitors will take a historical journey through northern Wisconsin as the massive white pinery was logged and exploited. A trip by lumber raft will drift past 100 years of Wisconsin

settlement. You'll have to hang onto your hats as wardens take you along on a deer poaching bust from the 1930s. A stop at a restored CCC camp will tell tales of reforestation. A final stop will describe current and emerging conservation issues.

Two of the exhibits are under construction and the rest will be finished as finances allow. Students from the neighboring College of Natural Resources at UW-Stevens Point are building the exhibits with professional guidance.

To help sponsor the construction or to nominate a candidate for the hall of fame, contact the Wisconsin Hall of Fame, P.O. Box 942, Stevens Point, WI 54481 or telephone (715) 341-1022.







# 3 SILENCE

QUIET TALK *about a* PRECIOUS COMMODITY.



ROBERT QUEEN

*Justin Isherwood*

Silence is music of the self. When I was a kid I wondered how it was that old people could sit in a chair doing nothing the least bit interesting. Not even listening to the radio. Just sit there. Rocking.

Silence is how great emotions work. Silence is why we can go to a funeral home and just sit there. The place so quiet you hear the tick of a wristwatch, and somebody's sob catches on something down inside us.

All the awful feelings a person can have are silent: sadness, melancholy, sorrow, hate, disillusion, despair, pity. Silence is not the only way to carry hurt, but it's the most common.

Silence also is the core of wilderness. Silent is the night, the stars, the crossing planets, the fiery meteor, the patient moon. Why then is humankind so noisy, when to our witness all that is eternal and powerful, is so...so...quiet?

Silence can not be alloyed or welded to other ideas; painted perhaps, tinted with bird song, wind, rain. Pure, uncut silence is too raw to bear. Nature is silent because stealth must be. Noise is for the victims and the prayerful.

Silent are the trees. Of all creation, trees do silence best.

They grow and suffer, live, go crippled and die without a single proclamation. For this we find trees admirable and, indeed, we think trees are heroic.

Of silences, the sea is good. Why else would Melville speak of it and know it so well?

The best silence of all is snow. None else so expert, so complete, so entire as snow. Snow can hush the countryside when nothing else can, this is why snow has so many admirers.

Sunset silence is uncertain. A catbird will pollute it, also the whip-poor-will, the starling, the mourning dove. Quality silence is not available here, though it is well-attended all the same.

A window can do silence. Combine smoking a pipe by a window and the silence is broad and fine-grained.

Other silences? A chair on a porch can do it, a treehouse, trout rod, a drifting fishing boat, a deer rifle (save one brief moment) and surely the bow season. A hunter knows silence and must.

Silence has no commercial value.

Silence has no ambition but for more. Unless you are a mime, you can not earn a living doing silence. Silence can not be built, only unbuilt.

Wisdom is silent too. In fact, silence is how wisdom is measured. The wise are silent more often than they are opinionated. We learn this sooner or later, usually later. Learn what silence means when we wish to be wise.

Silence has its tools and its untools. The automobile is an untool, a walk is a tool. The Walkman is an untool. So too is cordless anything, CB, CD, VCR, HDTV, coaxial, stereo, Bose and booze. A motorcycle is an untool although a motorcycle garage reduced to its elements can be a tool of silence, the same as a church pew.

The pen is a tool of silence. And the diary. Add the canoe, coffee pot, cemetery, injury and old age. Poems require silence as does bankruptcy, mourning, beauty, anger, worship, invention, love, loneliness, and maybe a couple others.

So why isn't there some public right to silence and some public agency responsible for preventing its contamination by the eager and quick? Healthy citizens require clean silence as much as they need clean air. As with all natural resources, silence is harder to fix than it is to spoil. □

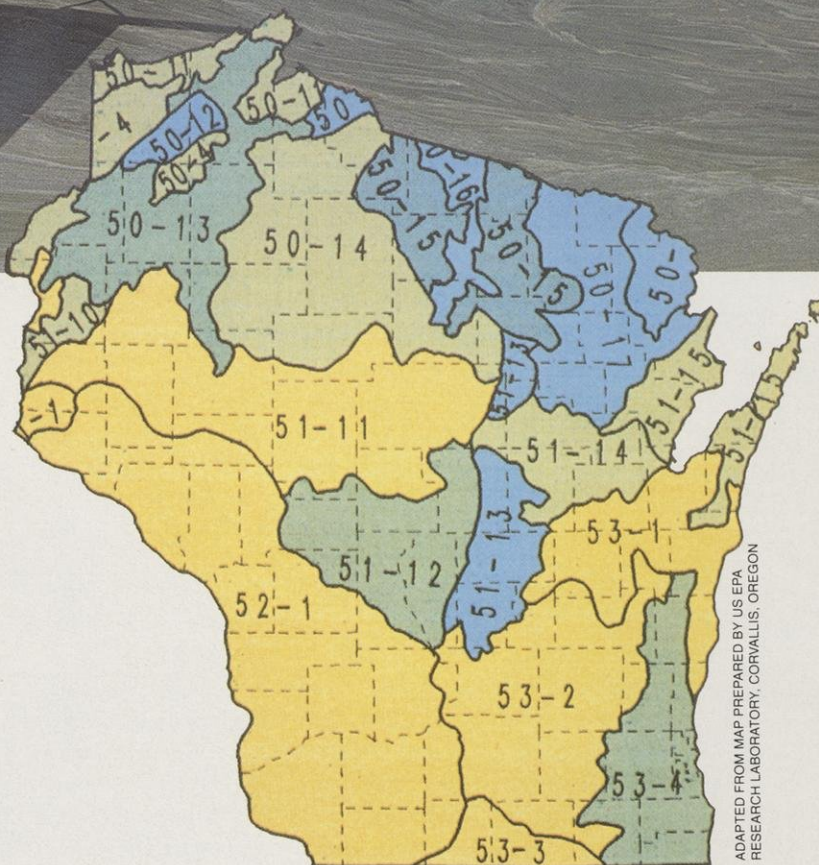
*Essayist Justin Isherwood writes about nature and our nature from his Plover, Wis. farm.*





(above) Algae blooms caused by excess nutrients are unsightly and can be unhealthy for mammals as well as aquatic organisms. Under certain conditions, strains of toxic algae proliferate. They can sicken mammals like cows, dogs and people that swallow water containing toxic algae.

(right) Phosphorus levels in lakes and streams naturally vary dependent on bedrock conditions, water flow, soil and vegetation along the banks. Human development invariably adds phosphorus and other nutrients to the water. Controlling the flow of phosphorus from waste pipes will seem small compared to steps we need to take to curb runoff from farms, neighborhoods, businesses and roads.



ADAPTED FROM MAP PREPARED BY US EPA,  
RESEARCH LABORATORY, CORVALLIS, OREGON



# SAYING "No"

*Curbing the flow of phosphorus to waters*

## TO THE

*will take more than turning off the tap from pipelines.*

# PHOSPHORUS FLOW

Bonnie Miller Goodweiler

I know this is a bit of a stretch for February, but imagine a clear, warm Wisconsin beach on a summer day. It's just right for a picnic, and your basket is filled with fresh watermelon, sandwiches, apple pie and lemonade. Your bike is packed. As you ride closer to the beach, you note that the parking lot is empty — no other cars or bikes are around on such a perfect day. In fact, the beach is closed! A massive green slime covers the rocks, sand and water near the shore and the shoreline is posted with signs. The edge of the lake is the color of pea soup and it smells. You are both annoyed and dismayed. When you were younger, you came here almost every summer day to swim and relax by the water.

Pretty ugly picture, wouldn't you agree? It almost makes you glad it's still winter and the lake is a tad hard and cold for swimming. Who or what caused this eyesore?

One of the likely culprits is phosphorus, a nutrient that encourages algae growth and degrades the water quality in lakes, rivers and streams. As an environmental engineer, one of my duties includes developing rules and



When algae blooms covered Buffalo Lake, clear channels for water recreation had to be cut and maintained.

regulations to protect Wisconsin's surface waters from harmful chemicals and excess nutrients. The Department of Natural Resources recently revised the

codes that restrict how much phosphorus sewage treatment plants and industries can discharge to lakes and streams.

The environmental controls DNR negotiates with businesses and cities are only part of the work needed to stem the flow of chemicals and nutrients into surface waters. Much more phosphorus runs off city streets, storm sewers and farm fields than is discharged through pipelines — nearly 243 million pounds of phosphorus are produced annually by livestock while only six million pounds are discharged by businesses and sewage treatment plants.

However, not all this phosphorus ends up in lakes and streams. Manure is disked into soil and spread as fertilizer. Some of the runoff from lawns and streets gets filtered in detention ponds or absorbed by grassy runways and shoreland vegetation. So some of the phosphorus in

DNR BUREAU OF WATER RESOURCES MANAGEMENT



runoff water is assimilated before it reaches waterways.

On the other hand, waste pipelines discharge phosphorus directly into lakes and streams every day. So point sources like treated wastes from sewage treatment plants, dairies, pulp mills, vegetable canning and meat processing can be more potent sources of phosphorus.

Wisconsin has actively taken measures to protect surface waters from phosphorus for years. Efforts included a ban on phosphorus detergents in the 1970s, laws to divert wastewater from lakes, zoning that limits how close septic tanks can be placed to water, limits on the soil types and doses of wastewater that can be spread on land, and requirements to remove phosphorus from wastes discharged to the Great Lakes and the Illinois-Fox river basins.

Before our recent work, only those municipalities and businesses that discharged wastes to the Great Lakes or the Illinois-Fox River Basin in Southeast Wisconsin had to limit the amount of phosphorus discharged in their wastes. A court decision in 1978 invalidated the concept of phosphorus limits on industrial discharges.

The impetus to protect all of Wisconsin's lakes, rivers and streams from excess phosphorus came when western Wisconsin citizens petitioned the Natural Resources Board in 1990 to limit phosphorus discharges to the Mississippi River.

A technical advisory committee was appointed to develop environmental rules. Their actions were supported by a proposed law in the State Assembly dubbed "The Clean the Green Bill" by Howard and Alice Clausing. She represented 175 members of the Tainter/Menomine Lake Improvement Association. Both Tainter and Menomine lakes were degraded each summer by large algal blooms. The pea soup cover over the lakes in summer put a damper on water recreation. Alice Clausing became such an active member in this environmental policy discussion that she subsequently ran for public office and was elected State Senator in 1992.

The rule, drafted with the committee's advice, limits both the total

amount of phosphorus and the dosages that can be discharged by sewage treatment plants that produce more than 150 pounds per month.

Typically, a sewage treatment plant serving 1,500 or more people would discharge more than 150 pounds of phosphorus in a month in its wastewater. So about 35 percent, or 207 of the state's 552 municipal plants, will have

to meet the new limits.

Since phosphorus can be found in natural products like raw milk, and many food industries use phosphate sanitizers and cleaners, any industries that discharge more than 60 pounds of phosphorus per month will be similarly restricted. Businesses that send phosphorous wastes to a sewage treatment plant might be required to "pre-



(above) Too much of a good thing. Excess nutrients grow dense stands of plants like duckweed. That blocks sunlight and consumes oxygen dissolved in water when plants die.

(below) Hiring harvesters after excess nutrients allow aquatic plants to choke waterways is costly.



DNR BUREAU OF WATER RESOURCES MANAGEMENT

DNR BUREAU OF WATER RESOURCES MANAGEMENT





DNR BUREAU OF WATER RESOURCES MANAGEMENT

The tradeoffs in chemically treatments to control lake weeds are more costly and riskier. Applicators must wear protective clothing and the public can't fish or swim in treated areas for a day or more.

treat" their effluent before they are blended with household wastes, treated and discharged to the surface water. Department of Natural Resources staff will work with these businesses and their consultants to review alternatives like non-phosphate sanitizers and cleaners that prevent this pollution.

Despite its admirable environmental goals, some officials question whether the treatment costs to remove phosphorus are worth the benefits. Some municipal and industrial representatives said treatment plants would find it difficult and costly to meet the standards. Businesses noted that non-phosphate sanitizers and cleaners are expensive and relatively new to the marketplace.

The final rules adopted last December include a system of variances for communities and businesses that can show phosphorus removal is not practical, will not reap environmental benefits or will add significant costs to

treatment processes.

Moreover, others believed the benefits of phosphorus removal compelled action, despite additional costs.

The Mayor of the City of Menomonee, Charles Stokke said of phosphorus removal "It's going to be expensive for the City, but if we don't support it, we can't complain about the green water in the Red Cedar River system which includes Tainter and Menomin lakes."

John Kennedy, a member of the technical committee who represents the Green Bay Metropolitan Sewerage District, added: "The costs for including phosphorus removal at our facility were minimal, though we did have an advantage. We incorporated the necessary equipment [to precipitate phosphorus] into the original designs back in the early 1970s."

Tighter regulations, coupled with other actions can curb the buildup of phosphorus in waters. Last year, the Legislature approved legal penalties for

those who fail to curb pollutants in runoff. In addition, 10 grant programs provide incentives for controlling runoff pollution.

Clearing nutrient-rich waters choked with algae and weeds will not happen overnight. Eutrophication, the natural aging process in surface water, is slowed or quickened by our collective actions. By limiting runoff, by applying fertilizers sparingly, by keeping grazing cattle out of streams, by installing grassy buffers between homes and lakesides, we can all slow the flow of phosphorus that overfeeds and greens up our waters. □

*Bonnie Miller Goodweiler is an environmental engineer with DNR's Bureau of Water Resources in Madison, Wis.*



# Readers Write



ROB NURRE

raised or lowered by the Rest Lake Dam, which controls levels on the 10 lakes in the Manitowish chain.

Manito can be seen from Highway 51 when traveling north over the Spider Lake Bridge. We're proud of what makes our area different, unspoiled and unique.

*Lois Wurm McManus  
Manitowish Waters, Wis.*

## ISLAND OR YOUR LAND?

*A photo caption in our August 1993 article, "Unknown Isles," misled some readers about who owns the islands in Wisconsin's rivers and lakes. A property owner who owns all the land surrounding a body of water does not necessarily own the islands that may be in that body of water. Island ownership can be difficult to determine; many factors enter into the decision. Readers interested in determining if they own islands are encouraged to contact the Register of Deeds, Property Lister or Clerk in the country where the island is located. The DNR Bureau of Property Management in Madison can also provide assistance; call 608-266-2135.*

I'm writing in regard to your August '93 article on islands. I'm concerned about the photo caption on page 24, which begins, "Islands, like this one north of Minocqua...."

The island pictured is called Manito; it's in Manitowish Lake in the township of Manitowish Waters. (That's about 26 miles north of Minocqua.) The carefully arranged rocks surrounding the island were placed there by DNR personnel to prevent erosion when the water level is

## SENIOR ANGLERS

In the October 1993 "Reader's Write," an 82-year-old gentleman wrote a letter about Senior Anglers. In your answer, you said "anyone born before January 1, 1927 may fish for free for his or her lifetime."

I am a 76-year-old Illinois resident who subscribes to your magazine and has a cabin near Hayward, Wis. I have been paying the full non-resident license fee for many years. Is this the correct situation?

*Donald G. Shriver  
Poplar Grove, Ill.*

*It is, Mr. Shriver — the Senior Angler program applies only to Wisconsin residents. It does not apply to out-of-state land owners. We hope that won't stop you from enjoying the excellent fishing Wisconsin offers to people of all ages.*

## A FUNGUS AT FAULT

In your special section about deer ("Whitetail!," October 1993) there is a photograph of an ear of corn damaged by deer. Rather than blaming *Odocoileus virginianus* for the damaged ear, I suspect the culprit is *Ustilago maydis*, the fungus better known as corn smut.

*Bill Akan  
Oshkosh, Wis.*

*Hard as we try to keep smut out of our magazine, it occasionally turns up. The ear of corn we pictured got the double whammy — it was plagued with the fungus and chomped by a hungry deer.*

## 400 FAN

Thanks for the great article about the Ol' 400 Trail in the August issue. My daughter and I rode the trail in early October at the height of the fall colors. It was a wonderful day! I especially enjoyed the "interpretive nature trail" on the Wonewoc section, a bowl of chili at a cafe in Elroy and having my bike chain repaired by a skillful school-aged boy in La Valle.

We did have to stop once for a large turtle crossing the trail!

*Noel Cline  
Dodgeville, Wis.*

## STEAMED ABOUT GLOBAL WARMING

"Global Warming — Should Wisconsin Care?" in your October 1993 issue left a great deal to be desired. Although author Eric Mosher waffles and qualifies, it's apparent he would like readers to accept global warming as established fact.

Before your readers buy this "established fact" I suggest they read "Future Imperfect" in the November 1993 issue of *Discover* magazine. This article makes no attempt to hide the scientific flaws in the global warming theory, and explains why global warming is a very dangerous basis for policy decision-making.

Let's clean up the air and limit toxic pollutants, but by all means don't try to snow the public with a faulty doomsday reason for doing so.

*Charles Roberts  
Janesville, Wis.*

Eric Mosher's article on global warming was worthy of its lead-off place in the October 1993 issue. I was particularly pleased

that Mosher pointed out that "Even if all manmade emissions of CO<sub>2</sub> were halted today, the effects of past emission would be felt for more than a century." Not only is this a fact; it is a fact that needs to be more widely acknowledged.

Several comments on the piece are warranted, however:

1. We humans, individually and collectively, are not wise enough to predict all the possible consequences of the increased concentration of greenhouse gases in the atmosphere. If we had any sense, we would be striving mightily to immediately and drastically reduce greenhouse gas emissions worldwide.

2. The assertion that global warming will occur by small and constant increments flies in the face of what we know about the behavior of systems. Systems use negative feedback loops to maintain stasis; when systems are stressed beyond a certain threshold, positive feedback begins and change is rapid. Who is to say global warming will not follow this pattern?

3. To say that the increased concentration of greenhouse gases in the atmosphere is the cause and global warming is the effect is to miss what may be the most significant effect: a messed-up, unpredictable weather system. This would have profound implications for farmers and agriculture — a fact that Mosher gave insufficient emphasis.

4. Mosher is surely correct in saying that "only reductions in greenhouse gases will realistically control global warming." And he is correct in saying that this will mean using less energy and switching to safer energy sources. But he has little else to add on this key topic.

I wish Mosher had pursued ways to reduce the use of polluting energy sources. Why not seriously promote the concept of "ecological company towns" with



energy-efficient industries and shops located within walking distance of energy-efficient homes? Why not promote a less materialistic life as a means to reduce pollution overall?

I must admit that I am not at all optimistic about humanity's ability to meet this problem head on. There is so much pressure in our society to refrain from doing things that will mean a loss of jobs that we are unlikely to take the drastic steps necessary. I'm just glad that I'm in the second half of my life so that I won't have to live through the environmental turbulence I'm convinced will become commonplace as we continue to assault Mother Earth.

Alton C. Thompson  
Greendale, Wis.

would affect Wisconsin. He described what might happen if global warming accelerated. He also offered a range of options that individuals and communities could choose to cut back on carbon dioxide emissions — including using public transportation and relying on alternative energy sources. The potential effect of global warming on agriculture was addressed in a photo and caption on page 9.

## CORRECTION

In our October 1993 story "Global Warming: Should Wisconsin Care?" we incorrectly stated that the United States had not signed the global warming treaty at the international Rio Earth Summit



ROBERT QUEEN

Eric Mosher's purpose was not to foist "doomsday" predictions on WNR readers, but rather to discuss the limits of computer models and the difficulty of predicting how atmospheric change based on those models

in June 1992.

The United States did sign the treaty and did agree to reduce emissions, but not by the year 2000 deadline agreed upon by the other treaty's signatories.



EDWARD PRINS

continued from page 2

Horned larks really shouldn't be confused with any other birds seen in Wisconsin as their markings are unmistakable. Two tiny black "horns" arise from their black foreheads. The horns, which are really feather tufts, may be laid back on the head where they are less visible. A black line under each dark eye curves down into black whisker marks on each side of the face. A black throat collar separates the pale yellow face from the cream-colored breast. White outer tail feathers show off the dark tail. Females have similar coloring and markings but are more somberly dressed. Her "horns" are not as prominent.

As the earth warms and the snow melts, exposing bare soil, horned larks move from the roadsides into the fields. They blend in so well with their surroundings that they are almost invisible, but you'll hear them. Fortunately, horned larks love to sing. Atop a dirt clod or high overhead in his courtship flight, the male warbles his sweet, high-pitched tinkling song.

Love songs in winter lead to nest sites in winter. The horned larks are early nesters, which isn't always productive in a land reluctant to release its icy grip. The larks' shallow cup nests of coarse stems lined with fine grasses are placed in slight hollows in the ground.

Early nests are vulnerable to April snowstorms and spring plowing. The birds are not easily discouraged; they'll re-nest, raising two, perhaps, three broods per year.

Though horned larks are common summer residents in Wisconsin, the best time to see them is in late February into March. As you drive about the state, look for these real harbingers of spring. If you spot squat, earth-toned birds that flush from the roadside, fly almost straight up, circle back and land on the road behind you, they are likely horned larks. Stop the car and listen for their tinkling songs drifting from the bare fields. You won't be disappointed. □

Cold weather never stops Anita Carpenter's treks along the byways near her Oshkosh home.



