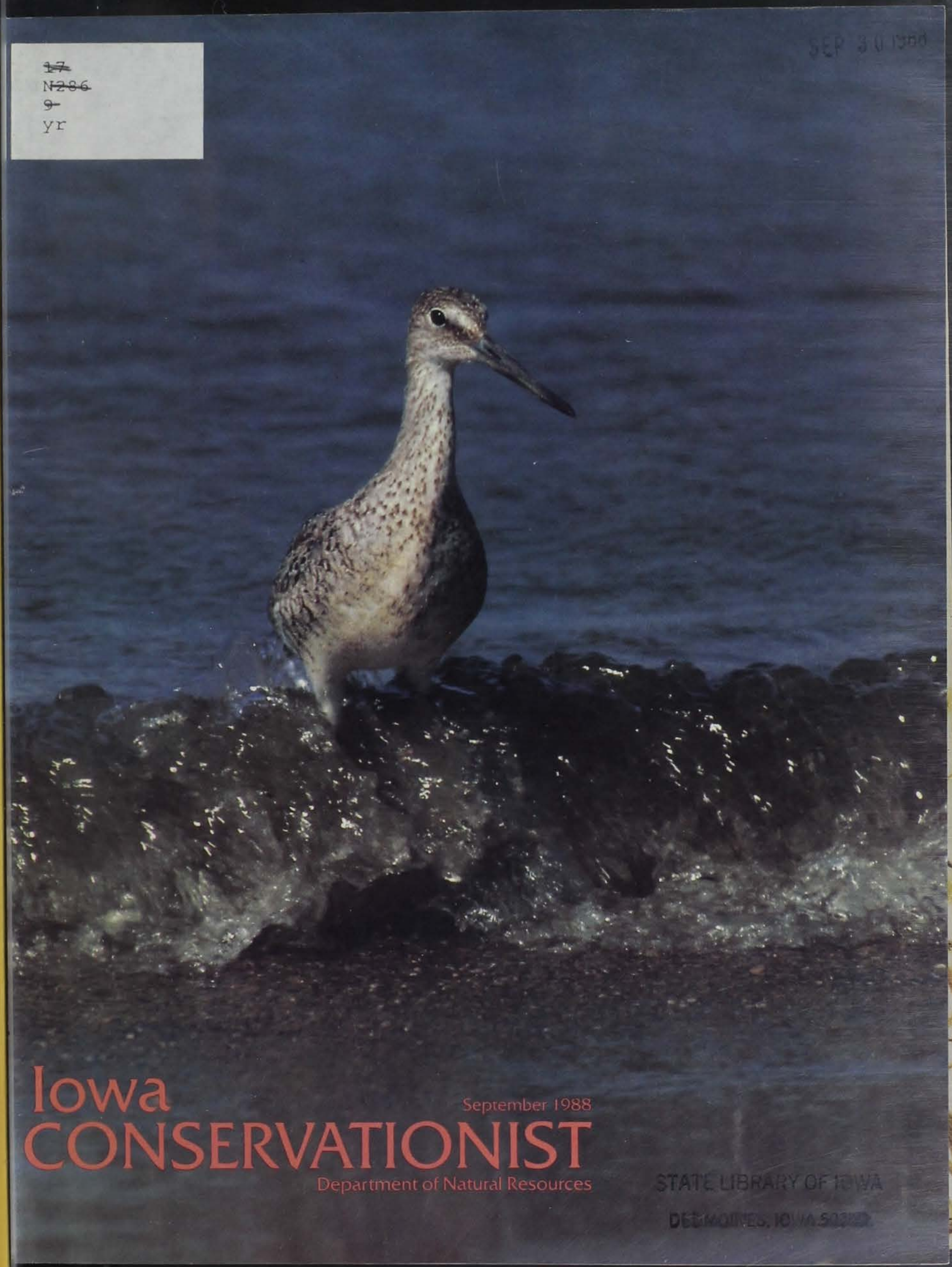

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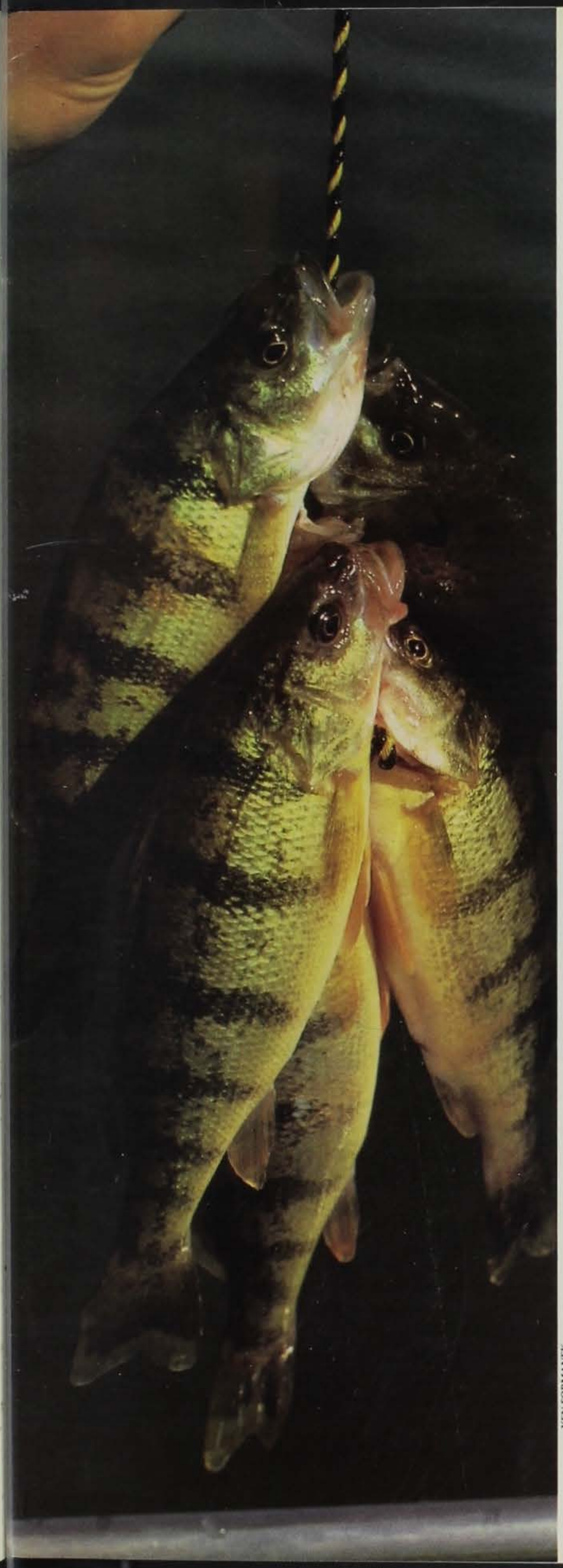


KEN FORMANEK

Hooked On Autumn Fishing In Iowa's Great Lakes

by R.H. (Dick) McWilliams

Over the years one question I have been asked time and time again is, "What is your favorite fishing season?" Without doubt, I am hooked on autumn — from the warm, lazy, easy-going days of early fall, fishing yellow perch, casting for smallmouth bass, or hooking a fighting white bass, to the bone-chilling, windy days of late fall, fishing for that last open-water walleye of the year.

Iowa's "Great Lakes" — Spirit, East Okoboji and West Okoboji — have a long-standing reputation for providing some exciting and excellent fishing. One of the best known is the yellow perch fishery, and early autumn is one of the best times to fish for them. Walleye fishing in late fall is one of the better-kept secrets and can provide some exciting action for anglers who are willing to brave the cold. In addition, there are also good opportunities to hook into a smallmouth bass, a northern pike or even a muskie. And in the past few years fall has provided a good chance to bring home a nice stringer of white bass, particularly from East and West Okoboji Lakes.

KEN FORMANEK

The cool, colorful days of autumn offer anglers many golden opportunities for fishing.

RON JOHNSON

RON JOHNSON

Sure signs of fishing activity are concentrations of fishing boats anchored around the lakes.

Early autumn is the time to fish yellow perch. It is hard to describe the tranquility of fishing during an early autumn day. The weather's just right, not too cool, not too hot. Along with some good friends, waiting for the action to begin seems short indeed. Boat fishing is the norm for fall perch, although fishing from shore or docks can produce some good action at times. Picking a likely fishing spot is easier than many believe, even for those not familiar with the lakes. Sure signs of fishing activity are the larger concentrations of fishing boats anchored around the lakes. A visit to a local tackle shop can also provide good information, not only in locating some "hot" spots, but which tackle and baits are currently working best. For those anglers preferring to go it alone, lake contour maps can also help locate some good areas, highlighting the larger flats, sharp drop-offs and rock reefs in the lakes.

Tackle used for yellow perch fishing is basically the same throughout the year. Yellow perch are notorious bait robbers, and as a rule of thumb, the lighter the better. I prefer a five- to six-foot rod with a light or fast action tip, and four- to six-pound monofilament line. Although yellow perch can hit hard, more often than not, they bite quick and light and the lighter tackle allows for a more sensitive feel. During early autumn, small, 1/32- to 1/16-ounce leadheads or "mini-jigs" with yellow, yellow-white, or white plastic skirts baited with silver wigglers, wax worms or meal worms work best. As the days turn cooler, yellow perch seem to prefer small metal jigging lures, again baited with silver wigglers, wax worms or meal worms. In late fall minnows often work best.

Fishing techniques for yellow perch range from simple to simpler. The easiest is a down line — simply drop the lure straight down so it is four to eight inches off the bottom. Give a jig every so often and wait. In shallow water or areas of vegetation, a small slip-bobber keeps the bait at the right depth and also allows casting to better looking spots. Slip-bobbers are also good when casting from shore or docks, particularly in early fall. The key is to use a bobber large enough to keep the lure up and small enough to detect light bites. Another less-active method for perch fishing if there is enough wind and wave action, is to just sit back and relax and let the rocking action of the boat do the jigging for you. One technique I use if fishing slows down, particularly in early fall using mini-jig lures, is to cast and retrieve, bouncing the lure along the bottom. If a perch hits, I play it slowly. More often than not, other perch will follow it back to the boat and start hitting on the down line.

Depth of water and time of day for fishing yellow perch varies somewhat as autumn turns toward winter. During early autumn, perch are often located in shallow water, 10 feet or less in East Okoboji Lake and Spirit Lake, and down 30 to 40 feet in West Okoboji Lake. As the water cools down, the fish generally move out into deeper, warmer water, down to 20 feet in East Okoboji Lake and Spirit Lake.

The best time of day is hard to pin down. Usually the best fishing is during early morning and from late afternoon to dark, particularly during early autumn. During late autumn, the morning and afternoon periods are the best bet; but the late-morning period can also be red hot, particularly in West Okoboji Lake.

The past few years have seen a return of the white bass fishery, particularly in the Okoboji Lakes. The same techniques, times and depths used for yellow perch also work fine for white bass. White bass usually strike much harder than yellow perch and even a medium-sized bass puts up quite a battle. So even if you are just trying for perch, do not be surprised.

For a change of pace, try fishing smallmouth bass. Although fishing tackle is largely a matter of personal preference, I find six- to eight-pound monofilament gives a good feel and is heavy enough to handle larger fish. The most productive areas for smallmouth bass are generally around rock reefs, sharper drop-offs, and on and adjacent to, deeper water rock piles and larger rock areas. Although there are a variety of good lures, I prefer a skirted or soft-body twister on a larger, one-fourth-ounce leadhead. Just remember the old adage — if what you have does not work, try something else.

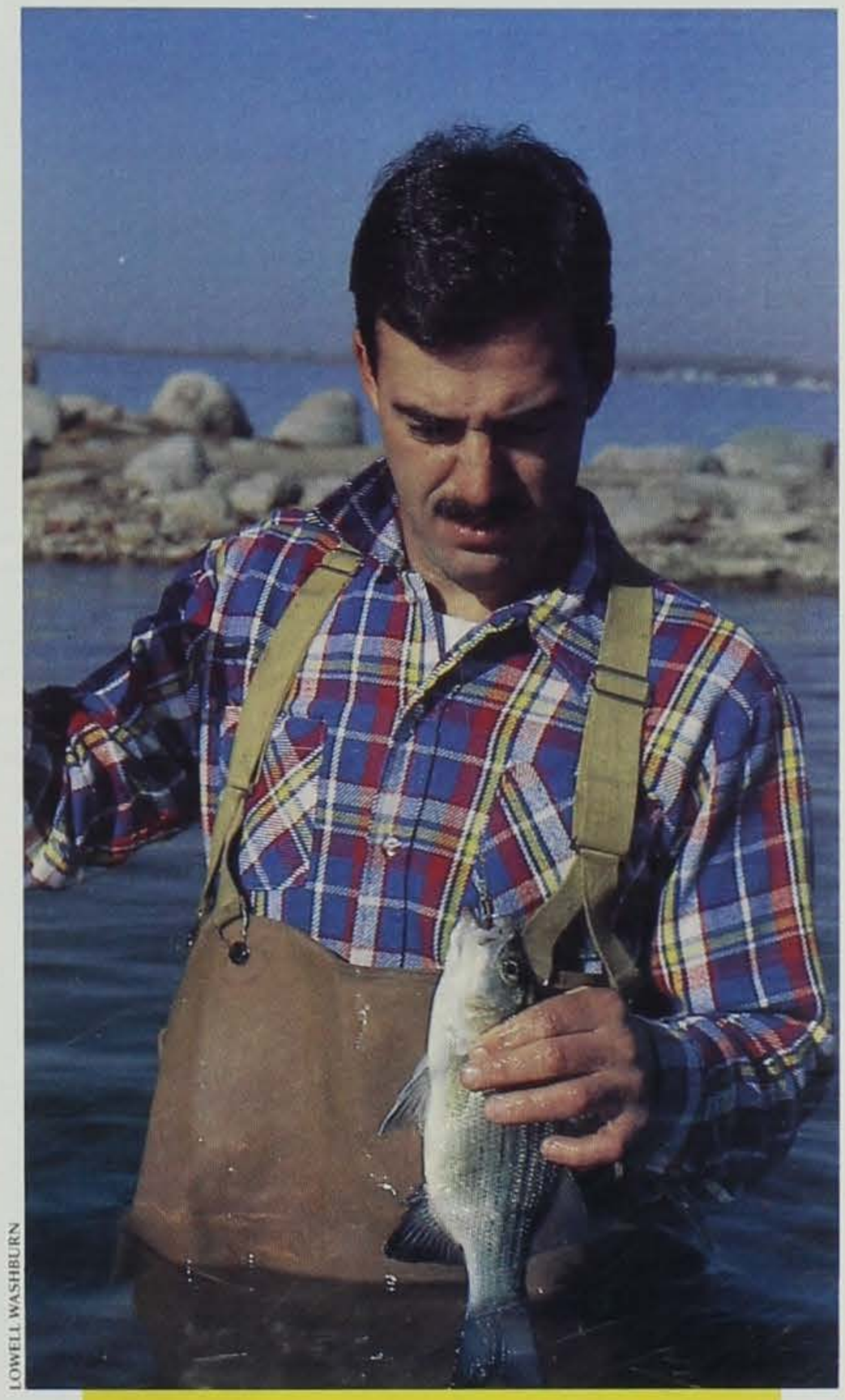
Fishing northern pike or muskie can also provide some line-busting action, particularly during early autumn. Light winds and balmy days are great for casting or trolling along edges of vegetation. As one pike angler said, "Keep the lures moving. If the fish gets upset, it may hit." Fishing for a trophy northern or muskie generally requires some heavier, more durable equipment. The larger lures or trolling plugs are the norm for these fish, and to handle these, stiffer rods and heavier reels and lines are almost a must.

As colder weather sets in, during mid- to late autumn, many anglers pack away the tackle and miss some golden opportunities for late fall walleye fishing. A change to heavier tackle — a stiffer rod and eight- or 10-pound monofilament line, although not required, can prevent a lunker walleye from busting a line. On windy days, I prefer drift fishing to trolling or casting. Just pick a good drift across a rocky area or drop-off, and drift along. My favorite lures for late fall fishing are fluorescent red or white floating jigheads and a fluorescent orange spinner. During mid-autumn, both leeches and minnows are good baits, but as the water drops to near freezing, minnows seem to draw the most strikes. If these techniques cannot buy a bite, another favorite technique during late autumn is to drag a heavy, one-half ounce or larger, leadhead with a white skirt or tail, baited with a minnow right along the bottom. The best time of day changes quicker than I change tackle, but the best success I have had in late autumn is between noon and 3 p.m.

Night fishing from the shore or docks is another popular technique that produces some nice catches of walleye. A variety of lures are effective for shore or dock fishing (or fishing from a boat). Among these are count-down plugs, deep- and shallow-running plugs, plastic-bodied leadheads and so on. If one does not work, try another. The fish are there — it is just a matter of finding the right combination.

If you have not tried fall fishing in Iowa's Great Lakes, come join us. I believe you will be hooked, too.

R.H. (Dick) McWilliams is a fisheries research biologist at Spirit Lake.



LOWELL WASHBURN

With the return of the white bass fishery, many Okoboji anglers are finding quite a battle on their hands when they hit a school of these scrappy fish.

The Mississippi River's Pool 19

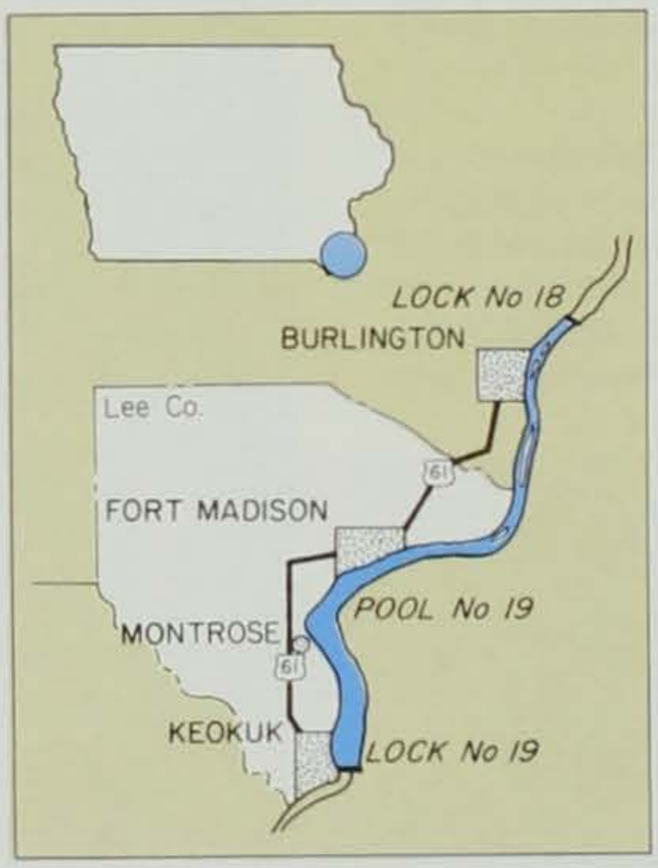
Iowa's Diving Duck Headquarters

Story by Bill Ohde
Photos by Lowell Washburn

Stretching from Burlington to Keokuk in southeast Iowa, Pool 19 of the Mississippi River sprawls out across 30,000 acres. An impressive expanse of water, to be sure, but even more impressive are the hoards of diving ducks it attracts during migration.

They come by the thousands — scaup, canvasbacks, ringnecks, redheads, goldeneyes and buffleheads — to rest and re-fuel on their trip north to the breeding grounds in the spring and again on their southern journey in the fall. As many as 800,000 diving ducks, the vast majority scaup and canvasbacks, have amassed on Pool 19 in past years. According to figures provided by Stephen P. Havera of the Illinois Natural History Survey, peak diver numbers have averaged around 350,000 during the last 10 years. The lower reaches of the pool, roughly from Ft. Madison to Keokuk, are especially inviting and house the bulk of these birds.

Why do so many diving ducks stop on Pool 19? A combination of factors explains its importance. Probably foremost on the list is the food supply. The broad shallow expanses of the lower half of Pool 19 are extremely rich in bottom organisms that the divers savor. Fingernail clams are especially abundant and are fed on heavily by scaup and canvasbacks. Other foods include snails, mayfly larvae and a recently expanding profusion of submergent plants. Large beds of wild celery, pondweed and water stargrass have developed in the last few years and will add considerably to the pool's food supply for ducks.



The location and appearance of Pool 19 also contributes to its importance as a stopping area. It is located at a strategic area midway between breeding and wintering grounds, and the Mississippi is a major migration corridor followed by the birds. Additionally, the lower portion of Pool 19 broadens out considerably and resembles a large shallow lake — a favorite with diving ducks.

Divers begin showing up in the spring immediately after ice-out. March is the peak spring month of diver activity on the pool, with numbers dwindling steadily through April. The birds tend to be scattered widely over the pool in the spring.

The fall spectacle begins in October with huge flights usually pulling in around the end of the month. Peak fall concentrations are almost always in November. Unlike in the spring, divers tend to concentrate in huge rafts at just a few locations in the fall. Hunting activity forces this distribution shift.

Hunting on Pool 19 is directed mainly at dabbling ducks, but fair numbers of scaup are bagged on the pool. Although it seems as if hunting should be easy with such huge numbers of ducks, it can be quite difficult to attract birds to decoys when competing with a raft of 50,000 live birds! Canvasbacks have been protected on Pool 19 for many years because of their low continental population and extreme concentration on this pool during migration. They are now protected in the entire Mississippi Flyway.

An excellent location to view some of these tremendous diving duck aggregations is the Linger Longer Rest Area, a Lee County Conservation Board area located on Highway 61, one mile north of Montrose. March and November are prime viewing months, with March being the better month for close-range observation of birds scattered along the shoreline. Binoculars or a spotting scope are a definite asset.

Pool 19 also hosts an incredible array of other birds during migration — dabbling ducks, geese, coots, grebes, mergansers, ospreys, bald eagles, herons, occasional oddballs like scoters and oldsquaws, and the list goes on. By sheer numbers, however, diving ducks dominate the pool and make it one of the most important diver migration areas in North America.

Bill Ohde is the wildlife biologist for the Odessa Wildlife Unit in southeast Iowa.

Canvasbacks (above) as well as the pied-billed grebe (left) find Pool 19 an attractive resting site on their annual migration south.

by Bob Mullen

BEFORE THE HUNT

DNR PHOTO

Hunting season is approaching and you have impatiently awaited the new season. Endless hours have been spent training your hunting dog to be steady at the shot and to hold point like a rock. You and your son or daughter have spent many enjoyable hours improving your shotgun shooting on clay pigeons and target shooting with that new .22 rifle. The new hunting license and wildlife habitat stamp have been purchased well in advance of the hunting season. You have really made preparations for the season. You are all set to go, except for the most important ingredient. Where you are going to hunt?

There are public hunting areas. But too often these are crowded on opening day. In Iowa, less than five percent of the land is in public ownership, with the remainder in the hands of private owners. Therefore, most of the uncrowded recreational opportunities exist on private land. But each year it seems more and more of these private lands are posted against usage. Why? Possibly, due to the lack of respect for the landowner. The most blatant act of disrespect, of course, is the failure to ask permission before entering private property. Iowa law requires that you must have expressed permission of the landowner before you enter his or her property. Have we, as hunters, ever considered the landowner's viewpoint on this matter? If we view the situation from the landowner's perspective, we might all have a better understanding and be able to improve hunter-landowner relations.

When we ask to hunt on someone's land, we are asking them to trust us to be responsible and courteous guests of their property, from which they obtain their living. We must never forget that we are only guests of the landowner. With this in mind, our request to use their land should *sound* like a request and *not* a demand.

Before you start knocking on doors to get permission to use private land for recreation, consider your appearance. Hunting clothes may be okay, if they are clean. Blood stains, dirt, a big sheath knife and a game bag full of ammunition may give a negative

impression. Do not wear footwear with last week's mud adhering to it in the event of an invitation into the landowner's home. Your impression to the landowner should be that of a person who takes care of themself and their property. You want the landowner to reason that if you take care of your own property, you will be considerate of theirs.

First impressions do count and may determine whether or not you are allowed to use the land for your recreational sport. But first impressions go further than just appearances. Many landowners have become concerned with liability for accidents on their property. It is therefore, important to represent yourself as a safe and conscientious hunter.

If a farmers grants you permission but tells you to stay out of certain areas, he or she probably has good reason. That reason may be for your own safety. Also, make sure to discuss the boundaries of the property.

Making sure you keep your hunting dogs leased until you get them out of the farmyard and into the field where you will be hunting. Besides preserving the farmer's chickens, your privilege of hunting and your peace of mind, you may also be preserving your own dogs. Farm dogs are often expert fighters and do not take lightly to strange dogs in their territory.

When hunting on land that you have gained access to , be extremely careful to never shoot in the direction of livestock, buildings or farm equipment. Pick up your empty shotshell cases. There is no reason to leave a permanent reminder of your presence on the land.

After you finish your hunt, stop back at the farmer's house to thank him or her for the privilege of hunting on their land. Let the farmer know you truly appreciate the opportunity to use the property for your recreation. If you offer the landowner a part of your game, make sure you clean it first. The farmer does not enjoy having to clean your game. Uncleaned game can become a burden, rather than a thoughtful gift.

If the landowner gives you complete freedom to hunt his or her land, do not go back to town and tell all your hunting friends. You must remember the farmer is not running a public recreation area. A good way to lose your welcome is by bringing everyone else along. The landowner may enjoy hunting and may be looking forward to it after the fall harvest is complete.

What is it that the farmers get out of having hunters on their property? Hopefully a good experience. You might help take the responsibility for maintaining the hunting area you have found. You could offer to help develop habitat on the farm with

BOB MULLEN

Whether the (private) land is posted or not, Iowa law requires the expressed permission of the landowner before entering the property.

BOB MULLEN

BOB MULLEN

food plots, shelterbelts or windbreaks. Your sincerity and efforts may well build a lasting friendship.

Asking permission to hunt is a nice thing to do and shows the landowner you want to be fair. But the fact is today you must go to the landowner and obtain permission before you set foot on his or her land, or you are liable to have the game warden or a sheriff's deputy escorting you off the land and having the landowner file a trespass charge against you. Such words as "thoughtful" or "right" thing to do in this instance are obsolete. Today, getting permission is the only thing to do.

It's already September. The farmer's busy harvest season is just around the corner. It's time to inquire about those areas you have been eying this summer. Waiting until the last minute on opening day to get permission does nothing for improving hunter-landowner relations. Now is the time to spend some unhurried moments visiting with the landowners, understanding their concerns and "mending some fences."

If you are the sort of person who always pays their way, is punctual in your responsibility to others, has a winning personality, is a true and ethical hunter, and well acquainted with landowners who have a lot of good wildlife habitat, you may feel you will always have a place to hunt. But will these same areas be available for your children to enjoy? Old relationships die with time. The place you have hunted quail on for 20 years may be sold and bought by an absentee owner you do not know. The timber you have hunted squirrels in since you were young may no longer be available because the elderly owner sells and moves to town. These things happen every year.

Anyone who has pursued the crafty wild turkey, seen the sunrise from a duck blind or watched their dog work a covey of quail, wants

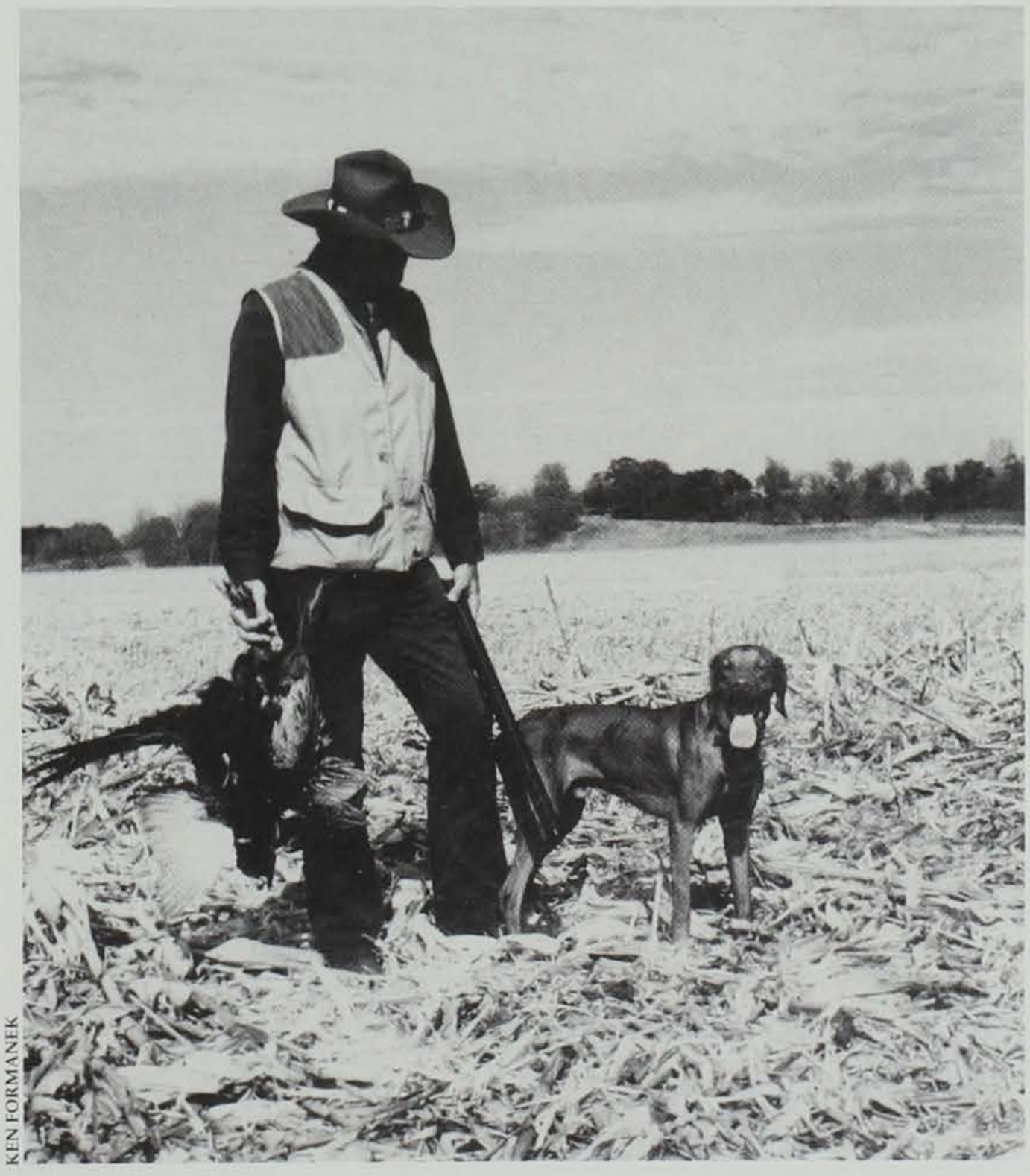
KEN FORMANEK

The future of public hunting on private lands rests with individual hunters and their respect for the landowner's property.

these experiences for their children and grandchildren. Are these experiences guaranteed for the future on private lands? Farms are bought and sold. Big efficient farms, run as large corporations, are there to get the maximum yield. Land is farmed road to road, gullies are filled in and cropped and fencerows cleared to make room for more cropland. Hopefully, the 10-year agricultural program will reclaim and increase much needed lands for wildlife.

Most individuals cannot afford the luxury of buying and maintaining land to provide their own hunting areas. Therefore, what does the future hold for recreation on private land? Today's hunter holds this decision in the balance by their actions toward the private landowner. We must realize the farmer is not required to cooperate. Hunters are the ones that must be willing to roll up their sleeves and pitch in to preserve and maintain recreation on private lands. Whether we like it or not, we need the private landowner for our recreation. And *we* determine the amount of recreation available on private land in the future.

Bob Mullen is a conservation officer for Tama and Benton Counties.



KEN FORMANEK

1988 Forest Crafts Festival October 8-9

Photos by Ron Johnson

The 8th Annual Forest Crafts Festival will attract thousands of visitors again this fall. This colorful celebration takes place at Lacey-Keosauqua State Park, just south of Keosauqua in Van Buren County. Dates of the event are Saturday and Sunday, October 8 and 9, 1988.

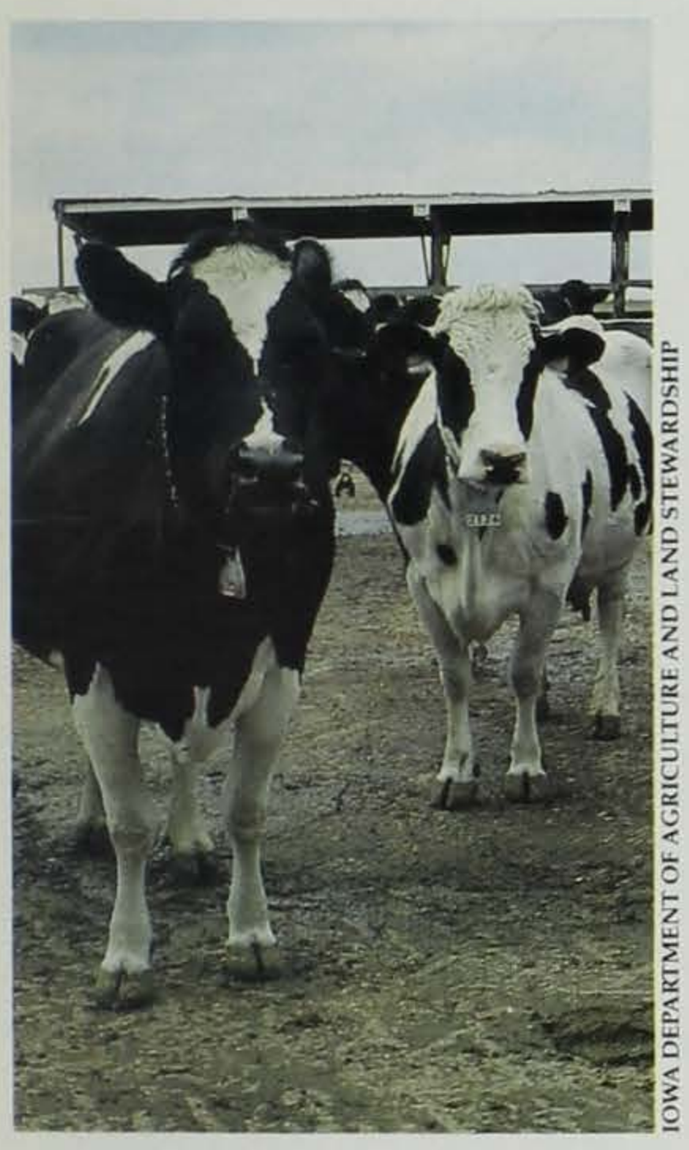
Many crafts people will present their handiwork in wood for display and sale. An operating sawmill, chain saw carvings and forestry-related educational events will be presented. Buckskinners reliving the early days of the area will again spread their trade blankets. Good food will be available on the grounds.

Local communities of Keosauqua, Bentonsport and Bonaparte will also feature special attractions. Ample parking is available in Keosauqua and free shuttle buses will transport visitors to the festival site.

This enjoyable outing is open to the public from 10:00 a.m. to 5:00 p.m. both days. See you there!

What Old McDonald Never Knew

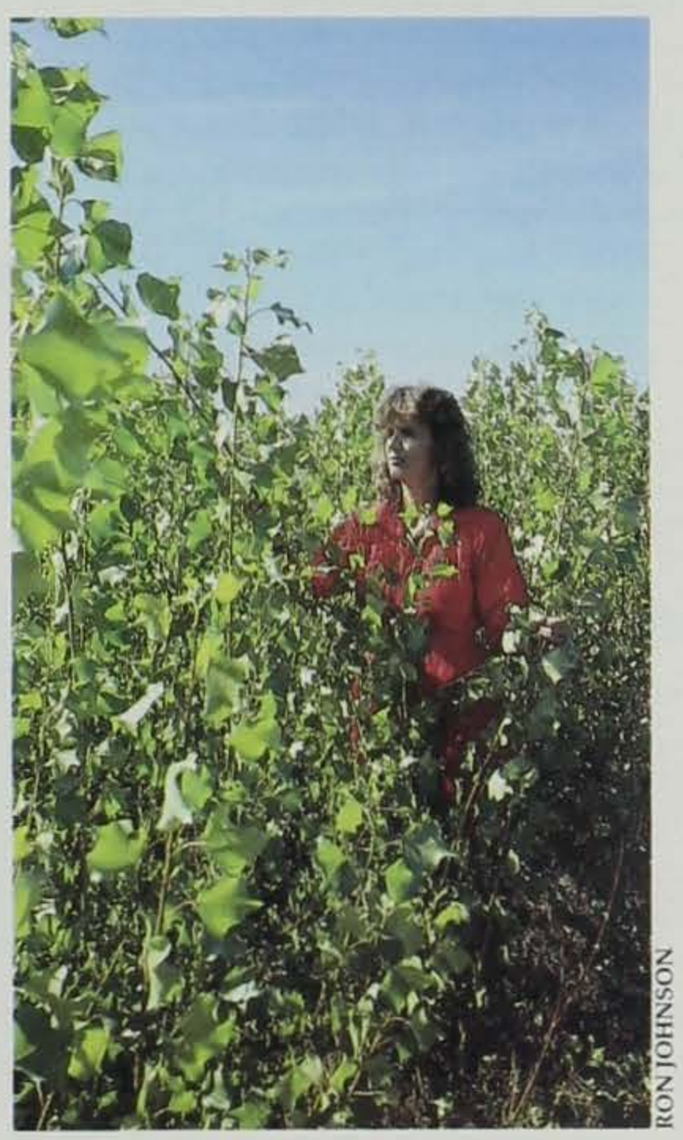
by Katherine Sibold



IOWA DEPARTMENT OF AGRICULTURE AND LAND STEWARDSHIP

RON JOHNSON

RON JOHNSON



RON JOHNSON

Imagine — Iowa competing with "energy rich" states such as Oklahoma and Texas. Iowa has been described as an energy poor state, importing nearly 98 percent of the energy it uses. One might ask what miracle occurred to transform the state from an energy importer to possibly being a major exporter. The answer is that Iowa has begun to tap into a greatly under-used energy resource base — agricultural waste resources.

What are these agricultural "resources"? Collectively, they are referred to as "biomass" which is organic or living material that is grown on a renewable basis or material that is a by-product of agriculture. Biomass includes animal wastes, agricultural crops and residues, wood and wood by-products, forest residues and livestock operation residues. Other examples that are not necessarily agriculturally based are aquatic plants and municipal solid waste. On a global scale, about one-seventh of the total energy use is obtained from biomass materials. If biomass energy resources were fully utilized in Iowa, it could provide 100 percent of the energy we require.

Biomass is converted into "useful" energy by one of the following processes: combustion or direct burning, gasification, liquefaction or thermochemical conversion. Heat, steam, electricity, liquid fuels for transportation, low and intermediate BTU gas and synthetic natural gas

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Iowa has the potential to become a more self-sufficient energy consumer with its agriculturally based resources. The use of animal wastes, crop residues such as corn cobs, and energy crops such as sorgum and perennial wood grass help to reduce Iowa's need for imported energy.

are products of biomass materials. In addition, petrochemical substitutes and fertilizers are produced from the heat of biomass combustion. The diagrams on the following page illustrate each of the processes in a simplified form.

Biomass can be used as solid fuels or made into pellets for direct combustion or converted into other forms by chemical or biological processes. For example, crops such as corn can be converted into ethanol (alcohol) through fermentation and distillation. Alcohol produced from wood or coal, which is called methanol, can be produced via a process called gasification. Methane gas, on the other hand, is produced from the breakdown of animal waste.

It still may be hard to imagine how these ag biomass materials could contribute significant amounts of energy, but one needs only to look at the amount being produced and wasted or under-used each year in Iowa. Table I shows the breakdown of energy resources by available tons per year and the equivalent in billions of gallons of gasoline. The 10 billion gallons of gasoline figure is the equivalent to the potential energy from agricultural products and by-products currently produced in Iowa. The figure is significant when compared to the 7.7 billion gallons of gasoline equivalent figure of energy consumed in Iowa. Even though it is unlikely that 100 percent of all waste materials available could be converted into usable energy, it does show the potential that is available. Further, if efforts were to be directed toward developing ag waste into an energy market, Iowa could become a net exporter of energy.

Among the advantages of using ag-based energy resources are that (1) they are renewable and not subject to international uncertainties/politics; (2) they are less capital intensive than some of the conventional energy sources; (3) they seem to be environmentally safe; (4) they require a shorter time to become operational; (5) they contribute to local and rural economic development; and (6) they broaden the energy resource base for the state, making Iowa less vulnerable to energy crises, supply disruption and other market conditions.

Agricultural Wastes

Agricultural wastes with energy potential include the residue from such crops as corn, soybeans, small grains (oats, barley), wheat and sorghum. These materials, when burned in boilers or furnaces, have significant heat value (BTU/pound ranges from 4700-8100) and can be used for grain drying and shop heating. According to Pat Pisarik, a consultant with the Iowa Natural Heritage Foundation, a 150-bushel corn crop will provide enough corncobs to replace 262 gallons of propane.

For larger applications, corncobs have been used as an alternative to fuel to coal- or natural gas-fired boilers. In 1986, Garrigan High School in Algona, Iowa switched from burning natural gas to burning $5/ton corncobs after installing a biomass boiler system. Kinze Manufacturing in Williamsburg, Iowa, uses 1,350 dry tons of corncobs per year and saves 90 percent of the cost of using natural gas. Because of the clean and efficient burning of corncobs, meeting air emissions standards has not presented a problem for Kinze.

Distressed or "out of condition" corn as an alternative fuel feedstock was evaluated by Iowa State University. The feasibility study focused on the potential for using distressed corn as an energy resource in the newly constructed fluidized bed combustion system and examined the handling requirements, emission characteristics, combustion properties and economics of the damaged corn which has an energy content of 7800 to 8150 BTU/pound (stated differently, one bushel of corn is the equivalent of 4.3 gallons of propane). The conclusion reached by ISU researchers was that distressed corn can be used as a fuelstock but only under the condition that it has no other commercial value. It is, therefore, unlikely that direct corn burning will play a major role as an ag fuel substitute.

Energy Crops

In addition to using agricultural by-products, considerable interest is being directed at producing "energy crops" such as forage sorghum and hybrid poplars. The Amana Society is in the process of planting "short-rotation intensive culture" trees capable of producing quality wood-burning material. The U.S. Department of Energy and Martin Marietta Corporation have sponsored a number of projects using poplars, cottonwood, alder, locust and soft maple. Other energy crops under consideration are corn, forage sorghum, sugarcane and certain perennial grasses. The soil nutrient depletion is being carefully analyzed to determine the long- and short-term impact of growing energy crops.

Wood and Wood By-Products

Some forest and wood processing mill residues are used for non-fuel uses such as particle-board. While some mills use sawdust and slabs for lumber drying, much of the material is wasted and landfilled. According to Mike Brandrup of the Department of Natural Resources forestry services bureau, markets need to be developed to utilize wood by-products. Equipment to burn the wood by-products is available; the greatest need is to match the suppliers with the users.

RESOURCE	PRODUCTION MILLIONS TONS/YEAR	EQUIVALENT TO BILLION GALLONS OF GASOLINE
1. Municipal Solid Waste	2	0.206
2. Agricultural Residues	53	5.0
3. Forest Material	5	0.642
4. Animal Waste	21	3.0
5. Energy Crop, Forage Sorghum	0.3	0.038
6. Corn, Ethanol	1.3	1.25
TOTAL	82.6	10.0

Iowa energy consumption - *7.7 billion gallons of gasoline*
Using Iowa's resources, we can produce *30 percent extra energy.*

Table 1.

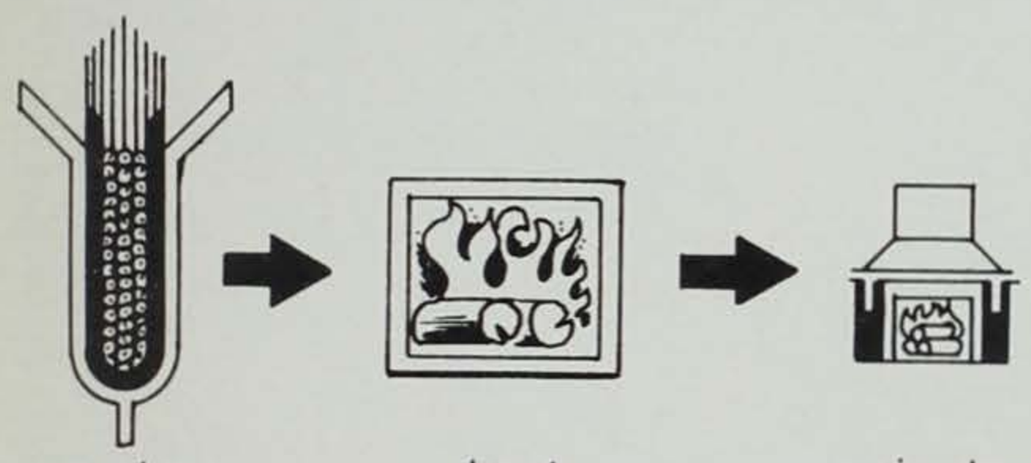
Methane

In addition to agricultural residues, energy can be produced from animal wastes to produce methane for use in electrical generators. The technology, which is used in several wastewater treatment plants, involves the collection of relatively low BTU gas which is burned to run a small generator.

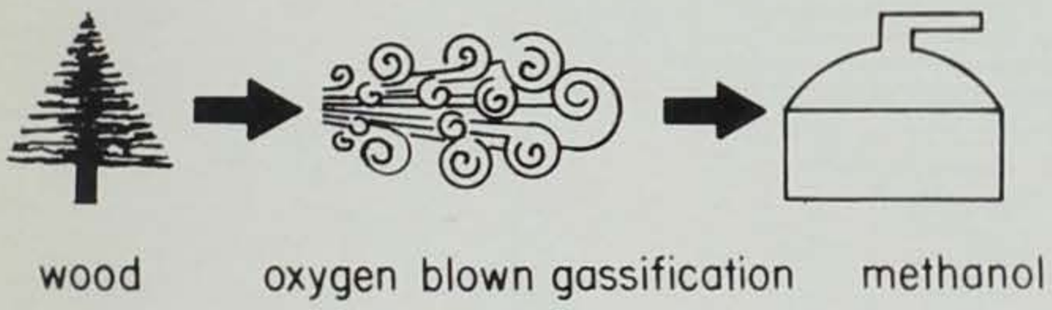
Iowa has much of the "natural resources" for energy production already available. What is needed is a change in attitude from viewing these materials as "waste" and a look at them in much the same way we view conventional energy resources. Where Texas has its "black gold," Iowa has its "green gold."

Katherine Sibold is a program planner for the department's energy bureau.

Combustion - Direct Burning



Gasification



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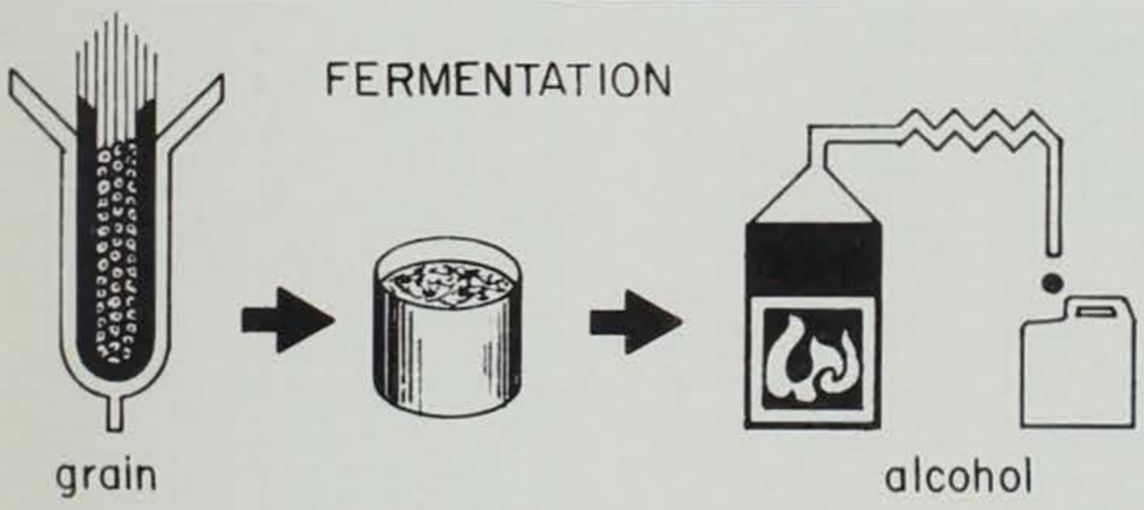

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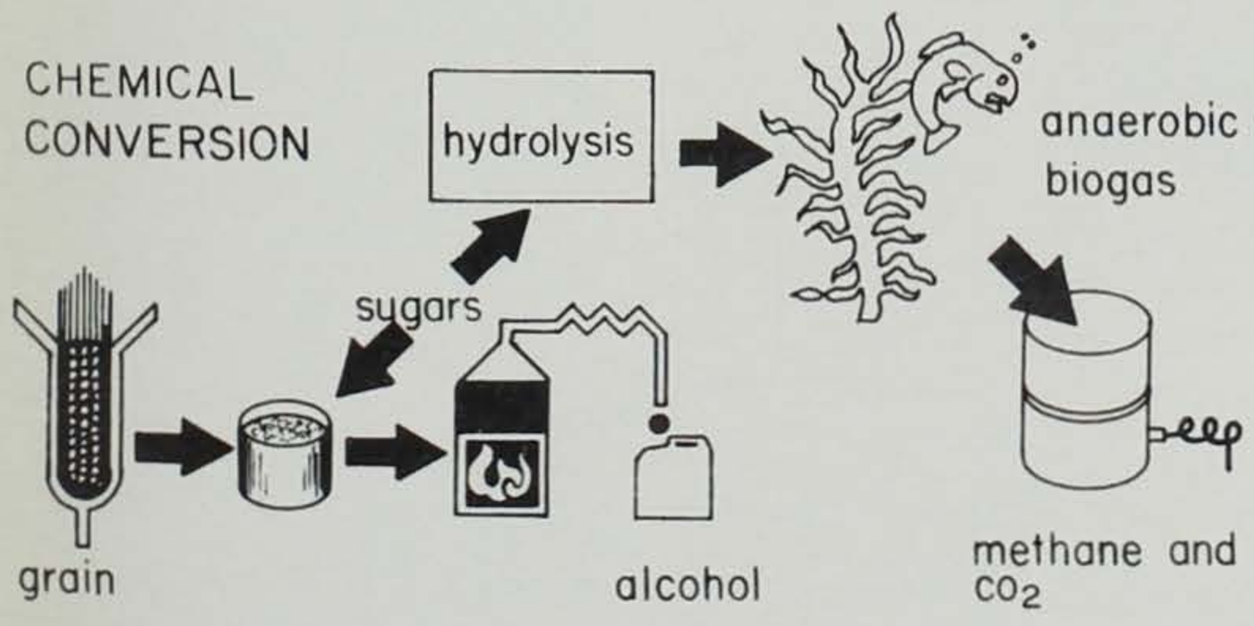
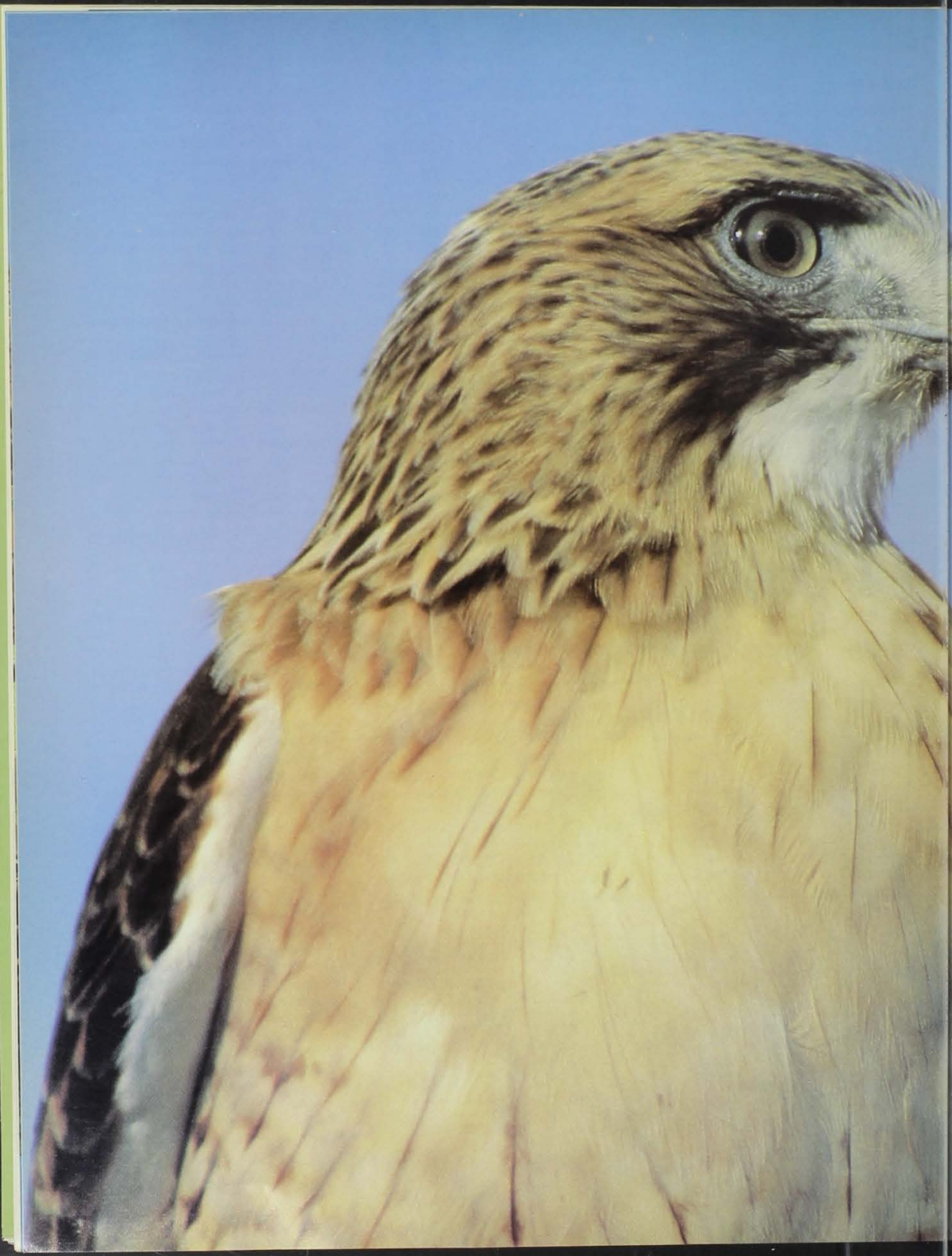
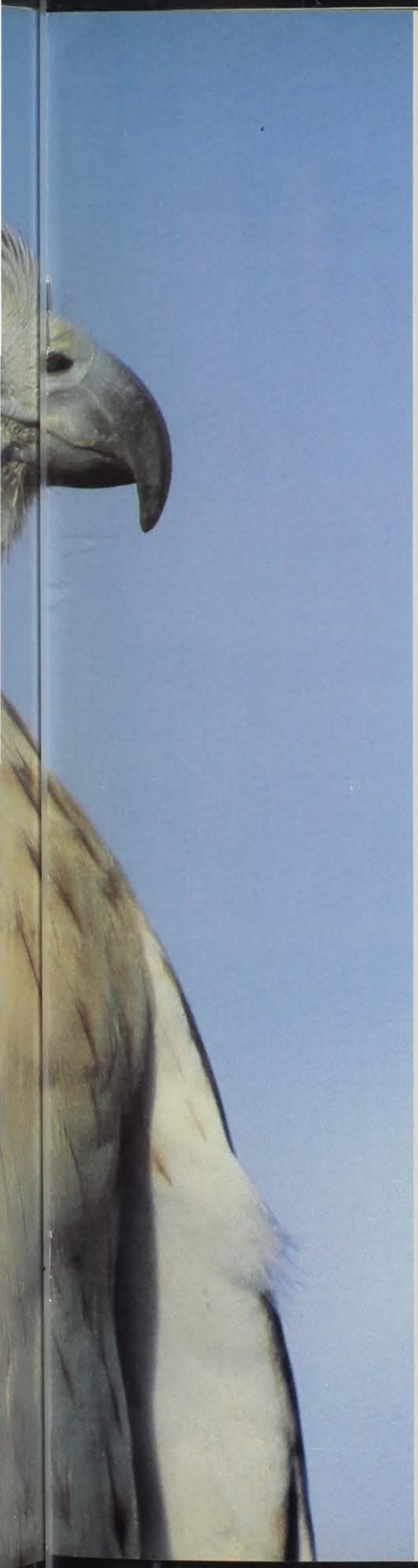






PAT SCHLARBAUM

The Migration Is On

"The predators and the prey and the places where they live are part of the wholeness of life."

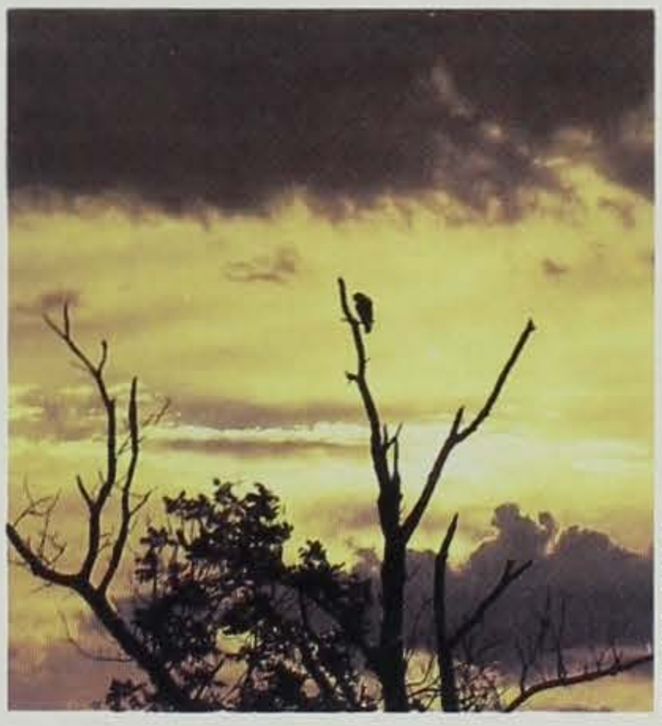
— *Paul L. Errington*

by Laura Spess Jackson

Framed by a clear blue sky dotted with cotton-candy clouds, the silhouette drifted, without flapping, across the sky. It banked against an invisible object, then on still motionless wings, slowly circled upward until it became a tiny speck dancing in and out of vision. Having played that particular wind current out, the speck once again lazily descended, at last becoming to human eyes a "hawk" until it caught the next current and spiraled upward out of sight. The hawk migration was on.

Nearly half of the world's 9,000 species of birds migrate. Although observed by people for centuries, there are still far more questions about migration than there are answers. The types of birds which typically migrate through Iowa include waterfowl, shorebirds, birds which eat insects such as warblers, vireos and flycatchers, plus predators such as eagles and hawks. Avid birders challenge themselves by trying to identify the numerous types of shorebirds and warblers which migrate through Iowa in late summer and fall in their drab winter plumage. Waterfowl hunters dream of strings of ducks setting their wings to land amongst their decoys. And a growing number of people are grabbing their binoculars and "flocking" to the highest local bluff to watch the hawks migrate.

Migration behavior evolved over a long period of time. Although debates still exist on whether the Pleistocene glaciers initiated the migratory response of birds, one thing that can be said for certain is the individuals that migrated, for whatever reason, eventually produced more young than those who did not move. These prehistoric young who adopted their parents' migratory behavior produced more migratory young until the majority of certain types of birds became migratory. However, life is not static and birds are still responding to changes in the environment. Some birds, like a population of juncos living on an island, have quit migrating. Others, such as a non-migrating



SUSAN A. KING

Red-tailed hawk (left). A hawk pauses briefly at an autumn sunset during migration (above).

population of house finches began migrating in the 1940s when it was introduced to other parts of the country.

Although migration is synchronized with seasonal changes, it cannot occur until the birds are physiologically ready and receptive to external cues. Physiologically, the birds respond to changes in daylight and other factors by altering their metabolism. This allows them to accumulate fat reserves to provide energy during migration. It also causes them to be restless. As this restlessness becomes pronounced, the birds then react to environmental cues such as changes in temperature and wind direction. This stimulates most birds to migrate, even before their northern food supply or other resources have dwindled or become unsuitable.

Styles of migrating vary widely between birds. The majority of migrants tend to flock. Most songbirds migrate at night while ducks, geese and shorebirds will migrate during day or night. Songbirds tend to migrate at altitudes of less than 2,500 feet, but may fly as high as 5,000 feet. Waterfowl normally migrate at less than 6,000 feet but may reach heights of more than 15,000 feet depending on the weather, cloud cover and terrain. Even with a tail wind, most migrants spend a lot of energy flapping their wings. However, many birds of prey literally cruise through migration, flapping their wings as little as possible.

In Iowa, 16 species of "hawks" or raptors can be seen during migration. Most of the raptors migrate alone. Traveling singly allows them to hunt for prey without interference or competition. However, several raptors may be seen taking advantage of the same wind current at the same time. One hawk commonly seen migrating through Iowa breaks this solitary rule and can be observed in large, drifting, flocks called *kettles*. Kettles of 2,000 to 5,000 broad-winged hawks have been observed in Iowa. Turkey vultures will also form large kettles and groups of several hundred have been observed roosting in the same area overnight.

Raptors which normally hunt during the day, migrate during daylight.

Buteo: Broad wings, fan-like tail. Soars, tends to hunt from perches.

Eagle: Long broad wings. Overall shape like a buteo, but much larger. Holds wings flat when flying.

Accipiter: Short, rounded wings and long tail. Woodland hunters. Tends to fly using a *flap-flap-glide* pattern.

Harrier: Long rounded wings, long tail and owl-like face. Flies very close to ground, can hover.

Falcon: Long pointed wings and long tail. Rapid wingbeat. Facial pattern includes sideburns or mustache.

Vulture: Wings similar to eagle, but "fingers" more obvious. Flight tends to be tippy and wings are held in a V-formation.

Osprey: Long narrow wings with a bend at the elbow. Seen near water.

These silhouettes help identify various raptors as viewed in the sky.

However, most migration activity does not begin until late morning. To conserve energy, most raptors float on the wind currents as much as possible during migration. One type of air current utilized by raptors is a thermal. Thermals are caused by warm air rising. The conditions for this normally do not exist until after 9 a.m. when the sunlight heats the ground. The best places for thermals to form include openings in forested areas, shorelines where the land heats faster than the water, some agricultural areas and some cities where localized areas are hotter than the surrounding landscape.

Another type of current used by raptors is the obstruction current. Obstruction currents are similar to thermals in that they are rising air masses. They are formed by obstructions such as ridges, cliffs, mountains and even buildings which force local breezes upward. The best place for obstruction currents to form in Iowa are above the bluffs which border large river valleys.

Because of their comparatively large wings, most raptors can drift upward on one of these air currents without flapping. They then glide and descend over to the next current and repeat the process — leap-frogging their way south. Hawks, eagles and vultures will commonly soar at heights of less than 10,000 feet but will sometimes soar to heights of more than 20,000 feet. To head south, however, the wind must be blowing in the right direction. Thus, during fall migration, the greatest raptor movement occurs right after a cold front. Fall cold fronts generally draw winds from the north. This provides raptors (and all migrants) with a tail

Buteos:
Broad-winged Hawk: Common migrant, forms kettles, peak migration from mid- to late September. Winters from Florida to Brazil.

Red-tailed Hawk: Most common Iowa hawk. Peaks in late September but continues through November. Some over-winter in state.

Rough-legged Hawk: Common migrant. Peaks late October through early November. Over-winters in southern Iowa.

Accipiters:
Cooper's Hawk: Uncommon migrant, peaks from mid- to late September. Winters in central U.S. to Costa Rica.

Northern Goshawk: Periodic, rare visitor. Appears in certain years from mid-September through November. Peaks in November. Normally winters in northern U.S. and Canada.

Sharp-shinned Hawk: Uncommon, peaks in late September through early October. Winters central to southern U.S. and Panama.

Falcons:
American Kestrel: Common Iowa falcon. Peaks mid-September to October. Some over-winter.

Peregrine. Rare migrant, follows waterfowl corridors. Peaks in late September. Winters in central U.S. through central America.

Osprey: Uncommon migrant. Seen near waterways. Peaks from September through October. Winters from southern U.S. to Brazil.

Northern Harrier: Common migrant in open grasslands. Peaks in mid-October. Some over-winter.

Turkey Vulture: Common migrant, forms large kettles. Peaks in late September through early October. Winters in southern U.S. through South America.

Eagle:
Bald Eagle: Common migrant and winter visitor. Begins arriving in September and numbers build through early winter.

Best times for observing some of Iowa's migrating raptors.

wind which assists their migration. Birds will avoid migrating in steady rain, foggy weather or during high winds. This contributes to "pulses" of migratory activity.

Because the raptors rely on air currents that are created by the land's topography, some areas are better for hawk watching than others. Among the best places to watch raptors in the United States are at Hawk Mountain in Pennsylvania, Hawk Ridge in Duluth, Minnesota and Cedar Grove in Wisconsin. The landscape in these areas funnel several thousand raptors through each fall. Where the birds go after they leave these major funnel areas is less well understood. Consequently, a group of Iowa biologists have been trying to document raptor movements through Iowa to be able to recognize important raptor migration habits.

This project began in 1982 along the Mississippi River near Effigy Mounds National Monument in Clayton County. Between 1,000 and 6,000 raptors have been observed using northeastern Iowa's Mississippi River valley each year. Turkey vultures, broad-winged hawks, red-tailed hawks, red-shouldered hawks, sharp-shinned hawks, Cooper's hawks, peregrine falcons and bald eagles have been regularly observed. The latter two birds are very rare and federally endangered. Thus, their use of the Mississippi River valley is particularly noteworthy and indicates that proper long-term management of this upper Mississippi River habitat will contribute to the continued survival of these species.

Information from the study allowed prediction of the peak raptor migration periods in Iowa. This enabled the Iowa Department of Natural Resources to hold hawk watches during key migration periods. In 1985, the Nongame Program in cooperation with Effigy Mounds National Monument held its first hawk watch. The DNR has since made it an annual event each September. In addition to biologists at observation areas sharing binoculars and spotting scopes with people to help them view raptors, there is also an indoor slide program about raptors and a raptor display. Last year Burke Thayer of the MacBride Raptor Rehabilitation Center in Iowa City also gave a program using live birds. The response was incredible — nearly 3,500 people had the opportunity to view migrating raptors. More than 70 birds were seen each day and rare and hard-to-identify birds flew in at close range.

This year's hawk watch will be held at Effigy Mounds National Monument on September 24 and 25 and will include indoor programs similar to last year. Observation areas will be open from 11 a.m. until 5 p.m.

If you cannot attend a hawk watch, you can still enjoy hawk watching throughout Iowa. Remember that the best viewing is after the thermals have started rising and the viewing is particularly good after a cold front moves through the area. Many beginning hawk watchers find it difficult to distinguish one bird from another — do not worry, you will never see a scientific data sheet for hawk observations that do not include an "unknown" category. To help you identify the bird, you will want to become familiar with the overall shape and style of the flying of different types of raptors. Once you know what type of raptor the bird is, you can begin identifying which species you are observing.

For further information on raptor migration contact the DNR's nongame biologists at 515/432-2823 or 515/281-4815.

Laura Spess Jackson is an urban biologist for the department and is located in Des Moines.

The Lost Is Found

Honey Creek State Park

by Brent Laning

I said, "Honey Creek State Park."

"Where is that?" he asked.

"On the north shore of Lake Rathbun."

"I've heard of that. Where is it?"

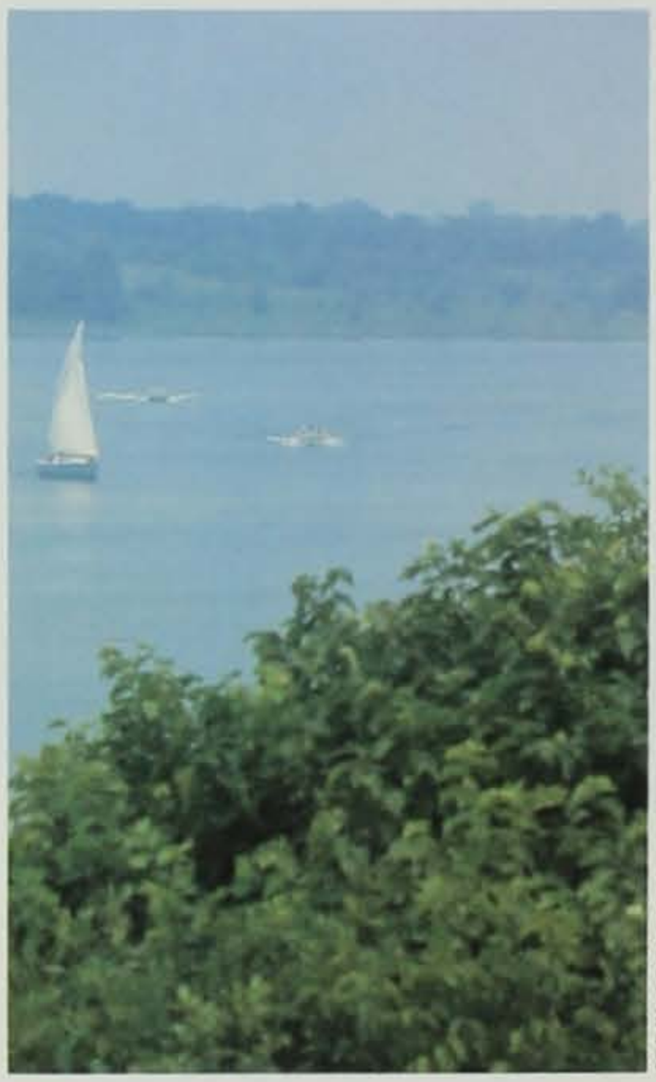
"Near Centerville."

"Oh...is that in Iowa?"

And so it goes nearly every time I mention to someone where I work as a park attendant. Having grown up in Indianola and spent most of my leisure time on Saylorville Lake, there really was not much I knew about Rathbun either before I started working here.

For those of you who are not familiar with Iowa's largest lake, let me help. Located on the Chariton River in Appanoose County, Rathbun Lake's dam is 10,600 feet long, 800 feet wide at the base and more than 100 feet above the stream bed. At its normal elevation, Rathbun contains 11,000 acres, but can hold up to 21,000 acres at maximum level.

Public use around Rathbun Lake is centered on eight park and recreation areas, six of which are managed by the U.S. Army Corps of Engineers. The other two are leased form the corps, one to a private concessionaire and the other, Honey Creek State Park, is managed by the Iowa Department of Natural Resources.



JERRY LEONARD

Located on Iowa's largest lake — Rathbun — is Honey Creek State Park.

Honey Creek is located on the north shore of the main body of Lake Rathbun. The park consists of 850 acres of land and is bordered on three sides by water. On its north and east border is the channel by the stream named Honey Creek. The southern exposure of the area faces the main body of the lake itself.

For the outdoor enthusiast, Honey Creek State Park is rich in variety. Foremost on the list of activities would have to be fishing. The park's central location on Rathbun Lake makes getting to the best fishing spots relatively easy. The greatest number of fish caught are crappie. However, other species stocked in the lake include walleye, channel catfish, bass and tiger muskie.

Fishing is not the only water-related activity available to visitors at Honey Creek. Rathbun Lake's size provides plenty of room for sailing, pleasure boating and water skiing. On calm days, canoeists can even find places to go for paddling in solitude.

As with other parks near bodies of water, Honey Creek has its own share of swimmers and sunbathers during the hot summer months.

People who do not participate in water-related activities have numerous other pursuits to keep them busy at Honey Creek. Large, well-shaded picnic areas provide relief from the scorching sun. Three open shelters overlook the lake and almost always have a nice breeze to keep things cool. Several miles of foot trails snake through the forest, and a careful observer may catch sight of some of the wildlife that abounds in Honey Creek.

Nearly every day, park visitors report seeing white-tailed deer. In the

RON JOHNSON

Fishing and boating enthusiasts will find an enjoyable atmosphere at Honey Creek State Park.

spring, it is not uncommon to witness a doe and her fawns quietly grazing along the edge of the road before they go bounding, into the dense foliage. Another delight for wildlife lovers is the sighting of an elusive flock of wild turkeys. Since their re-introduction into Iowa in the mid-1960s the big woodland birds have greatly increased in numbers. The mature oak-hickory forest in the park provides plenty of good food and protection for several flocks.

For the camper there is a modern campground with showers and flush toilets. There are more than 150 sites to chose from, most of which are conveniently located near the shower building. Electricity is available at 26 campsites, and an additional 14 have full water, sewer and electric hook-ups. For the hearty souls who like to brave winter's fury, the heated shower building is open year round. However, the full hook-ups are closed from late October until early April.

In the eastern section of Honey Creek you will find an area of historical significance. While driving to the end of the park road, you pass several low earth mounds rising about one and one half feet above the surrounding land. These mounds were constructed by ancient people as long ago as 200 B.C. Through scientific testing archaeologists believe that the 16 mounds are burial sites built by Hopewellian people during the woodland period.

The staff of Honey Creek State Park invites you to visit the area soon to find out for yourself the beauty and serenity of southern Iowa and Rathbun Lake in particular. For more information about Honey Creek, contact the park office at Rte. 2, Moravia, Iowa 52571. We'll be looking forward to seeing you.

Brent Laning is a park attendant at Honey Creek State Park.

CONSERVATION UPDATE

DNR TO CONDUCT SIMULATED ENERGY EMERGENCY EXERCISE

by Phil Svanoe, chief, energy bureau, and Monica Stone, energy bureau intern

Among the Department of Natural Resources energy bureau's most important objectives this year is to revise and update Iowa's Energy Emergency Preparedness Plan. Events in the Mediterranean in the recent past are constant reminders of the shortages and increased fuel prices of 1973, 1979 and 1981. These events could unfortunately lead to further escalation of tension and a cut-off of mideastern oil or sabotage of strategic energy distribution terminals in the United States.

The DNR's energy bureau is helping eliminate a potential energy crisis with Iowa's Energy Emergency Preparedness Plan.

In an effort to prepare for a possible energy emergency, the energy bureau staff recently attended an energy crises gaming exercise sponsored by the U.S. Department of Energy. Federal, state and private industry officials from around the country were invited to meet and act out the planning responses to several energy crises scenarios. In this exercise held at the Argonne Laboratory in Chicago, Illinois, several key issues and needs were identified. These include: a need for quick delivery of accurate information and data from industry and government, the psychological and physical need to use the strategic petroleum reserve (crude oil stored by the federal government in salt mines in Louisiana and Texas), the need for states to coordinate with other states in the region and to utilize a "set-aside" petroleum allocation system for distribution of transportation fuel for critical emergency services.

The energy bureau plans a simulation exercise for Oct. 3-7, 1988, to test its energy emergency preparedness procedures in Iowa. The gaming exercise will involve key state officials and DNR staff, private industry, local government, the media and federal government representatives. This exercise will familiarize staff with procedures they will use in an actual emergency. The key objectives of the exercise are to provide an opportunity to practice responses to extraordinary emergency events, allow the players to network with each other under crisis conditions, help identify data and information requirements, test communications, force players to appreciate time and space requirements of various emergency tasks, assess the administrative requirements of the crisis management team, reveal potential conflicts and policy differences, and finally allow the collective players (government, industry, media, public) to review the way they interact in an energy emergency. Effective gaming will result in the improvement of plans and an increased readiness in the event of an actual emergency.

For more information on the energy bureau's emergency preparedness exercise, contact Katherine Sibold, Department of Natural Resources, Wallace State Office Building, Des Moines, Iowa 50319-0034, (515)281-6486.

GROUNDWATER EDUCATION FOR IOWA SCHOOLS

Much progress has been made in developing groundwater education materials and teacher workshops for Iowa schools in the past year. These cover groundwater issues such as the use of fertilizers and pesticides, abandoned waste sites, leaking underground storage tanks and landfills, handling hazardous materials, and other sources or direct paths of contamination.

Subjects or grades to be targeted in the groundwater education program include, in priority order:

1. Life/Earth/General Science (7th-9th)
2. Vocational Agriculture (8th-12th)
3. Biology and Environmental Problems (9th-12th)
4. Chemistry (11th-12th)

5. Upper Elementary (4th-6th)
6. Home Economics and Industrial Arts (7th-12th)

Three projects funded to date are:

1. The University of Northern Iowa conducted two one-week workshops for 50 teachers this summer with materials called "OUTLOOK on Groundwater."

2. Iowa State University is developing materials for vocational agriculture which will be ready for teacher workshops next summer. One goal of the in-services is to reach 60 percent of the 260 vocational agriculture teachers in Iowa.

3. GREAT (Groundwater Resources and Educational Activities for Teaching) are materials that were developed this summer for seventh to ninth grade science and are cosponsored by the Department of Natural Resources and Department of Education. These materials will be tested in classrooms in the fall and will be ready for teacher workshops next spring or summer. One objective for this program is to in-service 85 percent of the 940 teachers in this area during the next four years.

For further information on groundwater education, contact Gail George, Iowa Department of Natural Resources, Wallace State Office Building, Des Moines, Iowa 50319-0034, or call the Groundwater Protection Hotline at 1-800-532-1114.

SHOREBIRD MIGRATION UNDERWAY

Fall shorebird migration is underway. Even though there are only a few hints of autumn, shorebirds (sandpipers, plovers and the like) are already heading south for the winter. During the last week of July about 300 shorebirds of eight different species were observed at Hendrickson Marsh in southeastern Story County. According to Doug Reeves, nongame wildlife biologist, shorebird migration through Iowa will probably peak in early September.

Reeves explained that because of abnormally low water levels, there are large expanses of exposed mudflats in wetlands across Iowa. These areas are especially attractive to shorebirds and provide excellent opportunities for viewing. Reeves explained that conditions are not normally this good for observing shorebirds. "It is one of the few benefits of this year's drought," said Reeves.

Identifying shorebirds can be very challenging. Collectively called "peeps" the smaller sandpipers are particularly difficult to identify. Reeves recommends a spotting scope or good pair of binoculars for viewing the birds. He noted that researchers in some areas have been placing small colored markers called "flags" on the legs of some shorebirds to determine their migration routes. Seeing one of these birds and reporting it is an added benefit to a shorebird outing.

Good places to observe shorebirds are found throughout Iowa. Shallow water areas around Saylorville, Red Rock, Rathbun and Coralville Reservoirs as well as Dunbar Slough (Greene County), Sweet Marsh (Bremer County) and most of the wetlands and lake shores in Emmet, Clay, Dickinson and Palo Alto Counties are good viewing areas.

1988-89 FEDERAL DUCK STAMP AVAILABLE

The 1988-89 Migratory Bird Hunting and Conservation Stamp, commonly called the federal duck stamp, is now available for purchase at post offices and most national wildlife refuges. The cost of the stamp is $10 and is required for all waterfowl hunters 16 years of age or older. The stamp is valid through June 30, 1989.

The duck stamp is also accepted as an entrance permit to national wildlife refuges. While a $2 daily vehicle permit is available, the duck stamp serves as an annual pass and will admit everyone in the vehicle.

This year's duck stamp features a single lesser snow goose flying over a marsh at dawn's first light. Proceeds from stamp sales are used by the U.S. Fish and Wildlife Service to acquire wetlands and national wildlife refuges for waterfowl and other wildlife.

BALD EAGLE

During fall migration and the onset of cold weather and freezing temperatures, the bald eagle makes an appearance in the marsh. According to Ducks Unlimited, as temperatures drop, the marsh freezes over and the areas of open water diminish. Sometimes sick and crippled waterfowl are trapped with no hope of escape — it's either starve or freeze to death. Bald eagles will patrol the shrinking water area, snatching up these birds off the water and the ice.

AG DRAINAGE WELL REGISTRATION EXTENDED TO SEPT. 30

The deadline to register agricultural drainage wells with the Iowa Department of Natural Resources has been extended to Sept. 30, 1988. The registration requirement is a result of the Groundwater Protection Act passed by the state Legislature in 1987. All ag drainage wells are required to be registered with both the DNR and the U.S. Environmental Protection Agency (EPA) and registration with one does not eliminate the requirement to be registered with the other.

No fee is required to register agricultural drainage wells, but landowners must complete a special form to register the wells with the DNR. Approximately 300 wells had been registered with the DNR by the original deadline of Jan. 1, 1988.

A special form is also required to register wells with the EPA and should be requested by calling the EPA at (913)236-2815 or writing the Water Division of the U.S. E.P.A., Region 7, 726 Minnesota Ave., Kansas City, Kansas 66101, Attn: Vic Ziegler or Kurt Hildebrandt. No fee is required for registering ag drainage wells.

Many ag drainage wells are more than 80 years old and were constructed before the widespread use of agricultural chemicals. The wells threaten underground aquifers by channelling surface runoff and tile drainage and associated pollutants into the groundwater. Once contaminated, it is either very expensive or impossible to purify the groundwater. About 80 percent of Iowa's drinking water comes from groundwater.

The Iowa Department of Agriculture and Land Stewardship (DALS) is conducting research and demonstration programs to find alternatives which eliminate contamination of groundwater through drainage wells. The groundwater law sets July 1, 1995, as the target date to eliminate groundwater contamination from ag drainage wells. Based on the research and demonstration project results, the DALS will be initiating a program to assist ag drainage well owners to meet the requirements of the law.

Registration forms are available from county boards of supervisors' offices, County Extension Service offices, by calling the DNR at (515)281-5145, or writing Department of Natural Resources, Wallace State Office Building, Des Moines, Iowa 50319-0034.

You do not need a thermometer to figure out the temperature, International Wildlife *magazine reports. All you have to do is listen for the snowy tree cricket in late spring and early fall. Count the number of churps in 15 seconds and add 39. The total is the temperature in Fahrenheit.*

Morris Kay (left), EPA Region 7 administrator, presents Dirk Jablonski (utilities engineer), William Stangler (plant supervisor) and Royce Hammitt (pretreatment coordinator), with EPA's 1988 Operations and Maintenance Award. The Mason City sewage treatment facility was recognized as the best operated and maintained plant of its kind during 1987 in Region 7's four states of Iowa, Missouri, Kansas and Nebraska.

MASON CITY SEWAGE TREATMENT PLANT RECOGNIZED BY EPA

The municipal sewage treatment plant in Mason City was recognized by the U.S. Environmental Protection Agency (EPA) as the best operated and maintained plant in the category of "Advanced Treatment of One to 10 Million Gallons a Day."

The EPA's Regional Operations and Maintenance Excellence Awards were given to four plants in the region's four states of Iowa, Missouri, Kansas and Nebraska.

The Mason City facility uses a trickling filter/activated sludge process. A very high quality effluent is produced to protect the water quality of the Winnebago River. To optimize energy conservation the plant has installed a smaller, more efficient blower and has switched to diesel fuel for primary power.

Iowa's Mason City plant is also in competition for EPA's national awards program to be announced in October.

1988 IOWA WILDLIFE FEDERATION AWARDS ANNOUNCED

The winners of the 1988 Conservation Achievement Awards have been announced by the Iowa

Wildlife Federation (IWF).

"The awards are presented each year to the outstanding conservationists in the state," said Loren Forbes, I.W.F. president.

Each of the 10 winners will be honored at the I.W.F.'s Oct. 22 banquet in Coralville. "This is the highest number of awards we have ever given in a year," said Forbes. "We are looking forward to next year, when we hope we can name winners in all 12 categories."

The categories and winners are:

Governor's Award (Outstanding Conservationist): Laurena Hammes, Sigourney; Conservation Communicator: Dana Allan Larsen, Lakeside; Legislative Conservationist: Ralph Rosenberg, Ames; Conservation Educator: Cecelia Burnett, Ames; Hunter Safety: Sonny Satre, Des Moines; Conservation Organization: Johnson County Izaac Walton League of Iowa City; Wildlife Conservationist: Tom Utter, Columbus Junction; Water Conservationist: Lawrence Schaffer, Manchester; Soil Conservationist: John and Lucina Pitsch, Sigourney; and Forest Conservationist: Herbert Kersten, M.D., Fort Dodge

Awards were not given this year in the categories of Youth Conservationist and Air Conservation.

The Iowa Wildlife Federation is an organization dedicated to conservation and education projects and is affiliated with the National Wildlife Federation.

A STRATEGY FOR SAFETY

Whether it's the carefully mapped-out hunting strategy of a six-member deer camp or simply the way you and your partner decide to approach a piece of heavy cover, a well-planned hunt is often the key to a successful hunt. But while success may be the objective, safety must always be the primary consideration of any plan or strategy in the field.

Keep in mind that accidents in the "line-of-fire" category rank high on the list of the most common types of accidents that occur each season. Such incidents, for example, include situations in which the victim was out of sight of the shooter, was covered by a shooter swinging on game, or moved into the line of fire. While not every accident can be wholly attributed to a single cause, careless positioning or indiscriminate movement in the field are typically major contributing factors to these types of hunting accidents.

Most "line-of-fire" accidents involve members of the same hunting party so, before you head out, be sure to keep these safety points in mind:

- When hunting with others, always spend some time planning your hunt before you head out. Whether you'll be hunting from fixed positions or moving through an area, your first consideration should be that no one in your group will end up in the line of fire of another.

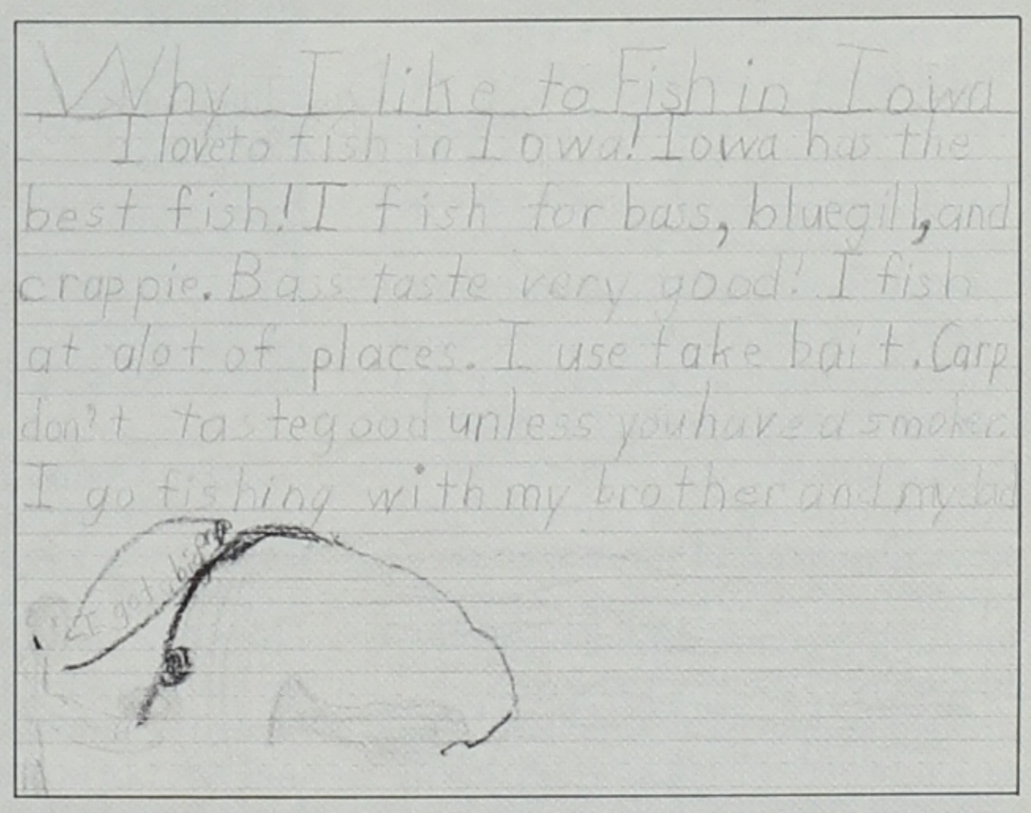
- Once you've agreed upon a strategy, stay with it throughout your hunt. If you need to move to another location, or change your line of travel, be sure to let your partners know.

- When hunting in heavy cover or in poor light conditions, extra caution is called for. Remember, if you don't know where your partner is, you can't know in which direction it's safe to shoot.

- Hunter orange clothing not only helps in avoiding the risk of being mistaken for game, but is also a great aid in helping you maintain visual contact with your partners.

- Matching your strategy to the game you're hunting is important not only in terms of success, but safety as well. For example, never try to stalk a turkey.

- When hunting from close quarters, such as a pit or blind, be sure you and your partner understand each other's safe zone of fire.


Why I like to Fish in Iowa
I love to fish in Iowa! Iowa has the best fish! I fish for bass, bluegill, and crappie. Bass taste very good! I fish at alot of places. I use fake bait. Carp don't taste good unless you have a smoker. I go fishing with my brother and my da

As a part of their aquatic education program, the Department of Natural Resources held the first "Why I Like to Fish in Iowa" essay contest. The contest, held last May in conjunction with National Fishing Week, was open to elementary school children across the state of Iowa.

Dan Tungesuik a second-grade student at Lowell Elementary School in Boone, won the contest. Above is his winning entry. Dan received a set of fishing tackle, courtesy of Berkley Co.

"The essay contest is just a small part of the department's aquatic education program," according to Don Bonneau, fisheries research supervisor with the DNR. "With the aid of the Wallop-Breaux Funds, we have launched an extensive aquatic education program in 1988. Through the program we hope to make people more aware of what is there and how to enjoy it."

Page County's Pioneer Park

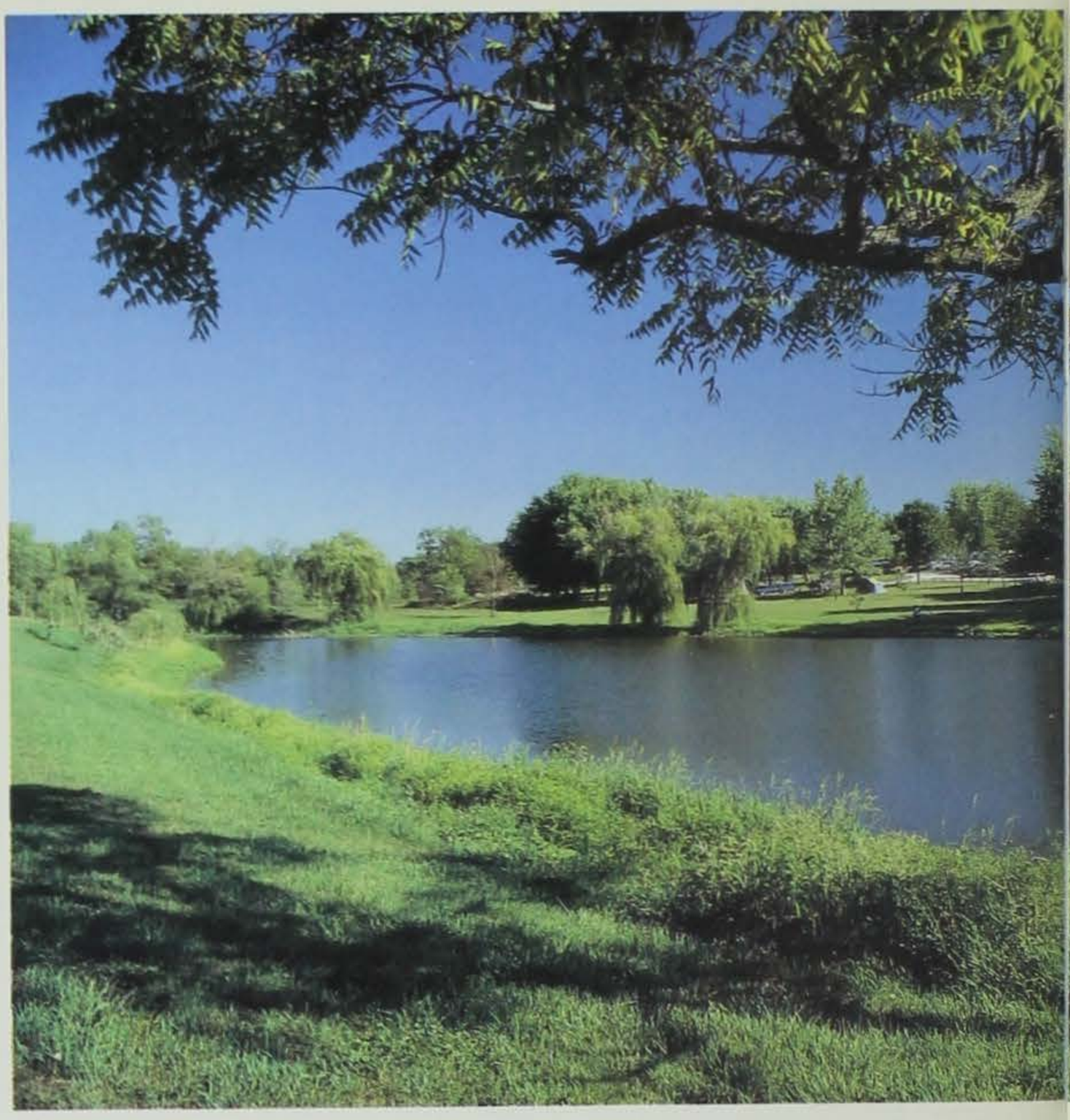
Story by Jerry Abma
Photos by Ron Johnson

Pioneer Park, located in central Page County in southwest Iowa, was one of the first county parks opened in Iowa after the establishment of the county conservation board system in 1957.

At one time, the 22-acre park had been part of a soil erosion experiment farm owned by the state of Iowa. A number of experimental tree and shrub plantings were made on the farm, accounting for the unusual and non-native tree and shrub species growing in the park today. The Civilian Conservation Corps also worked on the site in the 1930s and constructed several rustic fireplaces. The park received considerable use even before World War II from business and farm groups.

After the Page County Conservation Board purchased the area in 1958, the conservation board graded the area and constructed a dam and a small pond. Since then, a shelter house, rest rooms, showers, playgrounds and camping areas have been added to the park.

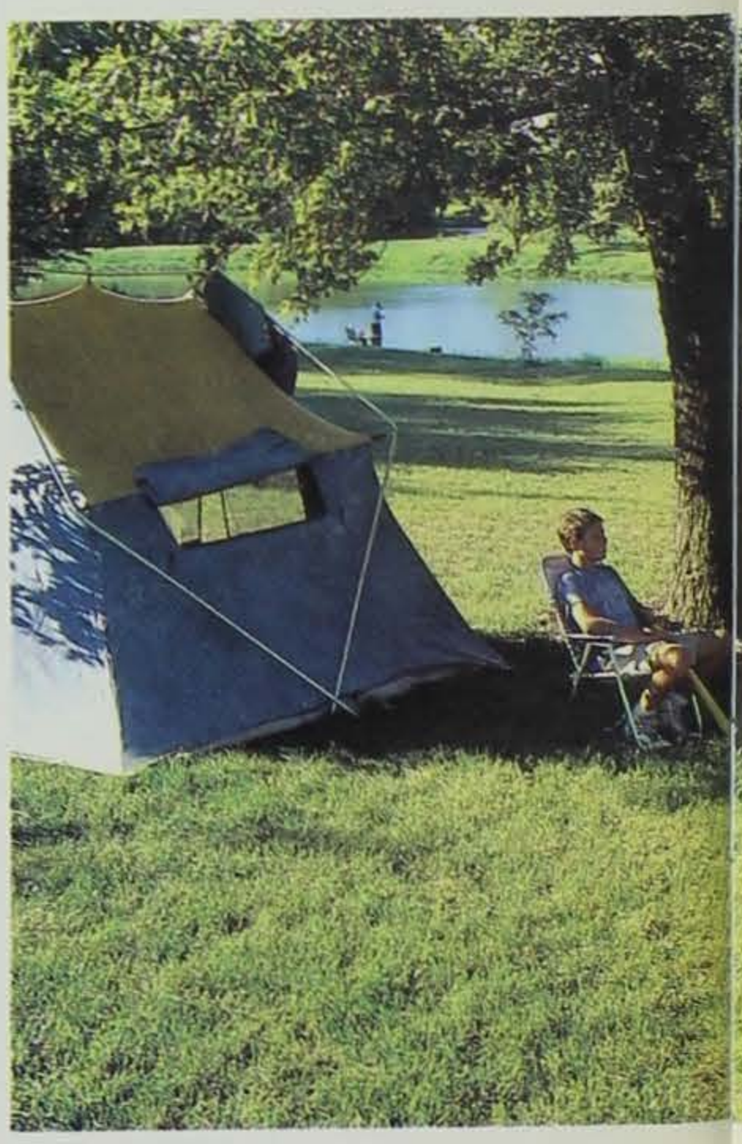
Playground equipment, a ball diamond, a nature trail and a large shelter in a cool, open setting adds to the appeal and attractiveness of the county park. Plans for the future include developing a second nature trail and adding some nongame wildlife plantings.



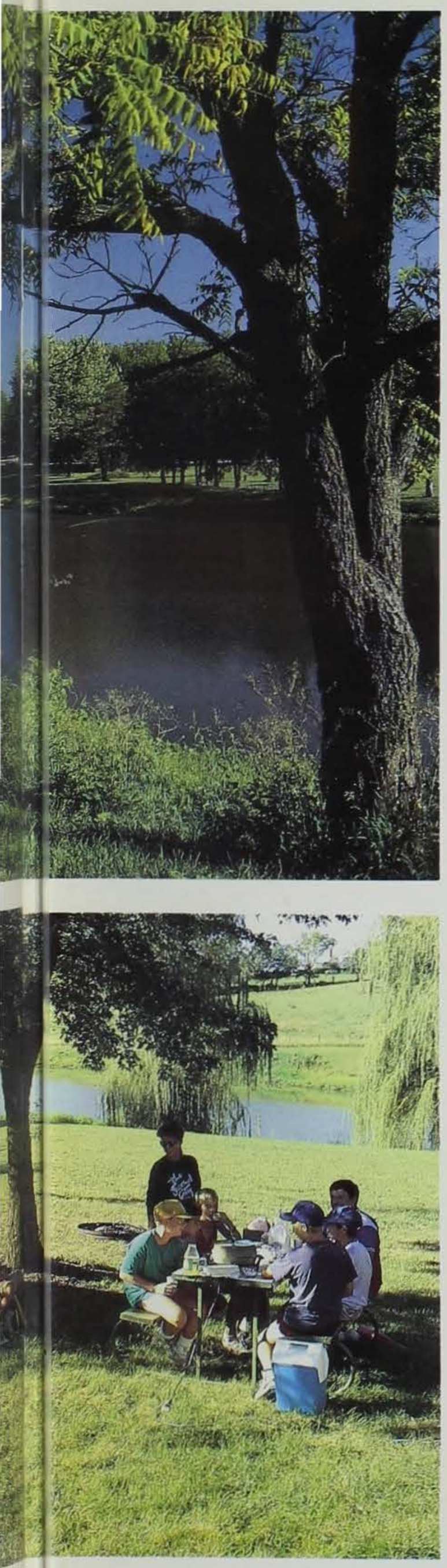
Today, Pioneer Park, named in honor of the pioneer settlers of Page County, receives heavy use by picnickers and campers. Its two-acre pond provides many hours of fishing for families with its population of bluegill, channel catfish, bullhead and even an occasional seven-pound bass. Pioneer Park's 10 electrical campsites provide a popular camping area for residents of the county and for visitors traveling along Highway 2 across Iowa.

So, while traveling Highway 2 in Page County, stop in at Pioneer Park for a visit.

Jerry Abma is the director of the Page County Conservation Board.



Pioneer Park, named in honor of the pioneer settlers of Page County, offers its visitors a wide range of activities.



CALENDAR

SEPTEMBER 10 AND 11

Chichaqua Wild Game Expo. Exhibits of sporting goods and hunting and fishing areas, outdoor shooting sport events, rendezvous encampment, demonstrations and displays. For more information, contact Mark Thompson, Polk County Conservation Board, Jester Park, Granger, Iowa 50109, (515)967-2596.

SEPTEMBER 11

Hopeville Rural Music Reunion. Hopeville Square County Park is the location for a music festival. For more information, contact John Klein, Clarke County Conservation Board, Clarke County Courthouse, Osceola, Iowa 50213, (515)342-3960.

SEPTEMBER 15-17

National Manufacturers Walleye Tournament. Fishing tournament on the Mississippi River, Dubuque County. For more information, contact KDTH, 8th and Bluff, Dubuque, Iowa 52001, (319)588-5700.

SEPTEMBER 17

Buckskinner's Rendezvous. Russell Wildlife Area, north of Oskaloosa in Mahaska County is the location for a knife throw, shooting, trap setting, crafts, Indian history and fossil find. Fee charged. For more information, contact Jackie Brenner, Mahaska County Conservation Board, Rte. 3, Box 136A, New Sharon, Iowa 50207, (515)673-9327.

SEPTEMBER 24 AND 25

Fort Atkinson Rendezvous. Buckskinners, period costumes, food and crafts, military drills and theatrical productions within the historic fort walls. For more information, contact Scot Michelson, Volga River State Recreation Area, Rte. 1, Box 72, Fayette, Iowa 52142, (319)425-4161.

SEPTEMBER 24 AND 25

Festival of the Forests. This second annual event will take place at Pioneer Park in Page County. Activities include crafts and displays and demonstrations on forestry and wood-related subjects. For more information, contact the Page County Conservation Board, Courthouse, Clarinda, Iowa 51632, (712)542-3864 or (712)542-5498.

OCTOBER 8 AND 9

Heritage Days. Osborne Pioneer Village in Clayton County is the location for pioneer crafts and skills. For more information, contact Clayton County Conservation Board, Osborne Conservation Education Center, Elkader, Iowa 52043, (319)245-1516.

OCTOBER 8 AND 9

Forest Crafts Festival. A festival of wood crafts and demonstrations, chain saw carvers, buckskinners and an operating sawmill at Lacey-Keosauqua State Park in Van Buren County. For more information, contact Lacey-Keosauqua State Park, Box 398, Keosauqua, Iowa 52565, (319)293-3502.

OCTOBER 8 AND 9

Covered Bridge Days Open House. Open house at Pammel State Park in Madison County with guided nature walks and hayrides. For more information, contact Pammel State Park, Rte. 3, Box 106, Winterset, Iowa 50273, (515)462-2188.

WARDEN'S DIARY by Jerry Hoilien

This one you are probably not going to believe, but here goes anyway. It was a beautiful fall day, and I was on patrol in northeast Iowa. The leaves were turning all their fantastic colors and the sky was deep blue. Gosh it was great to be alive. My radio squawked, and it was the sheriff's office calling. Abbey, the radio dispatcher could always find me, no matter where I went. Checking in, she told me of a call from a farmer's wife way up in the other end of the county. Seems her husband was picking corn and had come across two big buck deer locked together. Said to hurry! Now, there are no straight lines in Allamakee County, but I took the fastest route.

As I pulled up to the bunch of cars parked on the gravel, I could see people with cameras walking around in the picked part of the field. The huge combine was parked right out in the middle. The fella opened the cab door and waved to me, "Come on." It was a fair hike and as I climbed up the ladder on the side he pointed to an area in the unpicked corn.....

There they were, two of the biggest bucks I had seen in a long time, locked together in mortal combat. Their antlers had caught straight on, and when they moved sideways, they knocked down about 10 rows of corn at a time.

"Have you got a rifle," he inquired? *Oh sure, good time to think about that, Jerry, you're 20 miles from home*. Only thing I had along was my issued four-inch .357 revolver.

"Maybe I can get you close with the combine," he suggested, but when he started it up, they just moved away some more — again taking down corn, 10 rows at a time. "Don't worry about the corn," he yelled. "I can get that. Just see what you can do about getting them apart. The one's about done in."

He was right. One was down now and being dragged around by the other.

I climbed out and hollered for everyone to get back to the road. I didn't want anyone around for what I had in mind. They apparently had used up all their film anyway and moved back to watch. What a deal. As I climbed down to the ground, the one buck tried to run off, knocking down a big circle of corn. He was solidly anchored to his downed opponent. I approached slowly, but he was watching me with one eye as he struggled in vain. He was about done in, too. Studying the antler, I wondered if I could possibly shoot the dying one's antler off, releasing the strong one. Too darn far for a pistol. Sure wished I'd had a rifle. I tried getting close, but he just ripped and snorted. *Well, I thought, old boy, I'm gonna try!* I spread my legs, locked up both arms, and cocked the gun. There aren't any posts to steady you in the middle of a corn field.

"That's a mighty long shot, warden!" the voice came from the combine.

"I know!" I replied, but what could I do. Steady squeeze, slowly, WHAM! The strong buck went down like he was pole-oxed. Darn! Too low. There was a long groan of disapproval from the people on the road.

"Well, you killed that one deader than a tack-hammer!" the farmer mumbled.

"Yep, sure did," I said.

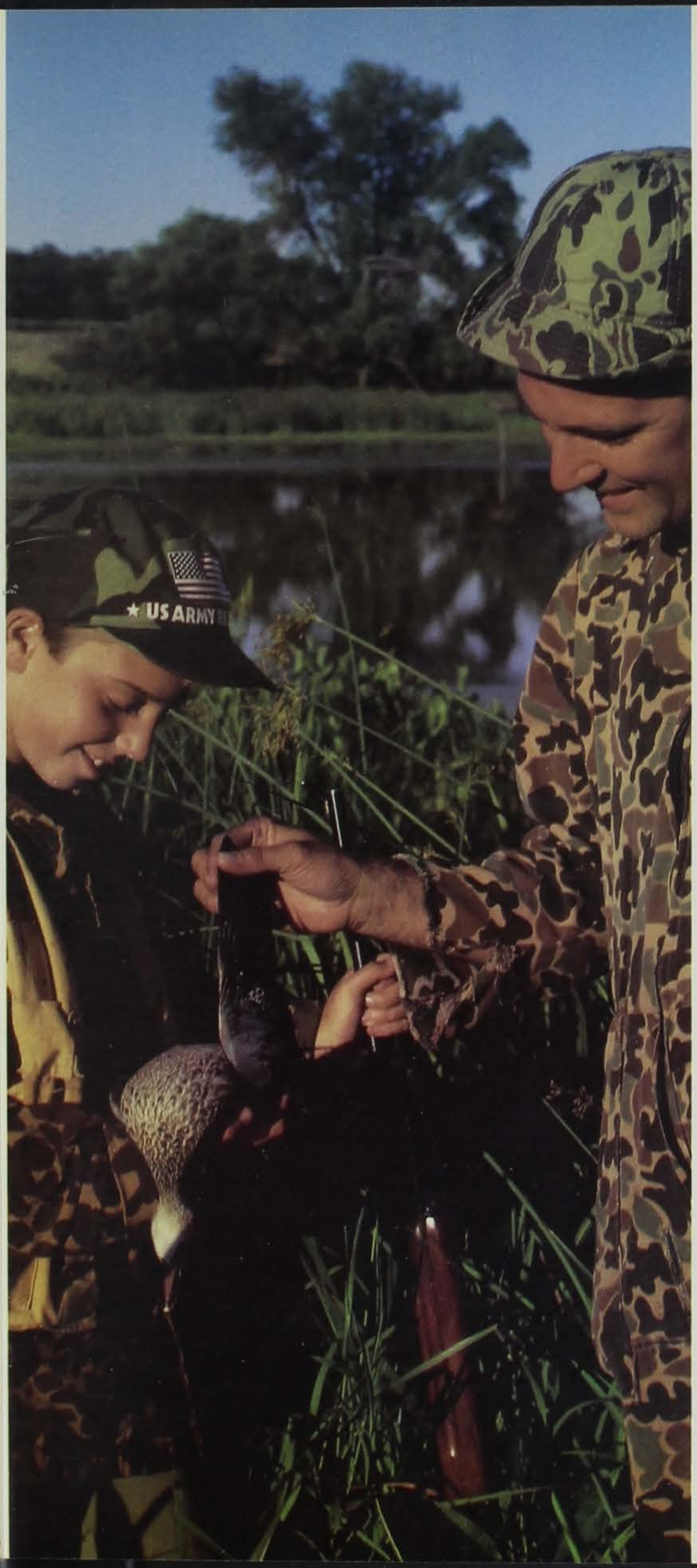
What a thing to do and right in front of everybody, I thought, as I slowly approached the two downed animals. Suddenly the exhausted one tried to get up but was too weak to lift the other one. Now, I was close enough for my pistol. Maybe I could still shoot an antler off and one would survive. I took careful aim. Don't want two dead ones. Wham! What a reaction. The exhausted one bounded straight up. He was free! Without a backward glance, he bounded out across the corn field amid cheers from the crowd.

Well, at least one made it I thought as I approached the one on the ground. His broken antler lay beside him, splintered and shot off close to his head. As I reached down to pick it up, he opened one eye, but didn't move. I jumped back quickly, still he didn't get up. I though he was stone dead from my first shot. We stood there in the middle of that field looking at one another.

"Are you going to get up or lay there all day?" I shouted at him, wondering just what I was going to do if he did jump up and come at me. With this, he bounded to his feet, shook his one-antlered head at me and off across the corn he went. You should have heard the crowd. I had a white hat on for sure, as far as they were concerned. I thought I had killed him with my first shot but had apparently only knocked him out.

"That's the greatest exhibition of shooting I've ever seen in my life!" I heard the excited farmer shout, as he banged me across the back, "Can I have that?" he asked reaching for the antler that was still in my hand. Two hits on the same antler; matter of fact, part of the slug was still embedded in part of it.

Talk about luck. I guess the story made the rounds, and like all stories, it got even better with the telling. Now this all took place years ago when I was younger and steadier, too. The ol' gentleman I had given that antler to has gone on, but an ASCS man recently told me his wife still had the antler. She lent it to me so I could take this picture. BELIEVE IT OR NOT!



LOWELL WASHBURN

A Memory of Duck Hunting

by Lowell Washburn

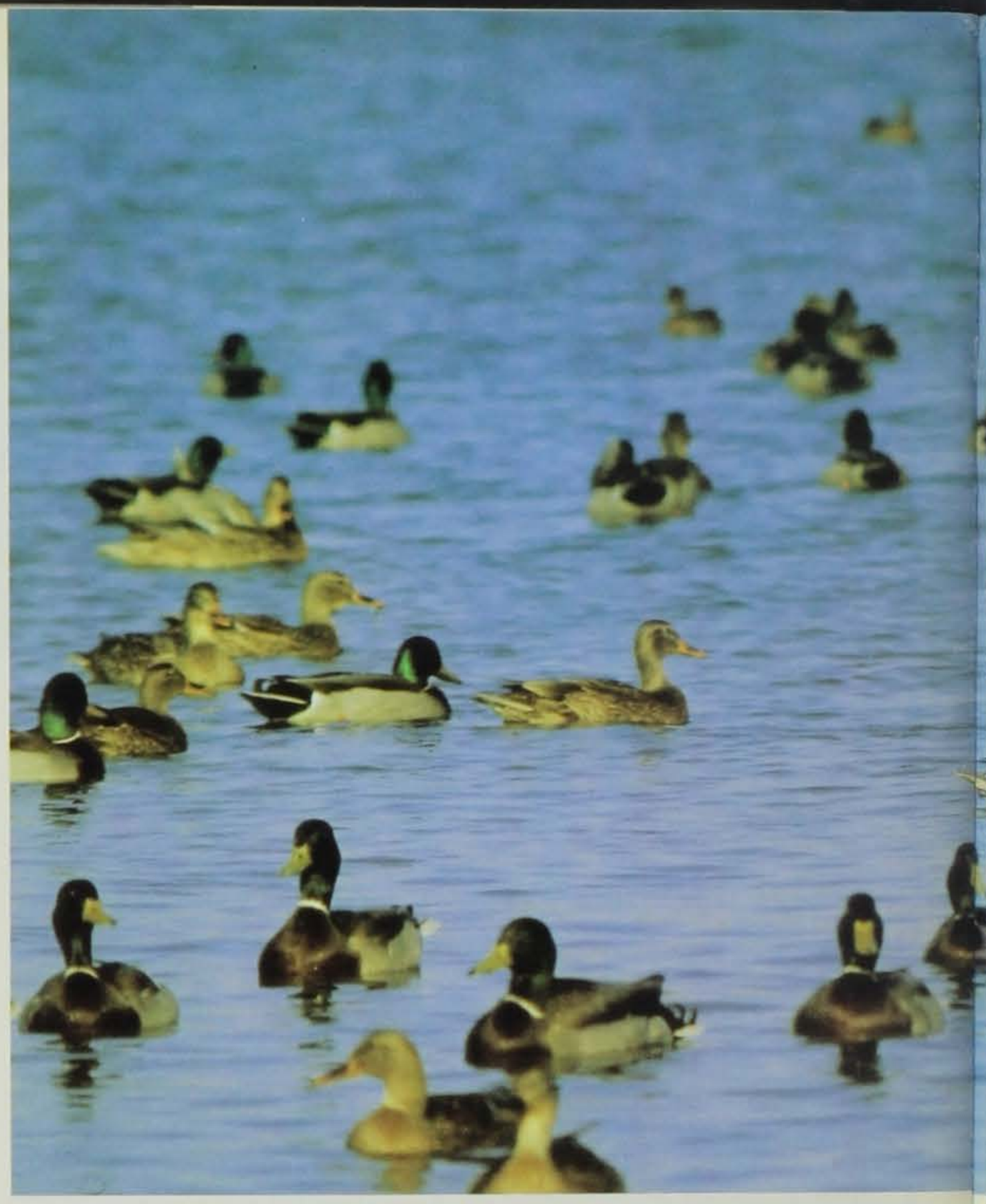
My first Iowa duck hunt took place 30 years ago on a backwater pond of the Winnebago River in northern Cerro Gordo County. My dad and I had decided to make a camping trip of the event, and we took off Friday afternoon after school was out.

We pitched our camp on an oak-studded knoll that sloped down to a marshy area. Although we hit the sleeping bags shortly after supper, I was so keyed up over the coming duck hunt that I barely slept a wink.

The season did not open until noon on opening day, and we spent most of the morning just watching as flock after flock of ducks buzzed the pond where we planned to hunt. At long last, Dad headed down to the water with a pair of gunny sacks filled with decoys. After these were placed, we prepared a blind on the shoreline, and Dad just sort of stepped back to see what would happen.

The first flock of blue-winged teal was not long in appearing, and the tight formation was soon sizzling its way through the air space above our pond. They spotted the decoys, executed a sharp bank, and came scorching back toward the blind. Within seconds, the birds were noisily splashing among the blocks.

Iowa's 1988 waterfowl stamp, a pair of pintails designed by Mark Cary of Des Moines, may generate more than $200,000 this year to be used for waterfowl habitat.



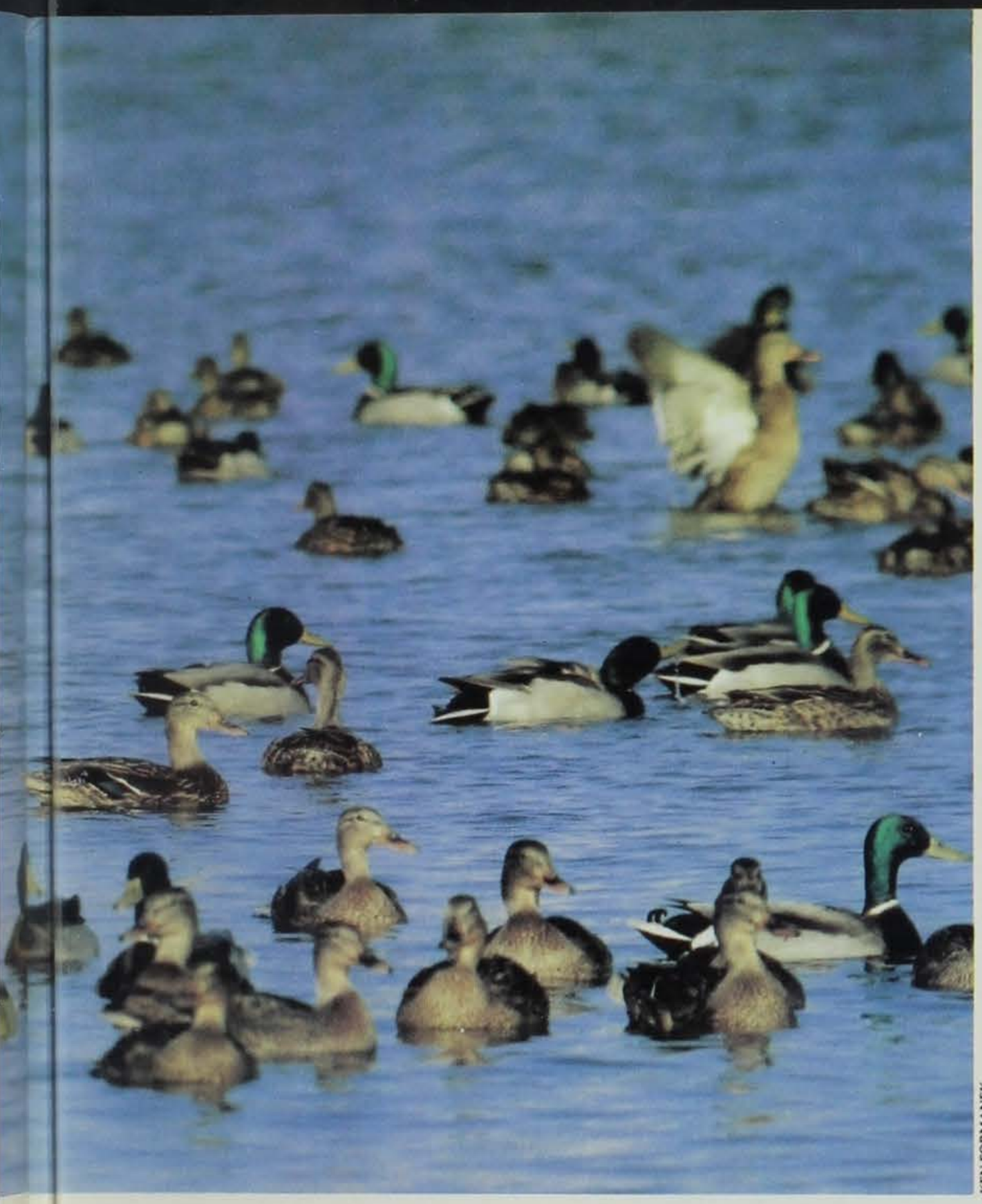
Although I had been mesmerized by the exhibition, the haze now began to clear rapidly. Eyeing the shotgun standing in the corner of the blind, I made my move. Unfortunately, so did the ducks. By the time I managed to shoulder the gun, the birds were long gone, effectively reducing my would-be duck dinner to so many widening ripples on the water's surface. Dad chuckled. I did not. He said there would be more, and he was right. A couple of hours and many handfuls of shells later, I was the proud possessor of my first-ever limit of ducks — four fat and beautiful blue-winged teal. If I live to be 100, I will never forget any part of that wonderful outing.

A lot of duck seasons have come and gone since that first day back in 1959. But nevertheless, I have remained no less excited over the prospects of each new year of waterfowling than I was as a wide-eyed kid crouched at the edge of that pond. Even today, I still find it hard to sleep on the Friday night before the opener.

However, this year things are different. There is a major wet blanket on the festivities, and waterfowl have fallen on hard times. Duck numbers are not just down, they have fallen on their face. And when waterfowl professionals from across the U.S. and Canada gathered for their annual joint session to establish the framework for this year's hunting seasons, it was revealed that the 1988 fall flight forecast is, in fact, the second lowest ever predicted. Particularly hard hit are some of the prairie nesting species such as mallards, blue-winged teal and scaup. Pintails are the worst of all, and hit a record low when only 2.5 million birds were inventoried this spring. During the mid-1950s, pintail breeding numbers stood at nine to 10 million birds, and during the 1970s ranged from five to seven million.

The reasons for the duck crash of the 1980s are varied and complex. Habitat loss certainly plays a major role. North America is still losing wetlands at the rate of 700,000 acres per year. In addition to the elimination of critical nesting areas, the degradation of habitat is also a problem at the bottom of the flyways where ducks spend the winter.

In the short term, the greatest culprit has been the searing drought that has plagued prairie Canada during eight of the last nine nesting seasons. Often referred to as the continent's "duck factory," southern Canada is currently the most important waterfowl nursery in North America. During recent years, it has been a dust bowl. In the north-central U.S., the number of May ponds were down 42 percent from the average, further depressing waterfowl production. All things considered, it came as no surprise when the Mississippi Flyway Council decided to cut both daily bag limits as well as the total number of hunting days



KEN FORMANEK

...whether or not you plan to hunt ducks during 1988, this is not the year to quit buying duck stamps. To do so amounts to kicking a resource when it is down.

RON JOHNSON

allowed for 1988.

But the most depressing news I have heard this year has not come from the Flyway Council or prairie Canada, but rather from a fellow duck hunter who told me that he did not think he would bother to hunt ducks this year. Instead, he plans to focus his attention on more plentiful game such as pheasants and deer. Even more distressing is the fact that my friend is not what you would call a casual waterfowler — this guy owns a ton of gear including a hand-crafted marsh boat, specialized clothing, a truckload of decoys, etc. Consequently, when my friend made his announcement, I could not help but wonder who else will not be buying duck stamps this fall.

Granted, buying duck stamps will not bring rain to drought-stricken wetlands, but the revenues can be utilized to acquire and preserve America's dwindling wetlands for the long haul. Since 1934, hunters have forked out nearly $330 million for federal duck stamps and millions more for the purchase of state duck stamps. These revenues are allowing individual states to acquire priority wetlands within their borders and have allowed the U.S. Fish and Wildlife Service to build a National Wildlife Refuge system that encompasses some four million acres. Although duck numbers are obviously in poor shape now, there is little doubt that they would be lower yet if it were not for the birds produced on these habitats.

However, if you happen to be a waterfowl enthusiast, one thing is certain — whether or not you plan to hunt ducks during 1988, this is definitely not the year to quit buying duck stamps. To do so amounts to kicking a resource when it is down. It is exactly what we did not do during the "dust bowl days of the dirty '30s." When waterfowl numbers hit the bottom during that drought, sportsmen lobbied for and achieved the passage of the duck stamp bill. In 1937, a fledgling conservation organization called Ducks Unlimited emerged from the dust. Today, DU is still in the waterfowl business raising more than $1 million per week for wetland habitat work in both Canada and the U.S.

The drought will pass and there are better days ahead. But in the meantime, we should stick to the course and support waterfowl programs that are striving to preserve the fragile wetlands upon which waterfowl and so many other creatures depend.