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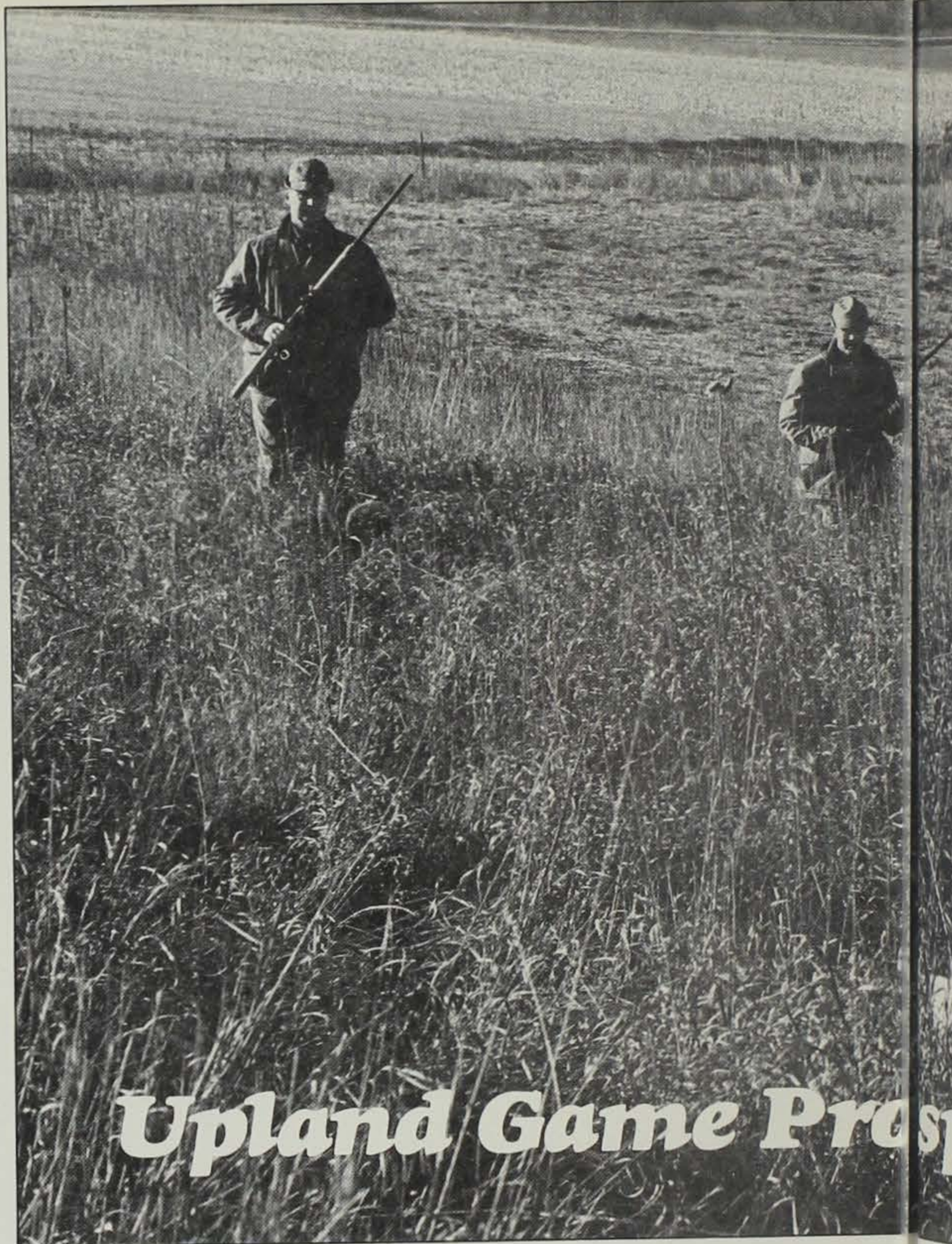
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By Charles C. Schwartz
Upland Game Biologist

As the green of summer changes to the colorful hues of autumn, many an anxious sportsman wonders what the upcoming hunting season will offer. How abundant will game be this year? How will success compare to last year? What will the hunting regulations be like?

The state of Iowa is blessed with abundant upland wildlife including the

ring-necked pheasant, bobwhite quail, cottontail rabbit and Hungarian partridge. These sporty game species provide hours of hunting recreation for sportsman. Over 300,000 nimrods annually take to the fields in pursuit of their favorite game species. Last year Iowa lead the nation in pheasant harvest, over 300,000 hunters bagged more than 1,900,000 roosters. This



Prospects - 1974

represents the highest harvest for pheasants in Iowa in the past 10 years, and reflects excellent hunting conditions coupled with a high fall bird population.

Prospects for the 1974-75 pheasant season look good. Statewide pheasant populations are down from last year, but are comparable to long term trends of the mid-60's when hunting was good. On a regional basis, southwest, west-central, north-central and south-central Iowa pheasant populations are similar to last year. There was a slight increase in bird numbers in northwest Iowa. Populations are down in central, east-central and south-east Iowa this year. This decline was probably due to

reduced production associated with torrential rain in early June. Heavy rainfall and cool temperatures during the hatching season are very detrimental to young pheasants when many die of exposure, or drown.

Hunting statistics also indicated over 200,000 nimrods harvested 1,425,000 cottontails during the 1973 season. Population surveys indicated the 1974-75 rabbit outlook continues quite good. Rabbit populations are similar to those in 1973 and with good hunting conditions the forthcoming season should provide many hours of excellent recreation.

Last year the bobwhite quail season proved to be slightly better than 1972

with 106,000 hunters bagging 791,000 quail. Quail hunting for the past two years has been above average. It remains below the heydays of the late 60's and early 70's, but much better than the early 60's following the severe winter of 1959-60. The 1974 prospects for bobwhites are fair. Surveys conducted this year indicate a decline in quail broods over much of southern Iowa. Mid-summer rains followed by severe drought were adverse for quail reproduction.

Hungarian partridge hunting is fast becoming a popular sport in northern Iowa. Game surveys conducted by Iowa Conservation Commission indicated the Hun population has been increasing. With this information in mind, the 1973 hunting regulations were liberalized. The daily bag limit was increased from 2 to 4 and the possession limit to 8 birds. Last year over 45,300 Huns were harvested. This was the highest partridge bag in the past 11 years. No doubt many Huns were harvested by pheasant hunters. However, since many pheasant populations in Hun range are low, some sportsmen are developing increased enthusiasm for partridge chasing. Prospects for the Hun season this year should be similar to last year. Weather conditions over much of Hun range in Iowa during the reproductive season were normal.

Upland hunting season dates are listed below for this year. One major change in all seasons this year is the shooting hours. They are now sunrise to sunset for all upland species. This change in the regulations is related to the nationwide change from standard time to daylight savings time early this year.

The seasons and limits on these species are as follows:

PHEASANT—Nov. 9 - Jan. 5; bag limit - 3 cocks, possession limit - 12.

HUNS—Nov. 9 - Jan. 5; bag limit - 4, possession limit - 8.

QUAIL—Oct. 26 - Jan. 31; bag limit - 8, possession limit - 16.

RABBIT—Sept. 7 - Feb. 28; bag limit - 10, no possession limit.

It appears from the 1974 summer game surveys that upland hunting will be good over most of Iowa this fall. Remember to ask permission to hunt on private lands and respect property, and by all means be a safe sportsman.



A Whitetail Challenge

By Cynthia Squibb, Fisheries Worker

Photos By Jerry Leonard

Author with trophy buck taken with bow.

Below: Excellent set up. Hunter utilizes "natural" limb stand - high and well camouflaged.



6:08 P.M. - Fifty-four hours of sitting in a tree, 2½ weeks since the opening of the season. Several does passed about 30 yards away three days ago, but so far nothing closer. Suddenly a branch cracks to the left up the trail - a buck - picking his way over a fallen elm tree. He's still about 60 yards away. Your arrow is still nocked and ready, the position it's always in when in a tree stand. Slowly raise from your sitting position, brace your feet firmly and lean slightly against the trunk to keep your balance. Movements should be very slow, quiet, and done when the deer is not looking in your direction. He has stopped 15 yards from your stand because he has caught your scent and is looking around trying to spot the source. Now's the time to shoot. Aim, thinking and looking only at that small area behind the front shoulder. "Buck fever" comes when you think of his rack and size.

Release! The arrow hits the

dirt below him. He jumps, but not knowing from which direction the arrow came he's reluctant to flee. Slowly slip out another arrow when he's looking away. Normally a deer will not remain there for you to take a second shot. But the slow movements may not attract his attention. Aim, release! This time it's a hit and he's off with a jump. Not even time enough for you to see clearly where the arrow hit. Now you discover the branch you are standing on is shaking from your "buck fever". He looked like an eight pointer and a big one, too.

Whether you hit him directly or not, stay in your tree a half hour or more. After the long wait, go to where he was standing when the arrow hit. Mark it so you will have a starting point for trailing him.

When he's found, attach the tag issued with your deer license. Field dress him as soon as possible taking care to thoroughly clean the body cavity.

The first Iowa bow season, in 1953, had only 10 hunters and only one deer killed. Since then, bow hunting has become an increasingly popular sport. In 1973 Iowa had 10,506 applicants for deer bow hunting as compared to 6,916 in 1972. However, bow hunting is not an easy sport. Patience and a willingness to devote many hours to the sport are primary requirements. The average archer requires 293 hours to bag a deer. However, bow hunters average 54 hours in the field during a season. The large difference in these figures results in about a 20% success ratio in bow hunting.

Besides the accomplishment of killing a deer with a bow, this type of hunting has many benefits. It's not the fast-paced atmosphere of shotgun deer hunting. While motionless in a tree, one is able to enjoy the movements of other wildlife. A squirrel may scold noisily when he discovers you in his oak tree. A bluejay may cry out your presence to all the world.

The basic equipment consists of a bow, arrows, arm guard and finger tab or glove. An archery shop or an experienced bow hunter are the best places to seek help in obtaining equipment to fit you. They can assist you in determining your bow weight,

draw length, and size of arrow. They also can show you the proper shooting form and hunting techniques.

Camouflage clothes can be bought or you can easily make your own by dyeing a pair of dark green or brown coveralls to resemble bark on a tree. Use different length stripes, alternating to get that "bark look". Deer are color blind, but the important thing is to break up your outline.

Practicing with your bow is a necessity. Most bow hunters will admit they have experienced "buck fever". When excited, one forgets all the small details that goes into releasing an arrow so it hits the target. The actual pulling of the string and releasing must be natural without thought.

Before the season opens take time to choose a hunting area. Find out where the deer move by checking deer trails and old buck rubs. Find a sturdy tree near a deer trail to use as a "stand". Climb at least 10 feet up and use the branches for sitting and standing. They prove to be more natural than boards nailed to the tree. Saw off small branches that will be in the way of the bow's movement and the arrow's path. Any branch or leaf can deflect an arrow from its course. Practice shooting at a point that would be the

same level as the deer's vital area — directly behind the front shoulder. Most deer killed in Iowa average 15 yards from the hunter. The closer the shot the greater the chance for a clean kill!

It's best to have two or more deer stands set up before the season. Deer tend to move around and bucks during rut are seldom predictable. Having all limbs cut and other alterations of the habitat made before the season will allow the deer to accustom themselves to the change.

A hunter should also familiarize himself to the area enough so he is able to walk directly to his tree stand in the dark and without crossing a deer trail near the tree. Hunting hours are from ½ hour before sunrise to ½ hour after sunset. The best time for a hunter to be in his tree is during the peak deer movement hours in the early morning and late evening.

A sharp broadhead arrow is the most important piece of hunting equipment and it must be razor-sharp to cut blood vessels. Deer are killed by hemorrhaging, the quickest spots being the heart and lungs. A kitchen knife sharpener will usually give a broadhead this needed sharp edge. Filing the sharp point off to a chisel point will keep it from curling back when it hits bone. A sharp point might also dig into the bone instead of sliding off of it and into the flesh.



Deer hunting can prove to be rewarding, but remember your sportsmanship rules. Don't shoot unless you feel sure of making a clean and quick kill. A wounded deer or any wounded animal that gets away is no good to anyone. A true hunter respects the animal he pursues as well as the weapon he is using. □



COMMERCIAL HARVEST OF ROUGH FISH from Iowa Inland Waters



By
**Robert
Middendorf**
Fisheries Biologist

Did you know that some Iowa inland waters are supporting 800 or more pounds of rough fish per surface acre? Studies by fishery biologists have found this to be true in our large flood control reservoirs and rivers. These are fish species deemed undesirable or uncatchable by most sport fishermen, and are detrimental in varying degrees to the welfare of more desirable game fish populations inhabiting these waters.

Most prominent of the rough fish species are carp and buffalo. Possessed with a high rate of reproduction (one large female carp may spawn up to 1,000,000 eggs), they expand rapidly and compete for food and space with game fish populations. They also have a habit of rooting in soft bottoms, causing turbid water and destroying egg nests of game fish. The hatch and extremely high survival rates of rough

fish usually correspond with periods of expanded water levels on our large reservoirs and rivers.

Due to the restrictions set out in the Iowa Code, control of rough fish in inland waters had, up till 1972, been confined to management techniques available to fisheries personnel of the State Conservation Commission. Their use of chemicals, lake drainings and special fishing equipment for control have been successful in small lakes and streams. But large bodies of water such as flood control reservoirs and rivers are beyond the manpower and economic limits of the commission.

One other feasible alternative to controlling rough fish on these large bodies of water is to allow private enterprise (commercial fishermen) to harvest them. The rough fish may be undesirable or uncatchable to sport fishermen and large infestations a detriment to survival and growth of game fish, but to a commercial fisherman they are a valuable source of income.

For many years the Code of Iowa had prohibited use of commercial fishing gear on inland waters. Use of

this gear was restricted to the boundary waters of the Mississippi and Missouri Rivers. Therefore, utilization of a vast untapped natural food resource was being wasted.

But in 1966 the State Conservation Commission received federal funding to determine the feasibility of a commercial fishery on large flood control reservoirs and rivers. This project provided information on the magnitude and rate that commercially valuable rough fish could be exploited without jeopardizing the sport fisheries. Maintenance and protection of a sport fishery is the primary concern of your Conservation Commission, hence, a commercial fishery must be compatible with good sport fishing management.

Information gathered in the research project allowed the Conservation Commission to go before the 64th General Assembly in 1971 with suggested changes in the Iowa Code. As a result it was modified to allow the commission to issue permits for the removal of undesirable fish from inland waters.

Rules and regulations to govern inland commercial fishing were carefully drawn up by commission personnel to allow utilization of the once wasted commercial fish species while at the same time protecting sport fish.



Any individual who purchases an Iowa commercial fishing license may apply for a free permit for waters designated open to fishing.

The use of fishing tackle is limited to trammel and gill nets at least 100 feet long and having a square mesh size of three inches or more. Tackle has to be attended at least once each 48 hours and in some areas constant attendance is required. When in use, all tackle must be licensed and tagged in accordance with Iowa law.

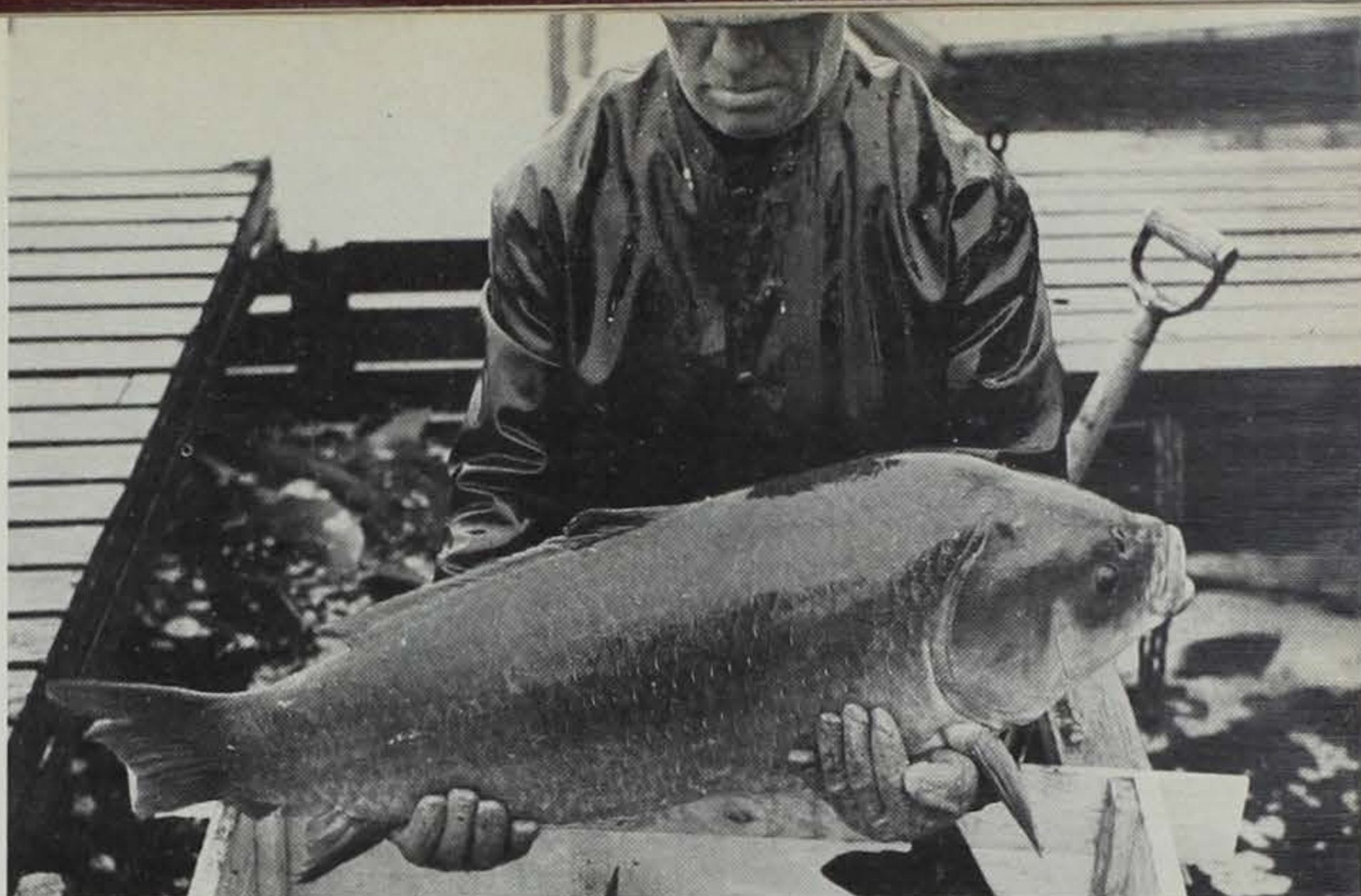
Fish species determined to be undesirable and permissible for catch on inland waters are limited to carp, buffalo, sucker and drum. All other species if caught must be returned unharmed to the water immediately.

Monthly records of fish caught must be kept by each permit holder and returned to the Conservation Commission no later than 10 days after the month has ended.

Four water areas were selected for the first inland commercial fishing season that commenced on October 1, 1972; Coralville Reservoir, a 4,900 acre flood control impoundment, Coralville Dam tailwater area and downstream for two miles, Lake Odessa, a 3,300 acre waterfowl impoundment and Sabula Lake, opened to eliminate confusion as to whether it should be considered part of the Mississippi River or inland water.

Commerce Commission Photographs

Commercial fisherman rate reservoir rough fish harvest as the "best they have encountered."



On October 1, 1973 Red Rock, a 6,300 acre flood control reservoir was added to the list of inland waters open to commercial fishing.

Lake Odessa, Sabula Lake and Coralville Dam tailwaters are open to fishing on a seasonal basis, December through April. This is done so as not to interfere with other recreational uses of the areas such as waterfowl hunting and boating. The largest reservoirs (Red Rock and Coralville) are open to continuous fishing.

From opening day to the present time interest has been high to commercially harvest rough fish from these waters, due to the excellent catches obtained. Older fishermen with fifty or more years experience and younger ones also, comment that fishing success is the best they have ever encountered. The majority of commercial fishermen reside in towns located on or near the Mississippi River, and some travel two hundred or more miles to fish the inland waters. A few local residents who previously had never observed commercial fishing operations became fascinated by the art. They saw an opportunity to catch rough fish for personal use or to supplement incomes. They also purchased necessary licenses and equipment to fish.

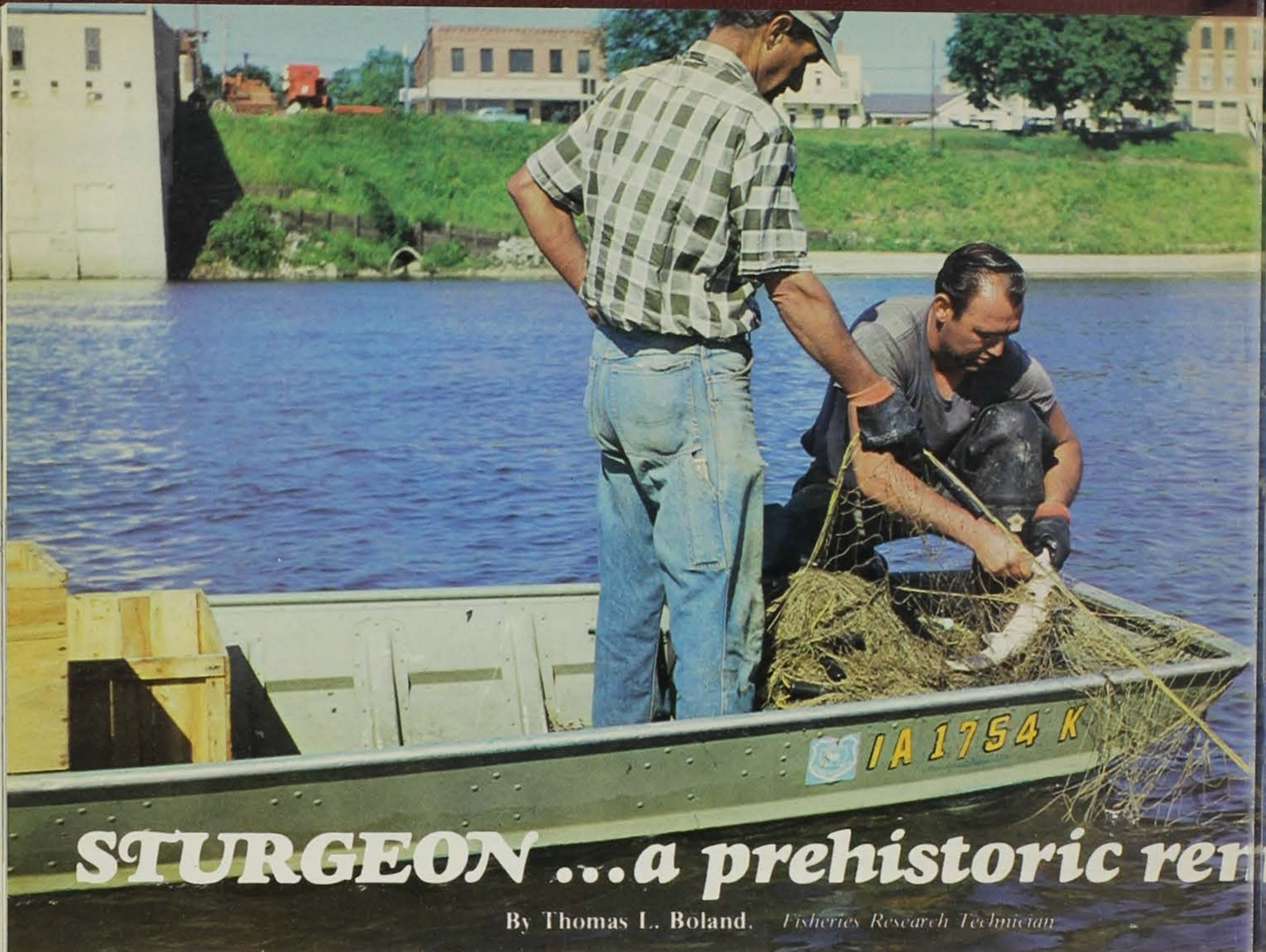
Commercial fishing is hard rigorous work and not a job consisting of hours from eight in the morning to five in the afternoon. More likely than not fishermen will get up before dawn and travel to waters open to fishing. They will spend all day raising their nets and then transport the fish caught to

commercial markets along the Mississippi River, ending their work after dark.

During open water months of spring, summer and fall the trammel and gill nets allowed for use on inland waters are set from a motor driven boat. Nets constitute a curtain of webbing suspended in water by a weighted bottom line and a floating top line. Each net is usually 300 feet in length and from four to eight feet in depth. The nets are set in a stationary position, with fish being caught by driving them by loud noises caused by pounding on the water's surface. Or the nets are set for a long period of time, normally 24 hours, and the fish voluntarily move into them. Fish are caught when they try to swim through the net. The net is large enough to allow part or all of the head to pass but not the rest of the deep-bodied rough fish, and they become entangled in the webbing. The use of large three inch or more square web permits escapement of thinner bodied game fish.

Commercial fishing is not just a summer occupation. Nets are set and raised in the winter months although it is a slow and more time consuming process at this time. To fish in the winter, holes are cut in the ice at 30 to 40 foot intervals and a long thin board, called a bat board, with a long rope attached is pushed under the ice from hole to hole. The board and rope are pushed under the ice a precalculated distance which will correspond to the length of a net to be set. The net is then tied to the other end of the rope and





STURGEON ...a prehistoric remnant

By Thomas L. Boland, Fisheries Research Technician

The most common questions asked by visitors to the Conservation Commission exhibit at the Iowa State Fair are, "How old are those prehistoric fish and are ancient fish usually extinct?" They are speaking, of course, about a group which includes some of the largest known fish in the world - sturgeon. There are 25 sturgeon species of which 7 inhabit North America. Three of these are freshwater species found in Iowa's boundary rivers and tributaries.

Sturgeon are often referred to as a living fossil because of physical characteristics that place it early in the evolution of fishes. Instead of scales, they are covered with armor like plates. The tail is forked, shark like, with the top lobe being longer than the bottom and instead of a backbone, they have a cartilaginous notochord. Although sturgeon have very small eyes and, though he probably has good vision, most food hunting is achieved

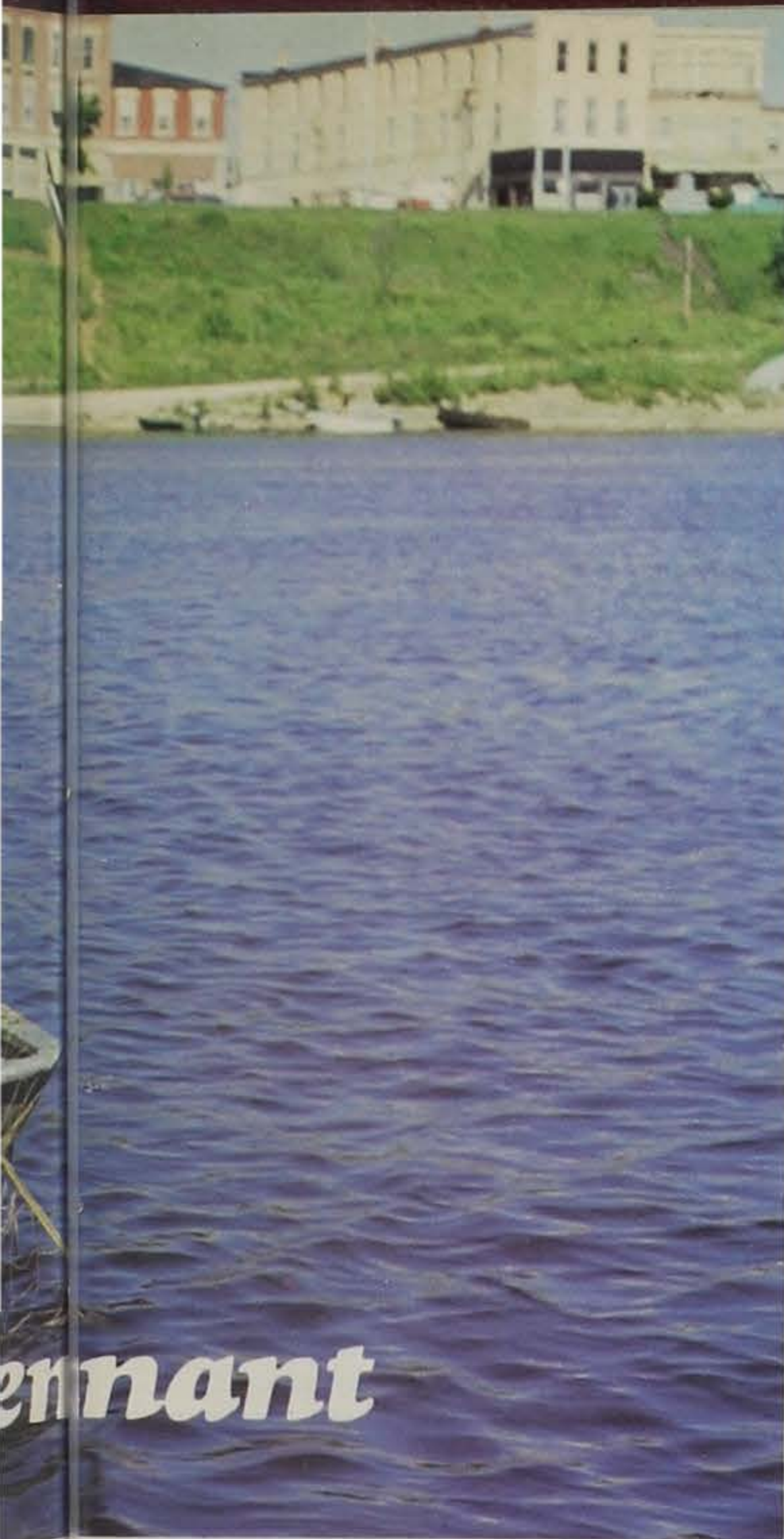
with the aid of four fleshy barbels or "whiskers" located in front of his mouth. The mouth is toothless with thick fleshy lips that can be extended for sucking up bottom dwelling organisms, such as insect larvae and small worms.

Lake sturgeon is the largest of Iowa's three species and has acquired many local names including rock, common, stone, ruddy, red, and rubber-nose sturgeon. In recent years, weights in excess of 100 pounds have been uncommon. An individual fish taken from the Mississippi River in the 1930's near Bellevue tipped the scale at 137 pounds. This "dandy" would have looked comparatively small if placed next to some of the largest lake sturgeon on record. Currently, two fish sharing the "whopper" title were reported from the Great Lakes region. Both weighed 310 pounds. The oldest known fish was caught in Lake of the Woods, Ontario in 1953 and was aged

at 152 years making him eligible for social security during the Civil War. He also would have been called a "keeper" weighing 215 pounds and measuring 81 inches from tail to snout.

Growth varies greatly due to water temperatures and available food supply. Sturgeon are known to be fairly rapid growers and may attain lengths of 40-50 inches in the first 6 to 8 years of life. However, reaching this point, growth becomes slower and females may take another 12 to 14 years to reach sexual maturity at 55 inches. Males mature somewhat earlier in life at 14-16 years of age and 45 inches in length.

The flesh can be cooked, pickled or smoked, but sturgeon are probably best known for caviar made from the coal black eggs. Although no longer produced in this country, Russian caviar today exceeds \$90 per pound. Another early day product not so well known is isinglass, a gelatin like



ennant

substance taken from the inner lining of the swim bladder and was used for a variety of purposes from clarifying



beer, wines and other liquids to stiffening jams and jellies. Oil was rendered from the fat and tanned skins made a very fine grade of ornamental leather.

Shovelnose or sand sturgeon, the most abundant sturgeon species in Iowa is much smaller than lake sturgeon seldom exceeding 6-8 pounds. Most are taken commercially in trammel and hoop nets. Trot lining is very productive during spring high water periods in lower reaches of large tributary streams of the Mississippi River such as the Iowa, Cedar, Des Moines and Skunk Rivers.

Until recently caviar was also taken from this species and during the early years of commercial sturgeon fishing in the 1930's there was little or no demand for the flesh. Large quantities of discarded sturgeon were a fairly common sight along the river. An old

process called smoking was soon to enter the sturgeon fishery and demand for the flesh increased steadily. Current retail prices for smoked sturgeon range as high as \$2.25 per pound placing the species near the top of the price list for commercial fish. For those who have never tasted smoked sturgeon, the flesh, along with the price, is considered to be somewhat rich. There are no bones. This makes eating a pleasure, but the presence of natural oils usually limits the amount one can "put away".

The third and least abundant of Iowa sturgeon is the pallid sturgeon. He is very similar in size and appearance to the shovelnose, but varies in color, different length barbels and an absence of platelike scales on the underside.

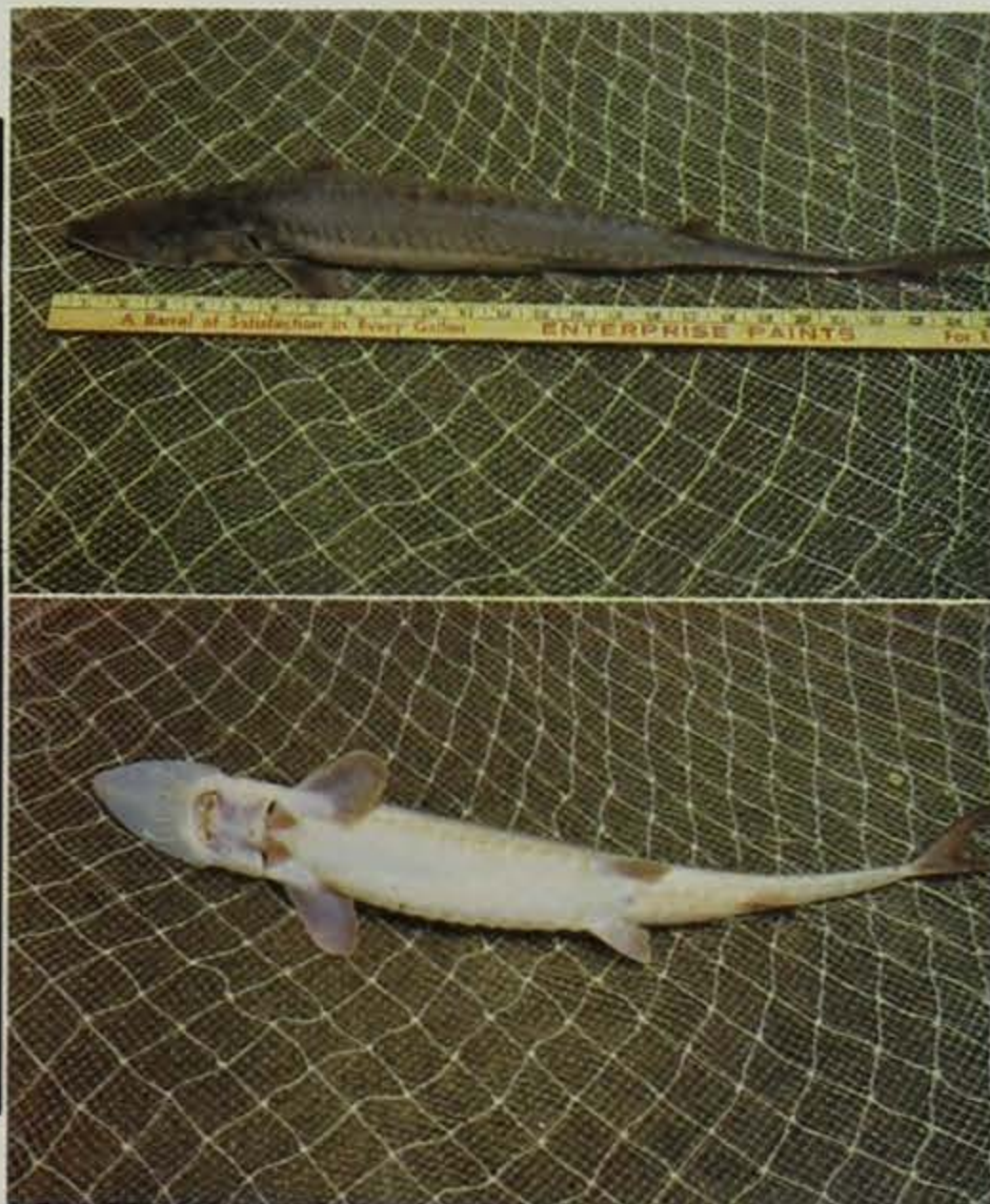
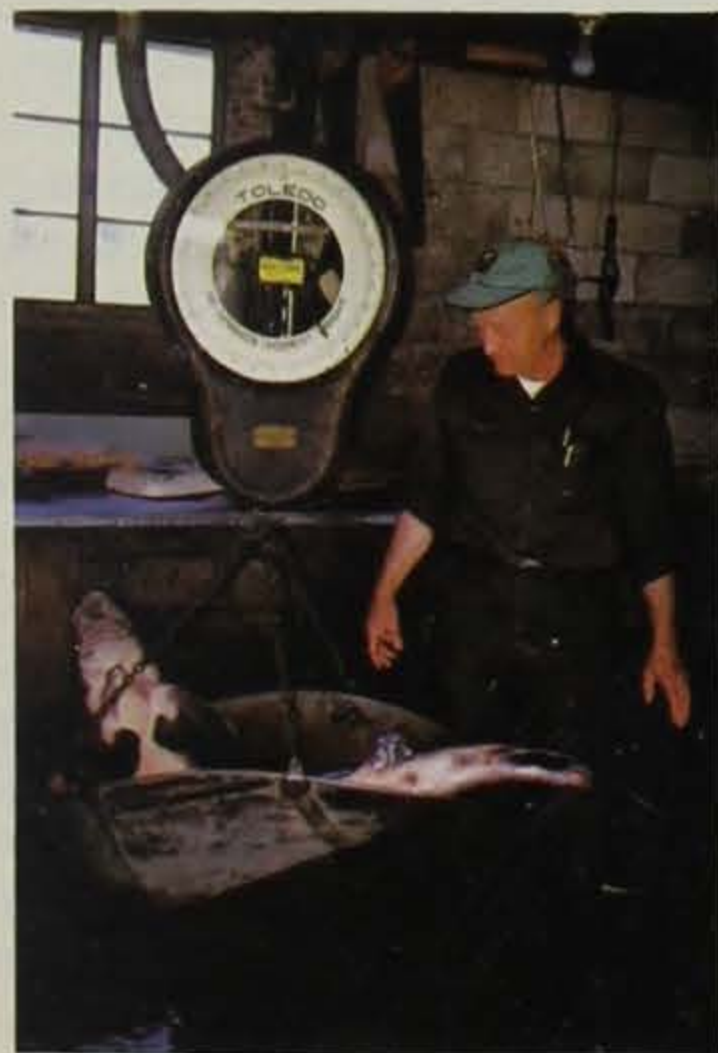
Commercial harvest and regulations vary greatly among the states bordering Iowa and among the different species. This variation results more from a lack of knowledge than to a true understanding of how the species should be managed. Although extensive research has been conducted to investigate the life history, ecology and management of the lake sturgeon, very little has been accomplished in unraveling the mysteries of shovelnose sturgeon. Since virtually nothing was known about this species in our streams, the Iowa Conservation Commission recently conducted a life history and commercial use investigation. The project involved tagging of over 3,000 individual shovelnose along the length of the Mississippi River bordering Iowa.

Population estimates were made in Pool 13 near Bellevue and fish movement was recorded. Though most individuals were relatively sedentary, some moved great distances. One restless sturgeon traveled from Bellevue, Iowa to Genoa, Wisconsin, 125 miles upstream, passing through four navigation dams.

No article on sturgeon would be complete without at least the mention of Iowa's most famous sturgeon - Oscar. Ol' Oscar was an 87 pound lake sturgeon who attended the State Fair for more than 25 years. He has passed away but remains on display at the Conservation Education Center, Springbrook State Park.

(Continued Page 11)

Photography: Don Helms





SNOWMOBILE REGISTRATION

"WHERE THE MONEY GOES"



By James E. Horan
Boating Safety Coordinator

The Iowa Conservation Commission, the agency which administers snowmobile registration funds, is often asked, "Where does the registration fee go?"

Snowmobiles were first registered in 1970 with total registration that year

being approximately 15,000 machines. This year, about 40,000 machines will be registered. The following describes how the Commission directs the funds received from this registration.

The Commission is responsible to the legislature, ourselves, and most

important to you, the public for the protection against destruction of any public lands under the jurisdiction of the Commission. In addition, it is the policy of the Commission to promote the safety of all snowmobilers.

Registration dollars go in a variety of directions to satisfy Commission goals. Of the various Commission lands such as state parks, state forests, and fish and game areas not all are available or even useful as snowmobile areas. On those areas that are suited to this type of use, trails are being built, signs are being established and periodic maintenance is performed. Although private snowmobile clubs have volunteered much of the work force, the task often involves time and money for manpower and equipment provided by the Commission. Since county supervisors may now designate certain county roads for snowmobile use, the Conservation Commission will be interested in cooperative funding of the costs of these signs.

An important concern of the Commission is enforcement of the safety and environmental protection regulations. The Commission must purchase and maintain the necessary snowmobiles and equipment in order to effectively ensure the safety and protection you deserve.

Another expense of any registration program is administration. Expenses borne by the Conservation Commission include the purchase and distribution of decals, registration certificates and registration applied-for cards, and of course personnel time. Although you pay, in addition to the registration fee, a \$.50 writing fee to the county recorder, it covers only the cost incurred by the county recorder in carrying out the transaction.

During the winter months, many conservation officers are asked to speak to various snowmobile clubs, schools, and other groups about snowmobiling safety and regulations. Of course there is no charge for this service but some part of the officers' salary should be derived from snowmobile registration fees rather than, for example, boat registration fees.

Beginning this year, the Conservation Commission will

provide a safety education course aimed primarily at the twelve to fifteen-year old group. After July 1, 1975, it will be necessary for this age group to pass a course in order to operate a snowmobile alone on public lands. Although there will be a fee charged, the funds necessary to start such a program (for materials such as manuals, certificates, etc.) must come from currently available snowmobile registration fees.

Not all Commission lands are suited for snowmobile use and together with the lack of public lands in general and the limitations of our annual snowfall we have less than perfect conditions for snowmobiling. For example, less than 5% of the total land and water in Iowa is in public domain, compared with 15% in Minnesota. Then too, most of the sustained snow cover exists in the northern one-third of our state. Minnesota, Wisconsin, and Michigan each register more than 300,000 machines, while Iowa registers only 40,000. Thus, the Commission has less public land and funds available for snowmobile programs. The services provided will take longer and they may be on a more limited scale than the other states mentioned.

Changes In Snowmobile Laws

For the next snow season, you can expect these changes: First, although you can still operate in the right-of-way, you must travel in the same direction as vehicle traffic in the nearest lane of the highway. Second, if you come upon an obstruction such as a stream, you may avoid the obstruction by operating on the roadway or shoulder if the snowmobile is brought to a complete stop before entering the roadway or shoulder and the driver yields the right-of-way to any approaching vehicle. Because county supervisors may now designate county roads for snowmobile use, an effective trail system of roadways, right-of-ways, state lands and waters and wherever possible, connecting lengths of private lands represent a greater potential for snowmobiling in Iowa.

With good cooperation between all interested parties we can ensure safe, responsible snowmobiling and work to secure additional lands while performing the necessary services for Iowa snowmobilers in the future. □



HARLAN'S DEATH A LOSS TO IOWA

Jim Harlan, one time Assistant Director of the Iowa Conservation Commission died July 11, 1974. A great contributor to the conservation cause in the State of Iowa, Jim Harlan will be long remembered by friends and associates throughout the state.

As a Commission employee, Harlan's career included being a game officer, and later the initiator and first editor of the Iowa Conservationist as well as Assistant Director with the late Everett Speaker. Harlan co-authored the book "Iowa Fish and Fishing". He also initiated the Commission's traveling wildlife exhibition, the nation's first.

Jim Harlan left the Commission in 1957 to join the U. S. Department of Health, Education and Welfare in Washington, D.C., as a Conservation Consultant. He retired in 1973.

STURGEON (Continued from Page 9)

STURGEON RECIPES

Smoked Sturgeon

Dress sturgeon by removing head and innards. Place in a strong brine over night for 10-12 hours. Remove from brine and rinse with fresh water. Let stand to air dry 30-45 minutes. (this is important). Place in smoker shell down so that none of the pieces touch. Smoke for 2-3 hours at low heat 120-140°F. Finish at 170-190°F until done (2-3 hours).

Deep Fried Sturgeon

Dress small sturgeon by removing head and innards. Hold by tail and dip in boiling water for 15-20 seconds. Peel

off shell. Steak meat in small strips. Dip in favorite batter and deep fry.

Grilled Sturgeon

Place dressed sturgeon in brine solution over night for 10-12 hours. Remove from brine and rinse with fresh water. Place shell down on electric or gas grill until done. Poke holes through flesh but not the shell and baste with butter. Grill again until butter melts into flesh. Drain excess butter and oil before eating.

Basic Brine

Add enough salt to a container of water to float an egg. □



Photo courtesy Michigan Department of Conservation

effect. Luckily, the "timber pheasant" responded well to game management and now prospers in the majority of the eastern states.

In Iowa, the ruffed grouse once ranged across all but the northwestern corner of the state. But now, the bird is found most commonly in a ten or eleven county area in the northeast corner.

HAVE YOU OVERLOOKED RUFFED GROUSE?



By Bob Runge
Contributing Editor

Photo by Jim Sherman



The timbered ridges of Northeast Iowa present a type of hunting that is vastly different from the rest of the state. The flat cornfields, brushy weedlots and thick sloughs which typify hunting in the rest of the state can be forgotten as the hunter makes his way into Ruffed Grouse Country.

The ruffed grouse has been hunted in the United States for as long as man has walked the continent. Long before the Europeans dreamed of oceanic voyages, *Bonasa Unbellus* was a favorite item on the Indian's menu. Going still further back, grouse bones have been found by naturalists among the bones of many animals which have been long extinct.

Since North America was settled by the white man this one bird has been known by at least sixty different local names. It seemed to be everywhere. Naturally, there were many grouse when the first European boat hit the shore. But to these early settlers' surprise the grouse increased as man cleared the timber for his cabins and farms. Now, of course, biologists recognize the effect of wood's edges on the abundance of many wildlife species. As time went on and more areas were cleared, the habitat became progressively smaller and hunters more numerous. In addition, market hunters took hundreds of thousands of birds before game laws came into

Photo by the author



The first modern ruffed grouse season was opened in Iowa in 1969. Although game biologists were sure the birds could stand hunting pressure, the season was set at sixteen days with a daily limit of two birds. The next year the season was extended to thirty days and in 1972 to forty-two days. The length of the season seemed to make little or no difference to the population

the following year. The birds actually were increasing in number.

The 1974 season is quite a change. Hunters will be able to take to the ridges for fifty-six days and the limit has been increased to three birds per day with a possession limit of six. The reasons are really quite simple. The grouse has continued to show a slight increase in numbers. Hunters are able

to take an annual harvest without damaging the population in any way. On top of that, the hunting pressure has always been rather light compared to other species. It may be the case that many Iowa hunters from other areas of the state feel that the drive isn't worth two birds. As a result, the limit has been increased to three in order to
(Continued Page 14)



GROUSE (Continued from Page 12) encourage more hunters to use this resource. A longer shooting day is provided this year as well, with sunrise to sunset hours instead of 8:00 to 4:30.

Grouse hunting is as exciting a sport as any. Many feel the grouse to be the "king of the game birds" and the way these birds twist through the trees after an exploding flush, the title may well be earned. In the fall, the birds usually can be found in the upper parts of draws where they border on open fields. The grouse does not usually feed on corn and soybeans like other Iowa game birds. Catkins, seeds and fruits make up most of their diet. The sunny slopes are better in cool weather

especially in the morning. As a general rule the birds are in the thicker cover during the midday and move to the weedy second growth areas toward late afternoon. The hunter should work the area slowly and be prepared to shoot as quickly as possible once the bird is safely identified. Ruffed grouse are relatively easy to knock down and number 7½ or 8 shot is usually used. A dog is a great benefit but not many grouse trained dogs are to be found in Iowa.

It has never been decided whether the flesh of the ruffed grouse is the best eating of all game birds or merely one of the best. There is no doubt, however, that the bird is very good on

the table. There is also little doubt that the hunter earns each bird he takes. Nothing is quite as pleasurable as climbing a steep slope when you were tired before even starting. It is well-known that shotguns can increase in weight to fifty or sixty pounds by the end of the day. Extra jackets, binoculars, cameras and other invaluable equipment is often left in the woods so that the hunter can make it up the last hill. The car seems always to be parked on the highest point in the area to make the last few yards the most exciting of the day. This work is soon forgotten, however, when the hunter is finally home and the ruffed grouse safely in the oven. □

FROM THE WARDEN'S DIARY

By Rex Emerson
*Law Enforcement
Supervisor*



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 get us on the 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 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 ricocheting 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.

COMMERCIAL FISH HARVEST (Cont'd)

pulled under the ice and anchored in position.

The utilization of commercial fishing for harvesting undesirable fish species on inland waters has been in effect for approximately two years. During this period enormous poundages of rough fish have been removed from the waters opened to commercial fishing. A total poundage in excess of 5,575,000 pounds have been commercially harvested. Buffalo are the most sought after species since they have the greatest market value and 5,000,000 pounds were reported as taken. Carp removed amounted to 555,000 pounds, sucker and drum 25,000 pounds.

Commercial harvest of the rough fish on inland water has been a very substantial industry. The fish contributed an estimated three-quarters of a million dollars to the income of commercial fishermen. This in turn has benefited the local economy where fishermen are working, through the purchasing of food, lodging, equipment repairs and fuel to operate their equipment.

Hopefully the Iowa sport angler will also benefit from removal of rough fish from inland waters. Removal of large poundages of rough fish in a short time period creates a biological void in a lake fish population. This void may be used by the fish management biologist to produce a more desirable - from a sport fishing view - fish population. In Coralville Reservoir, for example, gizzard shad adults were stocked in early 1974 following removal of large poundages of rough fish in 1973. Shad feed on the same organisms in the water as buffalo, thus helping keep buffalo numbers low. Additionally, they spawn prolifically and provide forage for such game fish as largemouth bass, crappie, walleye, and white bass. This allows faster growth of these fish and better fishing for the angler. Already numerous young-of-the-year shad have been observed in 1974 in Coralville indicating this experimental stocking was successful.

The Conservation Commission is hopeful the end result of this intensive management, research, and stocking work is to "shorten the time between bites for the Iowa Angler"! □

CLASSROOM CORNER

By CURT POWELL

Administration
Conservation Education
Center



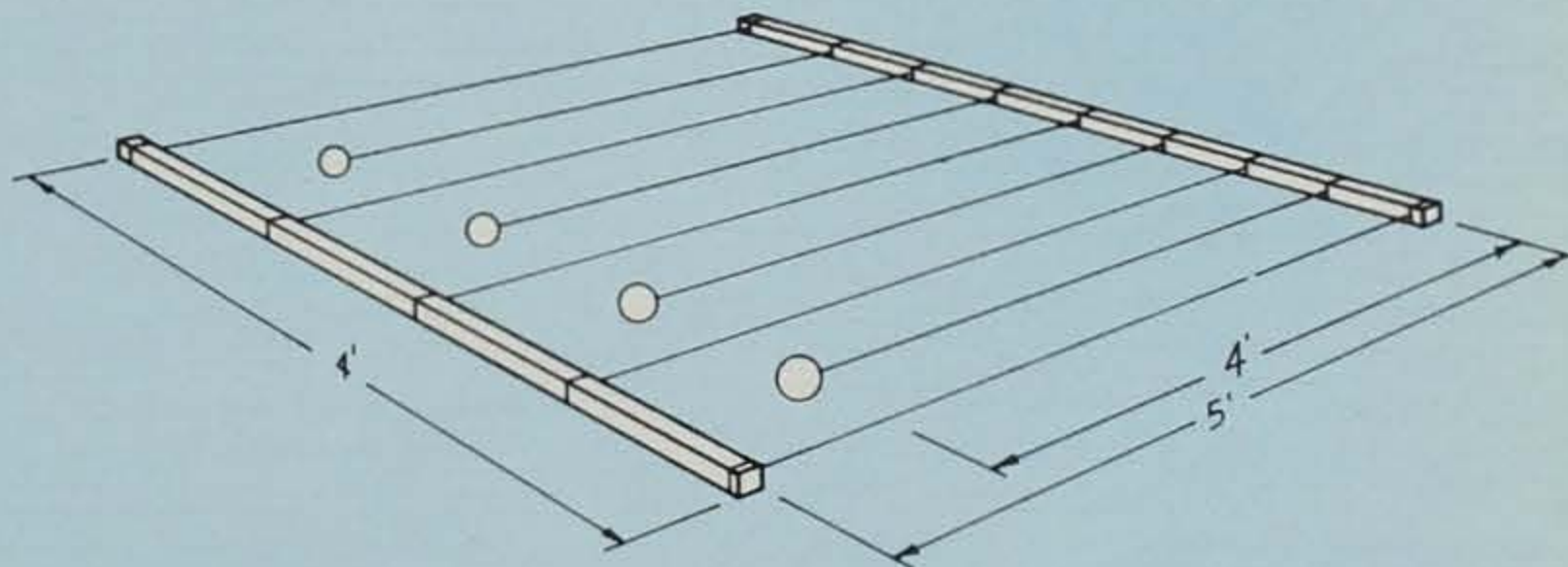
The fall season is upon us and preparation for winter must begin. The leaves have started their annual cavalcade of colors and the many birds have started their migration southward. Hunting seasons have begun and many an Iowan is sojourning into the countryside in pursuit of relaxation and pleasure during the brisk, crisp fall mornings.

Many of nature's creatures are gathering a bountiful food supply to last them through the cold winter ahead. Although we may not have to gather food for a cold winter, there are things that we could be doing to make our winters more enjoyable and to preserve the essence of fall in our homes and classrooms.

There are cattails and other plants to gather for table arrangements and interesting centerpieces. Plants and roadside weeds can be gathered and dried, then used for such arrangements. Have you ever seen or done an arrangement using natural materials such as I've described? I do know that most libraries have books on the subject and many flower and garden clubs around our state have the experience and interest to help you get started if you're interested.

Here's another project you may wish to undertake now that the cattails, sedges, and grasses have begun to turn brown: weaving mats. Make a loom by taking two sturdy sticks 48" long and tie 8 pieces of twine to one of them. There should be 4 pieces four feet long and five, five feet long. Alternate long and short pieces of twine. Leave about 6" of space between them. Then lash the stick across a tree trunk about 2 feet above the ground.

Drive four stakes in the ground, in a row, spaced opposite the short pieces of twine and tie the twine to them. Tie the ends of the five foot pieces of twine to another 48 inch stick. These should be parallel, evenly spaced, and equally tight when the stick is pulled upon. See the illustration for the completed loom.



Weaving then becomes a simple project. Using the material you've collected, lift up the free long stick, lay some of the materials on the four foot twines, and push the bundle up tightly against the tree. Lower the free long stick, (with the five foot twines) to lash the bundle in place. Continue until the mat is finished. To finish, release the strings from the sticks and tie the ends together to hold the bundles in place. Tie a five foot to a four foot twine, etc., on both ends of the mat.

It's an interesting project and again you will have brought some of the outdoors indoors for your winter enjoyment.

