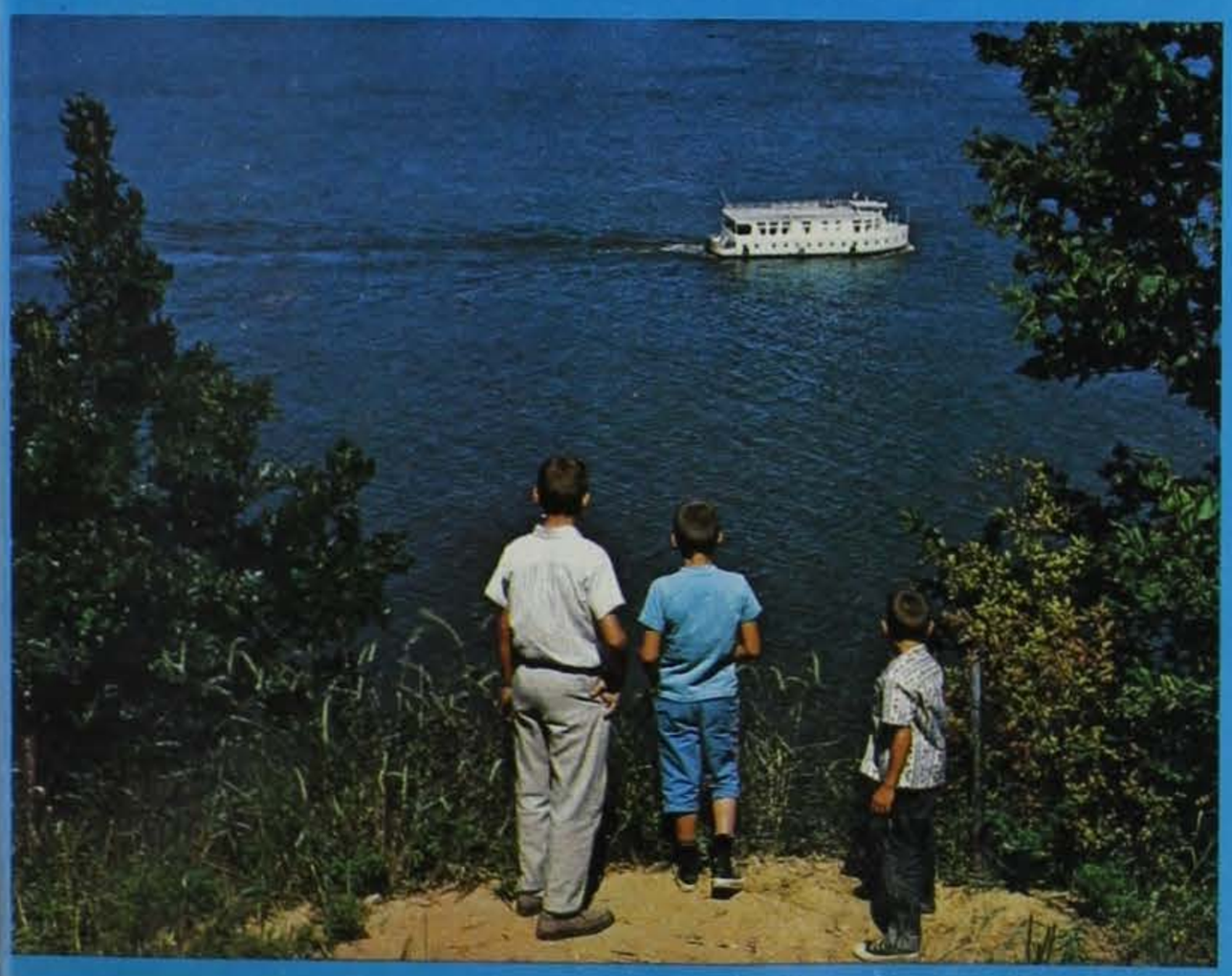
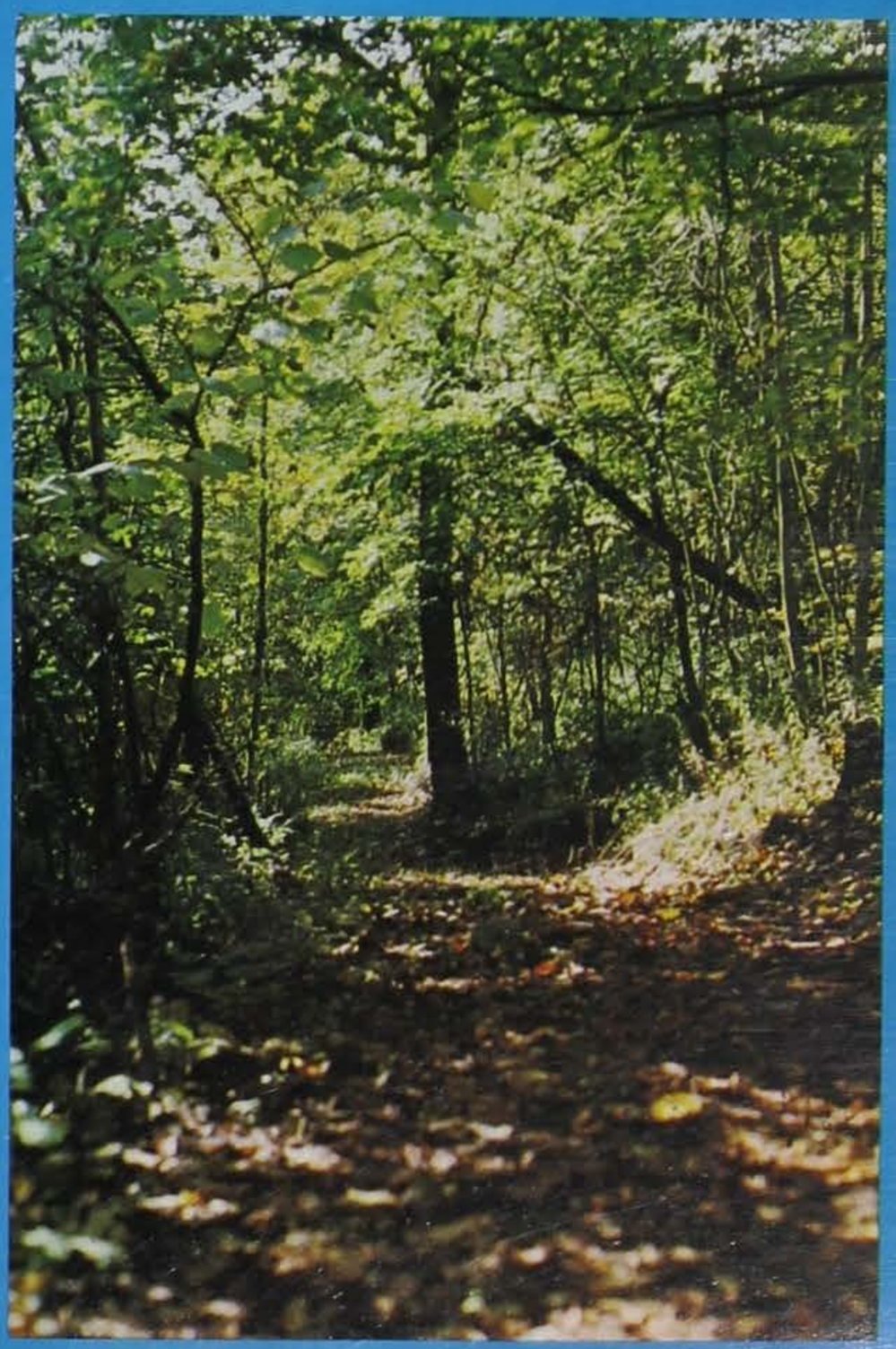


SEPTEMBER, 1974

# Iowa conservationist



# Iowa conservationist

Vol. 33, No. 9 September, 1974



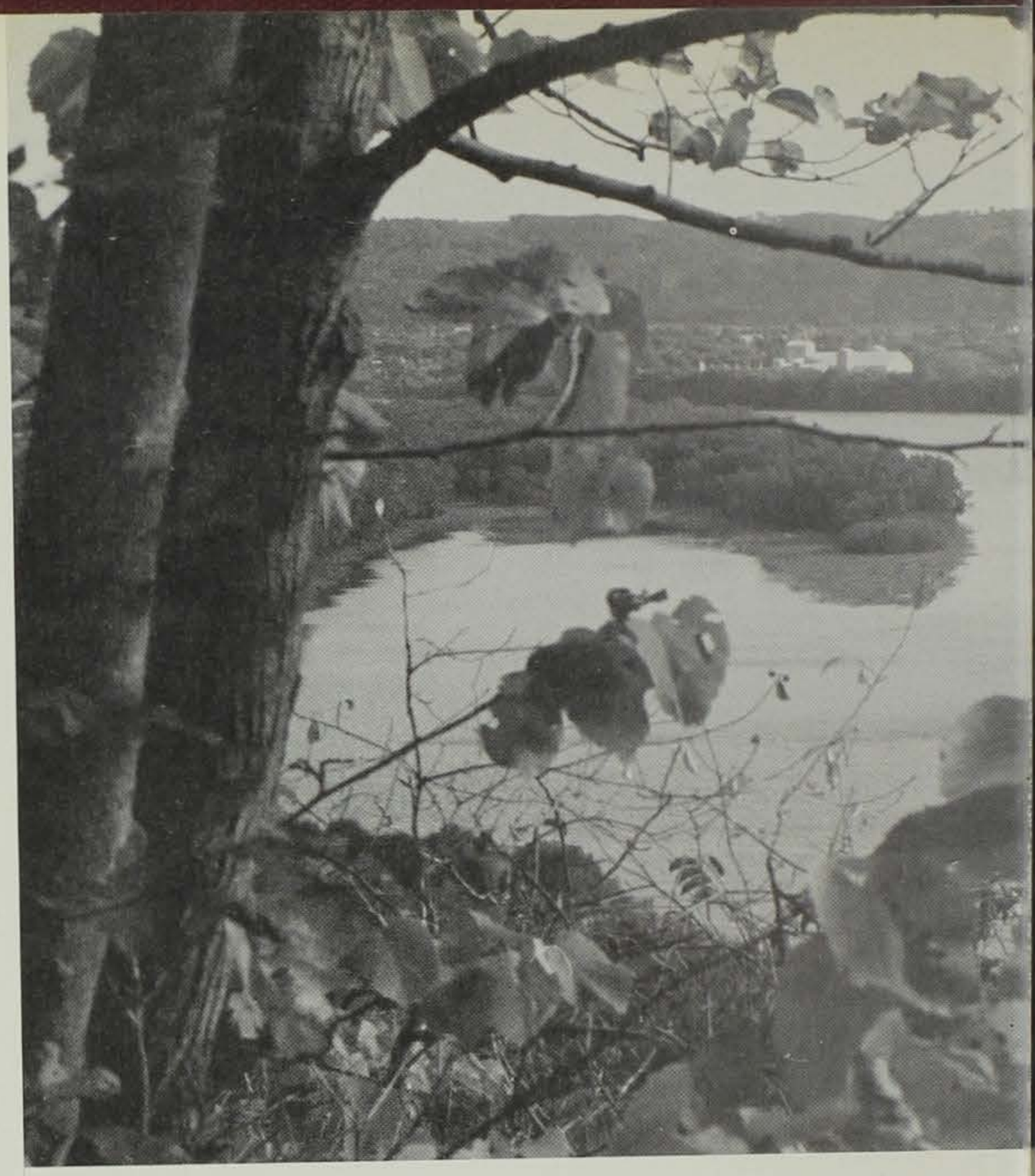

CONTENTS



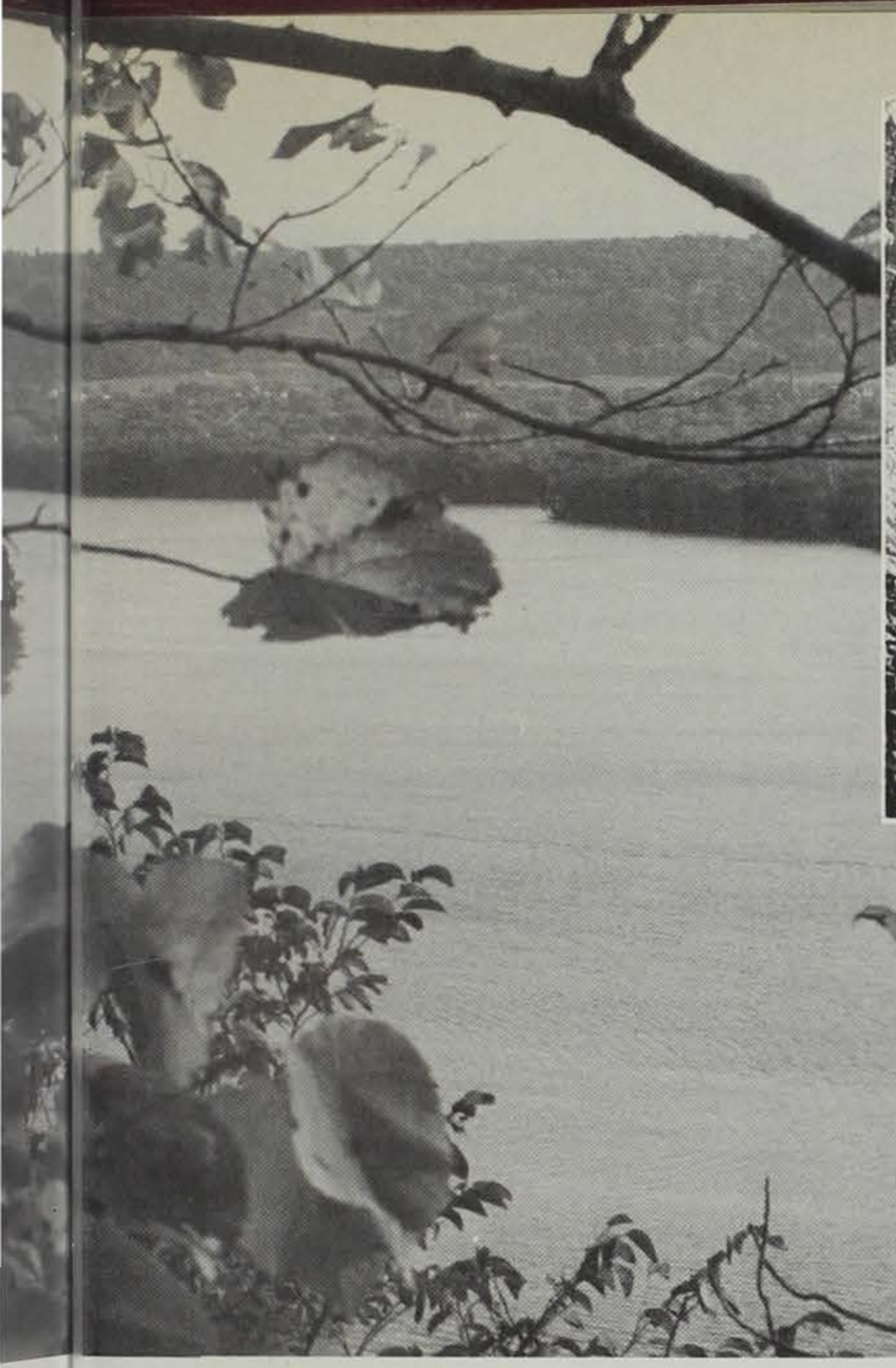
*Back Cover: "Common Egret" by Ken Formanek*



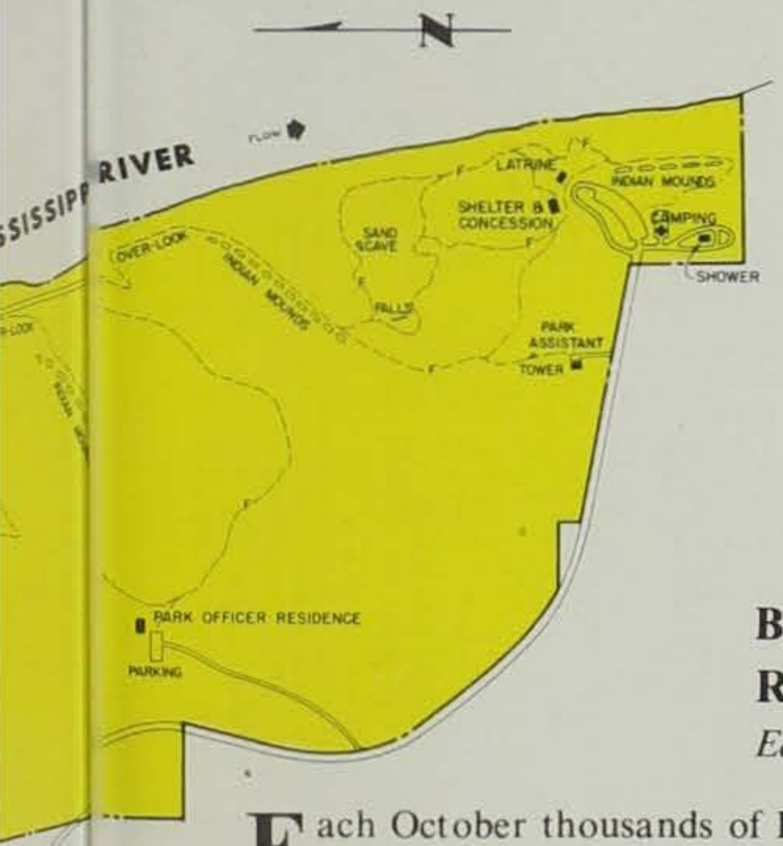

Published monthly by the Iowa Conservation Commission, State Office Building, 300 4th Street, Des Moines, Iowa 50319. Address all mail (subscriptions, change of address, Form 3579, Manuscripts, mail items) to the above address. Subscription price: one year at $1.00; two years at $2.00; four years at $3.50. Second class postage paid at Des Moines, Iowa (No Rights Reserved).

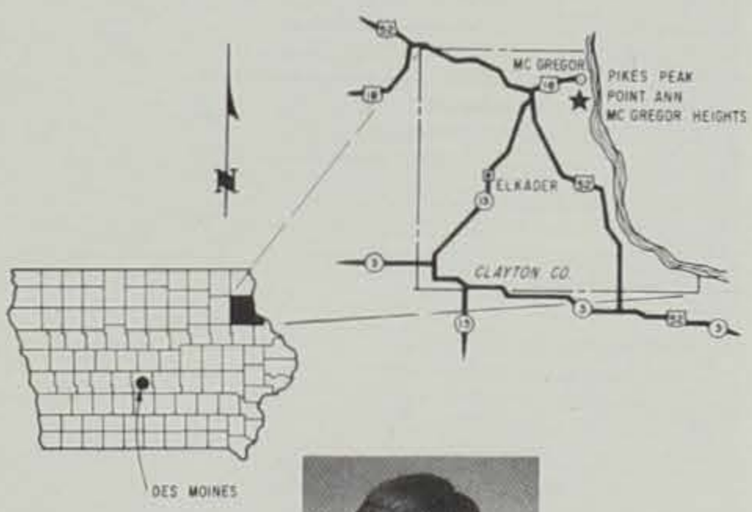



# Pikes Peak to Point Ann



Photos By The Author




**By**
**ROGER SPARKS**
*Editor*

Each October thousands of Iowans journey to northeast Iowa to enjoy the spectacular autumn display. Most visitors view vivid oak and maple hills from car windows, while some cruise the Mississippi witnessing the multi-colored foliage adorning the towering bluffs. Those interested in a closer look at nature's fall fashions may find the Pikes Peak to Point Ann hiking trail to their liking.

The trail is not for the weak of heart. The terrain acquired in recent years connecting Pikes Peak State Park and the Point Ann tract is as rough as Iowa can get. And the partially developed trail system—totalling nearly seven miles—requires a full day's effort to do it justice. Hikers embarking on the entire route may want to leave a vehicle on the other end to avoid a round trip walk.

The Pikes Peak area is well developed and facilities include a shelter, concession and modern camping area with electrical outlets and a shower building. Parking areas exist at Pikes Peak, the Park Officers residence (see map) and at the base of Point Ann. The rest of the 967 acre area can only be traversed on foot.

The trail from Pikes Peak to Bridal Veil Falls is mostly straight down the 500 foot bluff, the highest point in Iowa. Limestone steps eventually lead to sand caves with their "painted" walls of St. Peters sandstone, and an inspiring view of the tiny, spring-formed falls. From here, the long journey to Point Ann is a series of up and down switchbacks. Scenery includes glimpses of the river through rich fall folliage, dramatic overlooks, and hilltop meadows. Several series of effigy mounds occur along the trail as it winds around deep ravines. Bird life, especially during migration periods, attracts ornithologists from around the midwest.

Finally, at Point Ann, the hiker is rewarded by a birds-eye view of the picturesque, river town, McGregor. After a few, last-minute pictures, the down hill stretch to the parking lot is welcome.

The Pikes Peak to Point Ann trail is the longest hiking trail in Iowa. The trip takes plenty of time and energy, but the rewards are much more than just a lot of good exercise. Plan to visit the area in early October as the folliage reaches peak color, and hike into the historical Mississippi river hills at their brilliant best. □

# Waterfowl Seasons and R

By **RICHARD BISHOP**, *Waterfowl Biologist*

The 1974 Iowa waterfowl season was established by the State Conservation Commission on August 16, 1974. The regulations are as follows:

**Geese:**

- ☐ Daily bag limit of five geese including no more than one Canada goose and two white-fronted geese.
- ☐ Possession limit is five including no more than 2 Canada Geese and two white-fronted geese.
- ☐ Canada goose season - 45 days, October 1, 1974-November 14, 1974.
- ☐ Blue-Snow and White-front - 70 days, October 1, 1974-December 9, 1974.
- ☐ Shooting hours sunrise to sunset.

**Ducks:**

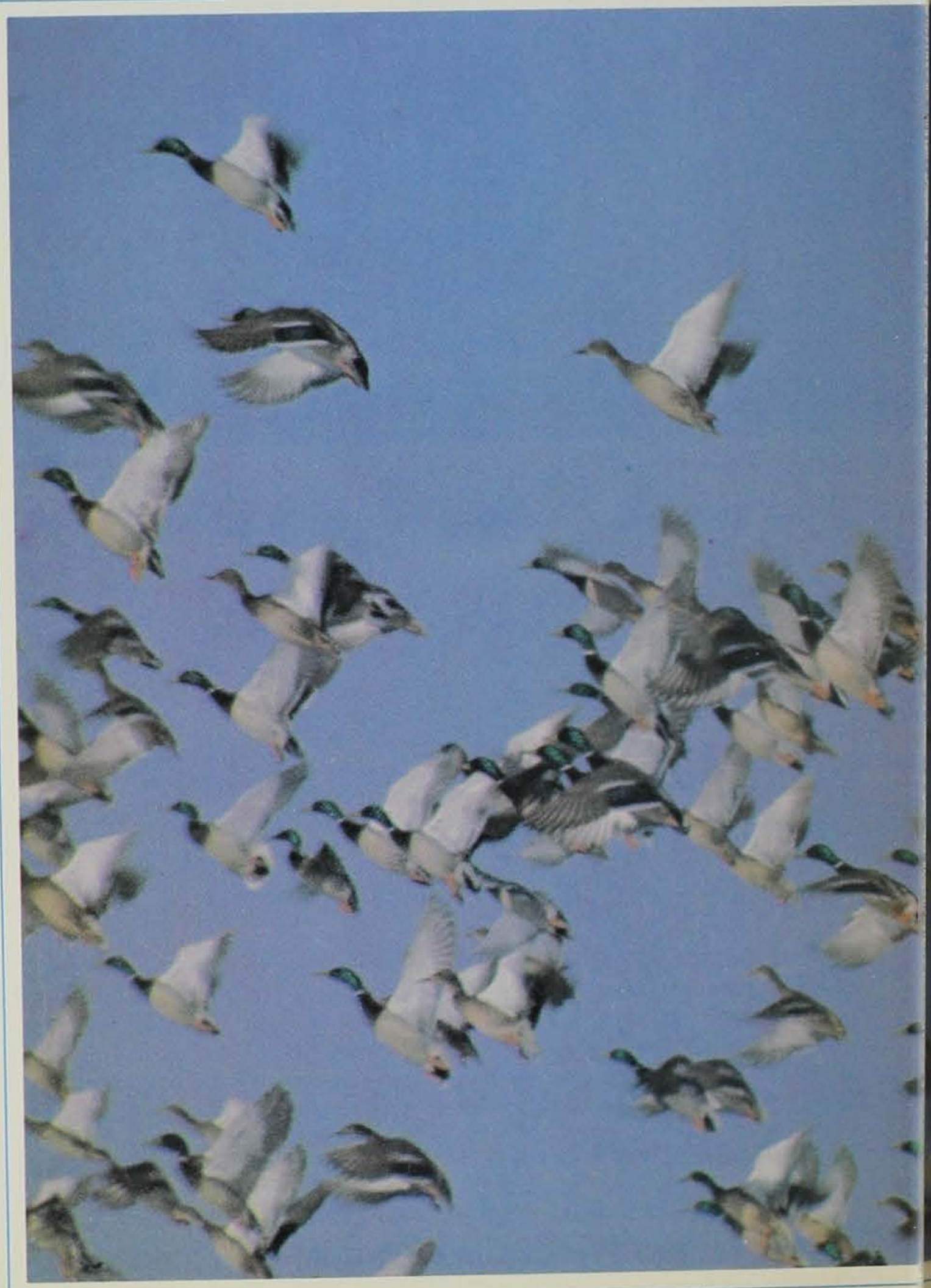
- ☐ Split season - point system. 45 day season
- ☐ The season will open on October 5, 1974 and continue through October 12, 1974. The season will re-open on October 26, 1974 and continue through December 1, 1974.
- ☐ Shooting hours are sunrise to sunset.
- ☐ Bag limit will operate under the point system as during the past few years. The point values are as follows:

100 point ducks.....Canvasback and redhead
90 point ducks.....Female mallard, wood duck, black duck, hooded merganser
35 point ducks.....Male mallard, ring-necked duck, and mottled duck
15 point ducks.....all others

These regulations are the culmination of many months of data collection and evaluation. Information is collected on hunter success, hunter numbers, number of birds killed, species of ducks bagged, winter population counts, spring breeding populations, and annual production. These data are reviewed and compared to past years which allow biologists to speculate as to the effect of season length and bag limits will have on the size of the harvest and subsequent breeding populations.

This brings us to the question; why are the 1974 regulations in the Mississippi Flyway more restrictive on the mallard than 1973, when breeding conditions are much improved and the production outlook is favorable.

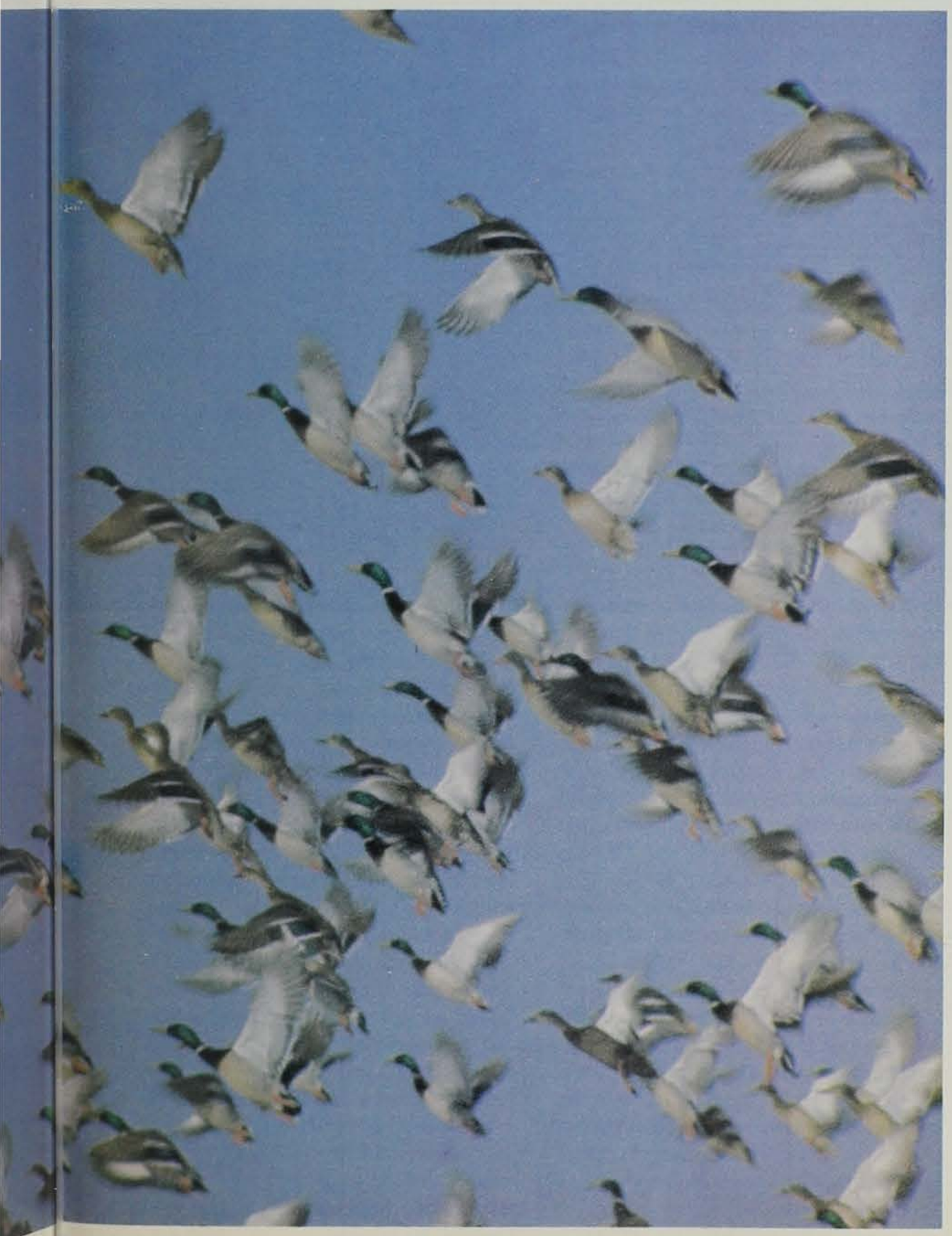
The mallard has traditionally been the number one duck in the harvest of



# d Reasons

this flyway and it is the most sought after duck during the hunting season. With this in mind it is not difficult to understand that annual waterfowl regulations in the Mississippi Flyway are tied closely to the status of the mallard population.

*Photography: Ken Formanek*



In 1973, the breeding population of mallards was approximately 8,660,000. Drought conditions along with more intensive farming practices in the Canadian prairies yielded about 1 young duck per adult bird in the fall flight. Using this production index of 1 young per adult we came up with a 1973 fall flight of 17,300,000 mallards. This was the smallest fall flight since 1969.

Biologists realized that hunting regulations, like the ones we developed for 1973, would further reduce the mallard breeding population in 1974. They also realized that the outlook for good water on the prairies was dismal. In fact, the dry summer of 1973 gave all the indications of starting one of the more severe droughts of recent times. It was reasoned that if water conditions were going to be poor, there was little need to send more ducks back to the already limited breeding grounds. The philosophy being—in years of poor water forecasts we would not be over restrictive with hunting seasons, but in years with good water prospects we would be more restrictive in order to send additional ducks back north to take advantage of improved breeding conditions. Thus the 1973 hunting seasons were viewed as liberal, but with the full understanding the harvest would reduce the 1974 mallard breeding by approximately 15 percent.

As "Ye Ole Forecasters", we were just doomed to be wrong about 1974 water conditions. Abundant fall rains, heavy sonws and a rapid spring runoff switched the dry spring conditions into one of the wettest years in recent times.

With fantastic water conditions across the northern U.S. and prairie Canada the ducks responded and stopped on the prairies to nest rather than flying on north into less productive areas. Surveys conducted on the prairies resulted in overly optimistic reports and created a false sense of greatness for the upcoming fall flight. When all the data were analyzed we found southern Canada up considerably in nesting waterfowl, but other areas were significantly down. The end result, calculated from spring breeding pair surveys, was mallards and green-winged teal down 14 percent from last year, widgeon down 22 percent, redheads, canvasback and scaup down, gadwall and shoveler up 22 percent and pintail up 28 percent. These species counter-balanced each other and even with better production in 1974 the fall flight of ducks down the Mississippi Flyway is expected to be no greater than last year.

Mallard numbers are estimated to be only slightly above those of 1973. Production indexes are suggesting a fall flight comprised of 1.4 young per adult. Using the 7,400,000 adult mallards and increasing this figure 1.4 times, we have a fall flight estimated at 17,760,000 mallards *(Cont'd Page 15)*

Rapid expansion of nuclear power plants for generating electricity and their possible effects on the future of our sport and commercial fisheries is a major concern among fisheries scientists and environmentalists. Just 20 years ago power plants were generally small, using small amounts of surface water for cooling, and usually had undetectable effects on fish populations and other aquatic life. Today, with the advent of nuclear power and the tremendous need of water for cooling, the potential of detrimental effects has increased many fold. Even relatively small nuclear reactors, such as the 550 megawatt Duane Arnold Energy Center near Palo on the Cedar River, requires about 11,000 gallons of water per minute to make up for water loss through the use of mechanical cooling towers. Larger units, up to 1,700 megawatts, like the Quad-Cities Nuclear Power Station on the Mississippi River require 1,000,000 gallons per minute using a once-through system of cooling. Water requirements of this magnitude could conceivably take the major portion of a river flow.

The Atomic Industrial Forum, Inc. listed 25 operable reactors in the United States in July, 1972. By the end of 1973, the number increased to 42 reactors with 56 under construction, 101 under "firm orders" and 14 in the planning stages! It was estimated by 1980, from 20 to 25% of all surface runoff water in the mainland United States will be used for cooling electrical generating plants.

Iowa, thus far, has only four nuclear power plants utilizing either its interior streams or boundary waters, although more than a dozen sites have been explored. The Duane Arnold Energy Center is the only plant located within our state. To solve the problem of cooling water the power company has been working with the Iowa Conservation Commission in building a 500 acre surface reservoir for supplying water to the cooling system when river flow is insufficient. The lake will also be used for water recreation. The Quad-Cities Station on the Mississippi River is quite unique because it has a once-through cooling system utilizing a spray canal. Two plants located on the Nebraska side of the Missouri river, the Coopers plant and the Ft. Calhoun plant, have once-through cooling systems and discharge heated water effluent directly into the river through a side-jet system.

Stringent water quality standards have been set for all nuclear plants within our state or those using border waters. The regulations set forth the allowable degree of water temperature changes along with amounts of other discharges from the plants. As long as these standards are maintained the danger to aquatic life is minimal, but chronic violations could be disasterous to stream life including fish. Power companies are also required by law to file environmental impact statements which must state the potential effects of plant use on the environment from the construction through operation. Electric power companies are conducting short and long-term studies to determine whether or not power plant operation is causing deleterious effects on the fisheries and other aquatic life.

Inherent dangers to our fisheries and other aquatic life stem from both direct and indirect sources. The most obvious danger is from discharging heated water directly into the streams, causing thermal pollution. A second, less obvious danger is from the life lost in the mammoth intake pipes needed to supply water to the cooling system.

Of the two, discharges of heated water directly into our streams, rivers and lakes has drawn the most attention and study. Adverse effects on fish life may be immediate, causing large fish kills. Another closely related effect is thermal shock, induced when fish are drawn into areas with large temperature differences. Since fish are cold-blooded animals and their body temperature is nearly the same as the water surrounding it, this physiological shock may be fatal or weaken the fish making it highly susceptable to chemical pollutants or disease.

As noticeable as the direct effects of thermal pollution may be, long-range changes in the biotic community may well be more devastating, even if more subtle. Studies of biotic communities in highly heated water have been shown to cause myriads of changes, including slower growth and lowered food supply.

Water temperature also has a direct bearing on fish spawning activity. Spawning normally occurs within fairly narrow temperature ranges and varies by species. If water temperatures are higher than normal, spawning activity may decrease, or if a large difference occurs, the fish simply stop spawning entirely. There is also some evidence that the chances of abnormal and less tolerant fry being produced increases greatly at higher water temperatures.

Another long-term influence of higher water temperature is changing the species composition of fish populations in streams. Sudden elimination of a species is seldom the rule, more often sensitive fish diminish in abundance first, followed by less sensitive fish until only the most tolerant species survive.

# FISHERIES IN A NUCLEAR POWER AGE

**By DICK McWILLIAMS**
*Fisheries Biologist*

*Cordova Power Plant. Photography: Ken Formanek*

Water supplied to the cooling coils comes through massive intake pipes imbedded in the river banks. Although pipes are screened to prevent larger fish from being drawn into the system, fish eggs, larval fish and other free floating organisms are drawn into the system where they are subjected to temperature raises up to 23° F. Studies at the Quad-Cities Power Station revealed nearly all larval fish and most of the other organisms were killed by passage through the condenser system. Effects from losses of fish eggs, larval fish and fish-food organisms on the fishery are difficult to access and only future studies will resolve the question.

It is also reasonable to expect some benefits to fisheries from utilization of the thermal discharges, although these possibilities are yet to be explored. Fish tend to seek warmer water during the cool seasons of the year. Concentrations of fish around spray canals and discharge ports have been reported, opening a new area of angling previously unavailable to fishermen. Heated water may also extend the fish growing season, particularly in the more temperate zones of the United States. Extension of the growing season will allow fish to attain larger body size in the same length of time thereby improving the quality of the catch. Vast stretches of open water during winter below power plants could extend use of these areas to nearly year round by many recreational interests.

Work completed in Europe showed some potential use of thermal discharge to develop commercial fisheries operations. Fish are grown in a series of lakes used for recycling heated water. Increased water temperatures greatly decrease the time necessary to produce a marketable sized fish.

Whatever effect nuclear power plant operations have on stream life and fisheries it is safe to say they are here to stay in our power hungry world. In fact, within the next generation nuclear fusion plants will be a reality, requiring even larger amounts of cooling water. The discharge of heated water into our streams without regard for the fish or other aquatic life is wholly unacceptable. Our course of action is to insure our natural fisheries resource is neither abused nor destroyed, and if possible enhanced through wise use of heated water.□

# Big Spring Trout Hatchery


By **VERNON SPYKERMAN**
*Fisheries Biologist*

*Photography: Jerry Leonard*


As many Iowa fisherman know, northeast Iowa offers some fine trout angling. Located in Iowa's nine northeastern counties are some 45 cold water streams stocked on a put and take basis with catchable sized trout. Also there are numerous marginal streams which receive fingerling brown trout plants and which contain trophy sized brown trout. The real heart of Iowa's trout program is its put and take trout fishery and this is where Iowa's three state trout hatcheries play a major role. All of the catchable sized trout planted in Iowa streams are raised and stocked by the three state trout hatcheries located at Decorah, Backbone State Park, and Elkader. This article will give some information on one of these hatcheries, Big Spring Hatchery at Elkader.

**Location and Description**

Big Spring Hatchery is located approximately ten miles northwest of Elkader in Clayton County. Although the hatchery is located in quite a rural area, it is easily found by following directional signs from Elkader.

The hatchery is situated on the bank of the Turkey River and receives a year around flow of water from a nearby spring. The spring is relatively large, delivering between 5,000 and 10,000 gallons of water per minute in a temperature range of 46-50° F. This abundant amount of cold water facilitates good trout production.

Production units at Big Spring Hatchery include 3,600 feet of concrete raceways and four 0.1 acre ponds. The concrete raceways are used entirely for rearing rainbow trout and the ponds are used for rearing brown trout. Also located on the hatchery grounds are a storage building and residence. For those people wishing to camp, a small, primitive campground is available adjacent to the Turkey River a short way from the hatchery.

**History**

A portion of the present site of Big Spring Hatchery, approximately 22 acres, was purchased by the Iowa Conservation Commission in 1961 from Mr. and Mrs. Otto Bankes. Prior to 1961 this area was a private trout fishing club and after the commission took possession, the facilities were used for the production of trout for Iowa's trout program.

Over the past 13 years many improvements have been made at the hatchery. An additional 53 acres of land was purchased allowing space for a campground, new road access to the hatchery, and more public access to the Turkey River. Also, the levee along the river was riprapped with rock, a large storage building was erected, and in 1971, the concrete raceways were constructed. The construction of the raceways was a major improvement, allowing for more efficient production of trout.

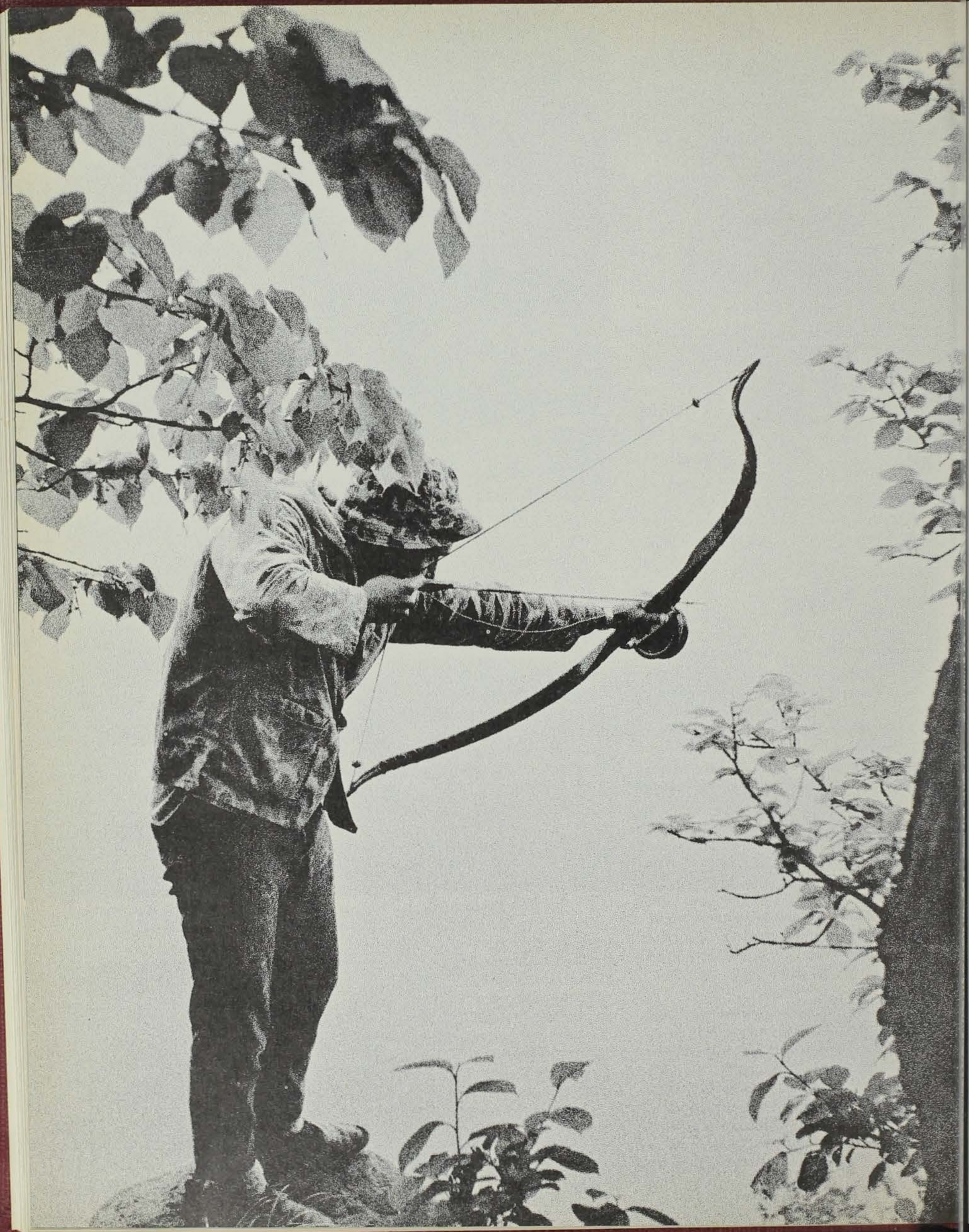
Improvements currently under way at the hatchery include construction of a new emergency spillway for overflow from the spring and a new office-storage building.

**Fish Production**

Big Spring Hatchery is entirely a trout rearing station. All of the trout for Iowa's trout program are hatched at Backbone State Trout Hatchery and when the trout reach fingerling size, or approximately three inches in length, the majority are transferred to Big Spring for rearing to catchable size. Fingerlings arrive in the spring and summer months and reach catchable size by the following spring for the stocking season of April through November. Big Spring Hatchery supplies all of the trout for streams stocked by both Big Spring and Backbone Hatchery. In addition, some of the trout stocked by the Decorah Hatchery are also reared at Big Spring.

Besides rainbow and brown trout, a small number of albino rainbows are reared, and these fish are randomly scattered in the streams throughout the stocking season. These trout are completely gold in color and are rather spectacular when seen in a stream. At the beginning of the 1974 trout stocking season, there were 200,000 rainbow trout, 69,000 brown trout, and 14,000 albino rainbow trout on hand at the hatchery. All of these trout will be stocked before November, 1974.

Since no hatching is done at Big Spring, visitors need not make a special effort to visit the hatchery during a particular time of the year. There are always trout present at the hatchery, and the activities of caring for the fish go on throughout the year. Visitors are welcome at the hatchery seven days a week and an employee will be on duty from 7:30 A.M. to 4:00 P.M. each day to answer any questions. The Turkey River which flows adjacent to the hatchery is stocked with trout from April to November. So when you have a chance, come visit the hatchery, do some trout fishing, and observe the beautiful scenery of northeast Iowa.□



# Ethics for Archers

**By Doug Stubbs**

*I will support National, State and local regulatory agencies and conservation organizations in the propagation and management of all game.*

*I will at all times actively support and promote hunting with the bow.*

*I will abide by current Game Regulations and at all times conduct myself as a sportsman so as not to bring discredit to the Bowhunting Fraternity.*

*I will respect landowner's rights.*

*I will assist all bowhunters in locating places to hunt, but I will not impose myself knowingly on another bowhunter.*

*I will enjoy the challenge of the hunt and will study the habits of the game I hunt.*

*I will use legal archery equipment and will search long and diligently to track down and recover any wounded game.*

*I will not undertake or commit any act which could be construed detrimental to the ancient and honorable act of bowhunting.*

The above list of resolutions are the National Field Archery Association's Bowhunter's Creed. Every bowhunter, whether he belongs to this organization or not, should adopt these rules to govern his hunting.

In the last few years several organizations in the United States have been working to ban hunting. The divide and conquer technique used by these anti-hunting groups is to claim that bowhunting is the cruelest and most inhumane form of hunting. The only way we, as hunters and sportsmen, can eliminate these claims is to unite in local, state, and national sportsmen clubs. Hunting standards and rules must be established and these local clubs must police and judge their own members. The greatest threat to archery and other forms of hunting today is caused by people who do not use a bow according to the above written creed.

Archery is one of the fastest growing sports today and because of this fact, we have many people purchasing bows and arrows who do not and can not get proper instruction in the use of their equipment. The local and state associations should put on exhibitions and demonstrations to help those that need help or are possibly interested in taking up archery. The main feature of these exhibitions and demonstrations should be safety, sportsmanship, and good conservation habits.

As with any other sport, safety must be the primary concern of all those who shoot a bow and arrow. If you have a younger person shooting with you, remind him if necessary, that a bow and arrow is not a toy but a deadly weapon.

Safety with a bow starts with the string of the bow. **ALWAYS** use a bow stringer for two reasons: (1) it is the safest way and (2) it is the only way to keep the guarantee on a new bow in effect.

After you have your bow strung never nock an arrow until you are ready to shoot. **NEVER** carry a bow with an arrow nocked on the string.

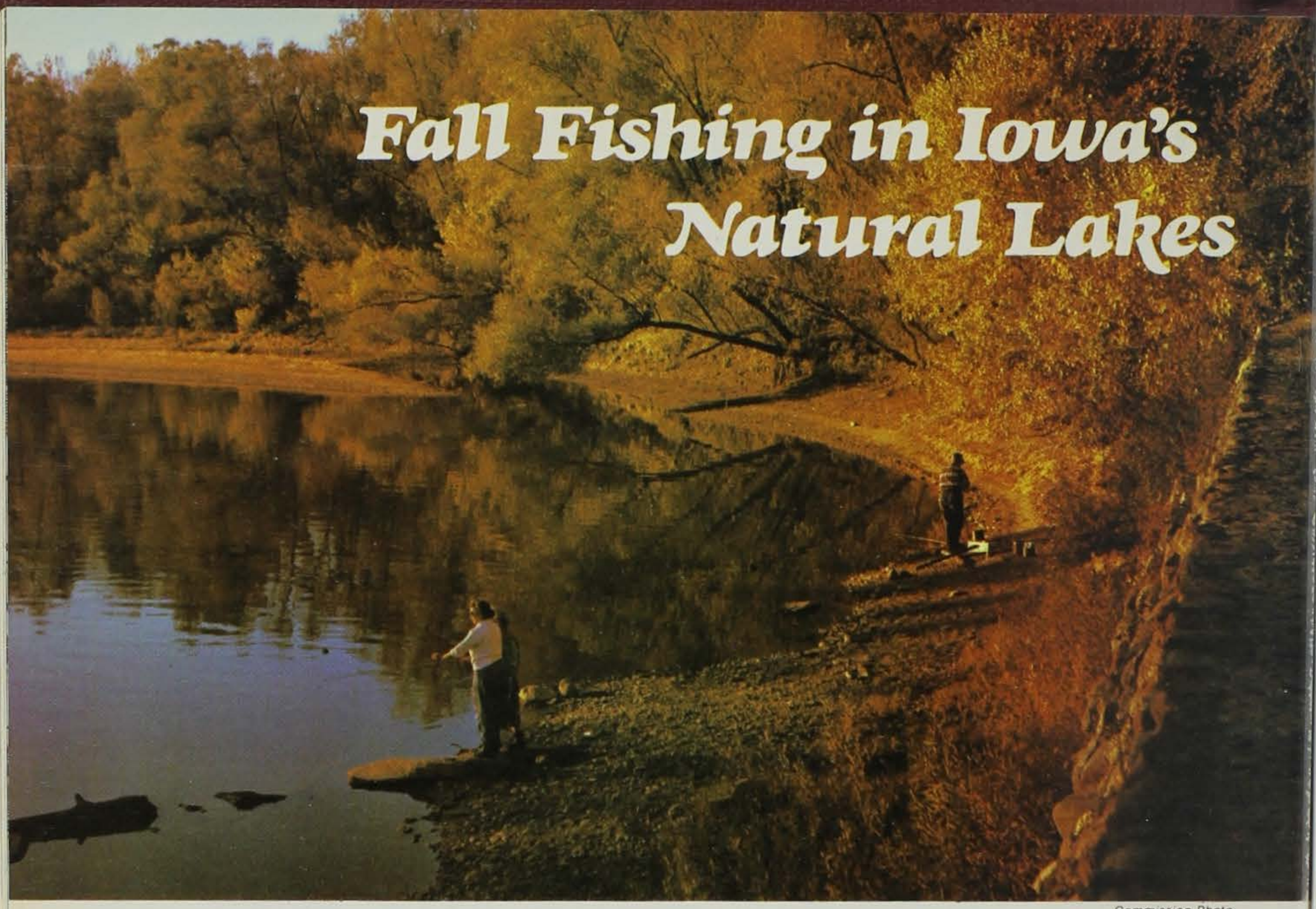
Most people are familiar with the saying "I shot an arrow into the air, It fell to ground I know not where." **NEVER** shoot at any object or target unless it is clearly and completely visible. An arrow can ricochet very easily and become a deadly missile into some unaimed for area. Also, **NEVER** shoot an arrow straight up for the same reason.

You should always inspect your arrows for cracks, dents, splinters or bends before shooting them. Fiberglass and wood arrows are under tremendous stress when they are shot from a bow. It is possible to seriously injure yourself if you shoot such an arrow and it "blows up" or splinters to pieces when you release it.

Those archers who use their bows for hunting should always use a quiver that covers the broad ends. If you should fall for any reason the cover will protect you and other people around you from serious injury.

The fun and relaxation that are available from archery should be considered by all sportsmen. Try all forms of archery to get the maximum enjoyment of this fine sport. If you try only one form of archery (target archery, field archery or hunting with a bow) you will miss out on an ever expanding field of fun that can last year around. □

# Fall Fishing in Iowa's Natural Lakes



Commission Photo

**By FLOYD A. THOMPSON,** *District Fisheries Supervisor*

Ever hear the expression, "I can't wait until fall for that excellent fishing in the natural lakes"? This is commonly heard throughout the northcentral and northwest part of Iowa during the warm weather months where the mechanical age of ours has tuned us to the speed of machinery and the humdrum of everyday activities. From all this, our minds and bodies need rest and relaxation. We, as fishermen, have the key to that which is so sorely needed. So, with that, let's pass along to others the art and enjoyment of fall fishing and all of its associated pleasures.

All Iowans are proud of the things that nature has provided for us, but more especially the peoples of the natural lakes area. Here the demand for relaxation and the benefits of having our lakes built for us by nature makes the area one of Iowa's most popular and talked about resources.

We find, with the fall season upon us, the fisherman reviewing his tackle with pleasure realizing it needs to be in a "ready to go" position. The rain delayed farmer or the businessman who closes his shop in late afternoon can hook-up the boat and trailer or throw the waders in the trunk and get in those relaxing and rewarding evening hours of just plain fishing on these beautiful waters.

There are a few drawbacks to consider in our fall fishing trips. We find the need for warmer clothing; the beginning of the changes in vegetation conditions and naturally the schooling of the various species and their movement toward feeding areas where they make diurnal runs dependent on feeding desires.

**Walleye Fishing**

Considering fall fishing we have found the most sought after predator is the walleye. He probably could be compared to royal families as he reigns supreme in the natural lakes. Used as a predator to help maintain a balance of panfish, he comes in first as the ultimate in the sport fishery. Though the fish requires a certain habitat for reproductive purposes his feeding habits will lead him to be found most anywhere. Modern devices, such as the fish locator or depth finders have proved very effective in deeper water areas, giving the walleye less chance to elude or escape the demands on him from the fishermen.

Many lunker-sized walleyes are caught each fall from our natural lakes. Each lake offers different conditions where this fish is being sought. For example, Lost Island has produced many lunkers by fishing with chubs, simply casting from the shoreline and following the same principle as bullhead fishing (leaving the bait still until you get a run).

Other major producers of lunker walleye are West Okoboji, Big Spirit, Clear, Storm and North Twin Lakes. Fishing these waters we find the methods are similar. Trolling in the open areas during the daylight hours with minnow or chub-spinner combinations proves very effective. However, greatest efforts are made

during the evening or dark hours when most people are free to answer their own desires.

All of the major natural lakes have several hot spots where literally hundreds of walleye are caught each fall with many over the 8 pound size required for big fish recognition by the Conservation Commission. Though many lunkers are reported, most of these fishermen prefer to keep mum so as not to attract more attention to these areas.

**Perch Fishing**

Ever caught your limit of perch in 25 casts? Yes, this frequently happens—particularly when you locate a large school and they happen to be on one of their feeding runs. This species is the most sought after fish in a limited number of the natural lakes, with West Okoboji, Clear, Big Spirit, Silver (Dickinson County) and Ingham lakes leading the way. With a year around open season, perch are caught continuously throughout the year. The fall season is by far the most productive. With Labor Day as the usual starting point, the water temperature begins to drop causing the vegetation lines to recede to deeper water exposing prey fish that have been protected through the late summer months. This condition attracts the perch to shallow water where they become readily available to eager fishermen. Migrating prey fish such as late hatched bluegills from shallow areas adjacent to the main lakes also attract perch to the shallower waters. These areas, such as the canals on West Okoboji, prove to be some of the "hottest" perch fishing spots known. The bay at Okoboji where East and West Okoboji connect probably provides the "hottest" perch fishing anywhere. Early morning or late evening fishing proves to be the most productive time to pursue perch. Cloudy days also provide excellent conditions and the windward side of the lake is the most preferred area.

The natural lakes provide a variety of excellent fishing for numerous other species. For example, the yellow bass in Clear Lake, northerns and smallmouth bass in West Okoboji and the white (or silver) bass in Storm Lake. Catfishing has vastly improved in recent years and fall fishing for them has provided many a successful trip for anglers. Lakes where these fish have provided this response are Black Hawk, Storm, North Twin and East Okoboji.

Should your desires lead you to try for an exotic or trophy species, the Okobojis and Clear Lake offer a challenge in the form of the muskie. Established in the early 1960's they now offer a chance to any angler as they will hit small minnows, crawlers, artificial plugs or spoons. Only recently a new state record was set at Clear Lake with a fish weighing a little over 29 pounds being taken. Fall offers the best time to pursue the muskie.

**Baits**

No fishing story can be complete without mentioning the types of bait to use and various methods. Our effort here is to identify a few and to a certain degree, explain the way to use them.

The principle bait used in casting for walleye, perch, and smallmouth bass are leadheads, jigs, rock-a-roos or whatever you wish to call them. Colors are anyone's choice as there are many varieties and at various times they will all take fish. The way to use one of these baits is most important. Allow the leadhead to sink to the bottom. In retrieving the bait, point your rod toward the area it landed holding it at a 45° angle and retrieve with short, snappy jerks by lifting upward. This allows the bait to skip along the bottom. The side or lower level retrieve will pick up vegetation and become snagged more frequently. Casting with plugs or spoons, the side retrieve is adequate. Perhaps a variable retrieve speed in this type of fishing will produce better results.

When still fishing with live baits such as minnows or chubs, always hook them so as to allow for swimming about. Preferably they should be hooked near or under the dorsal fin but not deep enough to damage the spine.

Many variations of all baits exist and no one could be proficient enough to describe how to use all of them successfully. Much effort is made annually to come up with the prefect one but it seems each season sees a different color, size or weight bringing better results over the previous year's best. Examples of this are the use of a perch or walleye eye on your jig—perhaps a piece of crawler will help as well.

Keep in mind during your fall camping trips or opportunities to go fishing that the natural lakes offer fine fishing during this season. Should you require information regarding conditions, where they are biting, the best baits and methods, ask in the sport shops in the area. The hatchery or the management station nearest to your choice of fishing spots also have helpful information.

Finally, the Conservation Commission has recently published a new fishing guide indicating waters, size, facilities available, and the major and minor species in each lake. The guide, which sells for 50¢, may be obtained by writing the Iowa Conservation Commission, 300 4th Street, Des Moines, Iowa 50319, or by contacting the nearest commission office or hatchery. Keep in mind that your investment in a fishing license is entirely returned to fishermen in improvements and the expansion of a better fishing program. □

*Photo By Ken Formanek*

# CLASSROOM CORNER

By CURT POWELL

*Administrator Conservation Education Center*

Each year, as school begins across the state, many people inquire about the possibilities of bringing a group of students for an overnight visit and program at the Conservation Education Center. The Center is located about an hour's drive from Des Moines, an hour south and west of Ames, and about an hour and a half east of Council Bluffs. It is very accessible for groups to use. Granted, the bus ride here may be a bit trying on sponsors, but I know you will find it well worth while once you're here and become involved in the activities at the Center.

Did you know that the Center has over 70 programs it offers to students and teachers? These programs not only cover science, but all of the subject disciplines such as home economics, history, art, and others. Our goal is to give students a good, solid conservation background. The facilities and programs are open to all age levels, so elementary teachers, why not give it a try? Get mothers and fathers to accompany you as chaperones.

Is money a problem in financing such a trip? It really need not be. Many of our school groups have paper, scrap metal, and pop bottle drives to raise money to pay the very low fees at the Center. Other school groups sell conservation-type projects, place mats, candy and participate in other fund-raising drives. How about the student that just can't afford to go and really wants to? Surely, there is a service club in your area that would discreetly help out. Check out the possibilities!

Other groups may use our facilities when they are not being used for conservation instruction. First priority goes to teacher education in conservation, second to in-service training for ICC personnel, third to non-profit conservation groups, and fourth to school and youth groups.

Our lodging fee for youth and school groups is $2.00 per student per night and $3.00 per chaperone per night. We even furnish all bedding, linen, wash cloths, soap and towels for that price!

Many people visited the Center last year. Talk to some who did and you'll find their time was spent in a well worth-while adventure. Most return another year. We are open year-around!

Write to us for our new colorful brochure (free) and a three page publication entitled "Taking a Field Trip With Your Students" (also free). Our address is: Conservation Education Center, Box 138C, RR #1, Guthrie Center, Iowa 50115. If you haven't brought a group to the Education Center, you're missing the best in conservation and environmental education. □

FROM THE

# Warden's diary

By REX EMERSON

Started out the day with the usual number of messages and requests that had been taken on the phone by my wife. The Conservation Officer's wife is very important to his work. She is an unpaid secretary who takes phone calls and answers the doorbell and makes notes so that her officer husband can return the call or make personal calls, depending on the situation. If you refuse to give your name over the phone, don't be surprised if she hangs up on you. Anonymous calls are seldom of any value, and usually they are just wanting to know where the officer is working at that particular time. If the call needs immediate attention she will call the sheriff's office or police station and they will reach my car by radio. The Conservation Officer's wife is a very special and understanding person, to do all this and put up with the irregular hours that the officer must work.

After lunch I went to a school to teach a hunter safety class. This is a four hour course, so it will involve going to the school four days.

The purpose of the hunter safety course is to teach proper gun handling in the home, when transporting and in the field. Basic information about ammunition and guns is included. Sportsmanship is stressed too, because safe hunting and sportsmanship go hand in hand. There is no intent to teach expert marksmanship. This is a separate subject requiring

*Law Enforcement Supervisor*

considerably more training and practice. The sole aim of this course is to give the hunter basic information which should enable him to avoid hunting accidents. We wish to spread the principles of safe hunting to as many people as possible. The more safe hunters there are, the better for all.

Listed below are some of the causes of firearm accidents that occurred last hunting season.

1. Crossing fences when loaded firearm discharged.
2. Firearm discharged while unloading.
3. Firearm discharged while clubbing game with gun.
4. Shooting a crippled duck with shot richochetting and hitting hunter in another blind.
5. Firearm discharged after falling from tractor.
6. Failure to keep loaded firearms out of reach of children.
7. Shooter not paying attention to what was beyond his target.

We go over some of the hunting laws and stress the importance of asking permission of the landowner before hunting on private property. If we could legislate common sense, we could do away with most of our laws.

We never really know how much good we do with the hunter safety course, but if we can save just one life, it will certainly be worth all the time spent. □

## 100,000th HUNTER SAFETY STUDENT HONORED

Photo by Jerry Leonard

During the 1974 state fair at the Iowa Conservation Commission building, Jerry Branderhorst, Pella, Iowa was awarded a "Certificate of Recognition" for having been the **100,000th student** to complete hunter safety training in Iowa.

Charles Olofson, Hunter Safety Coordinator is shown awarding the "Certificate of Recognition" and a "hunter orange" hunting vest to Jerry Branderhorst.

The hunter safety training program has been offered since 1960 and is available statewide. Those interested should contact their local conservation officer, whose name may be learned from any local law enforcement agency. The only requirement is that the boy or girl be 10 years of age or older. There is no charge for the course. □

## WATERFOWL

*(Continued from Page 5)*

Understanding the 1973 season was poor, and migrations were not condusive of high harvests, the kill declined 19 percent in our flyway. We can anticipate a higher harvest in 1974 under similar regulations due to more normal migrations and more young inexperienced ducks in the fall flight. Banding data have shown that young ducks are more vulnerable to the gun than are adult bird and with a larger percentage of young in 1974 the kill will increase.

All these considerations led the states of the Mississippi Flyway to recommend that we design hunting seasons to reduce the kill of mallards in order to send more adults back to the nesting grounds in 1975. Based on the amount of water presently available, projected water conditions are quite favorable for production in 1975. THIS IS WHY 1974 REGULATIONS ARE SLIGHTLY MORE RESTRICTIVE THAN IN 1973.

Rosy forecasts for a spectacular duck production year were quelled somewhat when biologists visited the prime duck factor of the Canadian prairies and came fact to face with a new evil. That evil being increased agriculture due to rising grain prices. No longer is water the sole factor needed for good duck hatches. Undisturbed nesting cover in much of the prairies is becoming a premium. Without water AND nesting cover we cannot produce bumper hatches. This situation is not unlike that of the pheasant in northern Iowa where intensive farming practices have eliminated the nesting cover and all but eliminated the pheasant.

In all likelyhood we cannot look to prairie Canada for the fantastic waterfowl production experienced in past peak years.

The fall flight forecast for geese is relatively unchanged from a year ago. Production of Canada geese on the Hudson Bay Lowlands appears about average and a good population is expected this fall. Blue and snow goose flights are expected to be similar to last year. In summary the goose situation is quite favorable.

If one would choose to compare the upcoming season with the 1973 Iowa waterfowl season, we can anticipate improved hunting success.

Hopefully this information will allow some insight as to the why's of our current regulations and what to expect in terms of hunting this fall. Remember, however, that migrations and weather conditions are two of the best regulators of Iowa's duck and goose hunting success. □