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Special Report: The Facets of Wisconsin's Warden Force

WISCONSIN NATURAL RESOURCES

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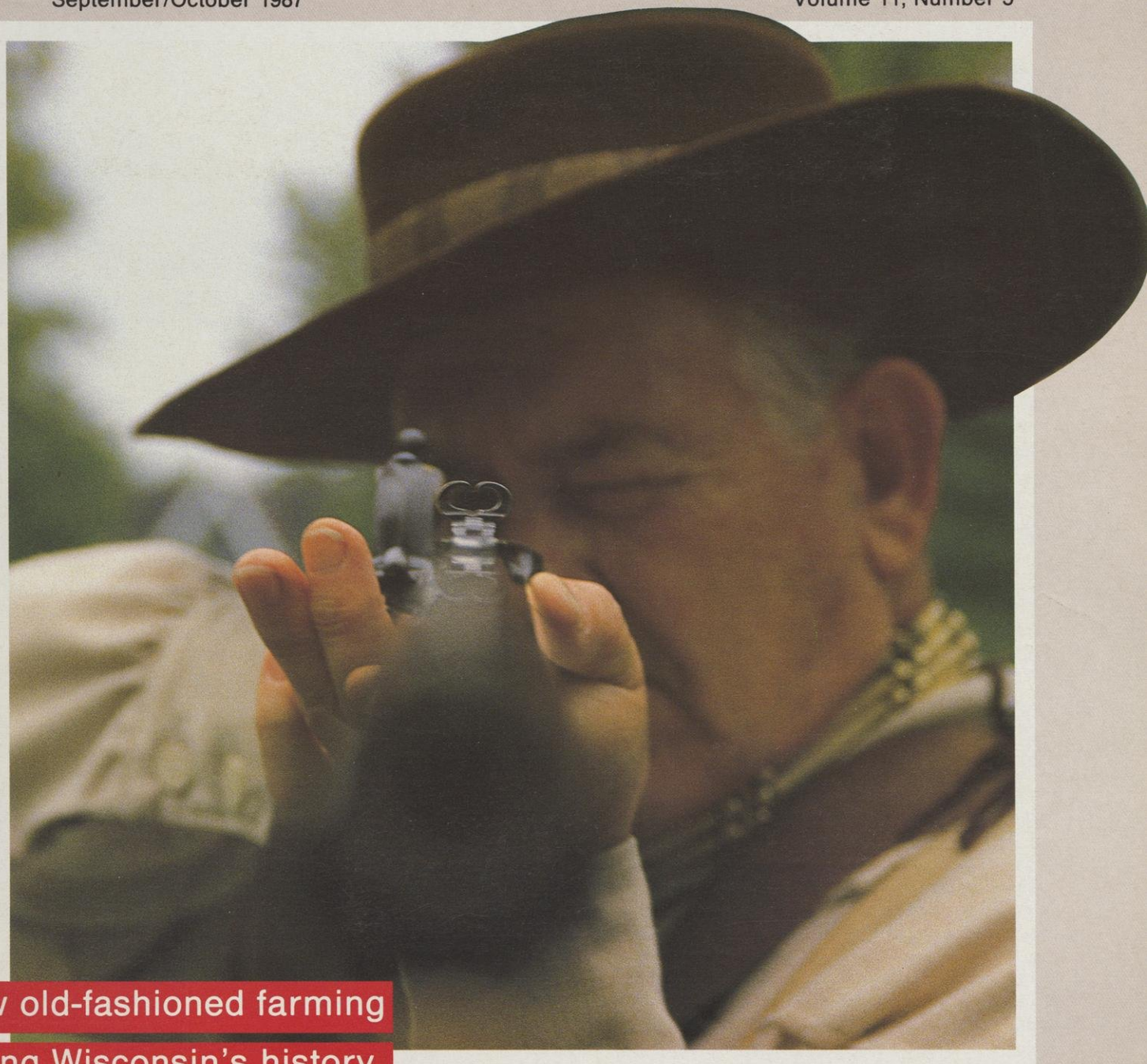

New old-fashioned farming

Hiking Wisconsin's history

Wisconsin's federal duck stamp winner

Order a 1988 Wisconsin State Parks calendar

This lustrous rock is chalcopyrite. It's dull, sooty-gray cousin, chalcocite, contains much more copper. DNR photo

The Flambeau find

Naomi Hubbard-Toler

Almost two-billion years ago the Ladysmith area was a volcanic sea much like today's Japan. Volcanic eruptions from that era helped bury a treasure, the "Flambeau ore body," that may be mined one day.

The land around Ladysmith in rural Rusk County looks much like the rest of northwestern Wisconsin. Primary economic activities are farming and forestry. And something special lies below the surface — copper. In the near future, mining could be another local business.

Mineral explorers in the Ladysmith area discovered a copper deposit in 1968 that was dubbed the "Flambeau ore body." By 1976, the Kennecott Explorations, Ltd., Australia sought to begin mining operations. Local zoning battles and slumping metal markets temporarily stopped the project. Since then, Kennecott has proposed a new, substantially smaller mine, and Wisconsin has updated and clarified mining laws.

The Ladysmith find is a small but rich, sulfide ore body from which several valuable minerals can be extracted. Most valuable, in terms of dollars, are chalcocite and trace amounts of gold.

Just like people, some of the most valuable minerals come in simple wrappings. Chalcocite is lead-gray to dull, sooty black in color. It's made up of 80 percent copper and 20 percent sulfur. The enriched portion of the ore deposit which Kennecott now proposes to mine near Ladysmith averages about 10 percent copper.

Chalcocite's less copper-rich cousins, chalcopyrite and bornite are, in contrast, extremely attractive. When bornite is broken or chipped, it reflects lustrous, iridescent flecks of metallic green, brown and gold colors mixed throughout the mineral. We know chalcopyrite by another name, "fool's gold."

As proposed, the chalcocite mined at Ladysmith would be crushed at the site and then shipped out of state. Once the ore is milled to separate and concentrate valuable minerals from waste rock, it would be further processed into various metal products. We use copper for electrical parts and coins, but we also smelt it with tin to make bronze and with zinc to make brass.

How did copper form in a land we now see as farm and tree country? Geological history tells us that 1.9-billion years ago the Ladysmith area was within a volcanic sea much like the region around present-day Japan. Volcanic eruptions spewed molten lava into surrounding waters, which settled as a layer of mineral rich sediment. Through time, the sulfide mineral layer was buried deep in the earth. As groundwater levels rose and fell over thousands of years, water and air oxidized the lava. Slowly, enriched layers of copper minerals formed.

Kennecott proposes to mine the top 200 feet of the ore body, called the enriched zone. If the company receives a mining permit, Kennecott estimates an eight-year project. It would take about a year to develop the mine, ore would be extracted for five years, and two years would be devoted to reclaiming and restoring the site.

Naomi Hubbard-Toler studied International Relations at the University of Wisconsin. Recently graduated, she now resides in Chicago.

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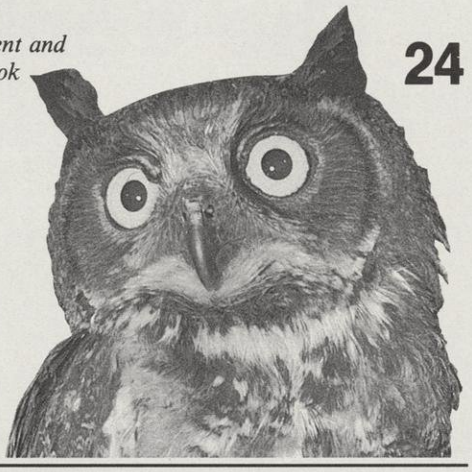

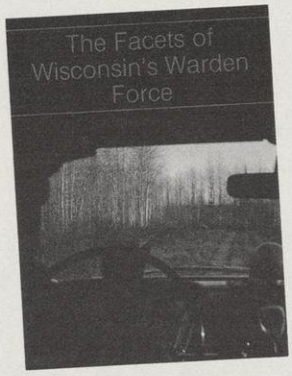

FRONT COVER: Merriwell Huebing's handcrafted muzzle-loading rifles draw long stares and deep breaths wherever he shows them. They work too! Huebing is also expert in ballistics and loading. Photo by John Beth

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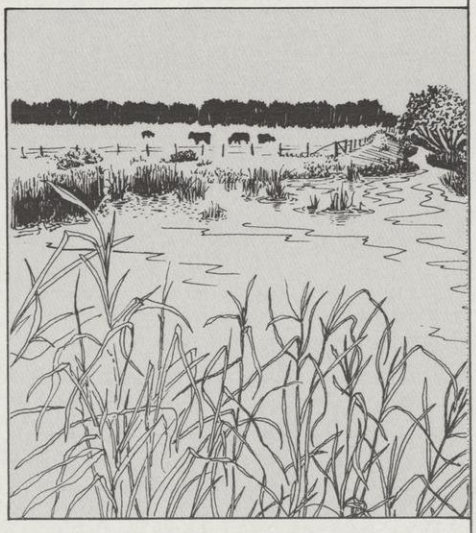
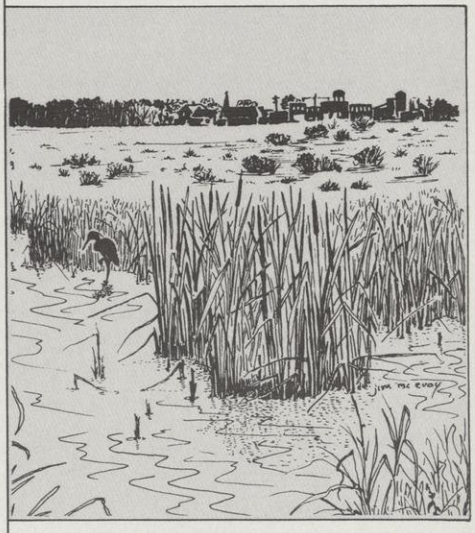
Aldo Leopold

The ecological conscience





Editor's note:

The December 1947 issue of the *Wisconsin Conservation Bulletin* carried this speech that Professor Leopold presented to the Conservation Meeting in Minneapolis in June 1947.

In it, Leopold continued to shape and hone the message which would be distilled in his great essay, "The Land Ethic." The speech demonstrated Leopold's skill in seeing ecological themes in current issues. Leopold challenged his audience to "throw your weight around on matters of right and wrong in land-use. Cease being intimidated by the argument that a right action is impossible because it does not yield maximum profits, or that a wrong action is to be condoned because it pays."

To drive home his point, Leopold chose four Wisconsin examples. He described the bust and boom cycles in Wisconsin's northern deer herd to implore that people study and learn wildlife management principles as well as "emoting about the problems of conservation." He was saddened by a neighbor's decision to cut an historic stand of pines by describing the individual's obligation to be custodian of rare places and the community's obligation to help individuals bear the burden of custodianship. He detailed a lost battle to preserve stretches of the Flambeau River to stress the importance of considering the public good when local sacrifices have to be made. He opened his discourse on the ethics of community life with this call to face our obligations to land and soil.

Drawings by Jim McEvoy

Everyone ought to be dissatisfied with the slow spread of conservation to the land. Our "progress" still consists largely of letterhead pieties and convention oratory. The only progress that counts is that on the actual landscape of the back forty, and here we are still slipping two steps backward for each forward stride.

The usual answer to this dilemma is "more conservation education." My answer is yes by all means, but are we sure that only the volume of educational effort needs stepping up? Is something lacking in its content as well? I think there is, and I here attempt to define it.

The basic defect is this: We have not asked the citizen to assume any real responsibility. We have told him that if he will vote right, obey the law, join some organizations, and practice what conservation is profitable on his own land, that everything will be lovely; the government will do the rest.

This formula is too easy to accomplish anything worthwhile. It calls for no effort or sacrifice; no change in our philosophy of values. It entails little that any decent and intelligent person would not have done, of his own accord, under the late but not lamented Babbittian code.

No important change in human conduct is ever accomplished without an internal change in our intellectual emphases, our loyalties, our affections, and our convictions. The proof that conservation has not yet touched these foundations of conduct lies in the fact that philosophy, ethics, and religion have not yet heard of it.

I need a short name for what is lacking; I call it the ecological conscience. Ecology is the science of communities, and the ecological conscience is therefore the ethics of community life. I will define it further in terms of four case histories, which I think show the futility of trying to improve the face of the land without improving ourselves. I select these cases from my own state, because I am there surer of my facts.

Soil Conservation Districts

About 1930, it became clear to all except the ecologically blind that Wisconsin's topsoil was slipping seaward. The farmers were told in 1933 that if they would adopt certain remedial practices for five years, the public would donate CCC labor to install them, plus the necessary machinery and materials. The offer was widely accepted but the practices were widely forgotten when the five-year contract period was up. The farmers continued only those practices that yielded an immediate and visible economic gain for themselves.

This partial failure of land-use rules written by the government led to the idea that maybe farmers would learn more quickly if they themselves wrote the rules. Hence, in 1937, the Wisconsin Legislature passed the Soil Conservation District Law. This said to the farmers, in effect: "We, the public, will furnish you free technical service and loan you specialized machinery, if you will write your own rules for land-use. Each county may write its own rules, and these will have the force of law." Nearly all the counties promptly organized to accept the proferred help, but after a decade of operation, no county has yet written a single rule. There has been visible progress in such practices as strip-cropping, pasture renovation, and soil liming, but none in fencing woodlots or excluding plow and cow from steep slopes. The farmers, in short, selected out those remedial practices which were profitable anyhow, and ignored those which were profitable to the community, but not clearly profitable to themselves. The net result is that the natural acceleration in rate of soil-loss has been somewhat retarded, but we nevertheless have less soil than we had in 1937.

I hasten to add that no one has ever told farmers that in land-use the good of the community may entail obligations over and above those dictated by self-interest. The existence of such obligations is accepted in bettering rural roads, schools, churches, and baseball teams, but not in bettering the behavior of the water that falls on the land, nor in the preserving the beauty or diversity of the farm landscape. Land-use ethics are still governed wholly by economic self-interest, just as social ethics were a century ago.

To sum up: we have asked the farmer to do what he conveniently could to save his soil, and he has done just that, and only that. The exclusion of cows from woods and steep slopes is not convenient, and is not done. Moreover some things are being done that are at least dubious as conservation practices: for example marshy stream bottoms are being drained to relieve the pressure on worn-out uplands. The upshot is that woods, marshes, and natural streams, together with their respective faunas and floras, are headed toward ultimate elimination from southern Wisconsin.

All in all, we have built a beautiful piece of social machinery—the Soil Conservation District—which is coughing along on two cylinders because we have been too timid, and too anxious for quick success, to tell the farmer the true magnitude of his obligations. Obligations have no meaning without conscience, and the problem we face is the extension of the social conscience from people to land.

The new old-fashioned farming

Margaret Krome

"Sustainable agriculture" can cut production costs and protect the environment. More and more farmers are trying the method, that calls for minimized use of synthetic fertilizers, herbicides and pesticides.

Stan Szymanski watches a tree swallow fly across his field and alight on one of several birdhouses:

"There's my insecticide program," the Marathon County farmer says.

Stan and wife Angie use no chemical insecticides or commercial fertilizers on their 400-acre dairy, hog and ginseng farm.

Soil nutrients come largely from rotating crops and applying 10 tons per acre of liquid manure each year. According to Szymanski, "Soil life is the source of nutrients." Weeds are controlled through cultivation, careful rotations and judiciously applied herbicides. For example, they have applied only one-half to one pound per acre of Atrazine herbicide every year to their corn crop: this contrasts with three to four pounds conventionally applied.

The Szymanskis were conventional farmers for 15 years before reducing purchased pesticide and fertilizers in 1981. Annual test plots began to indicate that many purchased products were unnecessary or detrimental. Szymanski says that conventional farming "by the labels" was easier than their current "low-input" practices, which require careful management and attention to farm conditions. However, he enjoys the challenge of finding alternative strategies to maintain both high production and superior quality on the farm. "You can't have soil life and label farming in the same field."

The Szymanskis' methods appear to be working. Their soil is more friable than when they used agricultural chemicals. Legumes are no longer burned by Atrazine carry-over (persistence) from the previous year's corn crop. Wildlife abounds around their farm. Perhaps most gratifying, the Szymanskis have maintained yields while cutting more than $20,000 per year from their operating costs. Indeed, they get a superior price for their ginseng crop because fewer chemicals are used.

"You can't have soil life and 'label farming' in the same field."
— Stan Szymanski, *Marathon County.*
Photo by Bob Queen

Szymanski notes that they have not completely eliminated the use of chemicals from their operation. "Maybe in the future we will," he says. "As a nation, we got into chemical farming over a long period of time, and it will take awhile to accustom ourselves to farming without chemicals now."

Charlie Opitz's Lafayette County dairy farm is larger than the Szymanskis'. But Opitz, too, uses low-input farming methods to reduce production costs. Opitz keeps 2,000 animals, milking 700 to 800 cows each day. He farms 2,000 to 2,200 acres, growing hay on half and using the rest for pasture. In the eight years since Opitz started farming he's used a pasturing program to keep his operating costs to a minimum.

"Pasturing's biggest advantage is that I don't have to handle manure and feed for all those animals," Opitz says.

He uses a method called intensive rotational grazing to pasture his herd. He divides his pastureland into 19 permanent paddocks of approximately 10 acres apiece, which he subdivides to make 38 paddocks, if necessary. The herd intensively grazes one paddock each day, continuing to a fresh paddock the next day. The previously grazed paddock is allowed 21 to 34 days to recuperate, depending on the time of year. In the spring, when grazed pasture recovers quickly, Opitz cuts excess pasture for hay. Later, when plants grow more slowly, he uses all of his pasture for grazing. He has one system of paddocks for his prime milking herd of approximately 250 cows. Dry cows and heifers graze in a separate system. Because intensively pastured animals graze more competitively than under conventional pasturing, they're not picky eaters, and weeds rarely mature to seed and multiply.

Tight-packed cows graze more intensively and they're not picky eaters. Like kids with spinach, cows can learn to gobble up healthy, less palatable plants.
Photo by Bob Queen

"We have the God-given responsibility not to pollute the soil and water of the future."
— Carl and Cathy Pulvermacher, *Richland County.*
Pennsylvania farm photo by Phil Norton

It's an old idea, but rotating grazing paddocks keeps pasture weeds low while cutting handling time for manure and feed.
Photo by Bob Queen

"It's a good system," Opitz says. "Probably my biggest problem with pasturing is mud. After a rain, animals' hooves can chop up a wet pasture into a sea of mud." Opitz uses this occasional problem as an opportunity to reseed and adjust the mix of forage plants in his paddocks.

On the hot June day when we visited, Opitz stopped cutting hay an hour before his lunch break, when his hay chopper broke down. Over lunch he learned that his truck had engine problems, the milk pump seemed to be faltering, and two workers had quit unexpectedly to take a factory job elsewhere. "This is an average day," he said. "With such a large operation, minimizing such problems is one reason that I like to pasture my animals."

Intensive grazing offers several other advantages. It saves Opitz money as well as time and labor. His cows produce an average of 15,000 pounds of milk each annually, well above the 13,000 state average. He estimates that gross milk sales per acre (including costs for purchased feed grains) range from $690 to $900. This compares well with $700 in gross sales other farmers in his area receive, and Opitz's labor costs are lower than theirs.

There are environmental advantages, as well, to Opitz's pasturing approach. Erosion has declined significantly since he bought the land from a grain farmer nine years ago. Land planted fence-to-fence in corn is now almost continuously covered with pasture. This year Opitz plowed only 40 acres for oats, which are less erosive than corn. Furthermore, unlike the common crops of corn or soybeans, pasture requires few herbicides.

Szymanski and Opitz are part of a growing number of farmers who are changing methods to cut production costs and protect environmental quality. Currently called "sustainable agriculture," these practices include biological pest control, manure spreading, composting, crop rotations to control pests and balance soil nutrients, minimum tillage and incorporating green manures. All of these practices stress minimizing the use of purchased products such as synthetic fertilizers, herbicides and pesticides, and also emphasize reducing costly irrigation practices.

Not 'organic' farming

Sustainable agriculture is sometimes confused with organic farming, which uses no agricultural chemicals at all. In fact, farmers employing these "sustainable" techniques reduce, but do not entirely eliminate, such products. These practices are being used by large and small farmers alike, to produce a wide range of commodities, from beef and poultry to milk, vegetables and grains.

Several factors account for farmers' increased interest in sustainable agriculture. Low commodity prices and high production costs have contributed to the current economic crisis in agriculture. Even if yields decline slightly, lower production costs can compensate for this drop and still increase profits. As Opitz puts it, "The costs I pay to move a pasture fence, I pay to myself. To keep paying your profits to commercial dealers these days is like putting a rope around your neck and kicking the stool out yourself."

Dairy farmers Carl and Cathy Pulvermacher in Richland County began reducing chemical use primarily for environmental reasons. "I believe we have the God-given responsibility not to pollute the soil and water of the future," Carl Pulvermacher told a sustainable agriculture conference in Stevens Point in February. Documented environmental problems from conventional farming practices have increased in recent years — groundwater contamination from pesticides and fertilizers is a growing controversy in the central sands and other areas of Wisconsin. Other concerns include nonpoint pollution of lakes and waterways, soil erosion, damage to wildlife and long-term health problems for farmers themselves.

Many speaking up

Farmers are not alone in advocating less intensive farming methods. A growing number of voices in Wisconsin and around the country are identifying a wide range of advantages from sustainable agriculture. Environmental groups support practices requiring fewer chemicals. Soil conservationists emphasize soil health and erosion control. Energy conservationists predict these methods will reduce national energy consumption, since 30 percent of energy in agriculture is used to manufacture agricultural chemicals like nitrogen fertilizer. Farmworker groups advocate using fewer chemicals to reduce health hazards to farmers and laborers. Indeed, recent consumer surveys show that chemical contamination of food is consumers' single largest food-related concern. Social issues are also important. The Wisconsin Rural Development Center and similar groups around the country recognize that conventional, intensive farming technologies have contributed to increasing farm sizes and decreased populations in rural communities. The center actively supports efforts to develop sustainable agricultural practices.

Given this support and the many successes with sustainable agriculture, why don't more farmers practice it?

Farmers cite several constraints. Reliable, scientific and economic information on these farming methods is difficult to obtain. "I need help in developing an effective composting system," says Carl Pulvermacher, for example. Extension agents and other specialists are usually university trained in intensive, high-production agriculture. Despite their well-intentioned interest in helping farmers cut "chemical dependency," agents often do not understand methods or available options. In some cases, not much research has been conducted on specific methods. Whatever the reason, farmers like Pulvermacher say they lack necessary information.

Similarly, farmers unfamiliar with less chemically-intensive farming may think it is old-fashioned, or doubt that it can be profitable. Again, advocates are convinced that sound information, well disseminated, is key to demonstrating new profitable methods.

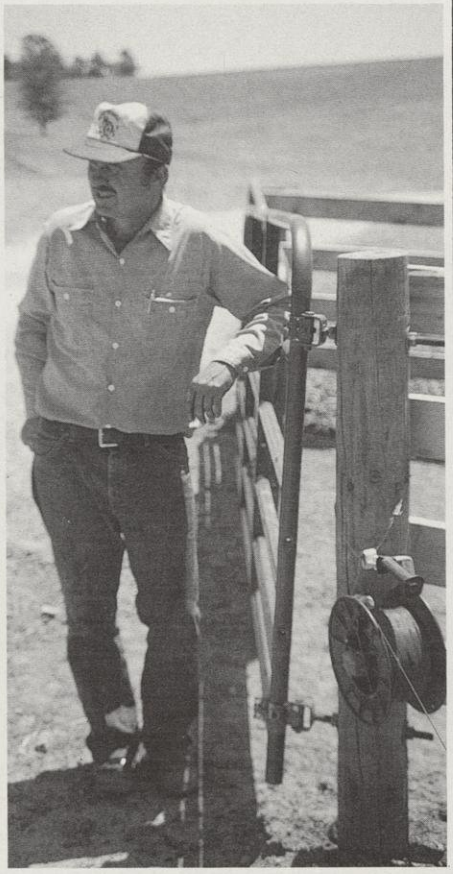
Another constraint for low-input farmers; it's difficult to market their commodities for a premium. For example, Dean Swenson is an Iowa County dairy farmer who uses no fertilizers, pesticides or other agricultural chemicals. "I get the same price for my milk as farmers using chemicals," Swenson says.

"There's no price incentive to farm sustainably."

Private research efforts

In Wisconsin and around the country, farmers and other advocates have started generating interest in sustainable agriculture. During the past two years, a group of southwestern Wisconsin farmers known as the Wisconsin Farmers' Research Network conducted on-farm research on less chemically-intensive corn production. The network, coordinated by the Wisconsin Rural Development Center (WRDC), has worked closely with extension agents and UW-Platteville agricultural staff. Last year's result demonstrated that spreading manure and plowing under alfalfa stands increased soil fertility, maintained yield and significantly increased net profits.

"Our project is important because it helps farmers to satisfy their own concerns," says Swenson, network founder. The network also publishes a bimonthly newsletter on sustainable agriculture through WRDC.



"Minimizing problems is one reason I like to pasture my animals."
— Charlie Opitz,
Lafayette County.
Photo by Bob Queen

Another private research effort began this year when the Michael Fields Agricultural Institute in East Troy started low chemical research trials on nearby farms. Cooperating farmers are undertaking experimental work on cover crops, weed control without herbicides, developing soil-building rotations using cool and warm season grasses and different legumes.

Several state agencies are beginning to address sustainable agriculture as well. Agencies joined private groups to cosponsor a two-day conference last February in Stevens Point to explore sustainable agriculture's potential in Wisconsin. More than 275 farmers, researchers, environmentalists, educators and policymakers gathered to discuss farmers' needs and agencies' initiatives to help meet them.

Promising programs

Several new state programs offer promise of making Wisconsin a national leader in sustainable agriculture. One that is drawing attention both in the state and elsewhere is an innovative $2 million Sustainable Agriculture Demonstration Program. Administered by the Department of Agriculture, Trade and Consumer Protection (DATCP), it is funded from oil overcharge refund monies. According to Agriculture Secretary Howard Richards, "The program's primary objectives will be to help farmers develop low-input methods to further agricultural profitability and protect the environment, particularly groundwater." Proposals will be considered and funds distributed for the 1988 cropping season, the first of the program's three projected years.

Another unique initiative is an agroecology program at the North Central Technical Institute in Wausau. The program was approved this summer by the State Vocational, Technical and Adult Education Board. The institute's horticulture instructor, Scott Trull, teaches the program, stressing the need for ecological balance in agricultural systems.

"Humans should be part of the ecosystem, without controlling it," Trull says.

He backs his philosophy with research results from around the country. As with similar courses that Trull has taught, the program takes a "hands on" approach aimed at small, commercial farmers, who constitute 60 percent of his students. Recently, students intensively cropped cucumbers, tomatoes and other plants using both field and greenhouse facilities for their classroom.

Other state agencies are also developing programs around sustainable agriculture. The Cooperative Extension Service of UW-Extension is planning to publish a series of Extension bulletins specifically addressing various sustainable ag issues and techniques. It also plans a "touring conference" on sustainable agriculture in three state regions next March. UW-Madison's College of Agriculture and Life Sciences has formed a task force to develop an interdisciplinary, "systems" approach to low-input farming research. It is hosting a lecture series on the topic this fall. Even DNR's responsibility to set groundwater standards for agricultural chemicals will influence farmers' decisions in choosing agricultural chemicals for years to come.

"Humans should be part of the ecosystem, without controlling it."
— Scott Trull, *Wausau.*
Photo by Bob Queen

The complex and long-standing problems afflicting American agriculture will clearly not be solved by any single approach. However, as more and more farmers like Szymanski and Opitz are discovering, sustainable agriculture practices offer concrete ways to increase net profits by lowering operating expenses, often without significant drops in yields.

In the course of sustaining the agricultural resource base for future generations, these techniques also preserve habitat for tree swallows, foxes and scores of other wildlife species.

In the end, these new ideas help preserve healthy rural communities — the backbone of healthy agriculture and the nation.

Margaret Krome analyzes sustainable agriculture policies for the Wisconsin Rural Development Center in Madison, Wis.

The 1987-88 federal duck stamp winner, a painting of redhead ducks by Arthur G. Anderson

"Two roads diverged. . ."

Rick Mulhern

Arthur Anderson was studying economics in college. He decided to leave it behind, and went on to become one of the nation's premier wildlife artists.

Onalaska, Wis. overlooks a gorgeous stretch of the Mississippi River. But that's not the community's only impressive natural resource.

Arthur G. Anderson, the wildlife artist of broad renown, has lived in the attractive town north of La Crosse eight years now. On the one hand, Anderson is recognized as a quiet man, who savors hushed treks through misty marshes.

But not too long ago he made a splash that was heard around the nation by winning the 1987-88 federal duck stamp contest.

True, Anderson, 51, had already earned recognition as first runner-up in Wisconsin's 1982 Great Lakes trout stamp contest. He'd become internationally known when his painting "Riding the Wind" was chosen one of six companion pieces to the Artist-of-the-Year's painting in the 1985 contest sponsored by Ducks Unlimited. In addition, Anderson had published more than a dozen limited edition prints, and provided 5,000 prints for DU banquets.

However, winning the federal duck stamp contest is an artistic feat that, for waterfowl painters, is up there with winning the Super Bowl.

The duck stamp, formally known as the Migratory Bird Hunting and Conservation stamp, must be purchased by duck hunters 16 years and older to paste on their hunting licenses. Proceeds are used by the U.S. Fish and Wildlife Service to buy waterfowl habitat. Anderson won in 1986, when his painting of three redhead ducks flying low over backwater marsh was chosen over almost 800 other entries depicting 37 types of swans, ducks and geese.

Like the winners before him — including Wisconsinites Owen Gromme and Martin Murk — Anderson received no cash prize. But the Eau Claire native did receive overnight recognition, and what art marketers describe as an opportunity for the most exposure an artist can get in the shortest period of time. That's because each artist copyrights his design and sells the rights to art companies. Three years ago, 31,000 prints of the winning painting were sold, and one dealer estimates artist William Morris made close to $2 million on his picture of two wigeons. It's said that an artist who wins a major contest can triple the price of his work overnight.

Anderson, a father of six who's made a living as a wildlife artist for about three years, says he doesn't have too many plans for his expected new income. He added a new studio on his house, and wants to build a fireplace and family room. He and wife Virginia are thinking about a cruise this winter.

"The months since the contest have been good ones," Anderson says. "I've been painting since I was 12, and a win like this gives you a good feeling."

Anderson has actually done all sorts

of painting since his days as an art student at the University of Wisconsin-Eau Claire. There have been birds, animals, portraits.

"It all began about 40 years ago," he says, "with a family that really liked the outdoors.

"I fished, I deer hunted when I was 12 — my dad brought us up like that. Meanwhile, in school, I was always drawing a lot, doing things like caricatures, wildlife.

"Some of my school pals thought the drawings were cute — my teachers didn't always agree."

Then something fortunate happened, something that kept Anderson's interest from going the way of childhood fancies.

"My uncle, you see, was a gifted man who'd come up from Milwaukee to visit us. He loved to head outside with his box of Grumbacher oils, find a nice hill somewhere, and paint the ponds, creeks and other natural things he'd see. I'd study his hand intently — much more closely than my brothers would.

"Then one day my uncle gave me that box of oils. He said he'd become interested in the violin. I was breathless, inspired. And I've never parted with that box."

Not yet a teen-ager, Anderson pushed on, painting a faithful likeness of an Alaska brown bear from the cover of an outdoor sports magazine. As a high school art student, he found himself picking up some serious training — and straight A's — in art.

"I entered some summer exhibits with my wildlife work but I just couldn't place," Anderson says. "Judges were going for landscapes without wildlife — paintings without deer or elk."

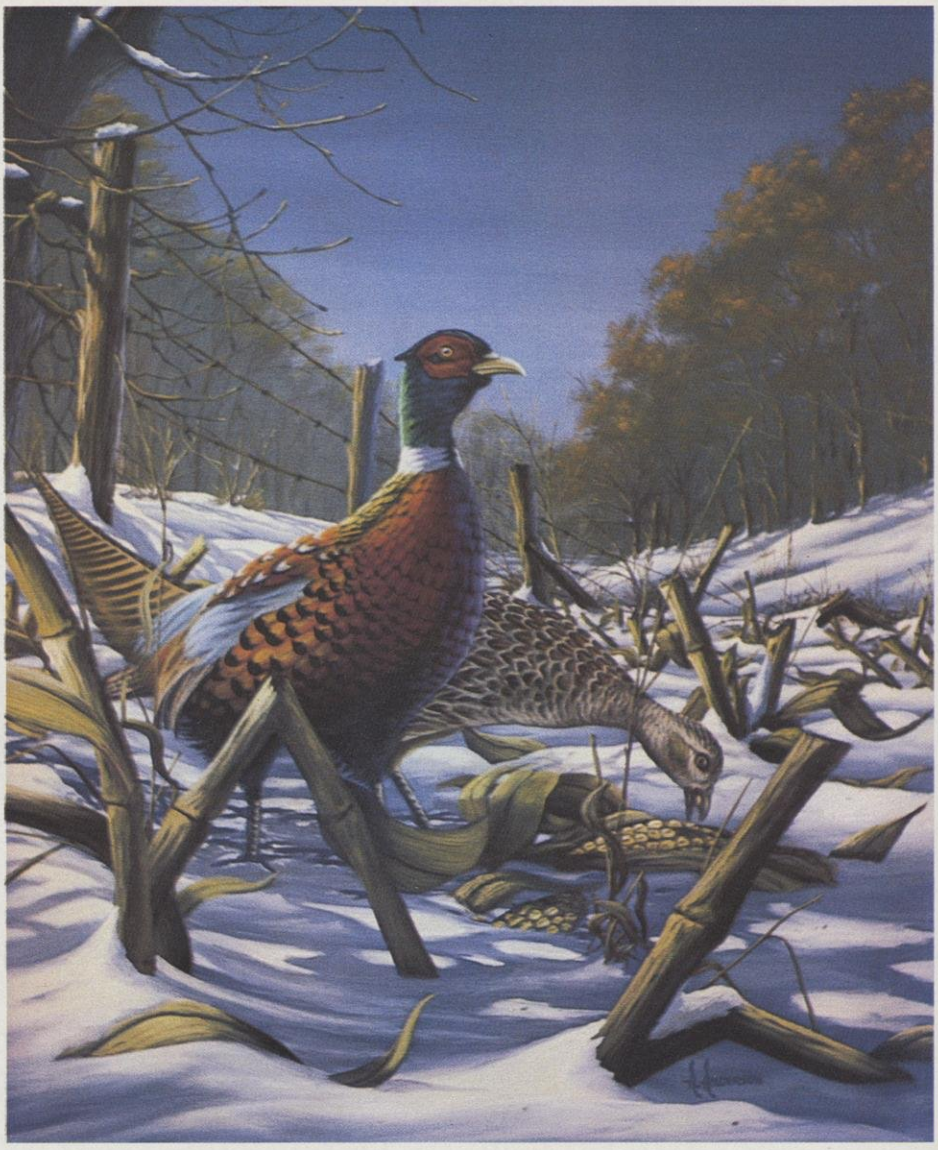
There was six months of college, then four years in the Air Force where there wasn't much time for serious painting. Still, there was opportunity along the way to do some landscapes and seascapes. After the Air Force came one more year at the UW.

"I quit school," Anderson says. "I almost had to. I was an economics major with an art minor, and I couldn't justify studying the economics. Once you're an artist, you're an artist."

Anderson took on janitor work with the City of Eau Claire. In the course of his duties at city hall, co-workers encouraged his artistic endeavors and bought some of his work. In 1965, Anderson began designing signs for the city. Eventually he moved to Wisconsin Rapids and into graphic arts work.

But would his career stabilize?

Well, Anderson began painting for the Ducks Unlimited auction, painting for a local exhibitor, and entering a local arts and crafts show. Friends urged him forward. Meantime, he sold some paintings to a restaurant.



An Anderson winter scene of Chinese ring-necked pheasants in the snow, "The Fencepost Pheasant."

"1977 — that was the year I started tackling wildlife art for real. That's when I really started approaching it earnestly. Before too long I entered the State of Wisconsin duck stamp contest and came to Onalaska."

Anderson went to work for a graphic sign company. Another try for the Wisconsin competition, and Anderson went for all the marbles in 1981 — the federal competition. He's entered the federal competition ever since.

Today, Anderson still looks back with some amazement on the duck stamp victory. For one thing, the stamp illustration has become a genuine collector's item through the years. Americans collect prints, much like those who collect dinner plates with Norman Rockwell scenes. The victory had been followed by a reception attended by senators and other celebrities. And yes, Mr. Anderson went to Washington to watch the first sheet of duck stamps roll off the presses at the Bureau of Engraving and Printing.

Despite the significance of the win, Anderson's hat size remains the same.

"The Onalaska area is genuinely beautiful — I have no desire to leave. One of the reasons I came here was to be close to marsh habitat, close to redheads and other waterfowl during migration."

Anderson pauses.

"I guess I've always been sort of a recluse as a painter. I love the wetland areas — cattails, bullrushes, a stiff wind blowing the water. There's something very special about cool days on the marsh, the ducks coming low through cold air, winging above the water. I gravitate toward natural action. What catches my eye first is what I paint.

"I suppose I look at myself as a realistic painter. For one thing, I like my subjects to jump off the page at you, and it happens with the right combination of light, volume, background and color. I

This stunning action picture captures the king of raptors, a bald eagle, striking a lunker fish. "The Northwoods Eagle," by Arthur G. Anderson

try hard to re-create nature as it is — in the unfearing eye of the eagle, the whip of his wingbeat, the way he can arrow through the wind.

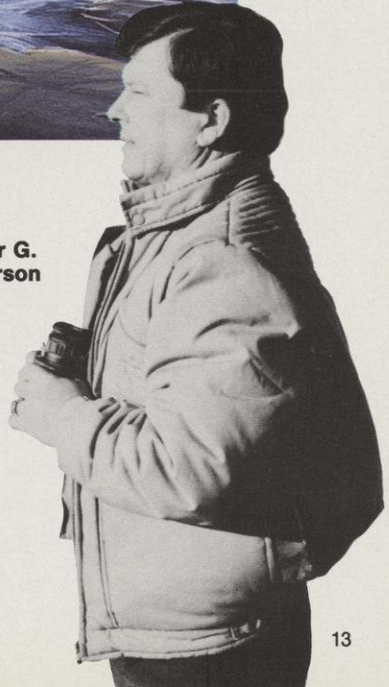
"And you know, when you think about it, birds and other animals really don't have any unattractive parts. Even the mysterious barn owl, with that flat face of his."

It's safe money to bet Anderson's vocation will never change. The painter was already living well before the win, exhibiting frequently in the Midwest and at the prestigious annual Waterfowl Festival in Maryland.

"No, we aren't looking at a big change here as far as lifestyle," Anderson says.

"But I'll say that the feeling after the win is like you're able to take your favorite hobby and run with it — absolutely great. And you do get things paid off a little faster."

Rick Mulhern is an editorial assistant for Wisconsin Natural Resources magazine from Verona, Wis.



Arthur G. Anderson

April 1956. "As we waded around the pond, we counted 77 dead geese and at least 30 more were sick or dying out on the water." Photo from the author.

Catastrophe on McComb's Pond

George S. Bachay

As Wisconsin waterfowlers start their first mandatory steel shot season in all zones, a former warden and game manager revives a grim memory of Wisconsin's early losses from lead poisoning.

In 1949, while working for the Wisconsin Conservation Department in Rock and Walworth counties, one could find many Canada geese dead or dying from lead poisoning on Lake Koshkonong during spring migration.

You could also find many dead and dying geese during the fall and winter of 1949-50 on the Rock Prairie Refuge and along Turtle Creek where Giant Canada geese spend their winters.

Lead poisoning was not considered serious by sportsmen during the 1940s, so despite pleas from some game experts to ban lead shot, hunters continued to spray the stuff into the environment by the ton each hunting season. Swans, geese, ducks, shorebirds, and even eagles and hawks that fed on crippled birds containing lead kept dying from the metal.

About 200 dead geese were picked up around the pond that week. But how many more died on their way to the Lake Koshkonong staging area and Manitoba in previous years?

Well, after a nine-year stint as a conservation warden and a district game manager, this writer got a job putting together an Outdoor Life column for the *Janesville Gazette*. That opportunity, which came in 1953, gave me the chance to continue observing wildlife.

In April 1956, we finally learned where some of the Giant Canada geese that spend their winters on Turtle Creek picked up lead pellets. Donald Totten of Whitewater notified Rock County conservation warden Royce Dallman that geese were dying on McComb's Pond. The 20-acre pond is located about nine miles south of Thiebeau Point on Lake Koshkonong, about six miles north of Turtle Creek, and five miles north of the Rock Prairie Refuge.

So Dallman, I and others visited Totten, who told us he found a dead goose in his woods four days prior.

"No, we didn't think much about it until yesterday when we found more dead geese near the pond," Totten said. "You can see some dead geese floating on the water."

As we approached the pond, Dallman caught a sick goose near three goose carcasses. A greenish fluid was flowing from its bill — a symptom of lead poisoning.

As we waded around the pond, we counted 77 dead geese, and at least 30 more were sick or dying out on the water. About 100 yards away 30 Canada geese rose from the water, circled the pond several times, honking as though grieving for dead mates. The paired geese were hedgehopping to Lake Koshkonong to join their flock before heading north for annual nesting duties in the Alf Hole area of Manitoba or James Bay, Ontario.

The sad thing is each mated pair of Canada geese that died on the pond could have produced a brood of three to eight offspring on the Canadian nesting grounds.

More than a city block from the pond, in the woods, we found more dead geese and some living geese that were too weak to fly. Almost every time we flushed a goose from cover, a dead goose lay close by.

They were large geese, but so dehydrated that to lift them was like lifting a bag of bones.

Many goose carcasses found along the shore had been dead for several weeks and were partly eaten by animals and crows. On some, only the breastbone, wings and legs remained.

We tried to capture some live geese. Some of that number were so weak from starvation that when they tried to take off, they flew about 100 yards over the water and fell, bouncing on their bellies.

We captured the living geese and carried them to a place where they could be picked up later. Before we completed our survey, state biologist Fred Zimmerman and Harry Stroebe, assistant superintendent of game management, arrived on the scene.

Stroebe weighed some of the live geese. They came in at 4 to 7 1/2 pounds each. Some of the dead geese weighed much less.

We agreed that a ban on lead shot for hunting waterfowl must be enacted in the near future. To prevent wildlife poisoning and to preserve the sport of hunting, there was really no other choice.

Stroebe cut open one of the dead birds, and the flesh around the intestines was green. The gizzard was removed and cut open to reveal three lead pellets, which had caused lead poisoning.

Waterfowl, including ducks and swans, probe the bottom of shallow lakes and ponds for grit. Occasionally, lead

pellets from hunters' guns are picked up with gravel and passed to the gizzard. Zimmerman explained how lead poisoning blocks the digestive tract and the bird dies.

Dallman said that gunners have been shooting at geese and ducks on McComb's Pond for more than 50 years. "And there's probably a ton of lead along the shore," he said. "The water level was unusually low last month, making it easier for geese and ducks to reach the bottom."

To prevent other migrating geese from stopping to feed on the pond, Carl Gruener, federal game agent, set up automatic goose scares around the shore. The explosives went off every 20 minutes, sounding like shotgun blasts.

In those days, the firecracker goose scare was made from a length of special rope five feet long, with two-inch salutes attached to a braided line. The salutes are tied six inches apart to explode every 20 minutes as the rope punk burns slowly. The rope is tied to a pole stuck in the mud at a 45-degree angle, so it hangs vertically above the water. The rope punk or wick is lit at the bottom.

While Gruener lit one of the explosive lines, a flock of 70 Canada geese appeared over the pond, but the birds didn't stop.

"If more migrating geese show up, we can get a Fish and Wildlife Service airplane to scare them off," Gruener said.

Gruener helped dissect 11 geese, and the gizzards each contained four to 23 lead pellets. The next day, Ronnie Cox, who worked for the *Janesville Gazette*, joined me at the pond with cameras to take movies and color slides of the sad event.

About 200 dead geese were picked up around the pond that week. But how many more died on their way to the Lake Koshkonong staging area and Manitoba in previous years?

The flocks of Canada geese that utilized the corridor from Turtle Creek to Lake Koshkonong likely were decimated by lead shot picked up as grit from McComb's Pond and other ponds located within the corridor. Following the 1956 catastrophe, Lake Koshkonong waterfowl hunters complained about the lack of Canada geese formerly observed during spring and fall migrations.

I discussed the catastrophe on McComb's Pond with game agent Gruener. We agreed that a ban on lead shot for hunting waterfowl must be enacted in the near future. To prevent wildlife poisoning and to preserve the sport of hunting, there was really no other choice.

Strings of firecracker goose scares dispersed geese by exploding every 20 minutes. Today, game managers use gas cannon exploders for the same task.
Photo by George Bachay

More recently we've learned that McComb's Pond was purchased in 1978 by the U.S. Fish and Wildlife Service.

The property was purchased with federal "duck stamp" money. According to Bruce Folley, DNR wildlife manager for Rock and Green counties, McComb's Pond is now managed to produce waterfowl, pheasants and other ground-nesting birds. It is primarily used by mallards and blue-winged teal.

Hunting is permitted on the area, and it receives much use. Fall migrations include all species of ducks and Canada geese.

George Bachay is a retired DNR warden and game manager living in Albany, Wis. He frequently contributes articles and photos to the magazine.

HUNTER'S ALMANAC '87
Edited by Kathy Kahler
Typeset by Kathy MacDonald

Duck population up, goose quota raised

John Wetzel,
Migratory Bird Specialist

Duck outlook about the same

Warm temperatures and little snow last winter delighted most of us, but those looking for more favorable duck production were cheated a little.

Unseasonably wet weather on the Canadian prairies of Manitoba and Saskatchewan in late summer and fall of 1986 set the stage for excellent duck production in 1987. By late fall an excellent frost layer and some early snow promised plenty of spring-thaw potholes essential for nesting waterfowl.

However, a warming trend beginning in December melted the snow and frost layer and the puddles were quickly absorbed. Warm winds continued to dry the prairie and by spring, Manitoba's and Saskatchewan's pothole numbers were way below average. Returning ducks found drought conditions instead of the plush habitat that seemed so promising in late November.

On a positive note, returning ducks found sufficient habitat elsewhere in northern Canada, Alaska, North Dakota, Montana, Minnesota and Wisconsin. Fall flights will be about the same as last year throughout North America, including the Mississippi Flyway. This year's fall flight

Mallards accounted for 37 percent of an estimated 370,000 breeding ducks in Wisconsin last spring. DNR photo

forecast of 20.1 million ducks for the Mississippi Flyway is slightly higher than last year's 19.7 million.

Wisconsin's breeding duck population increased 11 percent over last year. Of the 370,000 breeding ducks, 138,000 were mallards — the second highest count since surveys began in 1973. Blue-winged teal numbered 150,000 in the surveys — a healthy 76 percent increase over last year.

Wisconsin received permission this year from the U.S. Fish and Wildlife Service to return to an October 1 opening for the duck season. Final season dates and regulations will be published in the *1987 Migratory Bird Regulations.*

Goose forecast good

For the second straight year, Wisconsin hunters will be able to take more Canada geese. This year's quota of 49,500 geese is 10 percent over last year's 45,000.

The U.S. Fish and Wildlife Service increased quotas in Wisconsin, Illinois, and Michigan based on midwinter counts of over 500,000 Mississippi Valley Population (MVP) geese for the last two years. MVP geese are those that breed on the southern shore of Hudson Bay, migrate through Wisconsin and eastern Michigan, to winter primarily in southern Illinois and western Kentucky. The midwinter counts for 1985 and 1986 were 619,000 and 514,000, respectively.

DNR's wildlife managers recommend that 2,500 of the increase be added to the Horicon/Central Tag Zones to accommodate 43,300 hunters, compared to 40,000 hunters last year. The remaining 2,000 geese will be held in reserve to assure the outside seasons remain open the full 12 and 20 days. By holding those birds in reserve, DNR hopes to prevent a recurrence of the emergency closures of the past two years.

Small game prospects good

Wildlife specialists predict good hunting for small game this fall, especially for ruffed grouse, Wisconsin's most abundant upland game bird.

"We're looking for a 10-20 percent improvement over last year's ruffed grouse population increase," said Ed Frank, farmland wildlife specialist. "We estimated the harvest at about 740,000 in 1986. That's up substantially from 580,000 in 1985." The predicted increase in harvest is based on early reports of higher breeding numbers and good hatches.

Woodcock numbers are up too, according to Frank. Woodcock breeding populations statewide increased sizably over the last two years. Despite the population increase, there was no corresponding increase in harvest. Hunters took approximately 134,000 woodcock in 1986.

Currently, Wisconsin has about 11,000 square miles of woodcock habitat. Over 80 percent is in the northern third of the state. This area contains some of the most productive woodcock breeding habitat in the U.S., with summer densities of up to 100 birds per square mile. Wisconsin probably contributes over 750,000 woodcock annually to the flyway population. The annual migratory flight through Wisconsin totals at least 1.5 million birds.

Wildlife specialists estimate that gray and fox squirrel populations have increased due to the mild winter and continued availability of corn in picked fields. Hunters harvested approximately 1.3 million squirrels in 1985 and 1986.

"We estimate that more young were born and survived due to favorable conditions so we're looking for an increase in the harvest.

"The cottontail rabbit harvest has been poor the last couple of years," reported Frank. "Although we can't say exactly why, we believe it's habitat-related due to intensifying agricultural land use. Hunting success has been lower in the last two years than at anytime in the past 20. Only about 350,000 cottontails were taken last year.

"However, we're looking for an increased harvest perhaps up to a half million because the extremely mild winter improved the survival rate, and because more cropland has been diverted under USDA's Conservation Reserve Program." Rabbits are an edge species that need grassland communities and brush in close proximity.

Small game license holders should consult the 1987 Wisconsin Hunting Regulations pamphlet for season details.

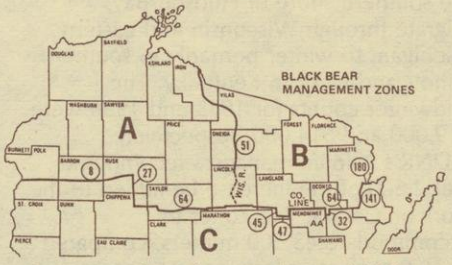
Bear harvest permits assigned by zone

1,730 permits issued in second year of preference system

Bud Gourlie,
Public Information Officer

The 1987 Wisconsin bear hunting season will be conducted the same way as the 1986 season except that **harvest permits this year were issued for one of three zones.** The zone system was created because the state's bear population is unevenly distributed.

The highest bear population is in the northwest (zone A). DNR issued 1,380 permits for that zone. In the northeast counties (zone B), 260 permits were issued; and in the north central counties (zone C), DNR issued 90 permits. Hunters who applied for a bear hunting license and a harvest permit were asked to list their first and second zone choices.



Last year, bear hunters bagged 503 bears from a total of 860 permits issued, for a harvest success rate of 58 percent. The bear population in the state has grown to the point where 1,000 animals can be taken this year. A total of 1,730 harvest permits were issued based on last year's success rate.

All hunters who bought a bear hunting license for the 1986 season in Wisconsin received an application for a 1987 bear hunting license. By returning that completed license application form along with the fee for a bear hunting license ($6.50 for residents and $21.50 for nonresidents) by the July 10 deadline, hunters were entered in drawing for a 1987 harvest permit.

DNR received just over 10,000 applications for this year's season. Successful applicants were notified the first week in August and had until August 25 to send in the additional permit fee ($25.50 for residents and $100.50 for nonresidents).

Only the 1,730 applicants who received a harvest permit this year can actually harvest a bear. People holding a bear hunting license can assist in the hunt, but cannot actually harvest the animal. Licenses can be purchased any time before opening of the season.

Bear harvest permits are issued on a continuous preference system. That means that hunters applying each year by the application deadline have a better chance of receiving a permit in each consecutive year. Permits are always issued randomly to hunters who have applied the most consecutive years. That way, everyone who applies will eventually receive a permit. The bear hunting seasons this year are: for hunters using dogs, September 12 through October 2; for hunters using bait, September 19 through October 9; and for hunters using neither dogs nor bait, September 12 through October 9.

Bear hunters can use dogs to aid in their quest during the early part of the season this year from September 12 through October 2. DNR photo

A small number of ducks contaminated with PCBs

Wendy Weisensel,
Public Information Officer

Wisconsin wildlife and health officials recently advised people to avoid eating some duck species from stretches of several Lake Michigan tributaries and two harbors contaminated with PCBs (polychlorinated biphenyls).

Avoid eating mallards from parts of the Sheboygan and Milwaukee rivers and Cedar Creek; black ducks from Milwaukee Harbor and lesser scaup (bluebills) from Sheboygan Harbor.

The advice was not so strict for mallards taken from parts of the Lower Fox River between Lake Winnebago and Green Bay. In that area, people should remove all skin and visible fat from the birds before cooking them. Also, discard drippings or stuffing that may contain PCB-contaminated fats.

Less than a third of one percent of the waterfowl Wisconsin hunters harvest each year come from waters subject to the health advice.

Although three years of tests reveal contaminants in some ducks, there's positive news. Tests show that **most other game animals people eat don't contain harmful levels of contaminants. Animals showing low or no detectable contaminants included white-tailed deer, ruffed grouse, pheasants, wild turkey, squirrels, rabbits, black bear and some waterfowl species.**

Studies of water, sediment, crayfish, snapping turtles, fish and several bird species showed that persistent toxic chemicals such as PCBs are found throughout the food chain in some areas of Wisconsin that have a history of pollution problems. PCBs are long-lived chemicals that don't break down easily and tend to accumulate in the fat of animals constantly exposed to them.

The DNR wildlife study showed about half of the 77 mallards sampled from waters on the health advisory contained PCBs higher than the U.S. Food and Drug Administration's standard for poultry. Less than 10 percent of the mallards collected elsewhere in the state had PCBs higher than the FDA standard. A total of 156 mallards were collected statewide.

Aquatic animals generally contain higher contaminant levels than land animals because contaminants deposited from the atmosphere, rural and urban runoff and industrial pollutant discharges drain into lakes and rivers.

Generally, fatty species carry more contaminants than leaner animals. Predators and scavengers, including eagles, mink, bobcat and gulls, have higher contaminant levels than plant-eating animals like white-tailed deer, rabbits and grouse. Northern furbearers at the top of their food chains also contain elevated levels of PCBs, the pesticide dieldrin, DDE (a breakdown product of DDT) and mercury.

DNR plans to further study some bird species but won't routinely collect any more white-tailed deer, ring-necked pheasant, cottontail rabbits, ruffed grouse, wild turkeys, squirrels or snowshoe hares since these species were virtually free of contaminants.

In issuing the advice, DNR and the state Division of Health compared PCB levels in tested ducks with FDA's standard of three parts per million for poultry. The standard measures PCBs in poultry fat rather than in the meat itself. The FDA standard of two parts per million for PCBs

New hunting rules

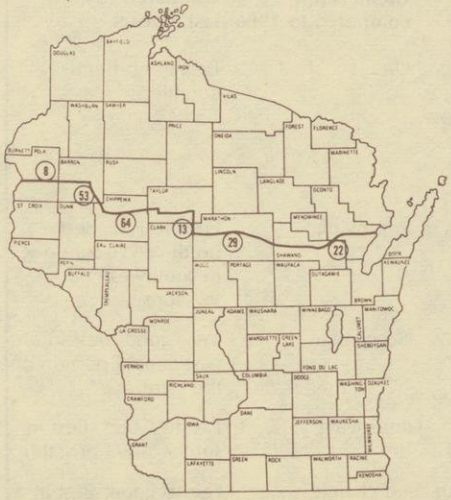
David Gjestson,
Wildlife Staff Specialist

Most proposed changes in hunting and trapping rules are presented at annual fish and game hearings conducted in each county the fourth Monday in April. Wisconsin residents with an interest in hunting, trapping or fishing are encouraged to attend those hearings.

Bear hunting zones — Three bear hunting zones were established for the 1987 fall season to distribute hunters proportionately with bear harvest. The DNR will analyze the effectiveness of these zones following each year's hunt before proposing any additional zoning.

Coyote hunting closure — Coyote hunting is closed during the gun deer season (Nov. 21-29, 1987) north of the highways shown on the map to provide additional protection for look-alike timber wolves, an endangered species in Wisconsin. The closure is designed to prevent deer hunters from making the mistake of shooting a protected wolf because hunters thought it was an unprotected coyote.

Nontoxic shot — State law now requires hunters to use steel shot when hunting ducks, geese, brant or coot



anywhere in the state. This means hunters are required to possess and use only steel shot when waterfowl hunting at *any* location (uplands or wetlands).

Transporting dead deer — Residents may now transport legally killed and registered deer out of state. This change eliminates problems resident hunters had when staying in out-of-state motels or camps along Wisconsin borders.

Coyote hunting is banned during the northern gun deer season to protect look-alike timber wolves. DNR photo

Tests show that most game animals, especially upland species like the ruffed grouse, are free of chemical contaminants. DNR photo

in fish, on the other hand, is based on analyzing skin-on fillets.

Removing skin and fat from mallards reduced PCB levels by 60 to 90 percent. Removing skin and visible fat from some fish species, however, cut PCBs only 20 to 30 percent because most of the fat in fish is distributed throughout its tissues.

Wisconsin's waterfowl advisory will appear in the 1987 waterfowl hunting regulations pamphlet issued early this fall. Separate copies are available now at any DNR office.

EXPERIENCE THE OUTDOORS: CELEBRATE
National Hunting & Fishing Day. Sept. 26, 1987

1986 season safest in 40 years

The Department of Natural Resources recently received an award from the National Rifle Association (NRA) for having one of the top ten hunter education programs in North America.

Homer Moe, Wisconsin Hunter Education Administrator, credits the dedication of 2,300 volunteer hunter education instructors for the award. "The enthusiasm and involvement of the men and women volunteer instructors is a major factor in any successful hunter education program.

Volunteers are definitely the front line in hunter education. The department, the conservation wardens and other personnel are the support staff for the volunteers," Moe said.

Wisconsin's 20-year-old hunter safety program has expanded from the original six-hour firearm safety course to a course more responsive to the problems facing modern day hunters. Besides teaching firearms safety and accident prevention techniques, instructors now teach young hunters their responsibilities to wildlife, the environment and landowners. Prospective hunters also learn to identify wildlife, including endangered species; outdoor first aid and survival; bow hunting; and field care of harvested game.

Wisconsin's hunter education efforts are credited with significantly reducing accident and fatality rates over the last 20 years. In 1966, an estimated 606,000 hunters had 264 accidents including 21 fatalities, for a rate of 43.5 per 100,000 licenses sold. Compare that with 1986 when 803,000 hunters had 78 accidents including 5 fatalities for a rate of 9.7. Last year was the safest season in over 40 years.

2,300 such volunteer instructors teach hunter education and firearm safety techniques to prospective hunters. DNR photo

Season dates and outlook

Species	1987 Locations and Dates	Game supply compared to 1986	Hunting prospects compared to last 5 years
Bear	Statewide with bait (bow and gun): Sept. 19—Oct. 9. North zone only with dogs (bow and gun): Sept. 12—Oct. 2. Other methods: Sept. 12—Oct. 9.	Up	Best in northern counties.
Bobwhite Quail	Statewide, noon Oct. 17—Dec. 9	Improving	Poor to Fair. Best north of Wisconsin R. in southwest Wisconsin.
Canada Goose	Statewide; dates published about Sept. 15	No change	Very good. Best in east central portion of the state.
Cottontail Rabbit	North: Sept. 12—Feb. 28 South: Noon Oct. 17—Feb. 28	Improving	Fair to Good. Best in southern 2/3 of state.
Coyote	Statewide, all year except north gun deer season closure	No change	Fair to good. Best in north.
Deer	Gun: General Nov. 21—Nov. 29 Bow: Statewide Sept. 19—Nov. 15 Dec. 5—Dec. 31	No change	Excellent in most areas. Best in southern ½ of state. Trophy opportunities in north.
Ducks	Statewide; dates published about Sept. 15	No change	Fair. Best along Mississippi R. and in east counties.
Gray and Fox Squirrel	Statewide, Sept. 12—Jan. 31	Improving	Good. Best in southern 2/3 of state.
Hungarian Partridge	Statewide, noon Oct. 17—Dec. 9	No change	Fair. Best in counties near Lake Winnebago and Lake Michigan.
Pheasant	Statewide, noon Oct. 17—Dec. 9	Improving	Poor to fair. Best in southeast 1/4 of state.
Raccoon	Residents statewide, Oct. 17—Jan. 31 Nonresidents statewide, Oct. 31—Jan. 31	Improving	Very Good. Best in southwest and west central.
Red and Gray Fox	North of Hwy. 64: Oct. 18—Jan. 31 South of Hwy. 64: Nov. 1—Jan. 31	Improving	Good. Best in west-central and southern Wisconsin.
Ruffed Grouse	North: Sept. 12—Dec. 31 South: Sept. 12—Jan. 31	Improving	Good. Best in central and western Wisconsin.
Snowshoe Hare	Statewide, all year	Improving	Fair to good. Best in north.
Turkey	10 units — 4 hunting periods between Apr. 20 and May 15, 1988	Up	Good. Best in south-west.
Woodcock	Statewide, Sept. 12—Nov. 15	No change	Good. Best in northern 1/3 of state.

1987 License fees

Conservation Patron (includes hunting, trapping, fishing, all stamps except the turkey stamp, vehicle admission to state parks, trail user fees, and a subscription to *Wisconsin Natural Resources* magazine) — $100.00

Sports (includes fishing, small game and gun deer) — $32.60

Resident small game — $9.60
Resident deer — $15.35
Resident bear — $6.60
Resident archer — $15.60
Resident trapping — $13.60
Nonresident small game (season) — $66.60
Nonresident small game (5-day) — $36.60
Nonresident archer — $76.60
Nonresident deer — $106.60
Nonresident bear — $21.60
Nonresident furbearer — $136.60
Waterfowl stamp — $3.25
Turkey stamp — $13.75

1987 Permit application deadlines

Apostle Island deer hunting — Postmarked no later than August 31 to Superintendent, Apostle Islands National Lakeshore, Route 1, Box 4, Bayfield, WI 54814.

Canada goose hunting, Horicon or Central Zones — Postmarked no later than September 18 or received by 4:30 p.m. that day by the DNR License Section, Box 7924, 101 South Webster, Madison, WI 53707.

Sandhill Wildlife Area deer hunt — Postmarked no later than October 2 or received by 4:30 p.m. that day by DNR, Sandhill Project, Box 156, Babcock, WI 54413.

Hunter's choice deer hunting permit — Postmarked no later than October 2 or received by 4:30 p.m. that day by the DNR License Section, Box 7924, 101 South Webster, Madison, WI 53707.

Note: Hunter's choice deer hunting permit and otter tag applications are attached to the licenses. Other application forms are available at most DNR and county clerk offices.

Bobcat, Fisher and Otter — Postmarked no later than October 2 or received by 4:30 p.m. that day by the DNR License Section, Box 7924, 101 South Webster, Madison, WI 53707.

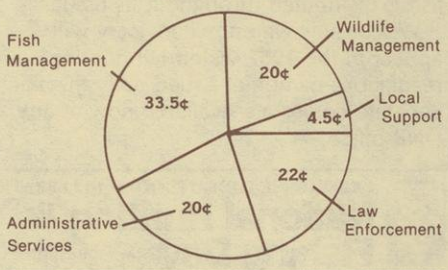
Turkey (1988 season) — Postmarked no later than October 30 or received by 4:30 p.m. that day by the DNR License Section, Box 7924, 101 South Webster, Madison, WI 53707.

Disabled persons (permit to hunt or shoot any legal game from standing automobile) — Apply to your local warden at least 10 days before date of use.

Pheasant hunting on select properties (includes tags) — Apply on DNR forms available at DNR offices any time before hunting.

Bear harvest permit — The 1987 deadline was July 10. (See story in this almanac.)

Where Your Fishing and Hunting License Dollar Goes



Representative Henry S. Reuss on the Ice Age Trail he fostered. Photo by L. Roger Turner. Courtesy of *The Capital Times*

A hike through central Wisconsin history

Henry S. Reuss

The Ice Age Trail will one day lead hikers over glacial moraines from Door County to the Minnesota border. Meantime, recent action has added a new segment to the trail, that will show hikers some peppery Wisconsin history.

The Ice Age Trail, a public greenway that will meander 1,000 miles across Wisconsin's glacial landscape, has come one step closer to reality.

The National Park Service recently certified a 14-mile segment of the trail between Portage and southern Marquette County, raising the number of miles that have been certified to about 175.

Certification means the segment is developed and managed in accordance with the comprehensive management plan. The segment will be marked with the official trail symbol. An additional 180 or so miles of uncertified segments are open to public use.

The new segment is by far the longest in the trail to be sponsored by private citizens, working in partnership with the National Park Service and Wisconsin's DNR. The segment stretches north from the Wisconsin River at the Highway 33 bridge in Portage to John Muir Park in Marquette County. It combines three of Wisconsin's finest natural resources — landscape, wildlife and history.

Certifying the segment is a tribute to Frederica Kleist, a Portage grandmother, and Leo Fredrick, a Fort Winnebago farmer. People like Kleist and Fredrick, members of local chapters of the Ice Age Trail Council, are largely responsible for piecing together the trail.

Back in 1971, Congress established a nine-unit Ice Age National Scientific Reserve in the state. Congress recognized the value of the continuous footpath, but left it to the private citizens of Wisconsin to complete the Ice Age Trail. In 1975, with formation of the Ice Age Trail Council, citizen efforts accelerated. Through local chapters, the council has worked cooperatively with public agencies and hundreds of private landowners to establish the trail. Kleist and Fredrick help lead the Columbia/Marquette County Ice Age Trail Council.

Designated a national scenic trail by Congress in 1980, the Ice Age Trail will ultimately stretch over the glacial moraines from Door County to the Minnesota border.

All segments of the certified national scenic trail are open to foot travel for hiking and backpacking. Other nonmotor uses may be permitted on a given segment depending on the policy of the segment's managing authority. A fee and/or permit is required for using some segments of the national scenic trail and overnight facilities.

Here's what you'll experience in the 14-mile hike from the bridge in Portage to John Muir Park:

Looking west from the Highway 33 bridge, you'll see the ancient quartzite Baraboo bluffs cradling Devil's Lake. The lake was created when the Green Bay Lobe of the glacier dammed both ends of the gorge. To the north lies the bed of glacial Lake Wisconsin, which once covered much of the state's center. As the trail parallels the Fox River, you'll encounter glacial lakes, streams, marshes, moraines fringed with oak and pine, conical kames and kettle-holes. An alternate western loop of the national scenic trail is projected for Juneau and Adams counties on the old lake bed.

Wetlands along the route present marvelous wildlife habitat. There are Canada geese on Pine Island, sandhill cranes on

the Fox River marshes and great herds of deer in the bottomlands.

But it's history that makes the 14-mile segment unique.

The trail's southern approaches pass the sand country of naturalist Aldo Leopold (1887-1948). As the trail traverses Old Portage, Blanche Murtagh of the Portage Landmarks Preservation Society can point out dozens of historic landmarks. There's the rambling home at 229 W. Howard where John Muir's mother lived in the 1880s and '90s. There's the Sunnyside Feed Mill, built in 1861 on the Portage Canal. And there's city hall — an early mayor was the father of Frederick Jackson Turner (1861-1932), historian of the vanishing frontier who speculated whether the U.S. today would be able "to reconcile real greatness with bigness."

The junction of the canal and the Fox is full of history. Henry Abrahams of the Portage Canal Society knows all about the long portage of Father Jacques Marquette and Louis Joliet in 1673. For example, the explorers soon found that the Wisconsin "has a sandy bottom, which forms shoals that render its navigation very difficult." Their warnings were not heeded by canal promoters (1838-1876), whose traffic stalled on the shifting sands, or by Sen. Philetus Sawyer, who proposed that the waterway be used to bring up gunboats along the Mississippi River to the Great Lakes to repel a possible Canadian invasion.

At the Fox River end of the canal are: the "surgeon's quarters," a remnant of Fort Winnebago, built in 1828 under then-Lieutenant Jefferson Davis; a nearby marker commemorating the spot where Red Bird, a fiery Winnebago chief, surrendered in 1827; the old Military Road from Green Bay to Prairie du Chien; the Fort Winnebago Cemetery; and the Indian Agency House, built in 1832 for agent John Kinzie and restored by the Wisconsin Colonial Dames in 1932.

Finally, there's the site of John Muir's (1838-1914) boyhood home on Fountain Lake. With help through the years from Averell Harriman and the John Muir Sierra Club, the entire lake is protected. You can look for Muir's private kettle-hole or climb nearby Observatory Hill — 1,100 feet — and gaze in wonder at the sweep of neighboring moraines. Millie Stanley, who lives nearby, is at work on a biography.

North and south of the 14-mile trail are "connecting road segments": along little-used country roads, they make good hiking. Many miles of them are slated to be upgraded to national scenic trail status as soon as they can be routed off-road. Volunteer help will be appreciated.

Trail history

The concept for the trail actually originated some 35 years ago, when a Milwaukee man proposed that an Ice Age Glacier National Forest Park be established along the length of the moraines marking the farthest advance of the last glacier in Wisconsin. He proposed a continuous footpath, similar to the Appalachian Trail, as the park's central feature. Soon a group of Wisconsin citizens organized to push creation of the park. As the effort to win congressional authorization advanced, volunteers were already building the first legs of the future Ice Age Trail in the Kettle Moraine State Forest.

The 1980 legislation establishing the Ice Age Trail assigned overall administrative responsibility to the Secretary of the Interior. Trail development and management would be accomplished through cooperating federal, state and local agencies, along with private trail organizations.

For information on trail segments on state lands, write the Wisconsin Department of Natural Resources, Ice Age Trail information, Box 7921, Madison, WI 53707. For county, municipal and private lands trail information, write the Ice Age Trail Council, 2302 Lakeland Ave., Madison, WI 53704. For information on the segment in the Chequamegon National Forest, write the Medford Ranger District, Chequamegon National Forest, P.O. Box 150, Medford, WI 54451.

Henry S. Reuss represented Milwaukee's fifth Congressional District from 1955 until 1983. Representative Reuss was the author and champion of legislation establishing the Ice Age National Scientific Reserve.

For those who want trail details . . .

Here's a quick distance guide to a 61-mile stretch of the Ice Age Trail that contains the new 14-mile certified segment. The stretch uses some connecting road segments and extends from Devil's Lake State Park (Sauk County), through Columbia and Marquette counties, to the Chafee Creek Fishing Area at the Marquette-Waushara county line.

***The southern connecting segment** (25.8 miles) extends from the trail northeast of Devil's Lake State Park 1.1 miles northeast overland (not yet in service) to Bluff Road; west on Bluff .5 mile to County W at Greenfield Town Hall; north on abandoned road across Baraboo River 1.1 miles to Highway 33; north on Johnson Road and west on Man Mound Road past Man Mound Park 3.3 miles to Rocky Point Road; north on Rocky Point Road-Paschen Road-County T 4.2 miles to County U; east on U 1.2 miles to Van Hoosen Road; north on Van Hoosen over I-94 and past Aldo Leopold Memorial Forest 2.9 miles to Levee Road; east along Wisconsin River levee/Levee Road 11.5 miles to Highway 33 bridge over Wisconsin River at Portage.

***The Ice Age National Scenic Trail, terminal moraine route** (14 miles), is officially marked. It extends from the Highway 33 bridge at Portage, east on West Edgewater Street past historic houses, .5 mile to Portage Canal; along canal 1.9 miles to Fox River at 1832 Indian Agency House (near Old Fort Winnebago surgeon's quarters, marker for Marquette/Joliet portage, marker for Chief Red Bird surrender); north along left bank of Fox 4.1 miles to Governor Bend County Park; east on Lock Road .3 mile; north on old Fox River Road 1.8 miles to Marquette County line; northeast overland past Grouse Road 1.3 miles to 12th Avenue; north on 12th Avenue right-of-way 1.6 miles to County O; north overland 2.5 miles to and through John Muir County Park.

***The northern connecting segment** (21.2 miles) extends from John Muir County Park northwest on 10th Road 4.5 miles to County D; west on D two miles across the Buffalo Lake bridge to County C; northeast on C .3 mile to 8th Drive; north on 8th 1.2 miles to Emerald Lake at Highway 23; east on shoulder of Highway 23 .5 mile to County ZZ; north on ZZ/9th Avenue three miles to Ember Drive; west on Ember .3 mile to 8th Drive; north on 8th 1.1 miles to Elk Lane; east on Elk .5 mile to 9th Drive; north on 9th .8 mile to County J; east on J .2 mile to 10th Avenue; north on 10th Avenue .9 mile to County B/E; east on B/E .4 mile to 8th Road; northeast on 8th two miles to 7th Lane; north on 7th Lane .1 mile to Dover Court; northeast on Dover .5 mile to 8th Drive; north on 8th 1.2 miles to County Z; west on Z .4 mile to County JJ; north on JJ 1.3 miles to Waushara County line at DNR's Chafee Creek Fishing Area.

Black powder perfection

John Beth

All article photos by the author.

The joy of creation and craftsmanship is still its own, beautiful reward for this talented gunsmith.

Flintlock and percussion rifles, to most of us, were crude weapons that fought early wars, opened the West, defended settlers from aggression and put meat on the table.

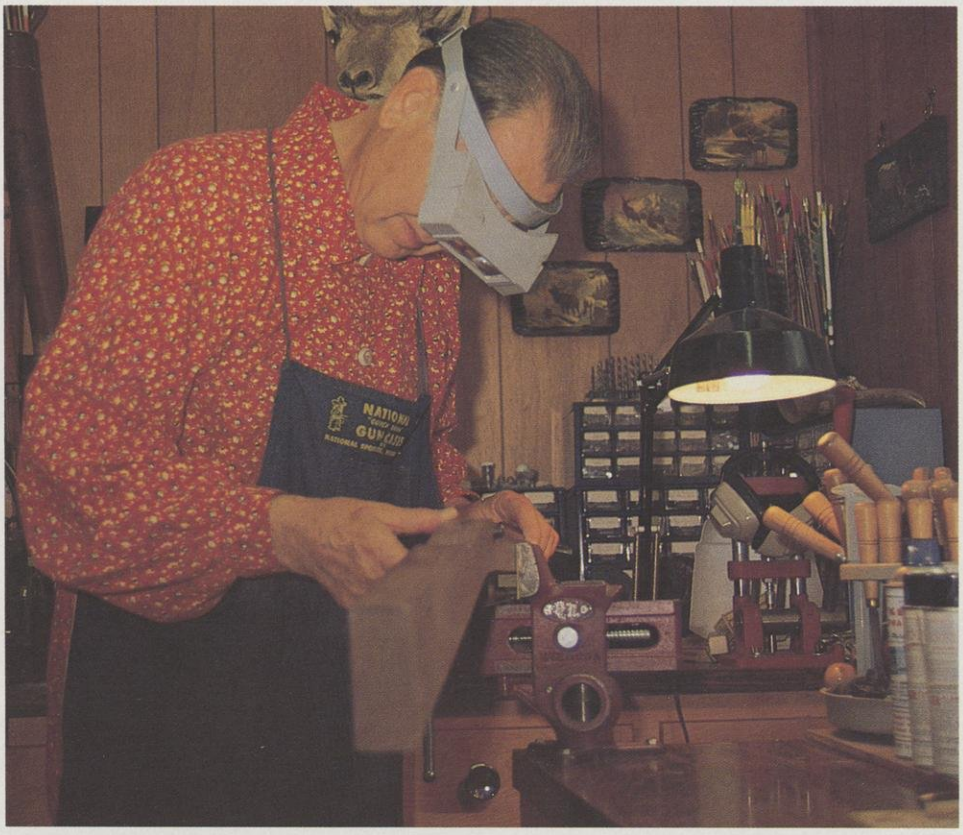
The rifles were a necessity, a part of freedom, defense and subsistence.

Well, today, many "black powder" enthusiasts are keeping tradition alive.

The buckskinners today save a piece of the past by hunting and target shooting with their beloved firearms, and displaying them at get-togethers.

Some of the hobbyists buy their guns ready to shoot. Some buy kits to get the pride of their forefathers — if only in a small way — that comes from assembling one's own weapon.

A small handful of folks are still true creators. They don't bother counting the hours and efforts into a cost-effective equation. To them, skill and craftsmanship are the bottom line.



Merriwell Huebing starts a new project that may take more than 300 hours to complete in his Reedsburg shop.

One of that small group is Merriwell Huebing of Reedsburg, Wis. His passion for craftsmanship has never slowed. Born in 1914 in Reedsburg, Huebing grew up enjoying the life of a small town. The good hunting and fishing of Wisconsin inspired him, from his earliest years as a self-proclaimed "river rat" along the Baraboo.

"My grandfather was probably my earliest influence regarding outdoor life," Huebing says. "He was a great fisherman and hunter. He took me along and carefully introduced me to the world of fish and game."

By the time he was a teen-ager, Huebing would ride his bike down the dusty dirt road to nearby farm houses to try to find inexpensive old muzzle-loading rifles. Once in a while he would find a deal his paper boy income could meet. So Huebing's fascination with black powder guns took wing. In the years to follow he would tinker and trade, hunt and try to learn more about them. The affinity grew.

Huebing began saving money for what would become an exciting purchase — a new, 16-gauge, slide-action Remington shotgun. It was 1931, he was 17, and the gun cost $48.95. And with 25 ducks per day limits then, Huebing had fun . . . the ducks didn't.

Huebing would later develop his skills in a private sport shop, and for 18 1/2 years he made and sold 63 modern rifles — mostly wildcat calibers, all custom-made. His skills in loading and ballistics served him well when he was needed at the Badger Army Ammunition Plant during World War II, the Korea period and the Vietnam era. Huebing had an uncanny sense of ballistic engineering, perfecting loads and powder for weapons from rifles to cannons. He was commended by U.S. loading plants for the superb propellants he engineered. When it came to speed, pressure, trajectory and consistency, Huebing produced.

Modern weapons and all, he never lost his love and fascination for the old muzzle-loaders. In the past 20 years Huebing has turned out some superb flint and percussion rifles and pistols. A true hunter at heart, he fashioned the guns to fill the needs of the field. But they would be just as much at home in a museum.

"I build them from scratch, except for the raw barrel and an occasional rough casting," Huebing says. "I have an extensive library of books documenting the evolution and construction of flint and percussion weapons. There were some incredible guns made in the old days. They

Merriwell with a flintlock and his wife Emelia with a percussion rifle shoot handcrafted replicas of yesteryear. He also designed and handmade their jewelry, powder horns and wool and leather clothing.

A Huebing sampler — knife and sheath with intertwining otters chasing each other, powder horns, scrimshaw powder measure, leather bags and a fiddleback maple pistol.

Hours and hours of filing metal, shaping wood stocks, meticulous carving, sanding, applying water stains, more sanding and rubbing 20 coats of oil produce a functional work of art.

were built by caring perfectionists to make an owner proud for a lifetime."

Huebing's talent with simple files and carving tools has turned out rifles and pistols that draw long stares and deep breaths wherever he has shown them. If you can get him to sell one (I doubt you should bother), be prepared for four-digit figures. "After all," he says, "what the hell is money? I'd rather have the gun."

Huebing has not only studied gun history, but the life and accouterments of the people who used them. He designs and hand makes his own "mountain man" clothes, accessories and jewelry. The wool and leather clothing is authentic and as carefully made as his rifles. He makes beautiful powder horns, bags and necklaces. Huebing's carving and scrimshaw ability complements his many other fine skills.

Watch Huebing work and you see the raw barrels being drawfiled and polished, and breech blocks fitted with watchmaker precision.

"Look at this," he smiles, handing over a huge block of raw curly maple. "What beautiful grain," he glowed. (It looked like a fence post to me.)

Slowly the weeks pass, and the filings and sawdust pile up on Huebing's tiny workshop floor. A shape is born, and soon the barrel fitting begins.

"I use a water stain, repeatedly, to get the deep color contrasts and beauty of the grain," Huebing says. "I will use 15 to 20 coats of hand-rubbed oil on this, applied and carefully sanded off, each time filling the wood pores to the surface. Slowly it will begin to look three-dimensional. Now this of course is after all the relief carving, inlaying and wood-to-metal fitting."

The locks, triggers (handmade) and internal components are of critical importance. Using some kits for locks, one must carefully work all the individual pieces over and over to get precision, and smooth and reliable functions. "Some of these trigger guards are made from rough sand castings," Huebing says. "Some are cold-rolled 1/16-inch steel, forged by hand."

The design and creation of ramrod, tubes and end caps are also painstaking. Perhaps most unique is a handmade brass patch box inlaid into a full stock Kentucky rifle. Huebing will work for weeks on making the beautiful, adjustable hunting sights for some of these rifles. The exacting inlet work, the task of securing the barrel to the stock, creating handmade keys — all are crucial to accuracy and structural integrity.

"I use a hot controlled-rust process to get the brown color and finish I want on my barrels and some of the other pieces," Huebing says. "I repeat the process until I get it just right."

The most impressive aspect of this man is that he is self-taught. Apron and magnifying glasses in place, micrometer and calipers within reach, Huebing's primary tool is patience.

How long to finish that Kentucky rifle? "Oh, 250 to 300 hours," he smiles.

"I work out all my loads, ball weights and rifle designs to be for hunting. I love to hunt. I think the level of skill required is what inspires me to hunt both blackpowder and bow."

"I won't accept a lot of today's logic... right is still right and wrong is still wrong. I've never been materialistic. The best things in my life have been my wife and three children, the things I've made and my experiences outdoors."

Indeed, Huebing makes bows — and good ones. He shoots them well, too . . . 53 deer to date.

"I've hunted all my life . . . shot whitetailed deer, elk, bear, antelope and mule deer, with bow, modern rifle and black powder," Huebing smiles. "Maybe I was born in the wrong century."

Huebing would like to see more hunting areas set aside for black powder hunting. "I know we are a small group, but the sport is growing each year. More men and women are finding fulfillment in this form of hunting."

"We have hunted in the special season at Governor Dodge State Park and are thinking of trying Fort McCoy this year. I think with a few more special areas for black powder many more folks would get into it. It really isn't fair to put a buckskinner who stalks, crawls and painstakingly positions for that ONE shot into the same field with a fencerow full of automatic weapons with big clips!" Merriwell says.

"Muzzle loading, like bow hunting, puts a lot of skill back into the sport and what's wrong with that?" he asks.

You can get into the sport on a modest budget and expand from there. Many gun shops and some hunting speciality shops offer black powder hunting gear, but Merriwell is quick to remind that information and advice from a qualified black powder hunter is wise before you start ramming powder in a rifle!

Huebing is a firm believer in the right and privilege of gun ownership. And he is strong willed, often outspoken, always honest.

"I won't accept a lot of today's logic... right is still right and wrong is still wrong. I've never been materialistic. The best things in my life have been my wife and three children, the things I've made and my experiences outdoors." Huebing and his wife, Emilia, hunt, fish, camp and travel together. They enjoy the simple things in life... a beautiful flower, a sunset, a family get-together. They are avid square and round dancers, and could keep pace with the disco pros. Not bad for a couple of great-grandparents.

We have known each other a long time, and walked many a mile on trout streams together. One of my fondest memories of Merriwell happened when I was an 11-year-old kid with a cheap bow. I had broken the bowstring shortly after getting it. The hardware store response was "they don't make string replacements for cheap bows like yours."

So I took the string to the tall man at the Tip Top Sports Shop. He looked at my long face and heard lost hopes of ever shooting the bow again. He held up the string, stared at it, and pounded two nails into his workbench.

In five minutes he finished winding a new string for me. Merriwell asked me how much money I had. "Thirty-five cents," came the reply. He decided I should pay a quarter and have enough left for an ice cream cone. Twenty-three years later, I *still* have the bowstring... and the memory.

When I pick up a gun Merriwell has made, I feel a subtle transfer of pride communicated... it's there... and when a craftsman has that ability, he has succeeded in earning his title. As I sight down the long barrel, the gun becomes an extension of my hands, arm and eye. It doesn't happen by accident. I've asked him how he feels he's developed this talent.

"I think it was part of me," he says softly, "right from the beginning."

John Beth, from Reedsburg, Wis., regularly contributes articles and photos. He's an avid salmon and trout angler.

Chapters from *North Country Notebook*

George Vukelich

An old time warden

We were off for our daylong float down the Lemonweir River, putting in at Mauston below the dam, and with luck surviving to our take-out point at Cliff House on the Wisconsin.

The river had a Southern feel to it — the water coffee-colored, the current undulating with dark mysteries. On the banks, rows of forked branches marked the beats of the patient people who set their stout poles here and wait for the catfish to feed.

Only one fisherman waited for them this morning.

He had the look of the river professional, gear strong enough to derrick out a four-ply tire, wearing an almost-smile as he took in the ridiculous ultra light in my hands.

He was up from Illinois, he said, to fish for cats.

He came up often and he fished right here, in the pool below the dam, because it was usually good, but not right now.

We wished him luck and drifted around the first bend.

"Can you believe that," Perce said. "All the way up from Illinois to fish catfish?"

There were probably a thousand places closer to home, and the man from Illinois probably knew that as well as anybody, but that was the trouble: They were closer to home.

Maybe he came here because he liked the name of the river: Lemonweir. Or the comforting mystery of that pool below the dam. Or the fact that he could fish from the bank on a Sunday morning and be absolutely alone, which is not always possible in those thousand other better places.

"It is pleasant," Henry David Thoreau wrote in *The River*, "to remember those quiet Sabbath mornings by remote stagnant rivers and ponds, when pure white water-lilies, just expanded, not yet invested by insects, float on the waveless water and perfume the atmosphere. Nature never appears more serene and innocent and fragrant."

We drifted and cast for smallmouths, and went down around another bend.

We should have been getting farther and farther from any road, yet there, right beyond the high bank, was a pickup truck crashing through the brush like a moose.

It caught up with us, passed us, and stopped at the next bend. The driver walked down to the sandspit and waited for us.

He wore a black hat and a black shirt and a little badge. He was also carrying a weapon, holstered, on his hip. I thought it was a 4.2 mortar, but Perce said later it was probably only a Magnum. The kind that will penetrate not only you, but your engine block to boot.

He said he was a warden, walked out on the sand to the point that his boots were getting wet, and showed his identification.

"Here's mine," he said affably. "May I see yours?"

We beached the canoe and I handed over my fishing license. He thanked me and passed it back.

Perce, in the stern, was going through his wallet.

His wallet takes some going through, because Perce keeps everything in there that ever happened to him, including his discharge from the Navy, gasoline ration cards from World War II — "the Big One," Steady says — and hunting and fishing licenses from the Year 1.

But, unfortunately, not for the Year 1981.

The closest he could come was 1974. He had two fishing licenses for 1974, his and Barb's.

Close, you see the warden thinking. Close, but no cigar.

"It's in my other pants," Perce said.

That must have impressed the warden. Or maybe Perce's honest blue eyes.

"I'm going to validate your license for today," the warden said, writing on it, "and when you get home, you send me the number of your '81 license."

"It's a Sportsman's," Perce said.

"Good," the warden said.

"A warden with common sense," Perce said in admiration. "Makes you feel a whole lot better about the DNR."

It reminded me of what Ernie Swift, in his book *A Conservation Saga*, had said about the old-time wardens:

They traveled in pairs, carried sidearms, and were careful not to cross in front of a light after dark... To survive and maintain any standing with local contemporaries and critics, they had to be rugged realists, shrewd improvisors with real outdoor talents and a liking for campfires. They had to be able to line out a pack string or pole a boat upstream in white water; they had to be better than average with an axe, with firearms and a compass... They had to turn to and pack in fish fingerlings, trap beaver on complaint, run compass, give a fair estimate on a timber stand, trail a wolf or track a man. They used ain't and scrupulously avoided any scientific jargon and could drink from a jug by using an index finger and an elbow. They also had philosophies tempered in the crucible of wind, water, prairie and trees. They left some mighty big tracks.

It was the first time a warden had ever checked Perce.

Perce kind of liked that. It was like Ernie Swift said.

Bulldozers and the great horned owl

The lawn party hadn't quite started and the host was sitting with the early birds under the sprawling tent-top that bathed us all in golden light. We were discussing the difficulties of trying to maintain his little chunk of undeveloped country in a new wave of development that was washing over New Berlin, Wisconsin.

We had parked at the end of the road, below his driveway, and had wondered about the huge earth-moving machines, their treads clotted with soil and prairie grasses, a pride of them, silent in the weekend sun, sleeping now and passive as fed lions. We almost tiptoed around them.

"They're putting in houses," our host lamented. "Two-family units all along that hill."

"We tried to buy it," his wife would say later, "but we don't have that kind of money."

It was an old story, of course.

In the old days, only farmers lived out this far from Milwaukee — people who had to work the land for their living. Then, slowly, came the first of the people who didn't have to work the land for their living. They made their living in Milwaukee and in other places and they wanted to live out in the country because they loved the peace and quiet and the wildlife.

"We used to have a dozen pair of nesting pheasants," our host said. "Now, a single pair. They shot the rest."

Our host said that he had tried always to be a steward of the land since they moved out here. The pasture lands had gone back to wildflowers, the woods were coming back, and goldfinches and warblers flashed across the openings like bits of molten sunlight.

He didn't "tinker" too much with what nature was doing, he said. A birdhouse here, a clover-planted trail there. Clearing debris out of the creek every now and again to keep it open and flowing.

"I believe in what Aldo Leopold said," he declared in that quiet way Aldo's faithful have. "We are all members of an ecological community, and the private owner of land has an ethical obligation to maintain that community."

He said he argued before the local Planning Commission to put his land — and the land around it that was targeted for development — into conservancy.

"I took *A Sand County Almanac* into a meeting," he recalled, "and I read what Aldo Leopold had said about 'a land ethic.' They didn't know what the hell *A Sand County Almanac* was. They had never heard of it. They didn't know who the hell Aldo Leopold was. They thought I was crazy."

He knows that he is fighting a losing battle, that he is in the minority, literally a voice in the wilderness, arguing against the rush of development and tax base and concrete covering up his little creek. The bulldozers are at the bottom of his hill now, the bulldozers are at the bottom of everybody's hill in America now, and what America really needs is an Act of God.

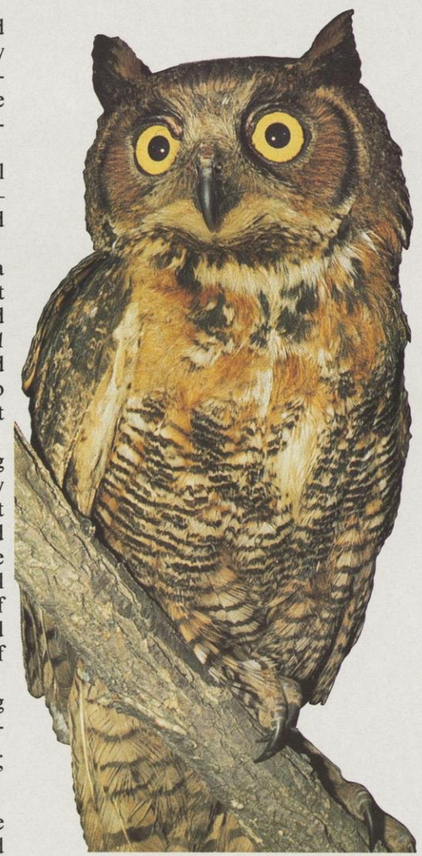
He talks about the paradox of calling what is engulfing the wild places "civilization." It is "uncivilization," he insists. The conduct of its members is not "civil." It borders on the barbaric, the criminal.

"I can see shooting the pheasants," he said. "I think it's wrong, but if you need food and you're going to eat them, I can see it. But we had a Great Horned Owl that used to be part of the community, and somebody shot it and just left it. Now, what the hell is the sense of that? How can you make a case for that? Who the hell is going to eat a Great Horned Owl?"

"Scientists have an epigram," Aldo Leopold wrote in *A Sand County Almanac*. "Ontology repeats phylogeny."

"What they mean," he explained, "is that the development of each individual repeats the evolutionary history of the race. This is true of mental as well as physical things. The trophy-hunter is the caveman reborn. Trophy hunting is the prerogative of youth, racial or individual, and nothing to apologize for."

Perhaps the Great Horned Owl was killed by youths who had never killed anything before, or perhaps it was killed by adults who no longer keep track of the things they have killed. In any event, our host pointed out, the owl was simply blasted out of his sitting-tree, and we are all diminished by the senseless act.



Great Horned Owl. Photo by Herb Lange

The disquieting thing in the modern picture, Aldo Leopold said, was the trophy-hunter who never grows up, in whom the capacity for isolation, perception, and husbandry is undeveloped or perhaps lost. Aldo wrote:

He is the motorized ant who swarms the continents before learning to see his own backyard, who consumes, but never creates, outdoor satisfactions. For him the recreational engineer dilutes the wilderness and artificializes its trophies in the fond belief that he is rendering a public service.

The trophy recreationist has peculiarities that contribute in subtle ways to his own undoing. To enjoy, he must possess, invade, appropriate. Hence the wilderness he cannot see has no value to him. Hence the universal assumption that an unused hinterland is rendering no service to society. To those devoid of imagination, a blank place on the map is a useless waste; to others, the most valuable part.

Recreational development is a job not of building roads into lovely country, but of building receptivity into the still unlovely mind.

On the way out, we passed the sleeping bulldozers, which first thing Monday morning would crush baby rabbits in the nests where they had always been safe and secure, even from the Great Horned Owl.

George Vukelich is a Madison-based writer, columnist and radio interviewer who regularly comments on resource and social issues. His new book,* North Country Notebook, *is published by North Country Press and is due off the presses this October.

Hunters and alcohol: separating the facts from the foam

Andrew Savagian

Some people have a drink after they hunt and some people just like to wear their blaze orange clothing downtown. We need research to determine if alcohol is a factor in hunting accidents. DNR photo

What we don't know could help us.

Wisconsin hunting seasons are rich in tradition. Grandparents passing down secrets to their grandchildren about where the old bucks hang out, parents teaching their children how to nab grouse on the wing, and story upon story of good hunts and good times — all are part of traditional Wisconsin hunts.

Another aspect of hunting in Wisconsin — as elsewhere — is alcohol. Who would argue the point that drinking is common during hunting seasons? Nonetheless, there are differing opinions about when and where the drinking takes place, and if it causes problems. To probe the facts behind the opinions, Wisconsin is taking a closer look at hunting-alcohol issues.

Who knows?

Reliable statistics on alcohol use during hunting seasons are scarce. One reason is that states do not randomly check for alcohol among hunters afield. Another reason is that those who know aren't necessarily telling.

In the few states that figure alcohol into annual hunting accident reports, data show alcohol as an insignificant factor. Often however, wardens investigating accidents must rely on hunters' testimonies about alcohol use. So, information might be questionable — a hunter who has just been involved in an accident may not be completely candid about his drinking activities. Furthermore, even when alcohol blood level estimates are available, lapses between the time accidents occur and the time wardens arrive may affect results.

Michigan DNR's 1985 hunting accident report stated that with more than a million licenses sold, only 85 accidents were reported. One-and-a-half percent of those accidents were listed as "alcohol related." This does not mean the hunter was drunk, only that alcohol was involved in some way.

We research to see ourselves

Wisconsin research may shed some light on the subject.

In an August 1986 survey conducted by DNR's Hunter Education Administrator Homer Moe and UW-LaCrosse Professor Bob Jackson, 850 Wisconsin hunter safety instructors rated alcohol third highest of 20 hunting problems.

In a similar 1982 study (Jackson and Anderson, UW-Stevens Point), 250 Wisconsin deer-gun hunters rated alcohol fifth highest of 11 hunting problems. Yet, when asked to rate each problem individually on a scale of one to five (five being the most serious), the hunters surprisingly rated alcohol at 4.05 — higher than managers (3.40), wardens (3.32) and landowners (2.79) surveyed.

These are just two studies, however, and alcohol was only one of several issues surveyed.

Alcohol use affects how hunters are perceived

"I think a greater problem is the image the hunter seems to project," said New Mexico Hunter Safety Coordinator John Davis, referring to the problem of how hunters are perceived by non-hunters. Does "the drinking hunter" fuel negative public views? "No doubt about it," said Davis.

Non-hunters tend to see only part of hunters' activities. Watching people in blaze orange go into bars or leave liquor stores adds a lot of fuel to the fire for anti-hunters, but rarely do they see hunters afield. "It's a periphery view," said Jackson, who directs regional and environmental studies at UW-La Crosse.

Some states, including Wisconsin, are urging hunters not to wear blaze orange when they are not hunting.

Where to from here?

"I would like to see a law requiring hunters to take a blood test immediately following [accidents]," said Bill Schwengel, a conservation warden in Columbia County. Some would like to see random breath screening made legal; others feel it would be ridiculous even to attempt such a move. Still others say states should consider stiffer penalties for offenders. Most state laws on the books today consider firearm use while intoxicated a misdemeanor. The stiffest penalties — and these are rare — are similar to Wisconsin's maximum fine of $10,000 and/or nine months in prison.

Specific research dealing directly with hunting-alcohol issues may be the key. Jackson is one of the few researchers studying this topic. A new study that he's considering would focus on hunting accidents. Hunters who cause accidents would be extensively interviewed. The work may involve psychologists, safety coordinators and officials in three or four other states. "I'm wondering if alcohol will come up as a factor," said Jackson.

Many others wonder, too.

Andrew Savagian is a free-lance writer from South Milwaukee, Wis.

Readers Write

Jim (aka J. Wolfred Taylor, Wisconsin Natural Resources retired editor/editor emeritus), this one's for you:

■ We at Trout Unlimited thank you for the important role you have played in promoting conservation. Under your guidance, WNR became the finest state publication in the country.

You have been a friend to TU with your article on our stream improvement projects that was printed in 1983. It was responsible for my joining TU, and I have since become very active in conservation on local and national levels.

Our cordial regards on the culmination of a fine career!

John Cantwell, National Director, Trout Unlimited

■ I liked the January/February article about trilobites. I have found at least five of them in a rock pile in my backyard. The pile is there from building our log cabin. Well, I am only 10, so finding fossils is a fun and a worthwhile thing to do.

Kelly Bennett, Brodhead

■ Congratulations to Northern States Power Company, Tom Lovejoy and everyone connected with the Jim Falls Project as described in the May/June WNR.

Now, can we get moving on Lake Onalaska? It's been 11 years since I first wrote to the Army Corps of Engineers complaining about the deterioration of Lake Onalaska.

My brother, George, moved up here in 1942 to run a machine shop to help the war effort. I helped him move and started fishing the lake in 1943. One July evening in 1944, we hauled in a 22-pound catfish.

In 1950, George built a house on the lakefront. In 1953, I caught a nice large mouth bass.

I moved here in 1975. Fishing wasn't the same. Rarely now do I enjoy fishing. Two years ago, in the spring, there were some pretty good days. But this year, nothing! It's a swamp! It's pitiful!

Clarence A. Reed, Onalaska

Thank you for expressing your appreciation of the Jim Falls Project. DNR recognizes that much more needs to be done. Your chronological account of Lake Onalaska is familiar testimony.

State and federal agencies are now working together on a major backwater rehabilitation project at Lake Onalaska. The project calls for dredging 200 acres between Rosebud Island and the Wisconsin shoreline to restore water flow. This should benefit the entire 7,700-acre Lake Onalaska fishery.

The project, jointly sponsored by Wisconsin and the U.S. Fish and Wildlife Service, is now in the engineering and design stage. It is scheduled for construction in 1988 or 1989, pending federal appropriations to the Army Corps of Engineers. Cost for the rehabilitation project is estimated at $3 million.

Editor's note: A few items in the July/August issue slipped past a fledgling editor's errant eye. First, our apologies to Washington County readers and employees for mislabeling their county parks as "Sheboygan" parks on our centerfold map. Second, we belatedly extend credit to Bernadette Gilleski, program assistant for Southeast District's resource management programs. Bernadette wrote the text, collected the photos and suggested the map design for our centerfold, "Explore the wonders of Southeastern Wisconsin."

Also, readers who enjoyed Jeanne Sollen's piece, "Potholes on the road to paradise," may wish to write DNR's Bureau of Information and Education for a copy of "Rural Property: Protecting Your Investment and Wisconsin's Environment." It provides an annotated checklist for potential rural property buyers. Contact the bureau at DNR, Box 7921, Madison, WI 53707.

A golden year

Happy 50th, Ducks Unlimited

Ducks Unlimited's 600,000 membership is celebrating its 50th anniversary.

The organization has tirelessly conserved millions of acres of waterfowl habitat throughout North America, and can count to its credit 3,000 completed wetland projects in Canada and 400 high quality projects in the U.S.

In its golden year, Ducks Unlimited raised $59 million for North America's wild ducks and geese. This year's fund-raising goal? — nearly $67 million. Wisconsin Ducks Unlimited leads the nation in number of contributors with 47,467, and is second in total net dollars raised in 1986 — $3.03 million.

The bulk of this kind of support comes from Ducks Unlimited's members. Fund-raising committees (nearly 4,000 nationwide) auction wildlife art, guns and other collectibles.

Well done, good luck and happy anniversary.

■ Re: "Tired old tires" in your July/August issue, I know nothing of the heat value from burning old tires. However, 115 gallons of fuel oil should generate approximately 15 million BTUs, not 15,000.

Dick J. Stith, Madison

Right you are Dick, that's our mistake. John Reindl, DNR State Recycling Coordinator, dazzled us with a little BTUtiful math. Fuel oil produces approximately 140,000 BTUs per gallon. So 115 gallons would produce about 16.1 million BTUs of heat. Each tire produces about 360,000 BTUs and there are 80 - 100 tires in a ton. So a ton of tires produces about 36 million BTUs. Typically, only 50 percent of the heat from burning tires can be recovered in incinerators, so a ton of tires would produce about 17.5 million BTUs of usable energy. As we develop economical methods of getting used tires from the tire pile to the furnace (or to a recycler), we'll have a very valuable resource.

■ Earlier this year, my son and I fished at Eagle Lake in Racine County. All we caught were small bullheads.

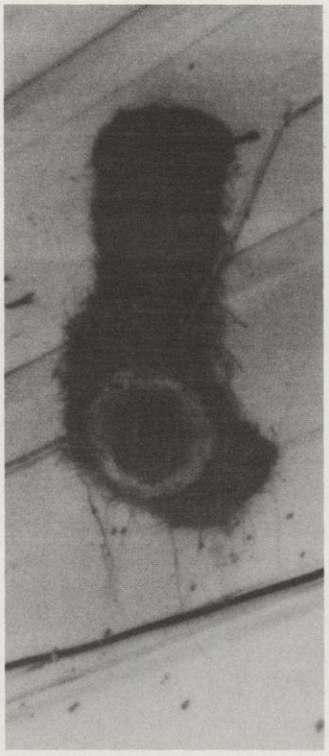
I know DNR treated the lake about seven years ago, and afterward the fishing was good for awhile. Even before the lake was treated, we caught perch and crappies.

Now, what's wrong with the Eagle Lake?

Leonard A. Dorece, Racine

■ For several years, a pair of barn swallows nested on an electrical fixture beneath the overhang on our house. This year, that spot did not appeal to the birds. They started building their nest on a plastic line used for Christmas lights. They would get a ball of mud around the line and begin the concave for the eggs; it would roll over. Again, these persistent birds would start building on top of the mud ball, only to have it turn again. Eventually, they got it anchored and were able to nest. Altogether, there are five concaves in the mud structure, proof that if at first you don't succeed: try, try, try, try, try again.

Milton and Eva Wodsedaleks, Chetek



■ This story, "A Lost Dream," was written by my eighth grade granddaughter, Leah Knuth. The school she attends in Plymouth is near the Mullet River. For a class assignment, she observed the river and wrote this. I think it tells us something about our environment.

Arthur Knuth, Sheboygan Falls

Thank you for sharing your granddaughter's story about dragonflies and their polluted environment — "they had tried to find a clean and beautiful place, a place that now, in their minds, seemed extinct." Perhaps the next class activity can be a cleanup project.

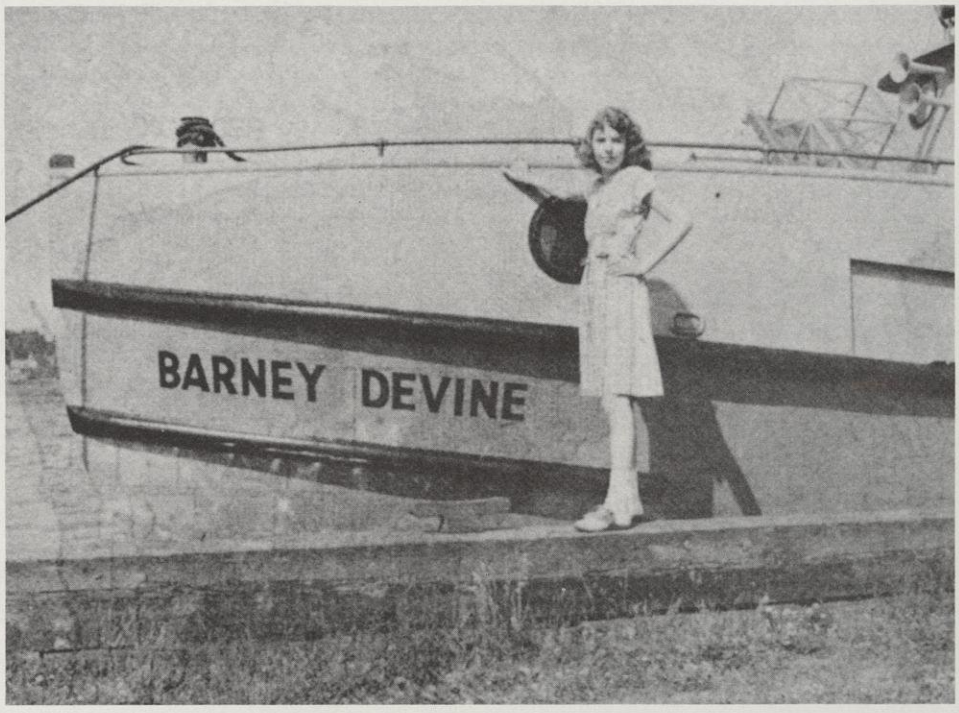
■ I came upon this sleeping doe and crawled down the corn row. She never heard me until I was a few feet from her. I whistled and she looked right at me. The photo was taken near Rush Lake.

Doug Stapel, Ripon

■ While reading through the July/August WNR, I was pleasantly surprised to see a photograph of me on page 14 of the Southeast Wisconsin special report. I am one of the two men jogging along Milwaukee's lakefront.

Rolf Johnson, Milwaukee Geologist, Milwaukee Public Museum's running team captain

Readers Write



■ My family and I very much enjoyed the article on the *Hack Noyes* and the *Barney Devine*. I have fond memories of the "Barney," the boat named after my dad — particularly, of an overnight trip in 1946 when I was 15.

My father, Barney Devine, was Wisconsin's chief conservation warden from 1934 to 1940. He died when I was only nine. A state patrol boat was named in his honor in 1941. My mother, Blanche Hickerson Devine, received some very nice pictures of the newly acquired WCD (now DNR) boat, and before long we had an invitation to take a short trip aboard the "Barney."

"Litz" Stumpf (now Mrs. Lydia MacKenzie), who was a co-worker with my father and a family friend, planned a Door County vacation to include the trip on the "Barney." She also invited her niece, my good school chum, Suzanne Harks, to make a fun foursome.

It was a hot June, and the long ride from Madison to Sturgeon Bay included several ice cream stops, but we finally arrived at the "Barney's" dock. She was an impressive sight, all silver-gray with black stripes edging her hull, deck and pilot house, and a bright American flag at attention astern. She was low and wide, very sturdy and dependable looking, a handsome boat, I thought.

We met the crew of four, captained by George Hadland, who had been my father's friend and also would be the state's chief conservation warden. A short tour acquainted us with our new surroundings. The galley and bunks resembled modern camping trailers, efficient and compact. I'd expected hammocks hung from the ceiling.

Next morning, we were under way. Our destination was Washington Island, at the end of Wisconsin's thumb. Just before noon, we caught sight of Strawberry Island where we docked for a picnic lunch on the pier. No one lived on the island, and there were no other boats tied up when we were there. We arrived at Washington Island before dark. After docking, we went for dinner to a lodge with a big screened porch where the evening was spent chatting with the locals.

With the dawn, we were heading back to Sturgeon Bay like old sailors. When it was time to say good-bye to the "Barney," I knew I had a grand memory on file. And yes, now I tell the story to my grandchildren, Barney Devine's great-grandchildren.

Mary Lou Sagan, Muskegon, MI

■ I am always surprised by the quality, breadth and depth of WNR — but the March/April issue was a record breaker for information of interest and relevance to me.

I am an educator involved in curriculum writing and trying very hard to relate lessons to Wisconsin geology, ecology and environmental issues. Every single article was useful to me in preparing to go back to school.

Your numerous special reports, such as those on groundwater and acid rain, have also been very helpful.

Ilse Ehlert,
Science Coordinator
Wauwatosa School District

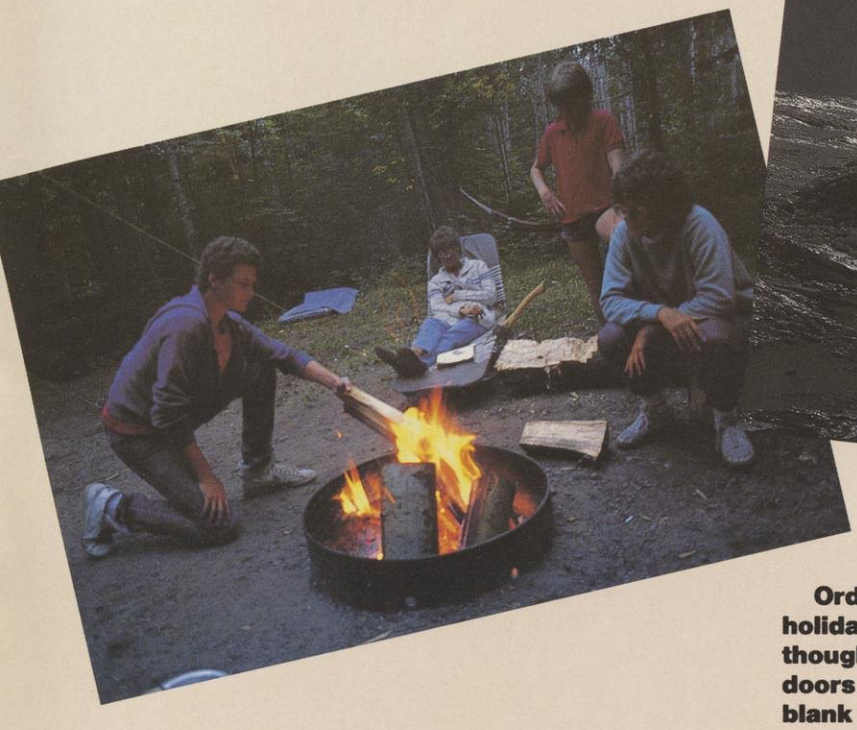
■ My family is very happy about the beautiful May/June WNR cover. Although the girls are older now, many people are recognizing them in the cover photo.

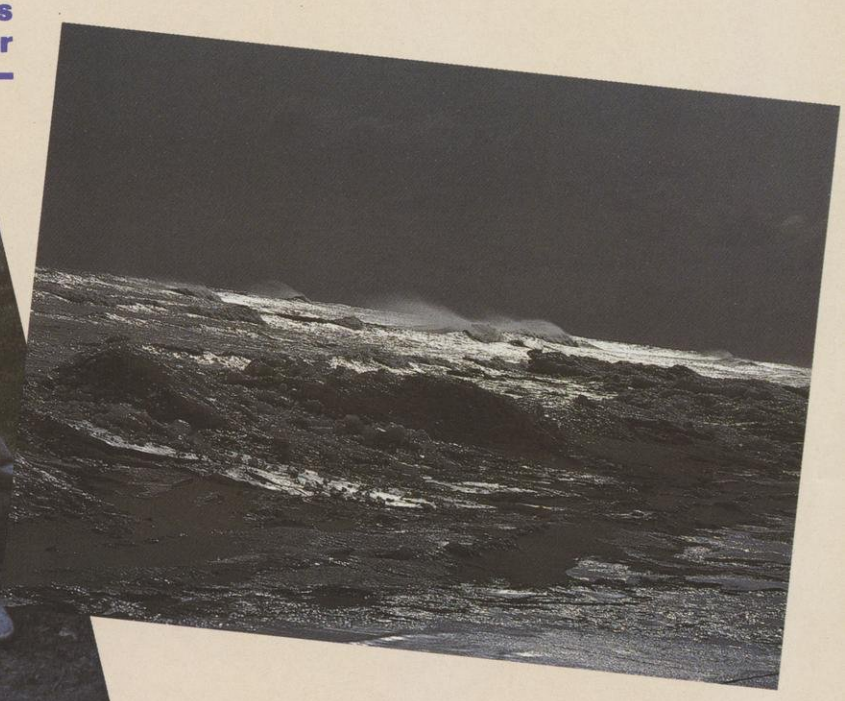
Gerry Johnson, Racine

Next Issue:
A Special Issue devoted to "Watchable Wildlife."

Hit the heights at Wisconsin state parks and forests all year long!

Capture special moments in Wisconsin's state parks and forests while you mark your outdoor travel plans in the "Limited Edition — Wisconsin State Parks 1988" calendar.





Order for your business, family or friends. Do your holiday gift shopping at home. Calendars are a timely, thoughtful way to share your love of Wisconsin's outdoors while supporting our state parks. Use the order blank below.

It's a handy guide that charts unusual vacations, weekends and quick getaways like:

- Candlelight skiing nights at Mirror Lake and lots of weekend ski races.
- Snapping perfect pictures of posies — a month-by-month guide tells which wildflowers are in peak bloom.
- Watching migrations — a seasonal guide for seeing geese, warblers, nighthawks, broadwinged hawks, Monarch butterflies and hummingbirds on the move.
- Joining special celebrations like the kite flying festival in Milwaukee or the Spirit of Christmas Past at Heritage Hill.
- Finding summer concerts and singalongs at the parks.
- Planning your fishing and hunting trips. Season starters are all noted.

Each month, breathtaking color photos share the scenic beauty of Wisconsin's state parks and forests that will entice you to explore rumbling, cool waterfalls at Copper Falls State Park; frosty woodlands at Blue Mound State Park; autumn's golden glow in northern birch and aspen forests; and quiet beaches on the Lake Michigan coastline.

Calendar quantities are limited, so pick up several or order by mail soon. Calendars are available for $5 at state parks, DNR district offices and DNR area offices or, for your convenience, calendars will be packed and mailed to your door for $6 (including tax and shipping charges).

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Canvasback ducks wing over wind-whipped waters in "End of the Slough," by Arthur G. Anderson of Onalaska. Meet this successful Wisconsin artist in this issue.

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