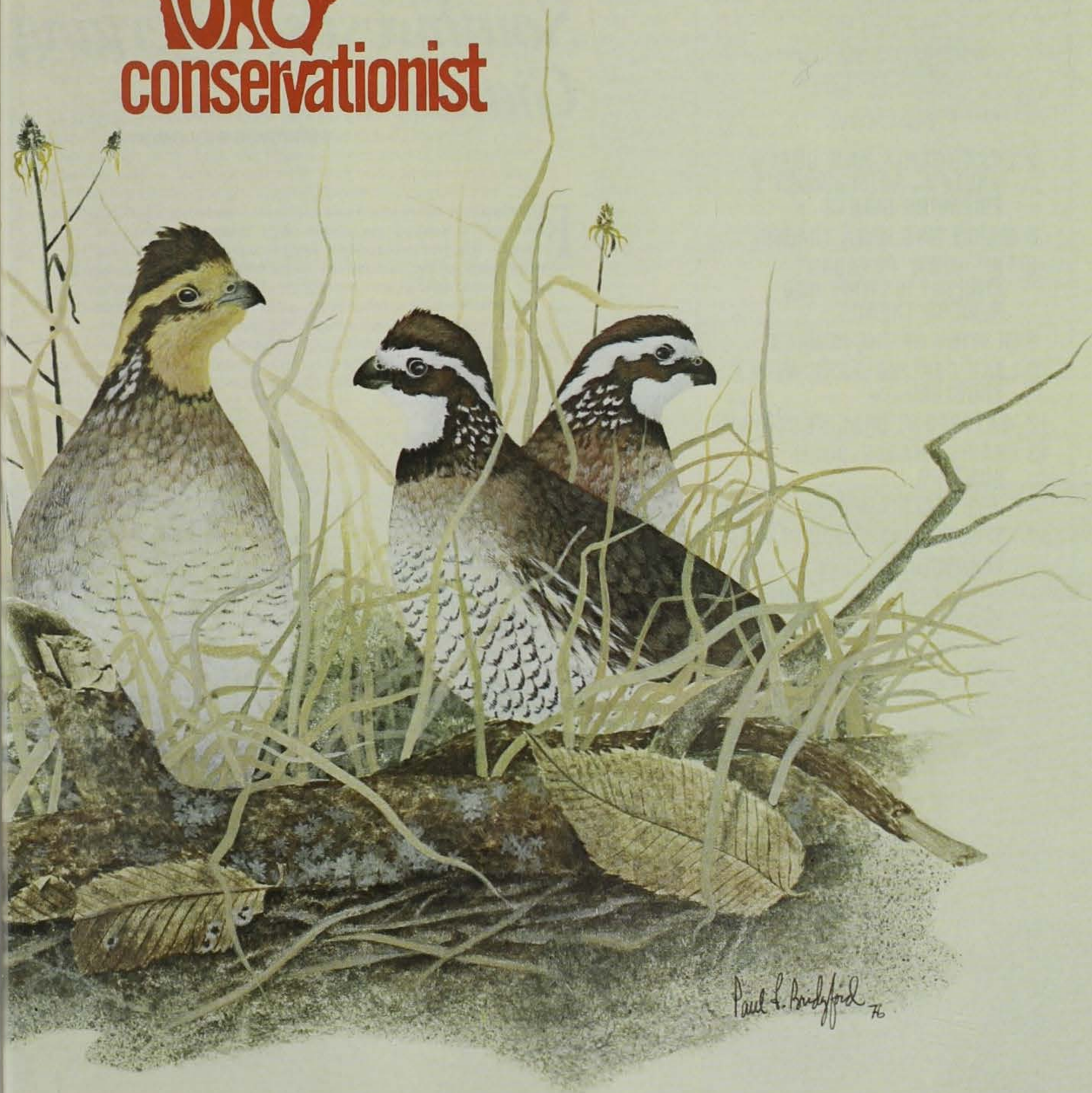




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COVER

The cover for this month's issue was painted by Paul Bridgford of Des Moines. Bridgford is an up and coming young artist soon to be heard from on the Iowa scene.

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LAKE ICARIA & GREEN VALLEY

Southwest's Emerging Giants

By Joe Schwartz
FISHERIES BIOLOGIST

Photos by the Author

Fishermen in southwest Iowa can look forward to excellent fishing on one of the area's older lakes as well as its newest one next year. Most anglers know that a new lake provides some of the best fishing to be had, especially for the popular panfish species and both Green Valley and Lake Icaria can be considered new lakes from a fisherman's stand point. Green Valley, although it was constructed approximately 20 years ago, was renovated in 1974 and fish populations are developing as if it were a brand new lake. The gates were closed just last year at Icaria and it was filled about 40%. But, lets get to the specifics of each lake.

First step in renovating Green Valley was to kill undesirable fish.



Green Valley

Green Valley Lake, located in Union County near Creston, was renovated in 1974 after several fisheries surveys showed the lake contained few scale fish acceptable to the angler. Also, creel surveys in 1972 revealed few fish were caught from this 400 acre lake and something had to be done.

Antimycin was used to renovate Green Valley that year because the chemical had several characteristics which were desired there. First, it does an excellent job of killing carp and Green Valley was loaded with carp. Next, the chemical does not kill bullheads or channel catfish. Both species were in the lake in good numbers and both are highly sought by southern Iowa anglers. Finally, the chemical could be purchased in formulations which effectively treat all depths of the lake. The chemical was applied in August 1974 and all scale fish were eliminated from the lake.

Following renovation and detoxification of the water, fish were stocked as shown in Table 1. Future stocking will be limited to catfish and northern pike because all other species have the ability to maintain their populations through natural reproduction.

The newly stocked fish have responded well to the optimum growing conditions present following renovation. Bullheads which remained in the lake spawned very successfully and tremendous numbers of 8 to 12 inch bullheads are present. Summer bullhead fishing improved considerably following a slow start this spring. Spring bullhead fishing is usually good, but, was slow at Green Valley. Evidently this was a result of the large

amount of natural food available in the lake. Bullhead fishing will be excellent for several years and will eventually decline to just an occasional large fish caught. Bullhead populations drop after initial highs because of limited recruitment in southern Iowa reservoirs. This is a result of severe predation on the bullhead fry by bluegill and bass.

Channel catfish populations are also large at Green Valley. Again, this species was not removed during renovation and numerous fish from 1 to 3 pounds exist with large ones up to 10 pounds fairly common in test net catches. Channel catfishing will remain good in the future.

Bluegill growth has been excellent and two year old bluegill average 7 inches with an occasional individual reaching 9 inches. Bluegill have spawned a number of times since being stocked and their offspring will provide excellent fishing in the future and needed food for good bass growth.

Crappie numbers are high with most of the fish present being members of the 1975 year class. These fish will provide good spring fishing in 1977 and even better fishing in 1978 when they will have grown to better than keeper size. Nine marked stake bed fish attractors have been placed in the lake and these artificial reefs are good places to catch this popular panfish.

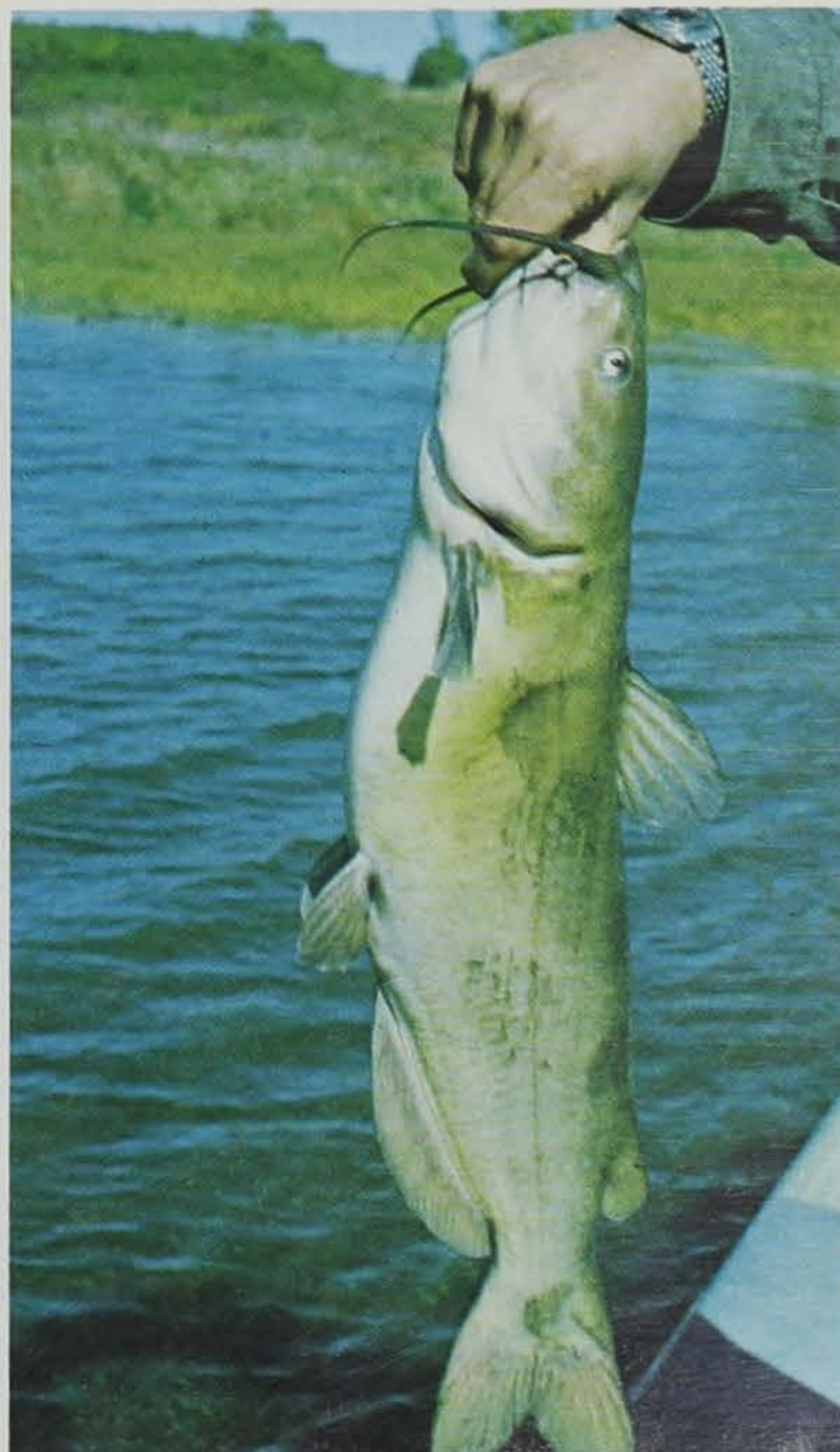
Largemouth bass stocked in 1975 reached 8 inches that year and should average 12 inches in 1976. A 14 inch size limit has been placed on the bass to prevent over-harvest of these essential predators and keepers will not be present until 1977.

Northern pike fingerling stocked in 1976 should be 18 inches by fall and were stocked to provide another trophy species.

Rough fish removal.



Renovated lake allows better conditions for game fish.



Lake Icaria

Lake Icaria, located in Adams county north of Corning, was constructed in 1975 as part of a SCS watershed project. The gates were closed that year, but only 50 acres of the final 700 acres of water were impounded because of limited precipitation. That same year an attempt was made to renovate the streams entering the lake because fisheries surveys revealed several species of rough fish inhabited them. Antimycin was used to treat the small amount of water impounded and some 16 miles of stream above the lake. Treatment of the impoundment was highly successful with many thousands of small carp killed. Renovation of the streams was a failure as revealed in subsequent surveys and retreatment with rotonone was undertaken. This second treatment was thought to be successful.

Stocking began in 1975 and will continue at the rates shown in Table 1. Maintenance stocking of catfish and walleye will be the only stocking needed in the future.

Development of the fishery in Icaria is very similar to that described in Green Valley with several exceptions. The lake was impounded one year later than Green Valley and fish growth at Icaria will be one year behind Green Valley. Also, carp were not completely eradicated from the lake despite the large numbers killed. Carp, hopefully, will not create a problem. The water level at Icaria was held at about 40% of capacity in 1976 to facilitate construction of a beach and two boat ramps and this action should help limit the carp population by crowding them into this smaller area with the numerous stocked game fish. Competition and predation will prevent them from becoming the dominant species in the lake.

A 14 inch length limit has also been placed on the bass at Icaria to prevent over-harvest. Heavy rains in 1976 evidently washed bass into the lake from ponds in the watershed and these fish will be legal size in 1977, two years earlier than stocked bass. Good fishing for 1 to 5 pound channel catfish and 6 to 12 inch bullhead exists in the lake now.

As you have seen both Green Valley and Icaria are rapidly developing into excellent fishing lakes. The outlook for good fishing is very promising for all species stocked in these lakes. Within the next few years both lakes will undoubtedly be the giants of southwest Iowa. □

Initial stocking schedule of Green Valley and Lake Icaria

	Green Valley	Lake Icaria
1974	133,000 small fing. bluegill 5,000 small fing. black crappie 34,500 small fing. channel catfish	
1975	1,500 adult black crappie 40,000 small fing. largemouth bass	70,000 small fing. channel catfish 670,000 small fing. bluegill 5,000 large fing. walleye
1976	9,000 small fing. largemouth bass 1,000 large fing. channel catfish 400 large fing. northern pike	70,000 small fing. largemouth bass 7,000 large fing. channel catfish 1,000 adult black crappie
1977	4,000 large fing. channel catfish 1,000 large fing. northern pike	70,000 small fing. largemouth bass 7,000 large fing. walleye 7,000 large fing. channel catfish



Marketing Iowa Timber

By Bill Farris
ASSISTANT STATE FORESTER

MOST OF IOWA'S woodlands contain merchantable timber. Marketing the timber crop is usually not a familiar venture for most woodland owners. They know how to sell their other crops and livestock but a sale of timber is not something he does on a regular basis.

Selling timber is like selling any other crop. You have to know what and how much you have; is it of the correct size and species; who is buying and some idea of the current prices. Assistance in marketing timber is available to Iowa's woodland owners through the Conservation Commission's twelve district foresters.

The district forester can assist the woodland owner in making an inventory of his woodland to determine what he has. The

landowner should decide, if he hasn't already, what the objectives for the woodland are . . . timber production, wildlife habitat, recreation area or a combination of several things. Then he works toward these objectives through application of different management techniques such as tree planting, timber stand improvement, and harvesting. The forester can assist in developing a woodland management plan to guide the owner in meeting his objectives.

Many woodlands in Iowa are overstocked and overmature or of poor species composition. Through a good management plan and application of proper silviculture practices, the woodland can be brought back into a vigorous, good growing, healthy woodland of high quality species.

Types of harvest cuts can and will vary depending on the landowners objectives. It may be just a sanitation cut to remove diseased, dying or damaged trees. The cut may be primarily to create better wildlife habitat. This would call for making openings in the woodland to increase browse and edge effect which is conducive to wildlife.

Whatever the objectives—once they are known—the forester can mark or designate the trees to be removed in order to meet the objectives of the landowner.

Trees to be removed are marked with a special tree marking point. The trees are measured for diameter and merchantable height. With these two measurements, the board feet volume of material to be removed can be determined. Once all trees to be removed have been designated, the board foot volume is calculated. The forester may then apply a cull factor to the volume. The cull factor deducts from the volume the amount that will be lost due to defect in the trees. This defect would include such things as excessive sweep or curve, frost cracks, hollow logs, etc.

A notice of timber for sale is then prepared. This notice lists by species the number and board footage of trees that will be sold. Sales are usually made on a lump sum sealed bid basis. That is, each interested buyer submits a sealed bid with a total dollar amount that he is willing to pay for all marked trees.

The notice of timber for sale will include on it the owner of the timber and his address. Also a legal description of the location of the trees to be sold, when and where the sealed bids will be received and opened.

The notice of trees for sale is sent to several buyers who may be interested in purchasing this particular sale. The district forester keeps a current list and is also familiar with the sawmills and buyers operating in his area.

By obtaining two or more bids on the marked trees one can obtain a price that reflects the current market situation. One should always try to get two or more bids to receive the best price possible at that time.

The market does fluctuate as other farm commodities do. Generally, the market is better in the fall.

Once the bids have been received and a successful buyer determined, a timber sale contract should be drawn up. The contract would include what each party agrees to do, any special conditions of the sale, the length of time the buyer has to remove the trees, exactly what is being sold and for how much. The district forester has sample contracts available.

To successfully market your timber crop, know what your objectives for the woodland are. Advertise and locate markets and obtain at least two bids. Draw up a contract or at least get the sale conditions in writing. Above all, get assistance from your district forester. □



Iowa's timber . . . a bigger crop than you think.



THE IOWA PHEASANT~

Ancient History and Modern Trends

By Ron George

WILDLIFE RESEARCH BIOLOGIST

Photos by the Author

OUR OLD FRIEND, the ring-necked pheasant, who seems so at home in Iowa's cornfields has not always been a resident of Iowa or even a dweller of cornfields for that matter. In ancient times the ring-necked pheasant was restricted to the Asian continent and ranged from the Black Sea in the west to the Island of Formosa in the east and from Mongolia in the north to Burma in the south. In the western part of its range, the black-necked race of Iran was reported to roost in trees and feed on small grains, berries, and greens. To the east, the Chinese ringneck inhabited dense reed beds along rivers and fed on waste grain in rice paddies. A closely related species, the Japanese green pheasant, was found in the lowlands of Japan. Oriental literature and art reveal that the pheasant was very much a part of every day life in eastern Asia three to four thousand years ago.





Introduction of the Ring-Necked Pheasant into the United States.

Jason and the Argonauts are generally credited with introducing the pheasant to Greece and southern Europe in the Seventh or Eighth century B. C. The pheasant's range was further extended about the middle of the First century B. C. when the Roman legions of Julius Caesar invaded England, carrying with them the long-tailed, black-necked birds of western Asia.

Historical sources indicate that by the Tenth century A. D. the pheasant had become well established in Merry Old England. It is also interesting to note that even in those days, good dog work was apparently very much a part of pheasant hunting. It is reported that springer spaniels were trained to flush pheasants out of heavy cover and into trees where they could be taken with cross-bows.

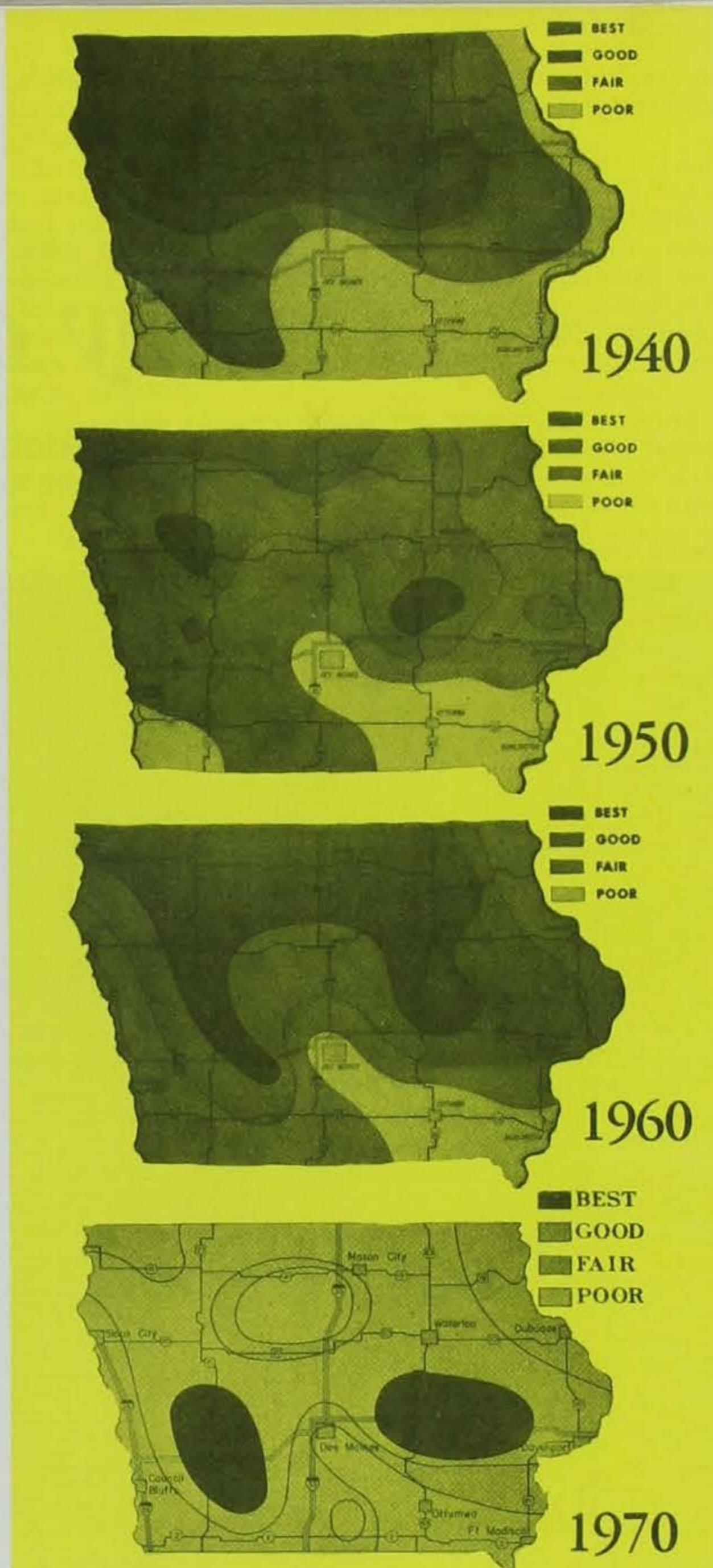
The earliest known attempt at pheasant stocking in North America occurred in 1733 when John Montgomerie, Governor of New York, released a dozen pair of English black-necked pheasants on Governor's Island, New York. Richard Bache, a son-in-law of Benjamin Franklin, also attempted to introduce pheasants on his New Jersey estate in 1790. However, these early stocking attempts were unsuccessful.

The first successful pheasant stocking in North America took place in Oregon in 1881 when judge O. N. Denny, Consul General at Shanghai, sent twenty-eight Chinese ringnecks to his brother's farm in the Willamette Valley. This stocking met with such fabulous success that the first pheasant hunting season in North America was held only ten years after this initial release, and hunters bagged an estimated half-million birds during that first season.

News of the fantastic new game bird from China spread rapidly and residents of other states rushed to get on the bandwagon. Brood stock and eggs were brought from Oregon, or imported directly from Asia and Europe. These frantic stocking attempts resulted in a thorough mixing of most of the thirty-one known races of the ring-necked pheasant so that the exact ancestry of the American pheasant is unknown; however, authorities feel that the black-necked strain is perhaps most dominant in the eastern United States while the Chinese race prevails in the midwestern states.

The first successful pheasant stocking in Iowa apparently occurred by accident when a windstorm blew down the fence around a private game farm near Cedar Falls in 1901. Various individuals, clubs, and the Conservation Commission then began to raise and release pheasants. By 1913 the first state game farm had been established, and by 1925 our first pheasant season was held in thirteen counties in northern Iowa. This first season was limited to three half days and the daily bag limit was three cocks. Since 1925 there has been a pheasant season in Iowa every year except for 1928, 1936, and 1937.

By 1928 the pheasant was well established in the northern one-third of the state, but game officials had difficulty establishing pheasants in southern Iowa even though thousands of birds were released in that area over the years. The situation remained unchanged until the mid-1950's when a large pheasant population developed rather suddenly in the grasslands of Union and Adair Counties in southwest Iowa. Birds from this area were then captured and transplanted directly or used as brood stock in producing high quality young birds for release throughout southern Iowa. This program was quite successful, and the introduction at the Stockport Site in Van Buren County (the last in a long series of releases) was completed in the fall of 1973.



Unfortunately, the high populations that existed in Iowa's traditional northern pheasant range were declining at about the same time the population was building in other parts of the state. While the St. Patrick's Day Blizzard of 1965 is often blamed for this decline, there were other factors involved. There had been a subtle but significant decline in the amount of nesting cover available in much of northern Iowa. During the preceding twenty-five years, more than four million acres of oats and hay had been gradually converted to soybean production. Additional nesting cover was lost when the Federal Soil Bank Program ended in the mid-1960's, and vital winter cover had continued to decline as wetlands were drained and farm groves were cleared. Under these conditions the effects of adverse weather were far more severe. However, it is important to remember that while pheasant densities in some of the old hot spots in South Dakota, Nebraska and northern Iowa have declined, Iowa's overall pheasant range has expanded to the south and our total number of pheasants, statewide, has remained fairly constant enabling Iowa hunters to harvest more pheasants than hunters in any other state during the past ten years. □

Destiny of the Honker

By Richard A. Bishop
WILDLIFE RESEARCH BIOLOGIST

Photos by the Author

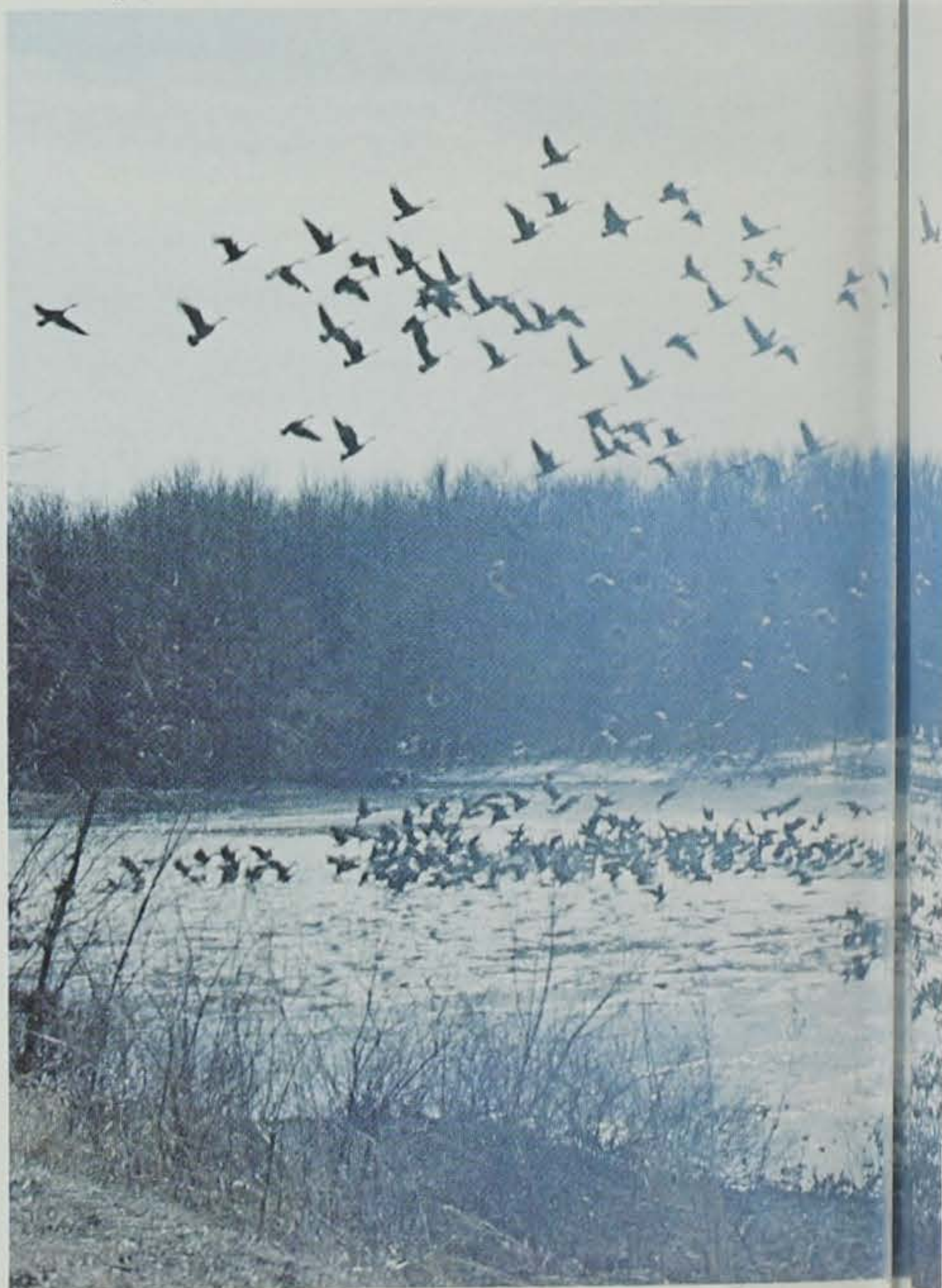
Marked female at nest site.



THE FINAL STAMP of approval of 1976 Canada goose regulations for the Mississippi Flyway was declared by the U. S. Fish and Wildlife Service and the Secretary of Interior. The dates, bag limits, season length, etc., went to press and many eager sportsmen read the information with much enthusiasm. This was the big day and after the eye teletyped these messages to the brain, thoughts sped to autumn winds, the cries of migrating geese and the numerous personal pleasures that go hand in hand with hunting these magnificent birds.

For those hearty Americans that cannot shrug off the tradition of hunting for more convenient and comfortable methods of self fulfillment and realization, the fall hunting season is the big apple.

Wintering geese at Swan Lake.



However, for a few wildlife biologists and administrators, the printing of these regulations is the culmination of many years of planning, hard work, frustration and most of all the achievement of a long sought goal. They too, look forward to the enjoyment provided by the fall flights of migrating waterfowl, but more often their thoughts return to the big story behind the establishment of these hunting regulations.

The compelling and alluring sound of Canada geese migrating from their summer breeding grounds in the north to southern wintering areas has stirred the minds of our most staunch thinking men and has generated a great restlessness in many others. But these flocks of geese, that were once a necessary part of life for our forefathers, later dwindled from numerous to occasional and the need for hunting regulations was evident. Initial hunting seasons slowed this decline but it was not until the late forties that a wildlife refuge in Missouri called Swan Lake, started to flourish as a safe wintering home for Canada geese. Proper protection at Swan Lake, along with low harvest rates north of Missouri, built this goose population to 133,000 in 1955.

In the 1960's increases in the Canada goose harvest north of Missouri, caused by earlier crop harvest which provided bountiful food supplies for migrating geese, gave testimony to the need for a new management program for the Canada geese known as the Eastern Prairie Population (EPP). No longer could Missouri manage the resource without the consideration of harvest in Iowa, Minnesota and the Province of Manitoba.

A new management plan was developed and it was engineered by the concept of larger demands for Canada goose hunting by an increasing sport hunting public. To provide more geese for the future, the breeding population had to be increased. This sounds

simple but to implement such action, it took cooperation of the three wildlife agencies as well as from sportsmen of all three states to cut back on the Canada goose harvest.

In 1971, season length and bag limits were tightened to 23 days in Iowa and nine days in Minnesota with a one bird daily bag in each state. The quota in Missouri was reduced from 25,000 to 14,000 birds. These restrictions did result in an increased wintering population at Swan Lake. Similar regulations were imposed in 1972 and curtailed seasons were maintained in 1973 and 1974. Reduced hunting opportunity continued to allow more birds to survive the hunting season and return to the southern Arctic to breed.

Along with curtailed regulations, management required a survey to index breeding populations and to estimate the number of young produced. From this information, the magnitude of the fall flight could be estimated and proper harvest regulations could be established to allow the appropriate number of geese to be bagged.

With clear objectives, a research project was designed. First we needed to know where the Swan Lake geese were nesting, nesting densities within different habitat types and the size of the breeding range. The second phase of the project involved banding a sample of geese on the breeding grounds to determine where the geese were being shot and how many.

Research work in northern Manitoba has been in process for six years and it has enabled us to map the approximate breeding range of the EPP. It extends along the western shores of Hudson Bay from the Northwest Territories border, southward to approximately 60 miles south of York Factory and then inland for about 180 miles. The majority (60%) of the breeding geese occupy approximately 9,000 square miles of tundra and spruce muskeg lowlands from Churchill Manitoba, south to York Factory.

Continued on Page 15

Nesting habitat along the Hudson Bay coast.



Successful banding drive.



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OBER 1976

LAKE DARLING

Lake With A Problem

By Donald Kline
FISHERIES BIOLOGIST

Photos by the Author

Lake Darling is a lake with a problem! Since the lake was constructed in 1950, heavy turbidity has limited the fishing potential.

Anglers eagerly awaited the construction of the lake. The dedication of the lake on September 17, 1950 was attended by a large crowd and bands from seven nearby communities. The lake, named in honor of the nationally known cartoonist and conservationist, J. N. "Ding" Darling, was planned as part of an effort to construct man-made lakes in convenient locations around the state of Iowa.

During the fall of 1950 the lake was stocked with largemouth bass, bluegill, crappie, bullhead, channel catfish and fathead minnows. Additional stockings of largemouth bass, bullheads and channel catfish have been made throughout the years to supplement the existing populations of these species, but now only channel catfish are being stocked because they do not reproduce in the lake. The bluegill and crappie found in the lake today are descendants of the original fish stocked 26 years ago. Golden shiner, carp and green sunfish complete the list of fish species found in the lake. Golden shiner and green sunfish were found during the first surveys in the early 1950's, but carp were not collected until 1960.

Upper reaches of Lake Darling. Six foot boat oar pushed in bottom where there was originally 10 feet of water. Old camp area is in background. Note the brown color of the water.



The problem which has plagued Lake Darling was discovered by fisheries survey personnel in their first visit to the lake in 1952. They noted visibility (depth to which one can see into the water) in Lake Darling was considerably less than the other lakes they surveyed.

The land in the watershed showed evidence of severe erosion, and Lake Darling (300 acres) was the silt basin for over 12,000 acres of the Honey Creek drainage. It has since been recognized, a ratio of 40 surface acres of land to 1 surface acre of water indicates the problem of excessive siltation may drastically reduce the recreation potential of a lake. For instance, at Lake Darling, the original campground had to be moved to a new location because the upper portion of the lake filled in and campers could not use the boat ramp provided.

The effect of the silt load brought into the lake was, and still is, the major factor influencing the fish populations. The situation is similar to the problems we would have in extremely heavy smog. First, the abrasive action and chronic effects we encounter in smog are also encountered by fish in silty water. It simply is not a healthy environment. Secondly, we depend largely on our eyes to move around and must grope along slowly in heavy smog. Fish have the same problem with loss of sight in turbid water. While we can circumvent poor living conditions in our locality, fish in a lake must make do with conditions which surround them.

The food supply in a lake is largely dependent on the amount of sunlight which penetrates the surface of the water. Sunlight is needed to supply the energy which is stored by microscopic green



A gallon of water was collected at Lake Darling on 9 different dates between 22 May, 1973 and 4 January, 1974. The silt was stirred up to show the amount of turbidity during the year.

plants (algae) living in the water. The effect of turbidity is the same as if we had a perpetual dust storm. Our crop production would be reduced, depending upon the amount of light which could reach the earth. The same is true for a lake, except the shading is caused by silt particles suspended in the water. In Lake Darling the light penetrates only through the first few inches of water instead of the normal 3 to 5 feet. The shading effect cuts the productivity zone to a small fraction of the normal level, and severely limits the first link in the food chain at Lake Darling.

Our fishery surveys at Lake Darling show a direct relationship between the amount of silt load in the water (measured as turbidity) and fish growth. During most years the turbidity is high and fish show no signs of growth, but during the few years of



Christmas tree brush shelter placed during the winter will fall to the bottom when the ice goes out and provide new fish habitat.



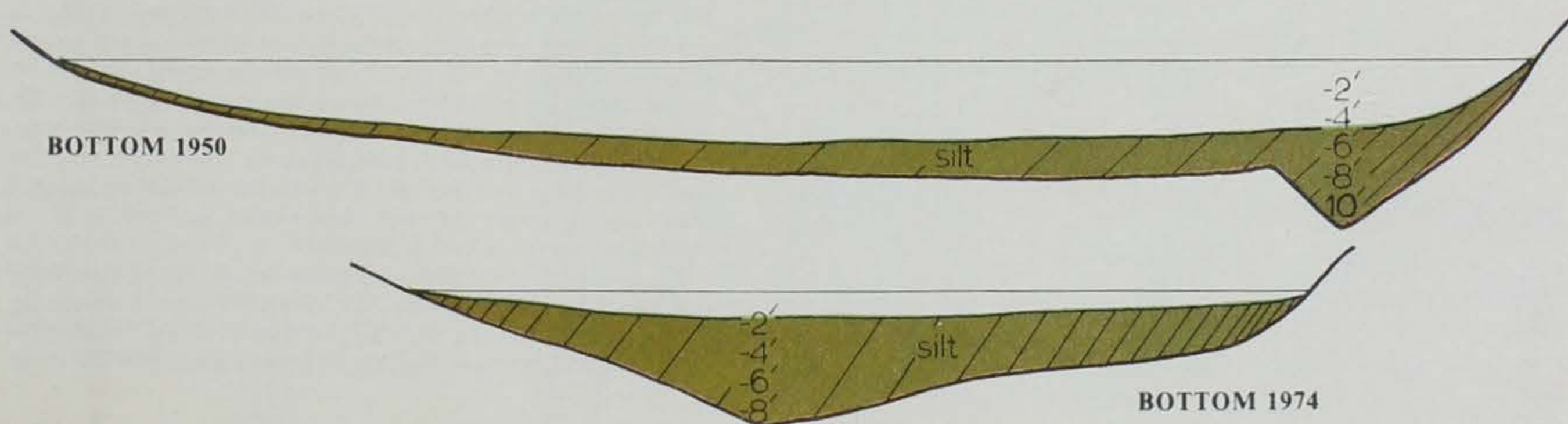
Fishing can be good when water conditions are favorable. A limit of largemouth bass taken in April, 1974 when turbidity was relatively low.

relatively clear water the fish show signs of some growth. The lack of a basic food supply is especially critical for the numerous bluegill and crappie, resulting in a stunted population of both species.

Should you come to Lake Darling to fish? Yes! But with full knowledge of the fishing potential offered by the various fish populations. Bluegill and crappie have a very low potential and few are being taken. However, largemouth bass, bullhead and

Continued on Page 15

Bottom contours in Lake Darling showing the loss of lake volume since 1950.





Loading the rockets is the final step in preparing the capture site.



After the shot the ducks are carefully removed from the net and placed in holding crates.



Information is recorded on the species, sex and age of the duck before it is banded.

This banded bird may some day add valuable information to our knowledge of waterfowl migration and mortality.



BANDING IOWA WATERFOWL

By Jim Zohrer

WILDLIFE MANAGEMENT BIOLOGIST

Photos by the Author

IT IS FIVE THIRTY A.M. and the mosquitos are biting us like crazy but we don't dare swat them. After forty minutes of waiting in the blind, the ducks are finally starting to set down in the water area in front of us. Here come eight more; small ducks, they must be blue-wings. Before long the water in front of our blind is black with ducks. A half dozen more come sailing in over the back of our heads not more than six feet above us.

After what seems like hours, but was actually only five or six minutes, the ducks turn and start to charge directly towards us. I look over to the other two men in my blind and ask if they are ready. "Yes," is the reply. "Well, let 'em have it."

With a roar that sounds through the valley like cannon fire and a belch of flames and smoke it is over. One hundred and twenty with one shot. That's not bad.

No, we are not duck hunting, at least not with shot guns. The roar was the sound of our four rockets carrying an 80 foot net across the birds in front of us. For weeks the ducks had been feeding at the bait site, and this morning we were waiting for them. After carefully freeing each duck and placing it in a holding crate we are ready to begin our banding.

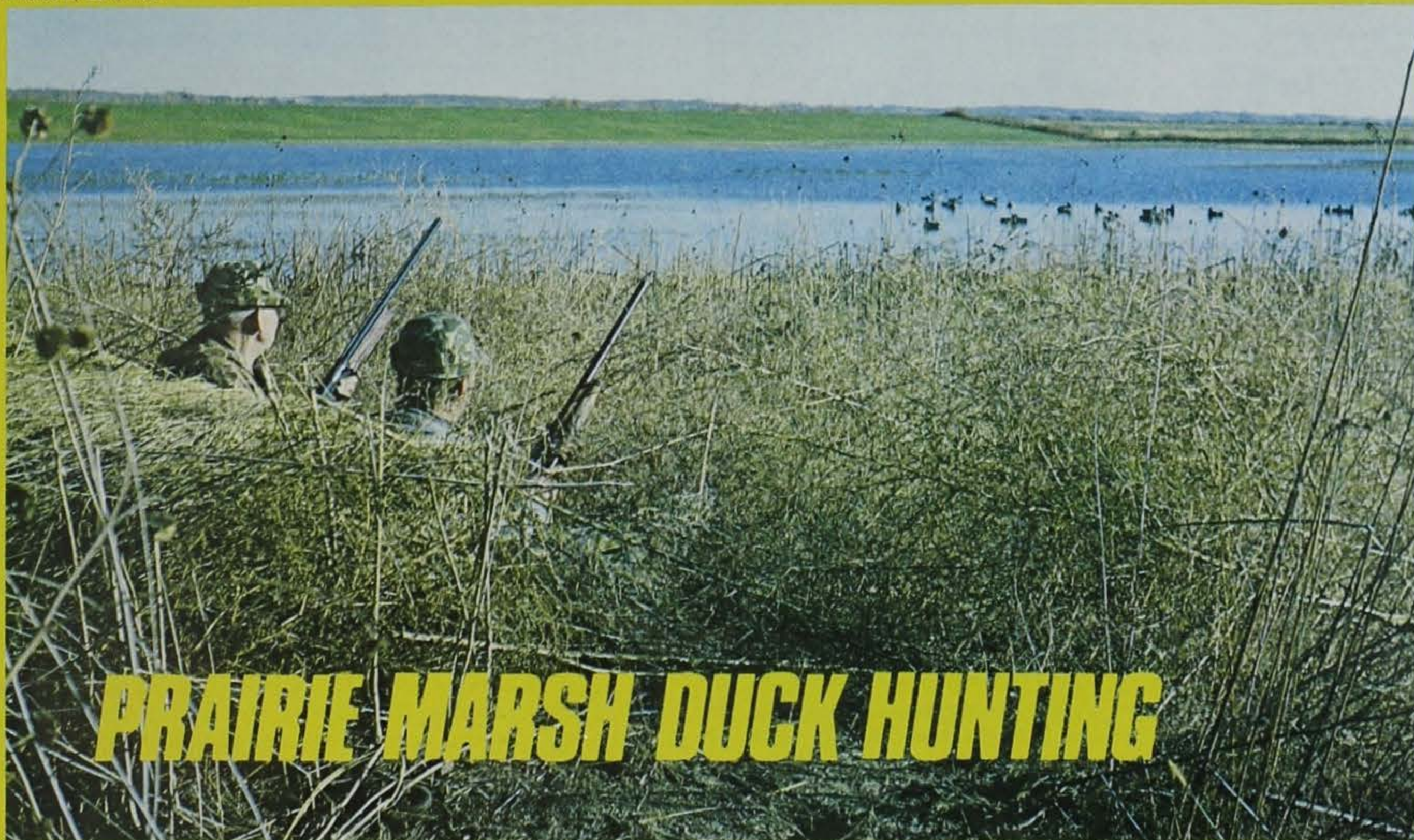
Each year wildlife biologists in Iowa live trap and band approximately three thousand ducks and geese. A variety of methods is used in capturing the birds. The rocket net or cannon net is one effective method. Baited walk in traps, night-lights or drives can also be used to capture waterfowl alive. Once the duck is in hand, information is recorded on the species, sex, age and general health of the bird. A special aluminum leg band is then placed on one leg of the bird before it is released. The band is marked with an identification number and the address of the agency that is responsible for collecting the data on these birds. Most of the waterfowl that we band in Iowa are marked with Federal bands, and so the band will carry a number and the words "Advise Fish and Wildlife Service, write Washington, D.C., U.S.A."

If a hunter shoots a banded bird he should send the band number or, if possible, the entire band to the address on that band. Once the number has been received and processed the hunter will receive some interesting background information on the bird that he shot. This information will include where and when the bird was banded, and who banded it. The person who originally banded the bird will also get information back telling him where, when, how and by whom the band was recovered.

Since only about eight percent of the band numbers are ever recovered it is very important that anyone who locates a banded bird return the number as soon as possible. The band number that you return may have been carried by a bird that has just set a new longevity record or a long distance movement record.

The collection of information on waterfowl migration routes, breeding and wintering areas, mortality rates and more has been made possible through the marking of waterfowl by leg banding. The information that is collected is vital in establishing waterfowl hunting regulations that will help protect and perpetuate our waterfowl resources in this country.

I received an interesting band return this spring. A blue-winged teal that I banded at Sweet Marsh in 1972 was recovered by a hunter near Progresso, Mexico this past January. I didn't even know where Progresso, Mexico was, but I guess that duck did.



PRAIRIE MARSH DUCK HUNTING

By GARY SWANSON, District Wildlife Supervisor and THOMAS NEAL, Wildlife Biologist

IT WAS STILL half an hour until legal shooting time. The two men had been rushing around since shortly after midnight in preparation for this opening day trip. Now, with the decoys out and the boat properly hidden, they could relax with a cup of coffee.

They had been planning this day for a long time. Their shooting eyes were in good shape from summer trap-shooting. The boat and decoys were freshly painted.

Well before the season they had purchased State and Federal duck stamps and hunting licenses. They knew their money was well spent if they never fired a shot, because the license money would be used to conserve wildlife.

They had checked out several marshes before the season to see which would be best to hunt. They had read and studied everything they could lay their hands on about hunting regulations, proper clothing and decoy placement. They knew that both the morning sun and the wind should be at their backs if possible. They knew that if you can see a duck's eyes and feet he's within forty yards. They were ready.

It was chilly for early October. The men shivered as they drank the hot coffee, partly from the cold, but more from anticipation. The only sounds were the quiet lapping of tiny waves against the boat, and the song of a small bird somewhere in the rushes. A dozen teal whistled over the decoys and were gone.

Finally, the coffee was gone and legal shooting time arrived. They loaded their guns and waited eagerly. A sudden barrage

of shots up the marsh was quickly followed by a high flight of ducks. They didn't shoot at the out-of-range birds.

It was quiet for twenty minutes. Suddenly there was a duck right over the decoys. Two quick shots and the startled teal escaped without a scratch.

The men made lame excuses for missing and went back to staring at the sky. A flock of widgeon came over high. As they were almost out of sight, five of them peeled off from the flock, circled once and set their wings for the decoys. This time the men were ready. When the ducks were ten feet over the decoys they fired. Two perfect shots and two widgeon floated motionless in the decoys.

Nothing happened for several hours and all of the other hunters had left the marsh. It was now mid-afternoon and nearly time to

head for home. Just as they started to take down the blind, a flock of twenty pintails materialized 200 yards away. Skillful calling brought them back in a hard circle and the birds spotted the decoys. The wary pintails circled four times before they decided it was safe to come in. All at once they were in range. The first three shots dropped one duck and a big drake, climbing frantically up to the left, was still in range. Another shot and the bird folded neatly. It was time to go home.

So ends another duck hunt. Memories are made and treasured, shots discussed and preparations are made for another hunt. The experience is etched into the two men's minds, and the big pintail drake on the mantel lives on as a permanent reminder of a prairie marsh duck hunt. □



FROM THE

Warden's diary

By Rex Emerson
LAW ENFORCEMENT SUPERVISOR

AMONG OTHER THINGS, I talked to twenty-five fifth graders today. To me they are one of the best age groups to talk to. Perhaps that reflects somewhat on my education, but I like their open minds and eagerness to learn. They are smart, and you'd better not try to snow them. However, if you are honest and sincere with them they are willing to listen. By the time students get into high school they are more inclined to think they know everything there is to know. After a few years out of school they realize they don't know so much.

This group today—if you tell them the reason for having a law they will accept it. Surely there is a good reason for having a law. If not, then it shouldn't be a law. Nearly everyone in Iowa has seen the big burly state trooper come on TV saying, "*You will not drive over 55 miles per hour on the highways, because that is the law.*" No reason - just because it is the law. That is quite threatening, and maybe to some, a little challenging.

If I had told this group today that they would not carry a loaded and/or assembled gun in a vehicle on a public highway, because it is the law, I would have been telling them the truth. But, some young man in the group would have been thinking, "*I bet I can.*" When it was explained that they shouldn't carry a gun in such a way because it is dangerous to them and the other occupants of the vehicle, they accepted it as a good law.

If I had told them you can't shoot a pheasant out of season because the law says so, that young man would have thought, "*Bet I can and I bet he can't catch me.*" Instead of that they were told that we have a closed season on most animals so they can raise their young and replenish the supply. Then in the fall and winter months if the supply is great enough, we can harvest the surplus. The animals and fish do not belong to me and they do not belong to the Conservation Commission. They belong to everyone. The Conservation Commission is merely in charge of managing the wildlife for all the people. We try to see that everyone gets an equal chance to harvest his or her fair share of the surplus. That is the reason for seasons, bag limits, and hunting hours.

Oh, sure, we have people who hunt out of season and no doubt always will. Usually it is because of ignorance or greed, or maybe both. When they do violate, they are stealing the animal from you just as surely as if they had stolen some chickens from your chicken house. I am a game warden. It is my job to catch this wildlife thief, and I will do my best with the information that I have to go on.

If someone was in your chicken house some night, when would you call the sheriff? I'll bet it would be while the guy was still in the chicken house. Many times I have had people tell me, "*Hey, I saw a spotlight working the fields one night last winter,*" or "*I saw someone put a fish trap in the river last summer.*" Well, that someone with the spotlight probably stole a deer from him, not me, because he gets a deer license and I don't. Had I known about it at the time, maybe we could have prevented it, or caught the thief. Six months later the trail is a little too cold, even for a good game warden.

Now that you know the facts maybe you will be willing to get just a little more involved in protecting your wildlife and give your local game warden a call when you see a wildlife thief at work. Not tomorrow or next month, but at the time. If you don't know him or can't get him on the phone, the sheriff's office would be more than willing to assist you. The warden has a radio and he might be closer than you think.

Always Ask
Permission
Before
Hunting



THE PROPER APPROACH

By Bob Mullen

STATE CONSERVATION OFFICER

TODAY, as you drive through Iowa's countryside, one is soon made well aware of more and more private land being posted on hunting. We have all seen the all too familiar, No Trespassing, Keep Out, No Hunting and Land Posted signs around farms. Why the increase in posting of land? Are farmers grouches, or wanting to keep all the game for themselves? Not hardly. They have good reason for posting their land.

Activities such as failing to ask permission to hunt, leaving gates open, trampling unharvested crops, driving vehicles across fields, and shooting close to livestock and buildings are kinds of incidents that understandably make a landowner want to close private lands to future hunting by others.

What can the sportsman do to maintain hunting or fishing on private lands? Just because a person has a hunting or fishing license does not give him the right to hunt wherever he wants. And just because the land is *not* posted, does not mean permission is not needed. The majority of Iowa's hunting opportunities are to be found on private lands, and if these areas are to remain available for hunting, we must remember that these are *private* areas.

Respect is the greatest thing the sportsman needs to keep in mind while hunting. The person who lives in town would be very upset if strangers came into their backyard and had a picnic, never saying a word to the owner of the land. It's the same for the farmer. But his backyard might be several hundred acres.

The sportsman always needs to get permission, whether the land is posted or not. It's just common courtesy, and shows respect toward the landowner. If you don't know the owner of the area you would like to hunt, stop and inquire who owns the land and where they live. When the landowner is located, be polite and courteous. If permission is granted to hunt this land, there are still a few things to check on. Ask if there are any areas that you should stay away from, such as livestock or certain fields. Park your vehicle where it will not interfere with the farming operations. Nothing is more aggravating for a farmer than having a hunter's vehicle blocking a field entrance. Invite the farmer to go with you. He will probably be busy with harvest, but at least you can extend the invitation. On completion of your hunt, check back with the farmer and thank him for allowing you to hunt on his land. Offer him part of your game if you had a successful hunt. These things will show the landowner that you appreciate the opportunity of hunting his land.

Even though lands may be posted, if you stop and ask to hunt and are courteous, you will be surprised how many of these farmers will allow you to hunt.

If a farmer refrains from giving permission to hunt, don't get mad at him, or leave and sneak in the back way. These actions will only reinforce the no hunting on his lands. And it takes only a few "slow-hunters" to close private lands to future hunting by others. If a farmer refuses permission to hunt, he probably has good reason. Thank him for his time and search for another area to hunt. Going onto private land, whether posted or not, can be grounds for criminal trespass charges being filed against a person.

Remember that the majority of Iowa's hunting is on private land. Respect these private areas. Show the landowner you are a sportsman and respect his property by getting permission to use his land. □

LAKE DARLING *Continued from Page 11*

channel catfish populations do have the potential to provide good fishing for those anglers who fish for them. Large adult fish of all three species are available and are being caught each year. It just takes more years than normal for them to reach harvestable size.

What lies ahead for Lake Darling, and are there solutions to the problem? With no action, the lake will continue to silt in at the accelerated rate of the past. The original 300 acre lake is now only 280 acres, and much more of the upper portions of the lake are in jeopardy. Of course, control of erosion to prescribed soil loss limits would alleviate the siltation problem.

The control of the silt already in the lake, so the loose bottom material is not stirred up by wind action, would then become the principal problem. Low dams in the upper shallow portions of the lake, shoreline riprap and wind diverting jetties would be in-lake solutions.

Much of the original bottom contour and associated habitat have been covered, so new habitat is being provided to the fish in the form of stake beds, tire reefs and Christmas tree brush shelters. This habitat provides fish concentration areas and helps the angler find the fish.

The possibility of a chemical renovation to reduce the number of bluegill and crappie to a level which could grow on the limited food supply is being considered. However, the chemical which would do this most effectively is retarded by the presence of silt.

Lake Darling has a serious problem which reduces its recreational potential with each heavy rain. It will take a tremendous effort to control the problem and maintain the existing potential. No single entity can solve the problem on its own. Anglers, recreation oriented groups, state and federal agencies, as well as the general public will all have to play a role in the solution. □

DESTINY OF THE HONKER *Continued from Page 9*

Banding data, which comes from bands turned in by hunters, showed that 6 percent of these banded birds were shot in Iowa, 35 percent in Missouri, 23 percent in Minnesota and 19 percent in Manitoba. From this information we can draft different hunting seasons to allow each state and province the maximum hunting opportunity without over-shooting the population. More information is needed to allow us to accurately predict the numbers of Canadas coming south each year, but we are on the final step to completing that need.

Since 1969, when we first started the work to ensure the future of Canada goose hunting, there has been many difficult hurdles from the tedious work of collecting field data in the northland to meeting with sportsmen groups to explain the need for their cooperation in curtailed hunting seasons. There are many steps that take place between the time the guns are silenced at the close of one hunting season and the announcement of the next season. But, it is truly a pleasant sensation to meet a goal in the wildlife field and visualize a bright future for this bird in the face of expanding agricultural and industrial needs.

Goose surveys conducted in Missouri after the close of the 1975 hunting season indicated approximately 220,000 Canada geese. Thus the largest breeding population in modern times arrived this spring on the Hudson Bay lowlands. Barring any exceptional loss of goslings due to extreme cold and wet weather on the tundra, we should experience a record fall flight of Canadas. Regulations in 1976 reflect this bountiful resource. But do not lose sight of the fact that the post-hunting season goal of 200,000 geese (after the close of hunting season) will only maintain itself as long as we closely regulate the harvest to the surplus of any given year. We must strive to accurately predict the size of the fall flight then diligently adhere to regulations in all states to maintain this delicate goal we have achieved. The future of our goose hunting will depend on our convictions and our stewardship of this unique resource. □

Classroom Corner

by Robert Rye
Administrator, Conservation
Education Center

CAN YOU FIND YOUR WAY from Minnesota to Missouri without a map? Have you ever considered doing it twice a year? Birds can find their way even further than that and we call it a migration.

Migrations are defined as movements of animals to a rather specific area and their later return to the general place of departure. Typically, these movements occur at a predictable time of year.

Your Iowa Conservation Commission is interested in these movements for several reasons and conservation personnel spend many hours observing them. Despite the difficulties in following animal movement, some techniques have been developed to make it possible. For example, several types of birds are banded so that the individual birds may be identified when they are trapped, killed, or observed in the wild. The Blue-winged-teal is an example of one species that the Commission bands. Another method of observing migration is telemetry. This involves the attachment of a power transmitting source to an animal and the tracing of its movements with a radio. The wildlife section has used this on turkey in Iowa.

There are several reasons for migration and it may facilitate the survival of a specific animal in a variety of ways. First, the food from two or more different habitats can be utilized allowing for a relatively efficient use of food sources. When an animal moves or migrates to a new area, its original food source gets a "rest". It then has time to regenerate itself in preparation for the animal's return. Second, migrations to northern areas in the summer and southern areas in the winter allow animals to remain in constantly favorable environments. If you plan on having a bird feeding station pay particular attention to keeping it supplied before the time of migration. You probably will have greater use. Third, animals can produce young in areas such as an arctic tundra or open prairie, where there are relatively few predators and parasites, thereby increasing their chance of survival. Fourth, migratory animals, which must live in different environments and face a variety of pressures, develop a relatively great range of adaptability. Thus, these animals can make adjustments to change with relative ease. Fifth, migration promotes geographic distribution allowing greater possibility of species survival. Also, the animals may spread out to new areas which they find compatible and make them into their permanent home.

Birds show the most extensive migrations in terms of both distance and species. Did you know that some birds migrate south from Iowa, while at the same time others fly south to Iowa? This can be observed through the banding procedure. There are people who have banding licenses and band all kinds of birds. They do this for both enjoyment and the knowledge that can be gained.

It has been found that birds follow geographic structures, — mountains, rivers, and islands. These can provide them with food as they fly as well as landmarks to find their way.

Some birds fly during one particular time of the day, while others travel at various times. This may be because of navigation, which is at best poorly understood. Wild birds are not trained, but somehow they find their way.

Take time — say a couple of hours per week for several weeks — and observe the birds. Are they the same type each week? Have new ones appeared? Are there more or less than before? Which way do they appear to be moving?

The Conservation Education Center is now taking reservations for winter programs. Write or call: Conservation Education Center, Route 1, Box 44, Guthrie Center, Iowa, 50115 OR 515-747-8383 to make your group's reservations.

