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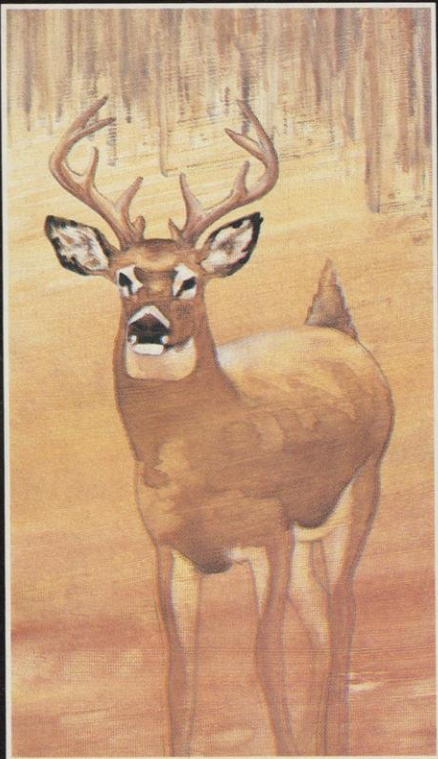
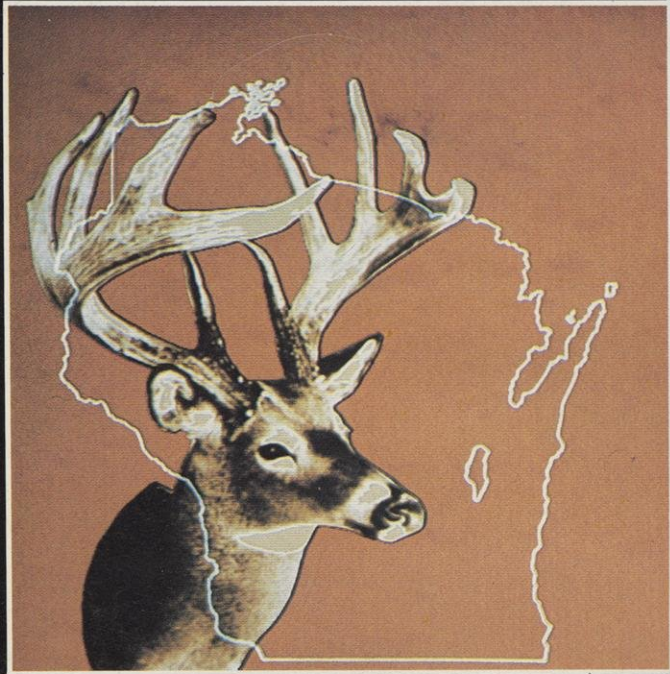
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Wisconsin

NATURAL RESOURCES

November-December 1983 Volume 7, Number 6

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**Holiday Wildlife Stamps:
Checkoff in '84**



Great gray owl

JENNIFER HAACK, Editorial Intern

Taxonomists have christened the great gray owl *Scotiaptex nebulosa*, or the "gray eagle-owl of darkness." These birds are in fact the only owl active during the day rather than at night.

Though the owls move about during the day, bird watchers rarely see them. The American Birding Association lists the great gray as the sixth most wanted bird — among bird watchers — on the North American continent.

The great gray occupies the circumpolar belt of coniferous forest in Eurasia and North America. In the winter it sometimes ventures farther south, even as far as Wisconsin. In 1978, one observer came upon a family of great grays — three young and both parents nesting in a tamarack seven miles east of the Minnesota border in northern Wisconsin. Other Wisconsin bird watchers spotted 20 great grays in 1979 and 10 in 1981. Most of the sightings were in the northwestern counties — Washburn, Douglas and Sawyer, although two were spotted as far south as Juneau County.

But the great gray prefers the cold tranquility and heavy cover of Canada's boreal forest. There among the black spruce the birds are almost tame. Many bird watchers have come quite close to a precariously perched owl and seemed to meet its stoic yellow-eyed gaze eye to eye. But while they might have imagined the owl to be calmly watching their every move, it was in fact really listening for the minute rustlings of small mammals and rodents beneath the snow and vegetation.

Despite the great gray's large and bulky appearance, it weighs only three pounds. A master flier, it can quickly and adeptly move through dense tree stands in search of the sound that means supper. Once located, the owl can brake in mid-flight to pounce on an unsuspecting mouse under a foot of snow.

But the great gray is best known for its slow, almost effortless glide. Its five-foot wing span, long tail and luxuriant coat of long, smooth feathers give this bird a perfect aerodynamic form that humans have for centuries tried to copy.

Great gray owls by Artist Ralph Holmes, courtesy of the Leigh Yawkey Woodson Art Museum, Wausau.

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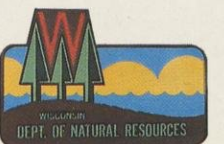
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Computer enhanced deer images. Stories on pages 23 and 25. Photos by Jean Meyer. Images by Linnea Probert and Donna Cox, Computer Graphics Artist. Paintings by Eric Weaver and DeAnn Wilde.

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Wild bear. Story on page 9. Photo by Lynn Rogers.

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The start of something big

KENDRA NELSON,
Editorial Intern

Wisconsin may be on the verge of a
new era in hunter-landowner relations.



Most hunting occurs on
private land and requires
the owner's cooperation.
DNR photo.

Wisconsin landowners, hunters, government people and concerned citizens share responsibility for wildlife — but access to it has become a divisive issue. How to satisfy everyone involved while still caring about wildlife has been the challenge of a Natural Resources Board-appointed council during the past year.

This Hunter-Landowner Council, chaired by William J. Horvath, submitted 32 recommendations to the Board at the end of August. By the end of September, the Board had indicated that more than half could be implemented immediately. Some of the remainder are controversial or merit further study and refinement.

Basic to the problem is that approximately 10% of Wisconsin citizens and corporations own more than 80% of the state's wildlife-producing lands. While wildlife roams with little restriction over all land, the state owns the wildlife and the people are the state. Therefore, many Wisconsin wildlife enthusiasts expect access to their wildlife, even though it is most often on somebody else's land.

Misbehavior by hunters in pursuit of game on private property has resulted in lots of posted land. While most hunters and recreationists conduct themselves safely and legally, there are always the problem few. They damage property and may even endanger lives. To a landowner, a stranger with a gun is not a welcome sight. Cooperation and courtesy on both sides with a little help from the government could change things. It's been tried with some success.

In 1979, DNR started two programs, Project Respect and Wisconsin Acres for Wildlife. Through Project Respect DNR provides signs for landowners to post in places where hunting is allowed. Hunters are then required to obtain the owner's written agreement in order to hunt. DNR also offers wildlife management services plus trees and shrubs to participating landowners, but few have requested them. In popular hunting areas, participating owners are besieged with requests to use their land, and unfortunately trespass problems persist.

Under Wisconsin Acres for Wildlife, landowners are asked to dedicate at least one acre for one year to wildlife. In return, the state provides educational materials and other management assistance.

In a special DNR quail management project, populations of the bird were successfully doubled on targeted private lands in Richland County. A similar program for pheasant and waterfowl is scheduled in Dodge County next year.

Neither Wisconsin Acres for Wildlife, nor the quail management programs require that hunting be allowed on participant properties. Nonetheless, hunters are especially interested in access to game produced in such projects. Dilemmas of this nature constantly faced the Hunter-Landowner Council. After a year of deliberation, the group has produced a set of proposals entitled "A Blueprint for Improving Wisconsin Hunter/Landowner Relationships." Their report laid out

the problems this way:

Private lands have long contributed to the overall abundance of Wisconsin wildlife. Sportsmen, conservationists and society benefit. Landowners suffer crop damage, trespass and liability suits. This imbalance, said the report, must be corrected.



"Hunter-landowner problems are severe and not going to disappear overnight. At best, they can be minimized by implementing well thought out public policy, which was the charge offered to our Council. We believe we have offered a balanced set of solutions, and if implemented as a package, it would be the most massive private lands program in the U.S."

William J. Horvath

For almost 50 years, Wisconsin partially reimbursed landowners for wildlife damage to private crops, but the program was discontinued in 1979. However, it will be reinstated again in revised form next year and the Hunter-Landowner Council recommended that payments be complemented by measures to minimize or prevent deer, bear and goose damage. Beaver damage should also be considered. The Council said additional, special hunting seasons could help to manage game populations and recommended continued use of shooting permits as a last resort control method.

The Council was especially concerned with trespass and wanted it controlled. The group supports legislation to decriminalize trespass when no criminal damage to property occurs, but wants to increase the possible fine from the current \$500 limit to \$1,000.

Assembly Bill 408 does this and also limits landowner liability when someone is injured on private property. It assigns the obligation for safe recreational conduct to the land user. Only in specific circumstances would owners be liable.



"Several council recommendations express a change in philosophy about DNR assistance on private land. Two of the most important issues are refinement of trespass law and compensation for landowners."

-Francis W. Murphy-

For their proposed trespass and liability changes to work, the Council said safety, livestock and similar closed areas on properties would have to be clearly designated. The Council suggested that by expanding Project Respect, DNR could assist in posting land and cooperate with owners willing to make their property available for public use.

The Council also proposed that small game hunters be required to wear identification backtags like those worn by deer hunters. In addition, the Council recommended that wardens be given authority to issue trespass citations. Neither of these is earmarked for immediate implementation. The council also said that repeat trespass violators should have their hunting, fishing or



other recreational licenses revoked.

Under the Council blueprint, owners of 50 acres or more would be given preference for 30% of deer hunting permits in their quota areas. The blueprint also asks DNR to make it easier for hunting clubs to work with landowners in forming shooting preserves on neighboring blocks of property. Farmers cooperating in these enterprises would be able to hunt free.

"Industrial landowners have gotten along with hunters pretty well. Consolidated Papers owns 250,000 acres in Wisconsin that have long been open for multiple uses... a change in trespass/liability laws is important to encourage smaller landowners to reopen their lands... The beaver population is increasing and so are beaver damage problems.

"I hope that all the time and effort that the council has put in is not lost."

-Daniel P. Meyer-

The Council wants to use funds contributed through the new nongame income tax checkoff to help with wildlife management on private lands. This would benefit both game and nongame. Also proposed were tax incentives — a break for lands where owners enhanced wildlife habitat, and income tax credits or exemptions for money or effort spent on wildlife improvements.

The Council also cited ways in which private landowners could be paid to allow hunting on their land. Continued DNR leasing of acreage that provides hunting opportunities was encouraged, and a receipt system whereby game taken from private property would yield compensation was discussed.

According to the Council, sportmen's groups, other wildlife interest organizations, landowners, DNR and other government agencies should develop better communications among themselves. This is needed, said the report, because intense, modern wildlife management requires new skills, information and understanding. Hunter education, according to the Council, should be mandatory and offered through vocational, technical and adult education programs to instill a hunter/conservation ethic.

Many agencies, groups and individuals help develop Wisconsin wildlife policies. Since DNR has a major responsibility to initiate, coordinate and direct these activities, the Council believes the job could best be administered locally, with a DNR office in every county. To accomplish this, 40 professional wildlife managers would have to be added to DNR staff.

Many of the Hunter-Landowner Council proposals, aside from the 16 already earmarked for immediate implementation, will require special regulations or new laws. Some of the ideas are already in bill form and being considered by the Legislature. Exactly how many will find general support is not yet known, but the Council has offered to meet again a year from now to review progress on their proposals.



Landowners complain about crop damage by geese and sandhill cranes. Photo by Greg Scott.

Hunter/Landowner Council

A 10-member Hunter-Landowner Council with representation from both groups as well as the legislature was appointed by the Natural Resources Board in August of 1982. The council was asked to come up with ways to improve relationships between hunters and landowners and to recommend changes in public policy to accomplish this end. Members of the council are:

Chairman: William J. Horvath
Regional Representative, National
Association of Conservation Districts
Stevens Point, WI

Robert Ellingson, DNR
Executive secretary

Otto Christopherson
Dairy Farmer
Wisconsin Dells, WI

Anne Fancher
Secretary, Wisconsin Bowhunters
Crivitz, WI

Senator David Helbach
Stevens Point, WI

Doug Johnson
Past President, Wisconsin Wildlife
Federation
Milwaukee, WI

Daniel P. Meyer
Director of Public Affairs
Consolidated Papers, Inc.
Wisconsin Rapids, WI

Francis W. Murphy
Chairman, Conservation Congress
Portage, WI

John Piechowski
Grain & Beef Farmer
Red Granite, WI

Allen Riese
Grain Farmer
Oregon, WI

Representative Tommy G. Thompson
87th Assembly District
Elroy, WI

Hunter/Landowner Council Recommendations

In August of 1982, the Natural Resources Board appointed a 10 member Hunter-Landowner Council to come up with recommendations on how to improve relationships between the two groups. Five appointees represented landowners, three represented hunters and there were two legislative members. William J. Horvath, of Stevens Point, a regional representative of the



"I feel that I have my finger on the pulse of hunters, and I am a hunter myself.

"For hunters, I think it is most important to decriminalize the trespass law. This is also important to landowners because it won't be quite the hassle to get someone out. Most hunters ask permission to be on a property. There are only a few bad apples, but most have to pay for a few."

-Anne Fancher-

National Association of Conservation Districts was named chairman. After a year of study, the Council produced a "Blueprint for Improving Hunter-Landowner Relationships." It contains 32 recommendations as follows:

1—Broaden the endangered species tax check-off to a Wisconsin Wildlife Fund for integrated habitat management on public and private property.

2—Use the Wisconsin Wildlife Fund for cost-sharing between government agencies and landowners to develop wildlife habitat.

3—Design the deer hunting license so that a portion can be left with the landowner when a deer is taken from private property. The owner would have the option of partial reimbursement from DNR.

4—Give 30% of deer hunting permits to landowners with more than 50 acres in the quota area.

*5—Provide safety zone and livestock warning signs to post restricted land.

*6—Continue private land wildlife awards and develop additional recognition programs.



"Wildlife damage depends on where property is: to a central Wisconsin farmer the problem is deer; to a bee keeper up north it's bear; to a cranberry grower, sandhill crane; and to a farmer with corn, goose.

"Private ownership is sacred to landowners. Allowing hunting, fishing or whatever on private property is a gift, and I don't really think that people appreciate what they're getting. I have a real problem with the city attitude that we must provide for them. It just doesn't work unless they, in turn, do something for landowners. I think the Council is taking steps in the right direction."

-John Piechowski-

*7—Promote landowner contributions to wildlife through Wisconsin Natural Resources magazine and other public relations tools.

*8—Expand Project Respect to cooperatively open private lands for public use.

9—Focus cost-sharing wildlife management

Among landowners, feelings about hunters are ambivalent. Photo by Dean Tvedt.



funds on high priority and hunter-landowner projects. Aim to have a wildlife manager in every county.

10—Direct the County Conservation Fund toward habitat management on private property.

*11—Encourage a closer working relationship between local conservation clubs and landowners.

12—Pass Assembly Bill 408 to change liability and trespass laws. In addition, revoke licenses of repeat trespass offenders and give DNR wardens authority to issue trespass citations.

*13—Define state provisions for wildlife management on private property in the DNR administrative code.

“In the past, landowners were always responsible for liability. The Council recommended that hunters be on property at their own risk... For safety, future hunters should be required to pass tests similar to drivers’ tests.

“I think a lot of good will come out of the Council — maybe better understanding between hunters and landowners.”

-Allen Riese-

14—Budget for county wildlife managers to work with private landowners.

*15—Coordinate wildlife habitat management with county land conservation committees and the Soil Conservation Service.

*16—Give public relations training and internships to DNR employees who work with private landowners.

*17—Identify owners who might participate in land access programs.

**18—Remedy wild animal damage through abatement and claims programs at county levels.

**19—Enact tax incentives for landowners to develop wildlife habitat and pass other legislation to promote preservation and management.

20—Establish mandatory hunter education.

21—Cooperate with vocational, technical and adult education systems to provide hunter education.

22—Have small game hunters wear identification backtags like those worn by deer hunters.

23—Fund hunter/conservation or environmental education with natural resource fine monies.

24—Penalize repeat fish and game violators not only with fines, but also through a period of required natural resource service.

25—Set up county DNR offices.

*26—Combine efforts so that nonpoint water pollution programs also help wildlife resources.

*27—Find out how much staff is necessary to include wildlife management as a component of forestry planning.

*28—Make the Farmland Preservation Program a tool to obtain habitat objectives.

*29—Explore further possibilities for inter-agency cooperation between DNR and county government in working with landowners.

*30—Help develop rapport between organized wildlife groups and landowners.

*31—Contract with the University of Wisconsin to improve communications about wildlife management between private property owners and DNR.

*32—Assist private shooting preserves, game farms and cooperative hunting enterprises.

*Approved by the Natural Resources Board for immediate implementation.

**Okayed for partial implementation.



Wisconsin's bear essentials

BRUCE E. KOHN,
Biologist, Forest Wildlife Research Group

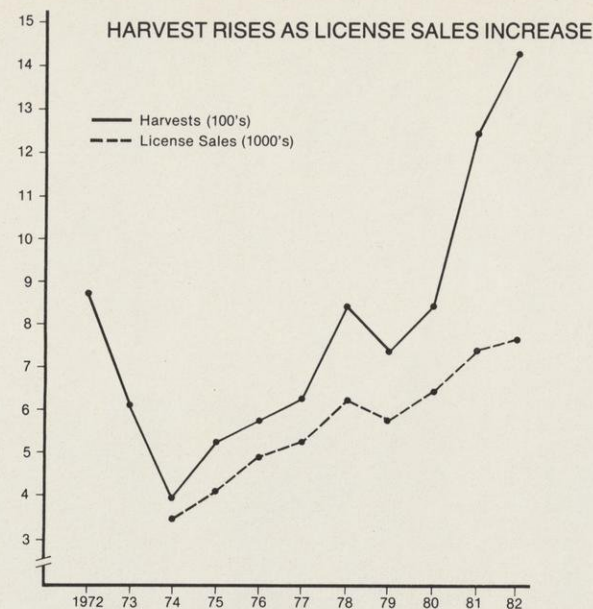
Various research projects monitoring Wisconsin's black bear population indicate a downward trend. Hunting regulations have been changed to reverse this and more changes may be on the way.

In 1955, a biologist, H.E. Spencer, Jr. wrote, "No wholly satisfactory method has been devised for censusing the black bear." That statement still holds true. Techniques have not been developed that will very accurately determine the exact number of bear in a state such as Wisconsin. But the methods we use can give a pretty fair picture. Keeping tabs on the population is especially important today because interest in bear and bear hunting is on the increase and it is essential that there be no overharvest.

The main goal of DNR's bear management program is to maintain a healthy, viable population in Wisconsin. Information that forms the basis for this management comes from a research project begun in 1972 and from data obtained by biologists in other states and Canada.

Since no one census method is "wholly satis-

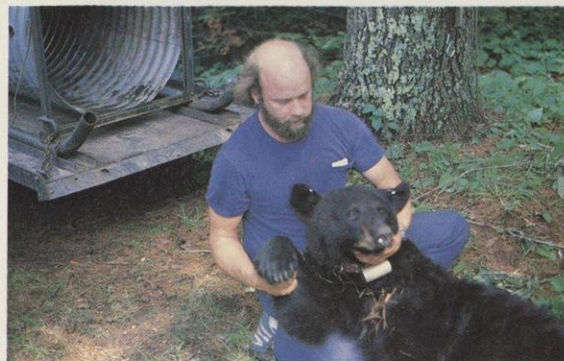
Bear harvests were high in 1981 and '82, but lower this year. Photo by Lynn Rogers.



This cub will be a yearling next season. Studies show the number of yearlings bagged is up 24 to 40% over the 1970s. Photo by Lynn Rogers.

Center: The average litter size ranges from one to four. Photo by Lynn Rogers.

Right: Captured bear are ear tagged to help determine harvest intensity. Photo by Jack Massopust.



determine whether a "safe" level of harvest has been exceeded.

Wildlife management and research personnel are now conducting bait station transects in all 18 counties in the major bear range. These involve wiring bags of meat to trees at half-mile intervals. Fifty of these are placed along each transect and checked seven days later to see what percent bear have taken. This survey provides another index to annual changes in the bear population.

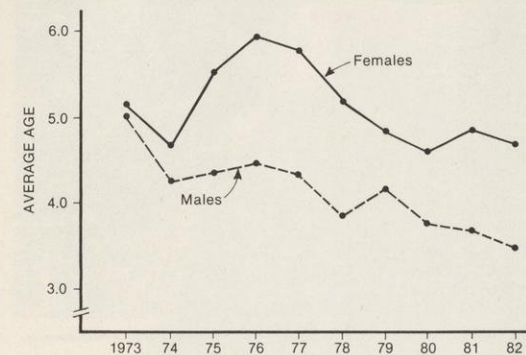
Finally, many bear trapped on nuisance complaints each year are ear tagged and then released some distance from where they were causing a problem. The percent of these bear harvested each year is compared to that of bear ear tagged from 1975 through 1979 to detect changes in harvest intensities.

Now, what has all of this information shown?

First of all, it confirms that the interest in bear hunting has increased dramatically. License sales have more than doubled since 1974 (the first year



AVERAGE AGE OF BAGGED BEAR IS DECREASING

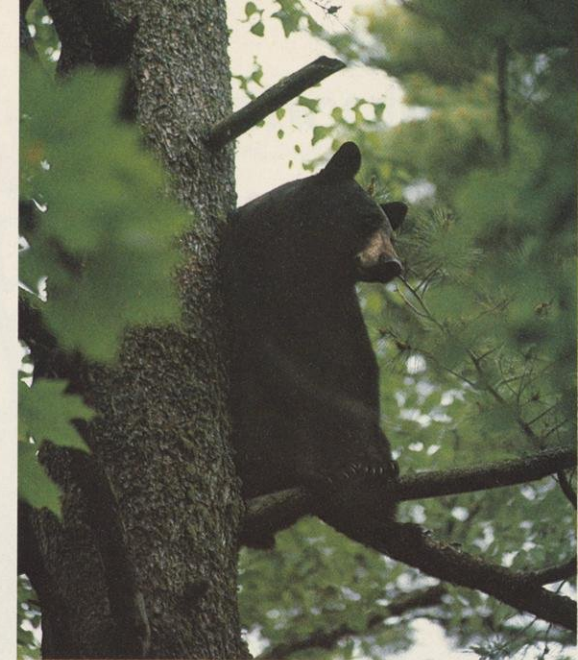


they were required), and bear harvests in 1981 (1,243) and 1982 (1,430) far surpass any others since registration began in 1957. Impacts from this heightened interest are starting to show up.

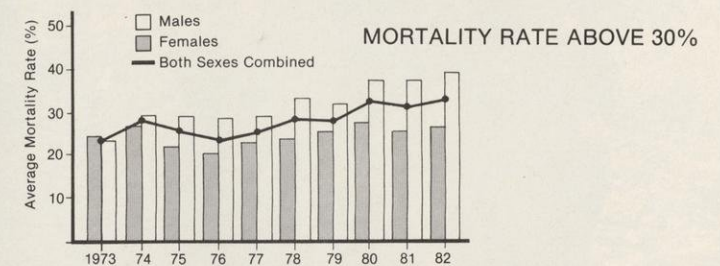
Bear harvested in the 1980s showed up about a half-year younger on the average than those taken during the 1970s. And since 1980, the average annual mortality rate calculated from these ages has exceeded the "safe" level determined during earlier stages of the study.

One of the main changes has been a big increase in the proportion of yearling bear in the harvest. This jumped from around 5% in the 1970s to 40% in the 1980s for males and from about 3% to 24% for females. Evidently, hunters are becoming less selective for larger bear than they were in the past.

Bear visitations at the bait station transects also show a downward trend as a result of the recent high harvests. Visitation rates ranged from 40 to 43% through 1981 and then dropped down



About 38% of the bear taken in Wisconsin are shot over hounds. Photo by Lynn Rogers.



Hunting bear with hounds is restricted to the northern third of Wisconsin and only six dogs are allowed in a pack. Photo by Jack Massopust.

factory," many pieces of information are gathered and analyzed that enable us to monitor Wisconsin's bear population. This requires the cooperation of thousands of people.

Bear hunters must purchase a special license and all bear shot during the hunting season must be registered. This allows us to follow harvest trends in fairly small areas and to detect changes in hunting pressure and success. Licensing also makes it possible to conduct a periodic survey of hunters to find out where they hunted, the number of days they hunted, their hunting methods and what they observed.

Every year nearly every bear bagged is aged. This is done by collecting a tooth which is then sent to UW-Stevens Point for processing. When properly processed, the roots of bear teeth show age rings much like trees.

Since 1973 teeth have been obtained from more than 5,000 bear. This gives us the average age as well as the annual mortality rate and helps

to 36% in 1982 and 1983. Although this might not seem like much of a decrease, it is statistically significant and provides another indication of current bear population trends.

Finally, bear ear tagged on nuisance complaints are now being shot at a much higher rate than bear marked between 1975 and 1979. This increase agrees with the mortality rates calculated from the age data.

So all information strongly suggests that harvests during the last two years have been excessive. Work is being done right now to alter the hunting regulations in order to bring harvests down to a more acceptable level.

What has been very encouraging is the support from the Wisconsin Conservation Congress and bear hunters themselves for more conservative rules. With our monitoring system and continued support of the hunters, there is little doubt we will be able to maintain a healthy, viable population of bear in Wisconsin for a long time.

The mythical minority:

Women who hunt



Both Jeanne Batha and Jackie Friend are hunters. Their husbands have careers in wildlife management. Photo by Milt Friend.

MADONNA L. KING,
Madison

Not many women hunt and there may be sociologic and psychologic reasons. Those who do find it rewarding.

Women who hunt! Does that conjure a certain incongruity? Is hunting as synonymous with masculinity as beer with Milwaukee?

Well, maybe, but not 100%! Here and there. In the shivering duckblinds, you can spot slighter figures shrouded in the bulky uniforms of the sport, their whiskerless chins lend the only clue that these are hunters of a different sex. Though often flanked by husbands or fathers, they are true hunters. They too cradle shotguns and wait for the chance to fire into the autumn air at fleeting targets.

No, they're not mythical Amazons, but they're

almost as rare. The 1980 US Fish and Wildlife Service's National Hunting and Fishing Survey showed only two percent of the female population hunts. That comes as something of a surprise to female hunters themselves. "No wonder I can't find hunting clothes to fit!" says Wisconsin hunter Sue Cedarleaf. The minority she belongs to is not much bigger today than it was a decade ago. And although some speculators envision growth in female participation in the next 10 years, dramatic change does not seem imminent.

But why? Hunting long ago changed from a subsistence activity that required superior strength to a technologically-easy sport. Women's child-bearing-and-raising time restrictions were long ago overcome, too. So why, especially with the inroads women have made in virtually every other area today, does hunting fail to attract more females?

Some of the experts — sociologists, anthropologists and historians — suggest that male social

patterns or fraternal ties developed around the "death-dealing" of war and hunting, while female social patterns or sisterhoods developed around the "life-giving" of home and children. So male and female attitudes about killing may have evolved differently from the outset.

Today, in fact, virtually all studies show that female disapproval of hunting — on the basis that killing is wrong — is far greater than male. And that's not just an anti-human hunter feeling; studies also show that far more females than males have negative perceptions of predatory animals, largely due to the tendency to humanize wildlife as the "big bad wolf" or "Bambi deer." Women, according to surveys, tend to have much less understanding than men about wildlife and their life and death ecological cycles in general.

If these are indeed some of the reasons why women don't hunt, then a more interesting question is why those two percent — like Cedarleaf and other Wisconsin female hunters — do.

"I like being outdoors, observing animals, enjoying the solitude," says Cedarleaf, a single, 31-year-old graduate student in land resources at UW-Madison. "I also like that 'Daniel Boone' sort of self-sufficient feeling that I get just feeling the gun in the crook of my arm. It's a feeling that's hard to explain, but it's something I don't experience when I'm just out hiking."

Cedarleaf had the classic "socialization" that typifies the "committed" hunter, and then some. She started hunting in a rural area when she was 10 with her father, and, unusually enough, her mother. She learned early to overcome any queasiness about dead animals since the family rule was "if you kill it, you clean it, 'cause if you don't you won't be able to eat it." The shooting and killing aspect of hunting was always dealt with as simply an essential skill needed to participate, she explains, never as a motivation for hunting itself. And there is always an instantaneous pang of regret about the death of an animal.

That same remorse is there, too, for 31-year-old Sue Niebauer of Oregon, Wisconsin, who was the "tomboy" in an all-girl family and learned to hunt with her father at about the same age as Cedarleaf. She enjoys hunting today with her husband and her extended family of hunters, but the real attraction now is the "excuse" hunting seasons give "to take that hike through the woods or the marsh." As a mother of three small children, Niebauer's free time is limited. "Hunting gets me out to places I wouldn't otherwise make the time to visit," she says.

As a youngster Niebauer recalls enjoying the specialness that hunting meant — "I got to do what the boys always got to do." That individuality carried over to her career as a wildlife ecologist, and she remembers being one of just three females in that program at the UW-Madison less than 10 years ago. She confesses that she does have the somewhat stereotypical "maternal orientation" towards animals, especially young ones, but her ecologic understanding of wildlife populations allows her to accept killing as a natural process.

That acceptance came early in life for 50-year-old Mary Larson of La Crosse, too, who grew up hunting with her father on the Mississippi backwaters in their backyard. "I absolutely lived down on that riverbank," she recalls. "My brothers would have to come fetch me there and drag me to my piano lessons all the time."

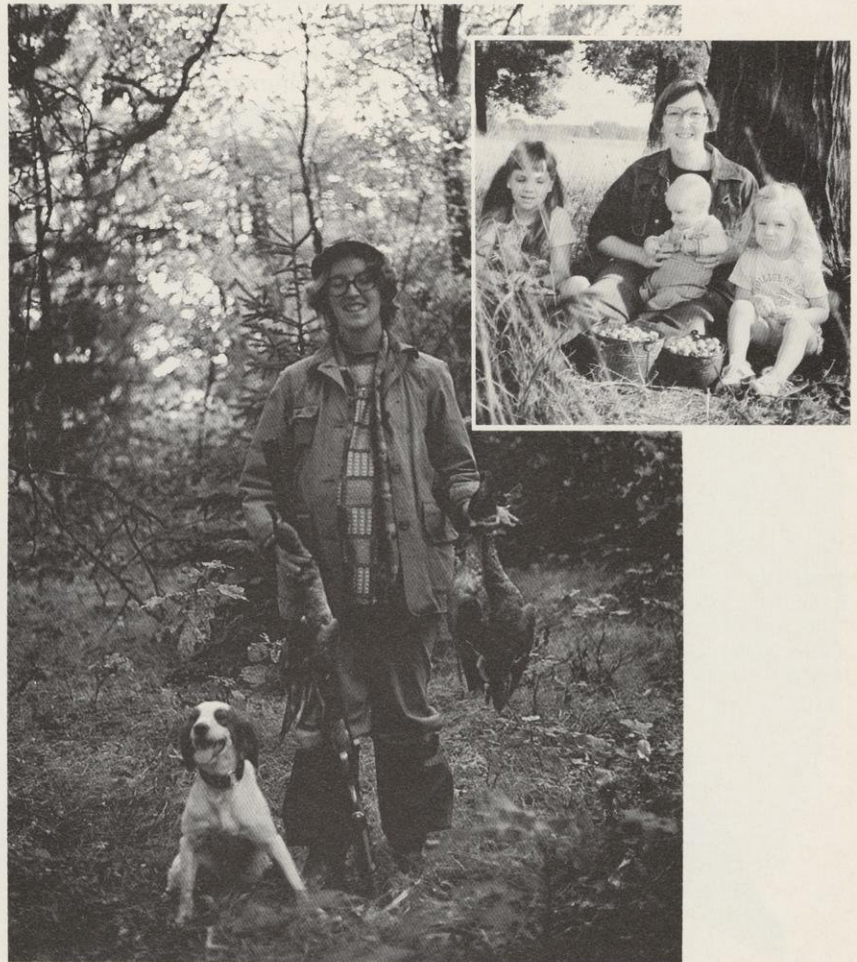
Today Larson is married to a man who learned to hunt from her. "He's proud of my hunting skills," Larson says. "He always knew I liked the out-of-the-ordinary, outdoorsy things that women usually don't like, and when we were dating he always knew he could find me on that riverbank."

Larson's daughter, on the other hand, was often embarrassed by her mother's hunting — at least through her teenage years. "When she had friends over and I'd come dragging in looking like a marsh rat and start cleaning ducks, she'd say 'Oh mother, how gross!'" Larson recalls. "Today she understands, and now she tells her friends 'My mother hunts!' with pride. She wishes she had shown some interest in learning how to hunt earlier, and in fact, is going to go out this year for the first time."

People who meet Larson in the office where she is a supervisor of computerized typesetting, or on campus where she was a computer science stu-

Sue Niebauer, her Brittany spaniel, Betsy and their opening day bag. Photo by Tom Niebauer.

Inset: Sue Niebauer and her three children, Sarah, Rebecca and Christopher on a hickory-nutting expedition this fall. Niebauer says she retains a certain "maternal orientation" toward animals, especially young ones. Photo by Tom Niebauer.





Mary Larson at a goose refuge in Minnesota. Raised on the Mississippi at La Crosse, Larson is a hunter who emphasizes that killing is not the attraction.

dent, are always surprised to learn that she hunts. "I'm not sure what they expect, but they always indicate that I just don't look the part," she says. "Maybe they picture hunters as strictly masculine and blood-thirsty. They don't seem to realize that killing animals is not the attraction. It's seeing and taking part in nature in a way unlike any other. I shot a squirrel once and didn't have a game bag with me, so I set it on a stump. All of a sudden a hawk swooped down and took off with the squirrel — evidently it needed that meal more than I did. Now that's the kind of thing that makes hunting such an experience in living."

That's also the kind of experience that 29-year-old Melody Stone would like to gain. Just three years into the sport, she is a single pre-med student at the UW-Madison whose original intent on joining the ranks of hunters was simply to get

to know her father better by hunting with him. Now Stone realizes that the aesthetics of the experience are more than a fringe benefit.

"Getting up when it's still dark outside, dressing warmly, feeling the cold air on your face, driving to a small town cafe for breakfast, stepping out into a field of corn stubble, carrying your gun before you with that continual sense of anticipation, the exhilaration of a bird bursting from cover, the challenge of shooting in the excitement and then recapitulating the moments with your partners — that's what appeals to me," Stone says. "And I think what really sets an experience like that apart from other outdoor activities is the alertness you must maintain at all times."

Stone has some reservations about the sport, however. "The killing part is the sorry part of the hunt," she says, "and I don't think I could do it if my gun didn't keep it very distant from me. I don't know if I could deal with the death of an animal if I had to wring its neck because of a poor shot. That would make it all too real. I guess, in that sense, I have a very pretty, or romantic view of hunting."

Another single woman who recently became a hunter participates as a bowhunter. But 31-year-old Katy Munz' interest was more along athletic lines than aesthetic ones. She started shooting pop cans with a .22 rifle, then got into trap-shooting and archery, developing a good eye and a steady arm. But she says "just shooting didn't make sense," so she began going afield with hunter friends and has been hooked ever since.

"Hunting gives me time to think about a simpler life by watching animals in nature," says Munz. "There's really no special mystique about it, over and above just spending time in the woods. But it's an established way that's conducive to doing just that. I like being out in the woods during autumn, but I'd feel really stupid going out to a tree blind at any other time of the year. I also like to make efficient use of my time, so I read and relax and think — and maybe shoot a deer — while I'm out there."

The shooting, says Munz, is a challenge to her concentration skills. As employee fitness director for a Madison firm, and a participant in nearly every sport and leisure activity imaginable, she enjoys testing herself and learning control. Experiencing the unique is also a part of the attraction, she admits, noting that hunting is akin to two other "very different worlds" she has recently entered — scuba diving and flying.

Anne Fancher of Crivitz, executive secretary of the Wisconsin Bowhunters Association for the past 25 years, reports that women bowhunters like Munz make up a higher percentage of all bowhunters than women firearm hunters do among firearm hunters. About 1,000 of the association's 8,500 members are female. Most, she says, get into the sport to learn new skills. But part of the attraction is also the basic contrast of bow-and-arrow to gun: bows are light and quiet, guns are heavy and loud. "Women tend to have a better feeling about bows," she says. "They don't represent a 'weapon' as readily and so they're not



Anne Fancher, executive secretary of the Wisconsin Bowhunters Association. "The death of an animal always brings a momentary feeling of remorse."

afraid of them."

At 56 years of age, Fancher is probably one of the most active hunters — male or female — in Wisconsin. "I try to get out almost every day for a while during deer bow season," she says. "For a high-strung person like me, it's the only time I can sit still and not let things bother me — just enjoy the outdoors and concentrate on other things."

Fancher, who came from a Milwaukee family where hunting was totally foreign, started hunting 30 years ago with her husband. She has often been the only female in deer and other big game camps since, but she says she has always been made to feel welcome and respected.

"I do enjoy the challenge of shooting," she says. "When you do something just right, the adrenalin really flows. The death of an animal, on the other hand, always brings a momentary feeling of remorse. I think you must feel some sense of that to be a decent hunter. I respect the animals I bag. I won't drape a deer over my car and parade it around. I realize there are people who can't handle seeing dead animals like that either, and I respect them, too."

Helen Hanisch of Oshkosh, who is "over 55" and also initiated to hunting by her husband years ago, sees the death of an animal in a very matter-of-fact way. "I realize that it bothers a lot of people to think about killing, even cleaning animals," she says, "but it's no different than butchering chickens in the farmyard. It's all good food on the table."

Hanisch says that although she's always enjoyed the outdoors through fishing and other activities, her father never took her along on hunting trips. "It just wasn't something for a girl to do then," she says, "I don't know how many fathers are taking daughters today, but I do believe more husbands are asking their wives to come along."

Twenty-three-year-old Connie Schink of DePere says that when her husband first started bringing her along on hunting trips with friends, "sometimes I felt like I was intruding." But, she says, she was readily accepted and encouraged to continue. She even felt that other men wished their girlfriends or wives would hunt too, and now so does she.

Jeanne Batha of Oregon, Wisconsin, has found the social circle of female hunters a little wider than most, perhaps, because she is married to a wildlife manager for the the Wisconsin Department of Natural Resources. Husbands whose lives revolve around hunting to that degree tend to get their wives involved, she explains.

"Hunting is the only way I can spend any time with him alone between September and January!" Batha laughs. At 34 years of age, she is now a 13-year-veteran of the sport, having tagged along with her husband before they were married. "I still remember one of the first times we were out and I made a poor shot at a rabbit. It squealed as it was dying, and when it did, I thought I would too. It really bothered me."

But, Batha contends, a hunter doesn't hunt to kill. And that is how she can deal with the death



Helen Hanisch. "It's all good food on the table."



Jeanne Batha with her husband Carl and daughters Jennifer and Janelle.



Here and there, in the duck blinds you can spot slighter figures, shrouded in the bulky uniforms of the sport.



Cindy Moe took this deer with a single shot at over 100 yards.

that is an inevitable part of hunting. "The shooting and killing are actually very anticlimactic," she says.

Batha has two daughters — an eight-year-old she imagines will someday hunt with her father, partly because she is very close to him, and a 10-year-old who has no interest in the activity, partly because she places more importance on peers who have no interest in hunting. The real difference between the two may prove to be genuine interest in the outdoors and wildlife. Exploring that interest in the traditionally male realm of hunting, instead of something "neutral" like backpacking, comes not only from the "socialization" that one or the other may go through, but also from self-perceptions.

Common to the self-concept of all these Wisconsin female hunters is a sense of uniqueness. "There's something egotistical about doing something that few other women do," says Cedarleaf. "I admit to being a bit demonic about it actually — I like to watch reactions when I say 'I hunt.'"

"When I say I'm a hunter," says Batha, "it's a real conversation stopper, for both men and women."

"People certainly don't forget you, that's for sure!" says Niebauer.

But Francis Murphy, chairman of the Wisconsin Conservation Congress is more positive. "If a man is even halfway secure about himself, he can readily accept women into the sport," he says. "A guy who's been hunting for 20 or 30 years will be more reluctant to admit that hunting doesn't take any superior strength today and that women can handle it just as well as men can. But the younger men today are more ready to welcome women into their ranks, and I think that's a big part of the reason we're going to see more female hunters in the future."

Art Doll, in DNR's Office of Planning and Analysis agrees that tomorrow's hunter statistics will probably show a greater proportion of females. Part of the reason is simply that more women have more free time to recreate in new and different ways today. And part of it is that there is a growing understanding and interest in human interactions with wildlife across the board.

In their own individual ways, many Wisconsin female hunters seem to handle the "death-dealing" aspect of hunting — the purported antithesis of basic femaleness — no differently than men. They have come to enjoy a sport that has been a bulwark of manhood, a bastion of masculinity, without feeling less feminine or without stepping on egos.

But there are still very few of them. The sociologists say that's probably because there will always be remnants of sexually-segregated activities in our society — there will always be men's poker games and women's coffees over baby care. Hunting may be one of those things that will never change much at all. And in sheer numbers, women who hunt may remain a near mythical minority, nearly as mythical as those Amazons, the fabled female warriors of Greek mythology. ♣

Catch-all

Beaver subsidy may save trout streams

By Mary Sagal, Editorial Intern

Madison — DNR is trying a special subsidy for beaver trappers in an effort to bring down an exploding beaver population and diminish their threat to trout streams.

The \$112,000 program allows trappers to take beaver during special seasons after signing a contract with DNR. **Contracts are issued free to licensed trappers.** The first special season began in October and runs through December 2. During it, trappers will receive \$20 for each beaver 30 inches or longer taken in specified streams in problem areas. Pelts can be sold after the beaver is registered



with DNR.

In the second special season, starting April 1 and running through September 30, trappers will be paid \$10 for each beaver, regardless of size and pelts will be kept by DNR. However, the

trapper may keep the pelt in lieu of payment.

All trapped beaver must be brought to DNR stations in the round.

There will be no subsidy payments during the regular beaver trapping seasons from December to March.

The program will continue beyond September 30, 1984 if successful. "It's something we'll try, and see how it works out. After two years we'll reevaluate it and go on from there," explained Chuck Pils, DNR fur specialist. **Goal of the program is to reduce the beaver population 5% each year for five years.**

DNR trout specialist Larry Claggett blames the beaver infestation of trout streams on reduced trapping because of low fur prices, plus reforestation and reduced predation.

In flowages behind beaver dams, water is warmed in summer and cooled in winter. Trout need just the opposite to survive. Altered temperatures interfere with spawning and change stream habitat. "Deep narrow channels, which are good for trout, are changed to wide, flat marshy areas," says Claggett. He lists silty stream bottoms and prevention of migration as other beaver-related problems.

Wisconsin Conservation Corps

Madison — Jobs for 500 young people age 18 to 26 who are currently unemployed will be available through the Wisconsin Conservation Corps during the next year and a half. To date, 27 people have been hired for projects in Iowa, Dane, Washburn and Forest counties. The 40 hour per week jobs involve outdoor work on some kind of conservation project and require no training.

Salaries are \$3.35 an hour for a Corps worker, \$3.85 for an assistant crew leader, and \$5.50 for a crew leader.

A total of one year can be spent with the Corps. Job openings occur when a sponsor designs a one year project in a given county. The sponsor then submits this project to the

Wisconsin Conservation Corps along with data on support services such as transportation, tools and other items it will furnish. If the Corps approves the project, the sponsor interviews people and gives names to the Corps, which then does the actual hiring.

At the end of the one year project, each worker receives a \$1,000 voucher for any form of higher education, or \$500 in cash. Says Bill Brakken, executive secretary of the Corps, "We want to be a starting point for young people, not a dead end."

Jobs are applied for through local Job Service agencies. For more information write: Wisconsin Conservation Corps Box 8918 Madison, WI 53708



1½ million Christmas trees

Madison — Christmas trees bring an estimated \$10 million into Wisconsin's economy each year.

Wisconsin markets around 1.5 million trees each year and vies for first place with Michigan, Washington and Oregon as the nation's number one tree producer.

About 97% of Wisconsin's trees are exported to other states, Canada, South America and the Caribbean.

Christmas tree farms in Wisconsin range anywhere from 50 to 5,000 acres in size.

According to a survey by Christmas tree growers last year, only 60% of American homes with Christmas trees had the natural type. Demand for "real" trees has leveled at about 30 million per year.

Most popular among "real" varieties are scotch pine, balsam, red pine and blue spruce.

Fishes of Wisconsin

Madison — A new book, "Fishes of Wisconsin," by George C. Becker, was published in September by the University of Wisconsin Press.

It's a comprehensive look at all of Wisconsin's fish and the environment affecting them.

The 1,052 page book deals with such issues as acid rain, pesticides, PCBs and eutrophication as well as fish stocking, research and ecological principals.

Publisher is the UW-Press, price \$75.

Phosphate ban

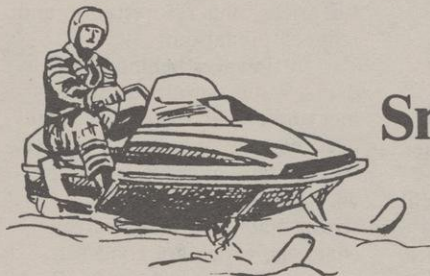
Madison — On November 1, Governor Anthony Earl signed into law the bill that once again bans sale of high-phosphate detergents in Wisconsin. The ban will go into effect January 1, after which retailers will be prohibited from selling detergents containing more than 0.5 percent phosphorus.

High phosphate detergents returned to grocery store shelves

in 1982 after a 1979 law against their use ran out.

Its reenactment is designed to reduce the level of phosphates which over-fertilize lakes and streams and stimulate weed and algae growth.

In trying to kill the measure, the detergent industry had argued that detergents contribute only an insignificant percent of phosphates to lakes.



Snowmobiler profile

Madison — According to *Hummer* a Wisconsin snowmobile news magazine, the average snowmobiler is 38 years old and has a family income of more than \$30,000 per year. There's an 80% chance that he or she is married and a 50% chance there are children at home. Snowmobiling, says *Hummer* is a family activity for 85% of those who enjoy the sport.

Blue collar workers make up 70% of the ranks, 25% are white collar workers and 5% are retired.

Two-thirds of all snowmobilers live in the country or in towns with populations of less than 10,000. More than 75% can snowmobile right from their homes.

Snowmobilers ride an average of 1,000 miles per year with some riding as many as 5,000 to 6,000 miles. Almost 90% take occasional over-night trips and stay an average of eight nights a year away from home while on these trips. Cabins are the preferred lodging.

Snowmobiles damage cane beds

Oshkosh — Snowmobilers are causing irreversible damage to vital cane beds on Big Lake Butte des Morts according to a DNR researcher.

DNR habitat specialist Arlyn Linde says the damage "can never be repaired or reversed because the cane beds were formed centuries ago, and since then bottom conditions of the lake have changed so that new beds can't take root."

Snowmobilers probably don't realize, says Linde, that the dead-looking cane tops above the ice are actually "breathing" for the entire plant below the ice. The stem is hollow and provides air to underwater parts of the

plants during winter. When something such as a snowmobile breaks off the top, the plant will eventually suffocate because ice seals the open, hollow stem.

Every acre of cane that's lost represents another acre of habitat lost for the Forster's tern, one of Wisconsin's endangered species, says Linde. He points out that "cane is good brooding habitat for ducks, yellow-headed blackbirds, marsh wrens, rails and even muskrats. The beds are also a major spawning site for crappies, northern pike, muskies, largemouth bass and other panfish."

Hunting, fishing, park and boat fees for 1984

EFFECTIVE January 1, 1984

FISHING

Resident Annual	\$ 7.50
Resident Husband & Wife	12.50
Daily (Great Lakes only)	6.00
Trout Stamp (Inland)	3.25
Nonresident Individual Annual	18.50
Nonresident Individual 15-day	11.50
Nonresident Individual 4-day	9.00
Nonresident Family Annual	32.50
Nonresident Family 15-day	18.50
Sturgeon Spearing License	7.00
Great Lakes Stamp	3.25

PARK USER FEE

DAY USE VEHICLE STICKER

Resident Daily	\$ 3.00
Resident Annual	12.00
Nonresident Daily	5.00
Nonresident Annual	20.00

CAMPING

COMBINED CAMPING + DAY USE

Resident, Class A Campground	\$ 4.00
Nonresident, Class A Campground	7.00
Resident, Class B/C Campground	3.50
Nonresident, Class B/C Campground	5.00

EFFECTIVE April 1, 1984

TWO YEAR BOAT REGISTRATION FEES

Class and Type	Voluntary Contribution
O Non-motorized	
A Motorized under 16'	6.50
1 Motorized 16-26'	8.50
2 Motorized 26-40'	10.50
3 Motorized over 40'	12.50
Fleet Registration	9.00
Motorized Fleet Boat	50% of fee appropriate to size
Dealer Boat Registration	6.00
Transfer Boat Registration	2.50
Duplicate Certification or Dec	2.50

EFFECTIVE September 1, 1984

SPORTS LICENSE \$ 26.00

CONSERVATION PATRON LICENSE \$100.00

HUNTING

Resident Small Game	7.50
Resident Deer	12.00
Resident Bear	12.00
Resident Archer	12.00
Trapping	12.50
Turkey stamp	11.75
Nonresident Small Game	60.50
Nonresident Small Game 5-day	30.50
Nonresident Deer	85.50
Nonresident Bear	100.50
Nonresident Archer	65.50
Nonresident Furbearer	125.50
Waterfowl Stamp	3.25

SENIOR CITIZEN REC. CARD 11.00

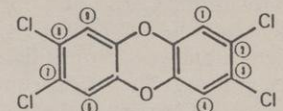
Dioxins booklet

Madison — The University of Wisconsin Sea Grant Institute has published a new 24-page booklet entitled "Dioxin: A Cause for Concern?"

The booklet tells what is known and not known about the 75 different types of this much-publicized contaminant. It describes dioxin's relation to birth defects and cancer, and to fish and wildlife contamination. Also discussed are what industry and government have done about the problem and who to contact regarding dioxin contamination.

UW-Madison water chemist Thomas Stolzenburg and John Sullivan wrote the booklet.

To get a copy contact the UW-Sea Grant Communications Office, 1800 University Ave., Madison, WI 53705.



Tender trappers

An education course designed by the Wisconsin Trappers Association and DNR, is available to new or inexperienced trappers at least 12 years old. The course includes instruction in trapping ethics, proper techni-

ques and basic furbearer ecology and management. For information contact: Chuck Pils, Trapper Education Coordinator, DNR, Box 7921, Madison, WI 53707, phone (608)266-7408.

Catch-all

The nose knows

By Jeanne Sollen, Public Information Officer

Milwaukee — More citizens complained about odors in the last year than about any other kind of air pollution, according to the director of the Department of Natural Resources air program in southeastern Wisconsin.

"Odor complaints from industrial processes consumed about 80% of our complaint rolls," said Wolf Klassen. Burning of rubber, garbage, plastic, insulation and even meat also prompted complaints.

These are investigated by DNR staff members who work with odor sources to reduce or eliminate the problem, Klassen said.

Klassen also reported more complaints last year involved tampering with automobile exhaust emissions. **These centered on illegal removal of the catalytic converter, an antipollution device, and on the use of leaded gasoline in vehicles meant**

for unleaded. Tamperers are more likely to be detected when the new automobile inspection program goes into effect in April 1984 under the Department of Transportation, Klassen said.

DNR's Southeast District Air Section received about 650 complaints on air quality during the fiscal year from October 1, 1982, to September 30, 1983.

In the future, Klassen says, the Air Section hopes to start monitoring airborne toxics. These are substances, such as arsenic, formaldehyde, PCBs, and beryllium, known to be harmful to human health but not included for regulation in the Clean Air Act. A task force is now doing preliminary work on state regulation of toxic and hazardous emissions.

Klassen also hopes to begin monitoring radon gas to determine radioactivity in the air supply. No starting date on this program has been set.

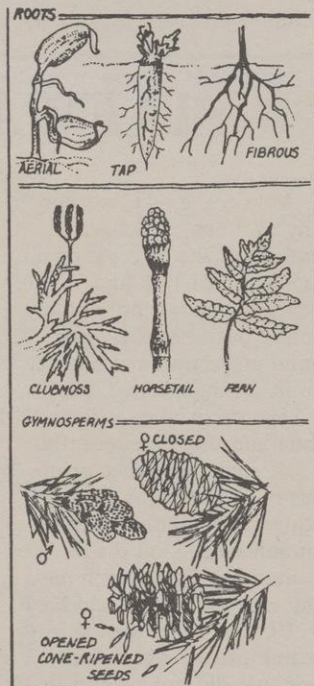
Study guide for endangered flora

An eight-page Plants Study Guide designed as a teaching aid to go with the publication, *Wisconsin's Endangered Flora* is now available free from DNR.

The guide backgrounds plant ecology and reproduction, and illustrates plant parts and functions. It describes more than 20 "plant projects," and suggests what to read, where to write and where to visit to learn more about plants.

Copies may be obtained by sending a business size, self-addressed, stamped envelope to DNR Plants Study Guide, Box 7921, Madison, WI 53707.

The DNR magazine's special 40-page color supplement "Wisconsin's Endangered Flora" is still available. Send \$2.95 to Wisconsin's Endangered Flora at the above address.



DNR Secretary C.D. "Buzz" Besadny, on the right, presents a plaque to outgoing IAFWA president James A. Timmerman, Jr. of South Carolina. Besadny was named president of the international fish and wildlife agency group at a recent meeting in Milwaukee.

Besadny heads IAFWA

Milwaukee — DNR Secretary C.D. "Buzz" Besadny has been named president of the International Association of Fish and Wildlife Agencies.

The organization includes executives of fish, wildlife and conservation agencies from the United States, Canada and other foreign countries.

Besadny has been with DNR for 30 years — and has been the department's liaison to IAFWA more than 20 years. He has been DNR Secretary for the past three

years and previously served as administrator of the Division of Resource Management, which is responsible for all fish, wildlife, forestry, parks and support activities and director of the Environmental Impact and Research bureaus. In 1974 and '75, he was president of the Wildlife Society, an international organization of natural resource professionals with membership in more than 10,000 in 70 countries.

Special issues: parks, trees, fish

Your 1984 subscription to *Wisconsin Natural Resources* will include something special. The May-June issue will be a 108-page illustrated Guide to Wisconsin State Parks. The Guide will describe geologic and scenic features, recreational and seasonal uses, history and more. Price for the special parks issue will be higher if purchased

separately, so make sure your subscription is current for May-June and subscribe for friends too.

Other special issues you won't want to miss are also scheduled for 1984:

March-April: **Wisconsin's Forests.**

July-August: **Fishing in Wisconsin.**

Wildlife damage abatement

Madison — A new program to handle damage to agricultural crops by bear, deer and geese will begin in January. **The program will emphasize abatement of damage rather than simply payment of claims.**

Individual landowners will be eligible for a maximum payment of \$5,000 with \$500 deducted. If a landowner fails to follow recommended abatement measures or chooses not to allow

hunting on the land, then the damage deductible will be raised to \$2,000.

Although funded and administered by DNR, the program is designed to be run at the county level, and county participation is voluntary. Only landowners in participating counties will qualify for abatement assistance or damage claims.

For a story on hunter—landowner relations see page four.

Commercial forest open to public

Rhineland — Consolidated Papers, Inc., has invited hunters to use the company's 268,000 acres of Wisconsin forest during the 1983 season.

Consolidated's lands are open to the public year-round for most recreation, but for safety reasons, camping and campfires are prohibited and vehicular traffic is not permitted on soft roads during extremely

wet periods or during times of high fire danger.

Maps showing land features, access roads and logging trails on Consolidated lands in Forest, Oneida, Rusk, Sawyer and Vilas counties are available from the Public Affairs Department of Consolidated Papers, Inc., P.O. Box 50, Wisconsin Rapids, WI 54494.

Violations

In 1982, the most frequent deer hunting violations were:

- loaded or uncased firearms in or on a vehicle
- hunting within 50 feet of a highway
- possession of an untagged deer.

One hundred or more people were arrested for each of these violations.

"Enclosed within a carrying case" means a firearm must be completely contained in a gun case expressly made for that

purpose. The case must be fully closed by being zipped, snapped, buckled, tied or otherwise fastened, with no portion of the firearm exposed.

Once a licensed hunter obtains a bag limit of any species the hunter may carry a loaded firearm and assist members of any hunting group but may not kill additional game of that species. As an example of the possible penalties, shooting another deer results in a minimum \$1,890 fine.



Rhineland — Bear Registrations for 1983 are down 583 from last year according to preliminary reports from northern Wisconsin. So far, 847 bear were bagged by hunters this season as compared to 1430 in 1982.

DNR Researcher Bruce Kohn said the drop showed regulation changes designed to reduce the kill were at least partially

Bear kill down

effective. Kohn also attributed the reduction to abundant natural food which meant bear were less attracted to hunter's bait stations.

Of the 847 registered, 484 were taken over bait, 333 with dogs and 30 by other methods.

For more details on Wisconsin bear see the story on nine.

Nonpoint pollution cleanup in four more watersheds

Susan Bergquist, DNR Environmental Specialist

Madison — Preliminary planning for cleanup of nonpoint source pollution in eight counties is now underway and will be completed next spring. Once plans are finished, landowners in critical portions of the watersheds will be eligible for cost sharing and technical assistance for installing control measures.

Planning moved into high gear after the eight counties formally accepted priority designation for the watersheds. The four are:

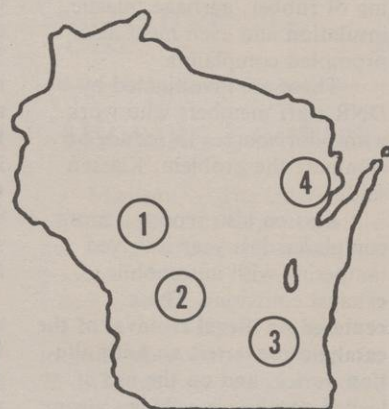
- 1) the Little River watershed, located in Oconto County;
- 2) the Oconomowoc River watershed, located in Washington, Waukesha and Jefferson counties;
- 3) the Crossman Creek-Little Baraboo River watershed, in Sauk, Richland and Juneau counties; and
- 4) the Fall, Bear Grass and Bridge Creeks (formerly Lower Eau Claire River) watershed, in Eau Claire County.

The new projects join 13 other Priority Watersheds currently being cleaned up under the Wisconsin Nonpoint Source Water Pollution Abatement Program. The four will share about \$1,360,000 of the \$5,588,000 being spent on watershed cleanup in the second year of the 1983-85 biennium. This money will provide cost share and technical assistance funding for the first year of each project.

The priority watershed program is conducted locally with assistance provided by various

state, federal and local agencies. It is administered by DNR's Nonpoint Source Section, Bureau of Water Resources Management.

The four selections were made from a list of 15 watersheds recommended to DNR by the State Nonpoint Source Coordinating Committee, a multi-agency group. Their recommendations were in turn made from a list of watersheds selected at public meetings of 10 regional committees that included all counties. The 11 watersheds not selected will form a "pool" from which program selections will be made next spring, depending on the availability of funds.



New Priority Watershed Projects

- 1 Fall—Bear Grass—Bridge Creeks
- 2 Crossman—Little Baraboo Rivers
- 3 Oconomowoc River
- 4 Little River

IAFWA meeting

By Jennifer Haack

Milwaukee — Governor Tony Earl has challenged members of the International Association of Fish and Wildlife Agencies to move more boldly into the business of environmental protection and natural resources management. Earl was the keynote speaker at their 73rd annual meeting here recently.

"People in science professions must lose some of their fastidiousness about making pronouncements on the basis of less than perfect research and jump into the fray," said Earl.

"I have never seen a research project or graduate thesis that did not suggest that

more research or more investigation would be desirable" said the governor. **He added that it is no time to be reticent when powerful economic interests, checkbook in hand, are on the doorstep.**

Earl told the group that people need to be encouraged to stand up for conservation as there are others who are trying to exploit their insecurity and convince them to cut loose from conservation traditions in exchange for a higher standard of living.

About 260 association members from 50 states, two Canadian provinces, Taiwan and the Republic of China attended the meeting.

The holiday season is upon us. It's a time to be thankful for the beauty and bounty of the Earth. It's time to watch birds at backyard feeders and animal tracks in the snow. It's time to celebrate the joy of living and the love of giving.

This year, put wildlife on your gift list. Donate to the "Endangered Resources Fund" on your Wisconsin income tax form. Your gift will help Wisconsin's endangered and nongame wildlife like bald eagles, pine martens, chickadees, loons and orchids. Spread the word to your friends. Seal your holiday cards with these wildlife stamps. Return a gift to wildlife. Joy to the wild!

Photographers: Ruth L. Hine (screech owls), Jana R. Jirak (snow trillium), Randle L. Jurewicz (badger), Stephen J. Krasemann, DRK Photo (bald eagle), Ohio Dept. of Natural Resources (chipmunk and bullfrog).

Return a
gift to
Wildlife



<p>Return a gift to wildlife.</p> <p>Donate to Endangered Resources Fund on your Wis. tax form.</p>  <p>Chipmunk</p>	<p>Return a gift to wildlife.</p> <p>Donate to Endangered Resources Fund on your Wis. tax form.</p>  <p>Chipmunk</p>	<p>Return a gift to wildlife.</p> <p>Donate to Endangered Resources Fund on your Wis. tax form.</p>  <p>Chipmunk</p>	<p>Return a gift to wildlife.</p> <p>Donate to Endangered Resources Fund on your Wis. tax form.</p>  <p>Chipmunk</p>
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<p>Return a gift to wildlife.</p> <p>Donate to Endangered Resources Fund on your Wis. tax form.</p>  <p>Screech owls</p>	<p>Return a gift to wildlife.</p> <p>Donate to Endangered Resources Fund on your Wis. tax form.</p>  <p>Screech owls</p>	<p>Return a gift to wildlife.</p> <p>Donate to Endangered Resources Fund on your Wis. tax form.</p>  <p>Screech owls</p>	<p>Return a gift to wildlife.</p> <p>Donate to Endangered Resources Fund on your Wis. tax form.</p>  <p>Screech owls</p>
<p>Return a gift to wildlife.</p> <p>Donate to Endangered Resources Fund on your Wis. tax form.</p>  <p>Snow trillium</p>	<p>Return a gift to wildlife.</p> <p>Donate to Endangered Resources Fund on your Wis. tax form.</p>  <p>Snow trillium</p>	<p>Return a gift to wildlife.</p> <p>Donate to Endangered Resources Fund on your Wis. tax form.</p>  <p>Snow trillium</p>	<p>Return a gift to wildlife.</p> <p>Donate to Endangered Resources Fund on your Wis. tax form.</p>  <p>Snow trillium</p>
<p>Return a gift to wildlife.</p> <p>Donate to Endangered Resources Fund on your Wis. tax form.</p>  <p>Badger</p>	<p>Return a gift to wildlife.</p> <p>Donate to Endangered Resources Fund on your Wis. tax form.</p>  <p>Badger</p>	<p>Return a gift to wildlife.</p> <p>Donate to Endangered Resources Fund on your Wis. tax form.</p>  <p>Badger</p>	<p>Return a gift to wildlife.</p> <p>Donate to Endangered Resources Fund on your Wis. tax form.</p>  <p>Badger</p>
<p>Return a gift to wildlife.</p> <p>Donate to Endangered Resources Fund on your Wis. tax form.</p>  <p>Bald eagle</p>	<p>Return a gift to wildlife.</p> <p>Donate to Endangered Resources Fund on your Wis. tax form.</p>  <p>Bald eagle</p>	<p>Return a gift to wildlife.</p> <p>Donate to Endangered Resources Fund on your Wis. tax form.</p>  <p>Bald eagle</p>	<p>Return a gift to wildlife.</p> <p>Donate to Endangered Resources Fund on your Wis. tax form.</p>  <p>Bald eagle</p>

Donate to Endangered Resources Fund
on your Wisconsin income tax form line 19 or 54!



Hunter \$\$ = public land and wildlife galore

JAMES E. HOEFLER,
DNR Wildlife Manager, Grantsburg

Hunter dollars buy public land that can be used by every Wisconsin citizen. They pay for management to produce wildlife of every description.

There are 220 Wisconsin wildlife areas scattered throughout the state. They vary from one acre access sites to 50,000 acre wetland complexes and together encompass more than 580,000 acres.

Managed by DNR to provide abundant and diverse wildlife habitat, they are home to several hundred species of birds, mammals, reptiles and amphibians, including most of Wisconsin's endangered and threatened species.

At areas like Horicon Marsh, Sandhill, Crex Meadows and Mead, you can see a marsh come alive with wildlife on a calm April morning or watch thousands of ducks and geese take to the air on a crisp October afternoon. These are the places to be if you enjoy wildlife.

But where does the money come from to purchase and manage these lands? State taxpayers in general pay some, but the vast majority is paid by Wisconsin hunters.

Most money comes from the sale of hunting licenses and duck stamps. In 1982, 756,005 hunters purchased 1.2 million licenses and stamps. They paid \$13.2 million. This money is put into a special fund called the Segregated Fish and Wildlife Account, and a portion is used to pay for the wildlife management program.

The other major money source is the Pittman-Robertson (P-R) Tax. This is an 11% federal excise tax on all guns, ammunition and archery equipment sold in the United States. The federal government collects this money and distributes it to the states based on the number of licensed hunters in a state, its population and land area. Wisconsin usually ranks 5th or 6th in the amount of P-R money received.

A smaller amount comes from all Wisconsin taxpayers through the Outdoor Recreation Aids Program (ORAP). ORAP money is obtained from the sale of state bonds and a biennial appropriation from the state general fund based on a formula of .0165 of 1% of the state's total equalized tax evaluation.

To date, 415,990 acres of wildlife management lands have been purchased and more than 165,000 acres are leased. Approximately 85% of this land was purchased with money generated



from hunters (i.e. segregated funds and P-R). The remaining 15% was purchased with ORAP and other general revenue funds.

Hunters also pay for most of the management and development on these lands. For example, in fiscal year 1982-83, \$8.9 million was spent on wildlife management. It included salaries of all wildlife personnel and purchase, development and management of wildlife lands. Eighty-six percent came from P-R and segregated funds and the remainder primarily from ORAP. Not all P-R and license fee money goes to wildlife management. A good share goes to other programs including law enforcement, administrative services, research, endangered resources, payment in lieu of taxes, wildlife damage and other miscellaneous programs. Hunters, therefore, pay for many activities in addition to wildlife manage-

Wildlife areas managed for geese also attract many other species. Photo by author.

WILDLIFE MANAGEMENT FUNDING (FY 1982-83)

Type	Source	Amount	% of total
Segregated Funds	Hunting & Trapping License Sales	\$5,321,000	59.5
Duck Stamp	Sale of State Waterfowl Stamps	220,000	2.5
Pittman-Robertson	11% federal excise tax on guns, ammunition & archery equipment	2,169,600	24.3
ORAP	State bonding and general revenue appropriation	1,226,500	13.7
TOTAL		\$8,937,100	100%

ment, yet most of their money goes there—about 85% annually. And they buy 85% of Wisconsin's wildlife lands! But while hunters and trappers put up most of the dollars, the lands are not for their exclusive use, but rather belong to all the people of Wisconsin. Everyone has an equal right to use them.

More than one million people visit Wisconsin's wildlife areas every year. They come to hunt, trap, fish, picnic, observe wildlife, hike, canoe, photograph, pick berries, cut firewood, study the flora and fauna or just get away from the rigors of everyday life to experience a natural setting.

Although hunting is the major activity, every wildlife area receives non-hunting use, and on certain ones non-hunting is more prevalent than hunting. One example is the Crex Meadows Wildlife Area. More than 100,000 visitors come to

Crex annually, but less than one-third come to hunt. The vast majority come to observe wildlife.

One important benefit of wildlife areas is to preserve habitat that might otherwise be lost to development. Millions of acres have already been destroyed and thousands more are lost annually. As human development continues to eat up habitat, wildlife areas will become even more valuable.

But these areas do more than simply preserve habitat. Habitat on them is intensively managed to improve its quality and diversity. Management might consist of manipulating vegetation to make it more productive for a greater number of species, planting dense nesting cover for waterfowl and upland game birds, constructing forest openings for deer and other forest wildlife, or building flowages for aquatic species.

While it is true that hunters provide most of the money and most management is aimed at game species, many nongame species also benefit. These areas are alive with both game and nongame wildlife and the general public is the main beneficiary.

Wildlife populations are not decimated by hunting. Sound wildlife management assures that numbers will remain relatively constant from year to year. Reductions in the quality and quantity of habitat are what cause loss of wildlife. Wildlife areas prevent this loss by maintaining permanent, good quality habitat.

So wildlife areas are a boon to both Wisconsin wildlife and all Wisconsin citizens. To the one they give valuable habitat, to the other, recreational opportunities. And the hunter pays the bill! As long as hunters purchase licenses these areas will continue to produce wildlife for future generations to enjoy.

Blue and snow geese at Crex Meadows Wildlife area. Only a third of the 100,000 people who visit Crex every year come to hunt. Photo by author.

Inset: More than a million visitors annually use Wisconsin's 220 wildlife areas to hunt, trap, fish, study nature, pick berries, cut firewood and do myriad other things. Photo by author.



A helping hand

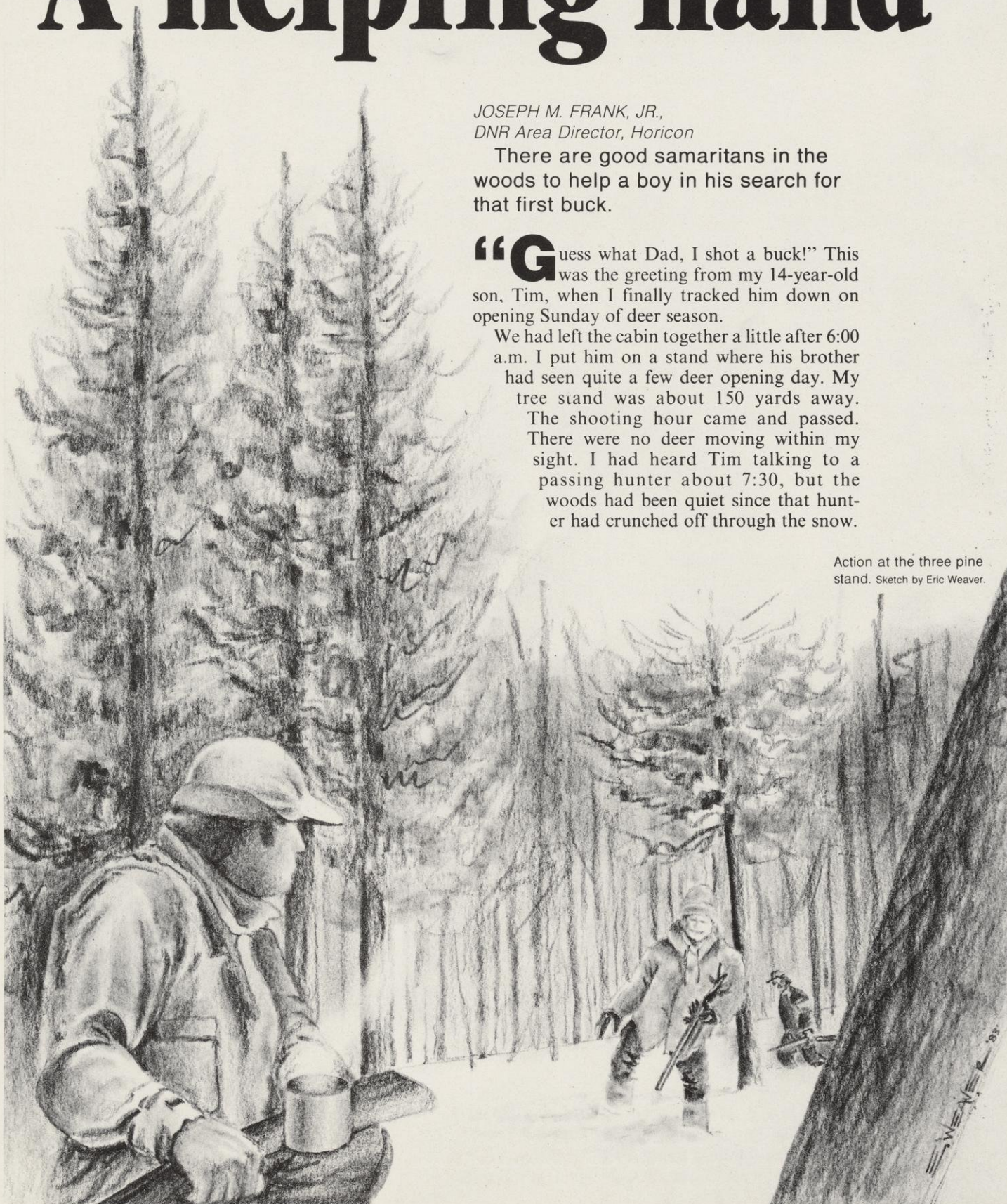
JOSEPH M. FRANK, JR.,
DNR Area Director, Horicon

There are good samaritans in the woods to help a boy in his search for that first buck.

"Guess what Dad, I shot a buck!" This was the greeting from my 14-year-old son, Tim, when I finally tracked him down on opening Sunday of deer season.

We had left the cabin together a little after 6:00 a.m. I put him on a stand where his brother had seen quite a few deer opening day. My tree stand was about 150 yards away. The shooting hour came and passed. There were no deer moving within my sight. I had heard Tim talking to a passing hunter about 7:30, but the woods had been quiet since that hunter had crunched off through the snow.

Action at the three pine stand. Sketch by Eric Weaver.



About 8 o'clock I decided to see if Tim wanted to try the Three Pine stand. There we could sit back-to-back and watch a series of good trails. This would also keep me nearby in case Tim shot his first deer and needed help dressing it out.

So I backed down from my tree, collected my gear and walked over to Tim's deer stand only to find him gone. My first reaction was, "Why didn't he tell me he was moving?" But then I remembered cautioning him about disturbing other members of the party. Besides, I was pretty sure I knew where he had gone.

It took me about 10 minutes to sneak up over the slight ridge to the Three Pine stand. As I approached the big red pines, I could see Tim's hot seat hanging from a branch, but no Tim. Again, I was somewhat troubled and perhaps a little irritated at his unexplained absence.

Since his hot seat was here, it appeared he intended to return. So I sat down on the old tar bucket and poured a cup of tea. I wrapped my hands around the hot mug, laid my rifle across my knees and enjoyed the warmth my 10-minute walk had generated.

I was still warming my hands on the tea mug when I caught a glimpse of blaze orange through the snow-plastered foliage. It was Tim. He was about 150 yards away, moving at almost a dog trot. His head was down, watching the ground.

At first, he appeared to be moving in my direction. Then, he veered away disappearing in the snow-covered jack pine, only to reappear doubling back toward me.

Puzzled, I got up and started walking in his direction. As I got closer, I called his name, but he was too intently searching the ground to hear me. His eyes were so riveted to the ground I think he saw my feet before he realized there was anyone around. He looked up, half-startled by my sudden appearance, and said, "Guess what Dad, I shot a buck!"

I asked about the location of this deer, and Tim replied that another hunter had it. My immediate reaction was, "Oh no, his first deer, and another hunter took it." Then Tim pointed back toward the direction he had come, and there was a hunter dragging a deer with Tim's orange and black drag rope attached to it.

As the hunter approached, Tim tried to tell me about the kill. In Tim's excitement, his answers didn't seem to relate to my questions. In the midst of this confusion, the hunter and Tim's deer arrived on the scene. The man handed me the drag rope and, during a momentary lapse in Tim's narration, said, "Your boy did real good." He turned and was gone as I tried to thank him for the help.

It was not until we started to skid the buck back to the cabin that I finally got a clear picture of what had happened.

Tim had moved to the Three Pine stand about 7:30 a.m. He had been there only a few minutes when he suddenly realized that there were two bucks standing about 10 yards away. They were intently peering at him through a partial screen of pine and snow.

Tim sat as still as he could. "I was almost afraid to breathe," he said, "because I was afraid they would see my breath." He knew he could never get his 20 gauge shotgun up quickly enough to shoot. So he waited.

Finally, the two bucks slowly moved off and disappeared behind a clump of pines. Tim sat there, almost sick with the thought that he had missed a chance to get his first buck.

Suddenly he saw the two deer again. They were now about 70 yards away and appeared to be feeding on some low shrubs. Tim brought up his gun and took aim at the closer, though smaller, of the two deer. Tim could feel his heart pumping, and it was getting harder to hold the gun steady. "It almost made me mad," Tim said, to be shaking so much when the deer he wanted so badly was right there in his sight. He quieted down a little and touched off the slug. The buck was knocked sprawling, only to jump up and take off through the woods. Tim remembered taking an instant to put on the safety (we had talked about that quite a bit). Then he went bounding through the snow and blowing the whistle I had given him.

He found the spot where the deer had gone down. There was hair and blood on the snow, but the deer was nowhere in sight. Tim kept blowing the whistle until he thought his lungs would burst. Finally during a lull, he heard a voice yell, "There's a nice buck laying down here bleeding to death." "That's mine," yelled Tim, and he headed in the direction of the voice.

The deer was only about 100 yards away, laying in the snow, not quite dead. The hunter who had hailed him was standing nearby. The sight of the buck raised Tim's excitement a few more notches. He was so excited, he didn't know what to do next.

The new-found friend said, "Now calm down a little. You have to kill this deer. Shoot it in the neck so you don't spoil the antlers or any meat."


Tim dispatched the deer as directed and then told his friend that he would have to wait for his Dad to dress it out. The friend helped Tim put his tag on the deer, and since Dad was still not present, helped Tim dress the deer.

The deer was trussed up with Tim's drag rope and they started back for the Three Pine stand. The hunter dragged the deer while Tim ran ahead to find his hot seat. That was what Tim was doing when I first caught sight of him.

By the time Tim had finished the story, we were back at the cabin. I now appreciated the full extent of the help Tim had received from the unknown hunter. I felt badly that I hadn't had a chance to properly express my thanks.

Perhaps if he reads this story, he will take pleasure in knowing how happy he made my son. As we sat at the cabin table sharing a sandwich Tim said, "Dad, I'll remember this day as long as I live." So will I. ●

Houdini the whitetail



This eight pointer was called Houdini because of his uncanny ability to disappear into thin air. The Audubon Center would like to hear from people who spot ear tagged deer.

Photo by author.

SCOTT R. DIEHL,
Volunteer Researcher, Schlitz Audubon Nature Center

Others are Bango, Bullwinkle, Hatrack and Stubby, all deer friends of the author who studied their behavior at the Schlitz Audubon Center near Milwaukee.

An eight-point buck waded placidly in the dark pond water, periodically dipping his muzzle beneath the surface to pluck a succulent water plant. He ignored the coot paddling about in the shallow water near the opposite shore and showed only casual interest in the muskrat which was ferrying long bundles of fresh green grasses across the pond to its burrow beneath the bank. I was crouched, securely hidden in a blind nearby, and could see him well.

Suddenly something changed. The buck stopped feeding, became tense and alert and anxiously watched the bank behind him. Slowly, the form of a second buck rose like an apparition



Groups of bucks are common in late winter and early spring, but very rare during the rut. Here Bango has just dropped an antler. Photo by author.

from the tall growth near the edge of the pond.

A chill ran up my spine as I peered through the binoculars and hurriedly counted the points on those massive, velvet-covered, non-typical antlers — “13, 14, 15.”

The huge buck browsed casually for a minute and then turned and slowly dissolved into the brush; the eight-pointer quickly left the water and followed him. I quietly crawled out of the blind and emerged from the brush just in time to see a third buck — another eight-pointer — join the others and trot off to the east with them.

Since my primary goal was to observe deer behavior, not cause it, I did not follow. Using a specially designed data sheet, I carefully recorded the number of deer in the group, their sex, the time of observation, their position on a grid-referenced aerial survey map and their behavior.

This was part of an intensive study of deer behavior at the Schlitz Audubon Nature Center in Bayside. UW student Tony Plickea and I were conducting it.

In addition to obtaining valuable information for designing deer management techniques in the area, we hoped to gain insights into the behavior of suburban white-tailed deer. More and more of them are showing up in the little towns of south-eastern Wisconsin.

The 185 acre Schlitz Audubon Nature Center is fabulous deer habitat and an ideal outdoor lab-

oratory for deer study. It is comprised of nearly equal areas of deciduous forest and grassland (about 40% each) with lesser areas of restored prairie, conifer plantings, marsh, ponds and Lake Michigan shoreline.

About 25 deer frequented the area when our study began in the autumn of 1980. Remarkably, the birth of 27 fawns (20 of which survived) in 1981 boosted the area deer population to nearly 50. The deer are not restricted to the Audubon Center proper but actually inhabit a much larger area. Though the Center is surrounded on three sides by high-income residential areas, these areas contain a great deal of suitable deer habitat. It is particularly good near the ravine-cut wooded bluff which parallels Lake Michigan and extends well north and south of the Center.

In our study we became so familiar with every deer in the area that to aid in monitoring them many were given names. For instance, in my encounter with the three bucks, the wading animal was Joshua, the 15-pointer was Bango (he was killed in a collision with an auto in September of 1982), and the second eight-pointer was Houdini, because of his uncanny ability to seemingly “vanish into thin air.” Some of the other bucks were Porky (fat), Bullwinkle (big), Sluggo (scrappy) and Pretzel-head (misshapen antlers).

Many of the does were given equally fitting names like Floppy (limp ear), Gimp (old leg

injury), Stubby (very short tail) and Big Doe.

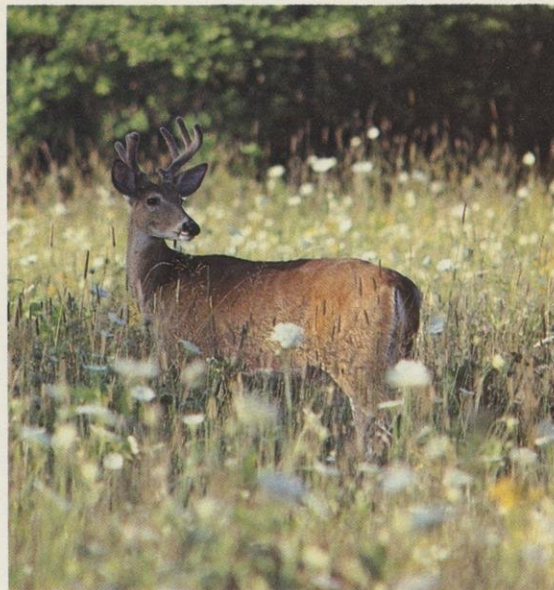
Not only did we get to know individual deer, they in turn got to know and tolerate us. For example, we were walking the trail through the meadows in the northwest section of the Center when we came upon a group of six deer — two does and their five-month old fawns. The deer continued grazing, virtually ignoring us as we approached, and we ended up in the middle of the group with the closest deer only 20 feet away. We were surprised when the group suddenly went on the alert; heads came up, ears pricked and tails went out to “half-mast.” It took a moment to realize the deer were not concerned about us but rather about two young women. The two were talking quite loudly as they walked on another trail about 50 yards distant. One doe anxiously craned her neck first to one side and then the other trying to see around us because we were evidently blocking her view of the “strangers.”

One doe in particular, which we knew as Mama was especially tolerant. On a number of occasions while she and her two fawns were bedded down, she allowed me to very slowly and quietly approach on hands and knees to within 15 feet. Sometimes she would tolerate me at this distance for nearly an hour. If they started to become disturbed by my presence, I would quietly back away and leave.

Many of our closest encounters with mature bucks occurred in autumn and early winter. During this time the adult bucks became solely intent on locating breedable does and their normal fear of humans was often greatly diminished. This fact was vividly demonstrated in the fall of 1980 when Tony was almost literally run over by Bango as the deer blindly chased another buck down a trail. In November of 1982 Houdini approached to within 20 feet of me several times over the period of about an hour as I stood in plain view on the hiking trail watching him protect a nearby doe from receiving the attentions of Joshua.

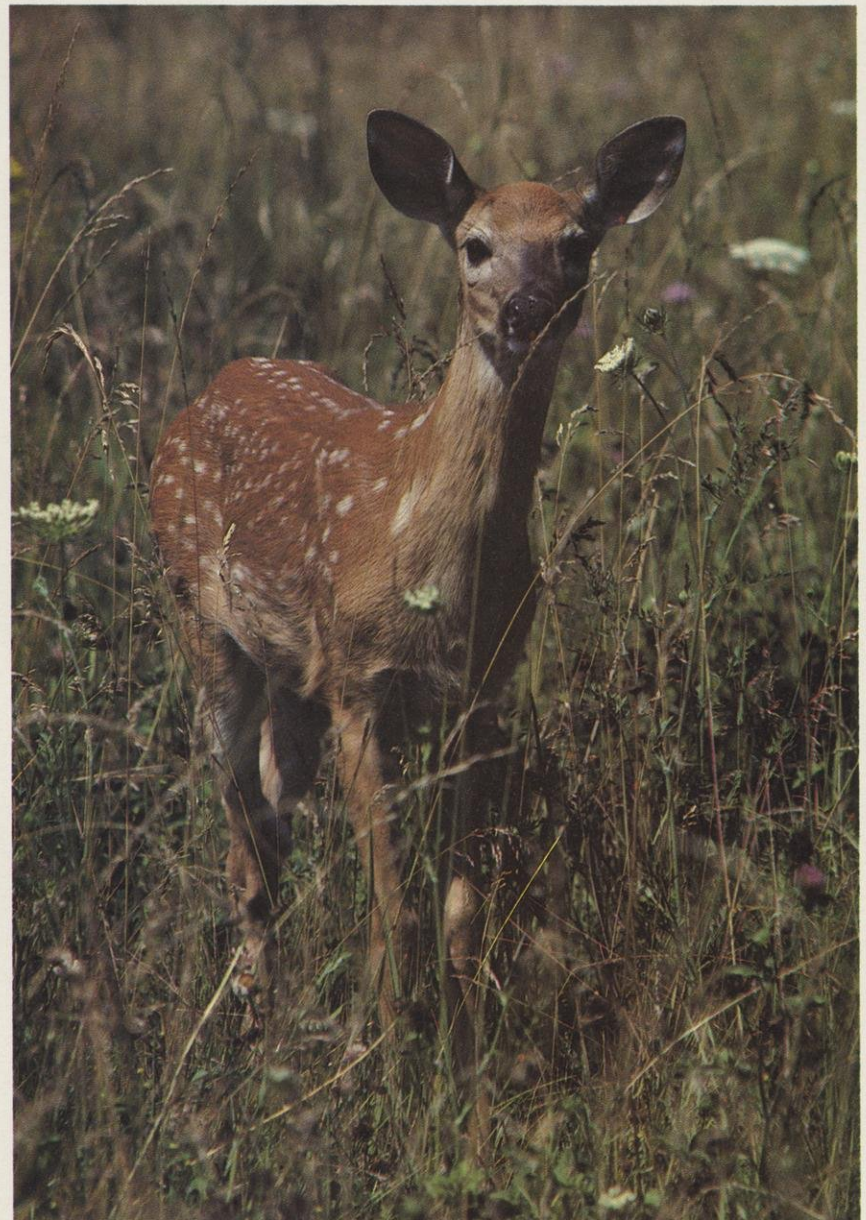
It is important for hikers and other outdoor people to understand that during the rut, bucks, who become ready to breed long before the does, are sometimes frustrated and may be downright dangerous. They should not be approached. In the course of our studies Tony and I have each had a number of encounters with rutting bucks in which we decided that “discretion is the better part of valor” and quickly backed away when threatening gestures were performed.

In this ardent state the bucks range widely in search of receptive does and unfortunately, with every rutting season at least one of the big bucks that frequent the Center grounds is struck and killed by an automobile. In 1981 Bullwinkle, a massive 10-pointer was struck by a car late one night as he attempted to cross the road at the western edge of the Center. His “carcass” could not be located until the following morning. He was found lying near the road some distance south of the collision site. However, when approached he jumped up, ran across the road onto the nature center and went through a four-



Spike bucks are virtually unknown around the center. Frequently, the first set of antlers they grow has six or eight points. Photo by author.

Most fawns were born in June with some births as early as May and others as late as mid-August. This means they were conceived between early November and late January. Photo by author.





The 185 acre Schlitz Audubon Center bordering Lake Michigan is fabulous deer habitat. About 40% is grassland, 40% forest and the remainder prairie, conifers, marsh and ponds.

foot high fence taking out a wooden post and a length of heavy mesh fencing. He was seriously injured and had to finally be put out of his misery.

Most of the pertinent results of our initial year of intensive field observations involved behavior and social interaction.

We found that the average buck group consisted of three deer.

During November, the peak of the rut, no buck groups were seen. Only one group was seen in December and groups continued to be rather uncommon through January. However, the number rose gradually from the low in November and finally peaked in March. April was second highest. Observations of buck groups gradually declined through June, rose again in July as yearling bucks were separated from their mothers at fawning time and once again declined through the end of October.

Between 30 and 40% of bucks seen during November, December and January were solitary animals. By late winter and early spring, however, the observation of solitary bucks had dropped off sharply. Only about 12% of the bucks seen during March and April were solitary animals. The number of loners rose sharply again in May and continued to climb regularly through summer and early fall so that by October nearly seven out of 10 (70%) bucks seen were solitary animals.

During November nearly 60% of buck sightings were of single bucks seen in the company of one or more does. Observations of this type continued to be rather common through January and were regular through May.

Also in November about 10% of buck observations were of multiple bucks with does. The percentage of observations of groups of this type rose regularly through the winter and early spring reaching a peak (of just under 25% of buck sightings) in April.

With the onset of the fawning period in June, observations of adult bucks with does dropped drastically to annual lows which continued through October, though sightings of single yearling bucks with does continued to be rather common.

During this period does were rarely very tolerant of mature bucks near their fawns and on several occasions does were seen to chase away eight and 10 point bucks when the latter approached their offspring too closely. Consequently, sightings of single or multiple adult bucks with does were rare from June through October.

"Spike" bucks of any age are virtually unknown in the area around the Center. One and one-half-year old bucks frequently produce a first set of antlers with six or even eight points.

While most bucks in the area drop their antlers

by mid-February, two eight-point bucks retained their antlers through the end of March and one eight point buck retained his through mid-April.

Like buck groups, the average doe and doe/fawn group consisted of three animals.

Doe and doe/fawn groups averaged nearly 80% of all doe sightings for every month except June. In June only 33% of doe sightings were of such groups. However, the number of sightings of solitary does skyrocketed from an average of about 21% to an annual high of about 67% in June. This is because June is the primary fawning month. At this time pregnant does seek solitude in which to give birth.

From February through April observations of solitary animals of both sexes dropped to an annual low while observations of groups of four or more increased. Beginning in May, but turning sharply in June, this trend reversed itself. From June through October sightings of groups of five or more deer were quite uncommon, and groups of seven or more rare.

Fawn births were noted at the Audubon Center between late May and mid-August, with the majority of births occurring in the month of June. These dates indicate that fawns were conceived between early November and late January. The peak of rut activity probably occurred in late November and early December.

Adult does on the Audubon Center were each observed to use a home range of roughly 100 acres. Bucks however, ranged widely and did not restrict themselves to any "home range" within

the boundaries of the Center. Reliable reports were received which revealed that during the rut a number of bucks that used the Center ranged as far as one mile north and south of there.

Eighty-seven percent of the deer we observed feeding were grazing in grassland areas. Only about 4% of feeding deer were seen browsing exclusively, and about 9% alternately grazed and browsed. The ratio of grazing to browsing did not change appreciably with the seasons. Snow cover was relatively light and of short duration which allowed deer to graze with little difficulty throughout the winter months.

The Schlitz Audubon Nature Center would like to hear from anyone with information about the deer moved from the Center to DNR-approved release sites in southeastern Wisconsin. These animals are wearing numbered, green plastic ear tags — right ear for bucks and left ear for does. If you see one, phone 414-352-2880, or write: The Schlitz Audubon Nature Center, 1111 East Brown Deer Road, Milwaukee, WI 53217.

To date we have had word on two relocated 1½-year-old, eight point bucks that were taken by hunters in 1982. Using the information they supplied, we were able to determine that these bucks had travelled 10½ and 16½ miles respectively from their release areas. Both were in good condition, and one weighed more than 200 pounds. The Schlitz Audubon Center will continue to gather information on "urban" deer and further reports will be issued in the future.



Between 20 and 40% of the bucks seen during November, December and January were solitary animals. There were no buck groups seen at all in November. Photo by author.

Kudos for Northwoods Edition

I am 96 years old and spend hours on the porch of my hundred year-old home not simply "watching the world go by" but using my good God-given eyes to read the best of everything. I want you to know I think your "Northwoods Edition" is a treasure.

LAURA M. MALTBEY, Portage

Just finished the "Northwoods Edition" of Natural Resources. Your wonderful story stirred my fondest memories.

We moved from Milwaukee to the north in 1902. I was eight years old. I am now 89. We lived in a log house on the shores of Pine Lake, the headwaters of the Wolf River.

In 1902 that was still pretty wild country. Oxen were used to skid logs which were loaded on sleighs and hauled over iced roads to the sawmill at Hiles.

There was abundant wild game to supply us with meat, such as venison, partridge, squirrels, ducks and snowshoe rabbits which we snared in the winter.

We trapped wolves, fox, mink, muskrats, skunks and weasels. Didn't get much for pelts then; Muskrats 7¢, mink \$1.50 and weasels 50¢. The bounty on wolves and wildcats was \$7.50.

When I retired and moved to Florida in 1965, it just about broke my heart to dispose of a beautiful point on Nelson Lake and 87 wooded acres with a spring fed lake just a mile from Hayward.

I planted bushels of acorns on the 87 acres and saw many of the little oak, three to four feet high.

Really miss that old north woods.

Am looking forward to the next issue of Natural Resources.

Thanks a million for taking me back to some of my fondest memories.

ANDREW F. BELL, Maitland, FL

The Special Northwoods Edition warrants a place in the classrooms of our school system. The Northwood's history, government and future is presented in a way that would be of real interest to the student.

GALE SPICEMAN, Boyceville

I'd like to add a bit of information to your "Northwoods" Edition geography lesson.

As a region, the Northwoods begins at 45°N latitude and extends to Wisconsin's northern border at 47°N.

Wisconsin cities at 45°N include North Hudson, Wausau and Jacksonport.

World cities include Ottawa, Canada; Salem, Oregon; Bangor, Maine; Pula, Yugoslavia; Bordeaux, France; Armauir, USSR; and Haerhpin, China.

DALE MARSH, chief, Watershed and Land Resources Section, Madison

Kudos to yourself and the entire Wisconsin DNR staff for the "Special Northwoods Edition".

This is the most comprehensive, informative, and well written treatise on the past, present, and future of the Northwoods that I have ever read.

I own several parcels of forest land in the Northwoods and would like to be categorized as a steward of the land I so dearly love. I'm sure many landowners feel as I do, but we lack the knowledge to properly manage this land. It would be of immense help if the DNR would make available, or let us know where to obtain, information regarding everything from tree identification to current harvesting and replanting techniques.

DR. EDWARD F. KAMINSKI, Chicago, IL

DNR publishes "Forest Trees in Wisconsin" publication 2-2400(77) and "Tree Planting in Wisconsin," publication 1-2400(77). To obtain a copy of either one, send a business-size, stamped, self-addressed envelope to the Bureau of Forest Management, Box 7921, Madison, WI 53707.

Congratulations on your fine "Northwoods" Edition.

I was impressed with the underlying "care for the north" theme all stories expressed.

The magazine is a real contribution to conservation education in Wisconsin. Keep it up!

HAROLD C. JORDAHL, contributing author

There is only one word to describe the July-August issue of Wisconsin Natural Resources Magazine: Superb.

WALTER A. NEUMANN, Janesville

Iceboating Fans

No place in the world has contributed more to the sport of iceboating than the Madison area's ardent fans and members of the Four Lakes Ice Yacht Club.

It would seem appropriate this winter to mention two veteran skippers who brought iceboat racing records to Madison: Andy Flom of McFarland and Carl Bernard of Madison. They guided such boats as the *Princess*, the *Fritz*, *Miss Alice* and the *Mary B* to victories, competing in the Northwest, the International and Hearst regattas. My grandfather owned the *Princess*.

In the early 1900s a boat was brought to Madison from New York to participate in the Hearst Regatta on Lake Monona. It required two railroad flatcars and a crew of six men. The boat was unloaded at the Blount Street yard of the Milwaukee Road and thence to Lake Monona, one city block away. The name of this boat, with over 1,000 square feet of sail, was *The Square People*. After I became 12 years old I never saw it again.

PHIL FAUERBACH, McFarland

The Readers Write...

I enjoyed reading the article last winter on "Racing Wisconsin's Winter Wind." I remember the "Fritz" very well from the 30's. The owners and operators were Carl Bernard and Fritz Youngblood. I "pulled sheet" a few times in the "Fritz." It took three men to sail it, one handling the main sheet, one handling the jib and one on the tiller.

I and others put in many an hour assembling and dismantling the old iceboats during the regular season for Bernard's Boat Landing on Gorham Street.

Looking forward to the next issue of your fine magazine.

PAUL E. HOVERSON, Augusta, GA

Does anyone care?

I enjoy reading the magazine and what you are doing to make this world a better place to live in.

I enjoy wildlife, but when I read about how many deer are killed every year by hunters it makes me disgusted. They can't go on killing that many or they'll become extinct like everything else. Then one has to go to a zoo to see them.

It's not fair the way hunters hunt. You can see from 12 to 15 in a 20 acre wooded lot. An animal has no chance. Then they shoot fawns, if nothing else. This is down-right dirty.

Just one week of bow and arrow and one week of gun hunting would be plenty. The same with trapping.

It's getting to be terrible with all the chemicals farmers spray on their crops and land. Wells are getting polluted. Birds and bees are getting killed off. Angeworms are disappearing. The human race needs all these things.

Poisons get into the crops and humans and animals consume them. It's no wonder so many people have cancer. Animals are getting sick and nobody wants to know the real cause.

It's the same with the air.

All the people in government and industry and those who run the businesses are to blame.

It's about time everybody started thinking of what is happening in our world. But nobody cares so long as they get their almighty dollar to live high and have fun!

If DNR wants to be the head of it, pick on the ones who are to blame.

Farmers should go back to cultivating crops. It would be much healthier, would stop over production, create jobs and be better for humans and wildlife.

JOHN MEYER, Watertown

Keshena not Kenosha

Reference your issue of Sept.-Oct. 1983, Volume 7, number 5, page 11. Where is the Menominee sawmill at Kenosha? Should it not say Keshena or someplace else up north?

DORIS C. MAGWITZ, Bristol

Yes, it was a typo. The Menominee sawmill is actually at Neopit.

Fishing for compliments

The May-June issue was a journalistic gem — so informative, so colorful. It was one of your finest issues covering many phases of fish and fishing. It is truly a collectors item that I shall cherish forever.

WILLIAM A. MCGILLIGAN, San Clemente, CA

Writing about the May-June issue with the fish articles in it — the best information I have seen yet. I have fished since a lad and feel I can still learn a lot more from articles you people publish.

The programs of the DNR have suited me (there are others that do not feel the same as I do). If it were not for DNR, there would be no public hunting or fishing grounds and our state would be covered with No Trespassing or Keep Out signs. If it were not for laws and rules laid down by DNR, this state would be a mess.

We have lived in Wisconsin all our lives and would wish to live no other place. Hot or cold we like it here. Whatever you do, never change the way you publish your magazine. You could not make it any better!

KENNETH P. VAN DE BOGERT, Delavan

November-December 1983 Volume 7, Number 6

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BY KEN WARDIUS,
Milwaukee photographer

Head out into the woods some early morning when everything appears deceptively quiet. At first you will hear only your steps and the rustling leaves. But soon from a distant limb, a resonant, echoing signal comes proclaiming mastery over a seemingly invisible territory. RAT-A-TAT-TAT-TAT, RAT-A-TAT-TAT-TAT, RAT-A-TAT-TAT-TAT. It's a happy sound. It's a woodpecker!

Classified in the large and diverse bird family, *Picidae*, woodpeckers are a peculiar group possessing specialized and unique anatomical features. Their razor-sharp beaks are straight and chisel-like and are especially suited for excavating, drilling and boring into trees. Ask any bird bander who may have been careless enough to permit one of these feisty birds to take a few practice thumps on an unprotected hand. OUCH!

Additionally, strong-gripping claws in conjunction with a stiff propping tail serve to securely anchor woodpeckers vertically as they cling to and climb tree trunks and branches.

Observing the antics of these woodchopping marvels makes you wonder how they avoid constant ringing headaches. The answer lies in the birds' skull, which is unusually heavy and thick-walled. Nearly as hard and strong as cement and cushioned by a tough outer brain membrane, the skull acts as a shock absorber and serves to soften the blows of the woodpecker's incessant hammering.

Another woodpecker adaption is its intriguing tongue. Capable of extending in some species twice the length of the head, it can be studded with projectile barbs and bristles or covered with a sticky mucous to probe minute tree crevices and spear insects.

Nine woodpecker species inhabit Wisconsin. The most common and the tiniest is the downy. Named for the soft appearance of its plumage this sparrow-sized permanent resident is cosmopolitan in distribution. It can be found in nearly every type of habitat from mixed forests to urban parks and gardens. Mainly clothed in shades of black and white, males sport a small red spot on the back of the head. Its vertical white back-stripe is the easiest identifying field mark.

Seek out a downy scavenging among the tree bark and you will immediately notice an almost tame and friendly disposition. Even in bitter sub-zero weather, downies go about their business in a cheerful manner, apparently oblivious to the elements.

If you are interested in playing a game of avian hide and seek, approach a downy and it will slyly slip around to the other side of the tree and peek out at you. Taunted further, it will continue circling until "found," then fly off with a scolding, rattling call.

The beat goes on

Wisconsin's nine wonderful woodpeckers all have their special adaptations.

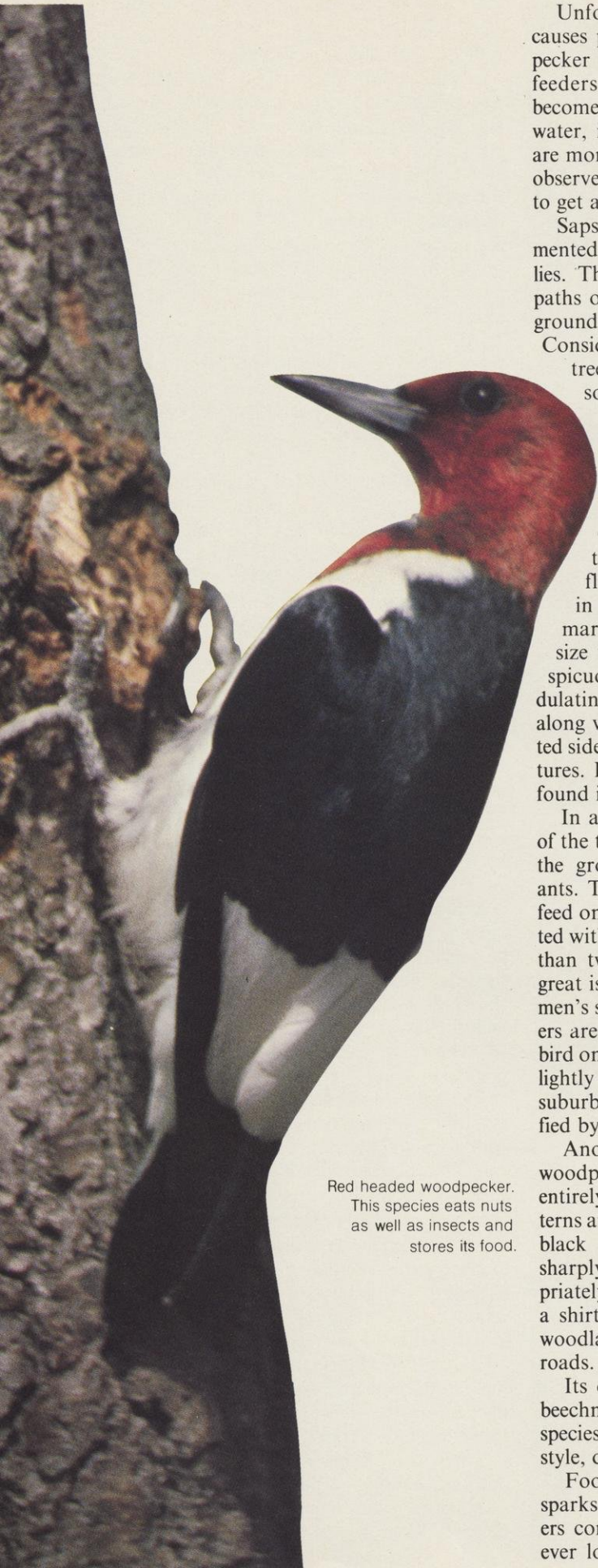
Photos by author

Another Wisconsin woodpecker is the hairy, virtual replica of the downy except for its jumbo size and heavier, longer bill. The hairy (meaning somewhat shaggy or "harried" in appearance) is more of a forest bird than its smaller cousin. Often seen with mixed flocks of downies, black capped chickadees, nuthatches, kinglets and brown creepers, the hairy woodpecker is shyer, though noisier, and not quite as free a spirit as the lighthearted downy.

If you see rows and rows of small holes methodically drilled into the outer bark of a tree, you have come upon the telltale handiwork of the yellow-bellied sapsucker. A migratory species, the sapsucker sports a smartly colored black and white body with variations of scarlet atop the crown and forehead. Males have a red throat which females lack. The best way to identify a sapsucker is to spot its narrow vertical white wing patch. The dull yellow belly, its namesake, is difficult to see at best.

Yellow-bellies exhibit some definitive and peculiar feeding habits. After drilling those neat sap "wells" the birds lap up the slow flowing juice with long brush-tipped tongues. Also, insects attracted to or entangled in the sap (flies, ants, beetles), quickly become part of the menu.

Other birds and animals share in the sapsucker's labor. Known as a commensal relationship, warblers, kinglets, flycatchers, nuthatches, other woodpeckers and even squirrels benefit from the sap oozing out of the bark, an important energy source.



Red headed woodpecker.
This species eats nuts
as well as insects and
stores its food.

Unfortunately, the sapsucker's love for liquid causes problems and frequently gets this woodpecker into trouble. People placing small nectar feeders out for ruby-throated hummingbirds become irritated when quarts and quarts of sugar water, intended for their much smaller friends, are monopolized by pesky sapsuckers. However, observers admire the fancy acrobatics performed to get at the relished solution.

Sapsuckers have been known to imbibe fermented sap and become intoxicated yellow-bellies. They lose coordination and fly in erratic paths or in severe cases flutter helplessly on the ground. Sometimes drunkenness results in death.

Considerable dispute rages as to the amount of tree damage sapsuckers do. Drilling into the soft cambium, or inner bark, may allow microscopic fungi or other plant diseases a point of entry. But this bad mark seems to be offset by the yellow-bellies' beneficial removal of boring and other damaging insects.

One of the easiest Wisconsin woodpeckers to identify is the common yellow-shafted flicker. The only brown backed woodpecker in the eastern US, it has several distinct markings and traits. Approximately equal in size to the blue jay, the flicker flashes a conspicuous white rump, easily seen during its undulating flight. Golden wing and tail underlinings along with a black neck-crescent and dark spotted sides and underparts are other identifying features. Females are void of the black moustache found in male and juvenile flickers.

In atypical woodpecker fashion, the majority of the time yellow shafts can be seen foraging on the ground, searching for their favorite food, ants. The only North American woodpecker to feed on ants regularly, the flicker is especially fitted with a "flypaper" tongue that protrudes more than two inches beyond the end of its bill. So great is the flicker's love for ants that one specimen's stomach yielded over 5,000 of them. Flickers are said to devour more ants than any other bird on the continent. They inhabit open country, lightly wooded areas, cultivated farmlands and suburban yards and are tolerant of places modified by the hand of humankind.

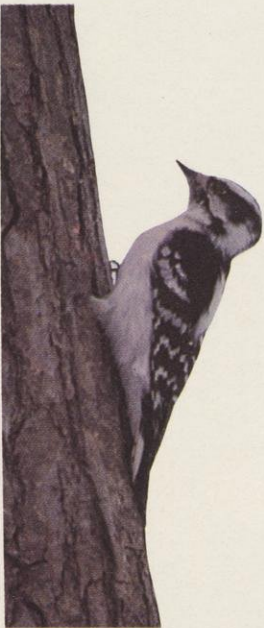
Another Wisconsin species, the red-headed woodpecker, is the only one in the state with an entirely bright scarlet head. It exudes bold patterns and is strikingly handsome with a solid blue-black back and shoulder colors that contrast sharply with its large white wing squares. Appropriately nicknamed white shirt, flag bird and half-a shirt, the redhead is usually seen in country woodlands, orchards, grasslands and along rural roads.

Its diet is a varied one consisting of acorns, beechnuts, corn, fruits, berries and insects. This species can also hunt from a perch, flycatcher style, darting and spearing insects on the wing.

Food storage is a typical redhead habit and sparks many interesting debates. Some researchers contend very little, if any, stored foods are ever located or used. Others report exactly the



The pileated woodpecker makes a rectangular excavation while drilling for carpenter ants and beetles. Photo by Millie Myers.



Downy woodpecker.

opposite and say that redheads often staunchly and ferociously defend their prized store. One observer watched a redhead placing acorns into a fence post which had an opening on the opposite side, with the bird never aware the coveted nuts were rolling out the other end.

A less common Wisconsin woodpecker is the red-bellied. Generally a more southeastern United States bird, this species is confined mostly to the southern half of the state. Deciduous forests and swampy woods and bottom lands are its preferred niche.

A "ladder backed" woodpecker, the red-belly's back is scored with horizontal black and white barrings resembling the rungs of a step ladder. Its red belly is more accurately pink and hard to see. Males have an entirely red crown and hind neck while females exhibit only a red nape.

One of the few woodpeckers whose diet consists more of vegetable material than insects, the omnivorous red-belly dines on wild fruits and



The red bellied woodpecker lives only in the southern half of Wisconsin. Photo by Helen Cruickshank.

nuts, berries, wood-boring beetles, grasshoppers and other insects. Like the red-headed, the red-bellied habitually stores its food.

If you should venture into very dense, extensive woods, you have a chance of sighting the granddaddy of all Wisconsin woodpeckers, the pileated. It's the biggest in North America. An even larger relative, the ivory-billed, is extinct. An encounter with the uncommon pileated is an unforgettable one. Crow-sized, this woodpecker is spectacularly colored with a solid black back, a bright fiery red-crested head and white facial, neck and wing designs. Males flash a red moustache.

A true symbol of the wilderness, the pileated is secretive and wary and adapts slowly to the encroaching march of civilization. The sound of a "cuk, cuk, cuk" or "yucka, yucka" call may be as close as you'll ever get to this woodchopping goliath.

The powerful blows of the pileated's bill carve out large chunks of wood and its distinctive drumming has been heard as far away as one mile. Typically leaving behind rectangular excavations, the "logcock" prefers a diet of large carpenter ants, nuts and beetle larvae.

At home in northern Wisconsin is the peculiar black-backed three-toed woodpecker. Its hind toe or hallux is absent but having only three toes instead of the typical four is apparently no handicap. The three-toed lives among both cone bearing trees of evergreen forests and deciduous birch, willow, aspen and larch, and prefers logged, swampy or burned over areas.

Uncommon even where found, this bird has a solid soot-colored back and black and white barred flanks. A golden cap adorns the male while the female is black.

Flaking off sizeable patches of bark, the black back's diet includes wood-boring grubs, weevils, spiders and natural fruits. Also known as the arctic three-toed for its northern habitat preferences, the black-backed emits several noteworthy calls including shrill cries which Audubon compared to "those of some small quadruped suffering great pain."

Less common than the black-backed is its neighbor, the northern three-toed woodpecker. More Canadian than badger, it is Wisconsin's rarest woodpecker resident. No breeding records within the state are known, and the bird is found only in the most northern tier of Wisconsin counties. It is somewhat difficult to easily and accurately distinguish the northern from the black-backed three-toed woodpecker. Males also have a yellow crown but the northern is slightly smaller in size and has a barred back.

Aside from their entertaining antics, fascinating habits and colorful plumage, woodpeckers play an important role in the overall picture of forest ecology. From the little downy to the giant pileated, each helps recycle small bits of wood and larger hunks of bark back to the soil.

Natural non-chemical "pesticides," woodpeckers have a tremendous impact on insect

populations. They help control many harmful species of ants, boring beetles, grubs, flies, caterpillars and larvae, consuming literally millions of these nuisance bugs annually. The sometimes delicate balance of woodland ecosystems depends on the woodpecker's presence.

Woodpeckers also help create housing for nuthatches, chickadees, titmice, starlings, bluebirds, small owls, flycatchers, wood ducks and even some mammals.

If you want to, there are ways to attract woodpeckers to your home or yard. Trees of course are necessary and those that bear nuts or fruits will find flickers, redheads and sapsuckers very much obliged.

In winter, suet mixtures, peanut butter cakes, nutmeats and sunflower seeds will attract appreciative downies, hairies, flickers, redheads and red bellies. If you're lucky you may even get a rare dinner appearance from "King Woodpecker," himself, the pileated.

Bird boxes of the proper size will encourage woodpeckers to take up residence near you. Common flickers are probably the best known user of man-made nest boxes, although occasionally redheads, hairies and downies answer the "vacancy" sign.

Unfortunately, sometimes woodpeckers need to be discouraged. Even the most ardent woodpecker fan frowns upon being awakened at 5 a.m. by a rhythmic drilling on nearby drainpipes, cedar shingles, television antennas or utility poles. Dozens of telephone calls hound ornithologists, particularly during spring courtship when persistent woodpeckers beat incessantly on a favorite reverberating object.



The flicker's long flypaper tongue is used to catch its favorite food: ants!

Some possible methods of peaceful coexistence include having abundant numbers of nest boxes, creating isolated perches for drumming, eliminating insects from their hiding places on the outside of the house or just a great deal of patience and a set of ear plugs!

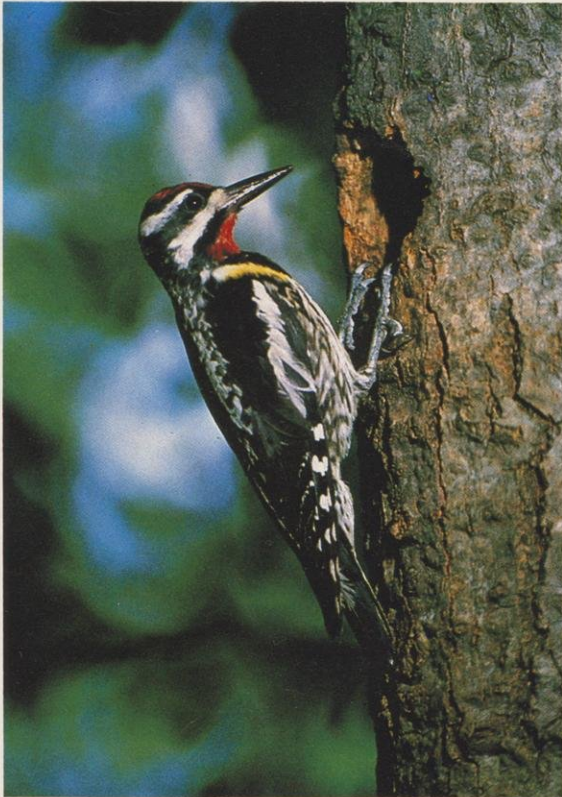
Woodpeckers need some degree of understanding from us because their overall numbers have been declining. Several key factors are responsible. Forest clear cutting, especially in the past, was a major cause in the reduced population of pileated, red-headed and the extinct ivory-billed. It's this simple: Remove the component the woodpecker has adapted to and you remove the woodpecker. Specialization can be deadly.

Starlings are another reason woodpeckers have a difficult time of it. Starlings compete heavily for natural nest sites, man made nest boxes and wild food. If you put out a nest box for flickers chances are the European starling will end up occupying it.

Monopolizing starlings are also a nuisance at feeders and may boisterously root out hairies, downies, redheads and sapsuckers.

Then there's the automobile! Since its advent woodpeckers and cars have literally been on a collision course. Redheads especially have dwindled significantly because of their love for highway insects such as grasshoppers. Swooping low along roadsides, attracted by a juicy morsel, the woodpecker of course is no match for a swift moving metal machine.

Despite all these threats, however, as long as there is sufficient suitable habitat, woodpeckers should continue to thrive as part of our natural world. Hopefully, for some time to come, we will be able to go to the woods and watch the show. Woodpeckers are fun. May their happy sound go on forever!



The yellow-bellied sapsucker has a long brush-tipped tongue for feeding on sap.



Hairy woodpecker.

