





Vol. 36, No. 12

December 1977

#### STAFF

Roger Sparks, Editor Robert Runge, Managing Editor Kenneth Formanek, A-V Coordinator Julius Satre, Contributing Editor

A STORY OF IOWA

THE SILENT SEASON

OTTER CREEK MARSH

GOOSE LAKE -The Marsh That Was and IS

10

TUNING IN ON HUNS

11

CLASSROOM CORNER

12

TROUT STREAM **IMPROVEMENT** 

13

THE WARDEN'S DIARY

14

PREDATOR CALLING

Back Cover: The biggest buck deer rack ever taken in Iowa painted by taxidermist Charles C. Brcka, RR 2, Garner, Iowa 50438. Prints are available from the artist.

#### COMMISSIONERS

John C. Thompson, Forest City, Chairman, John Link, Burlington: Carolyn T. Lumbard, Des Moines, Herbert T. Reed. Winterset John Brophy, Lansing. Marian Pike, Whiting, Thomas Bates, Belleview

#### DIRECTOR

Fred A. Priewert William C. Brabham, Deputy Director

### DIVISION CHIEFS

Harry M. Harrison, Fish and Game: Stanley C. Kuhn, Division of Administration, Gerry F. Schnept, Resource and Program Planning, John M. Stokes, Lands and Waters

#### SECTION SUPERINTENDENTS

Tem Albright, Engineering: Joe W. Brill, Parks: Robert Barratt, Wildlife: James Mayhew, Fisheries; Roy Downing, Waters: Robert Fagerland, Land Acquisition, Lester Fleming, Grants-In-Aid, Gene Hertel, State Forester: Kenneth Kakac, Low Enforcement: Caryl Carstens, License, Larry Davis, Information & Education Gene Geissinger, Accounting: Dayle Adams, County Conservation Bourds

All persons are entitled to full and equal enjoyment of the recreational opportunities, privileges. and advantages available in lowa's great autdoors.

Published monthly by the lowa Conservation Commission. State Office Building, 300 4th Street. Des Moines, lowa 50319, Address all mail (subscriptions, change of address, Form 3579, manuscripts, mail (tems) to the above address, Subscription price one year at \$2.00; two years at \$3.00 four years at \$5.00. Second class postage paid at Des Moines, Iowa and other points

### A STORY OF AWA

This isn't a story. It's just sort of a conversation I wanted to share with you.

by R. Runge

Once Gust and his friends drove a Model T to Wyoming.

ust arou

His na

as lived

pportur

"I was

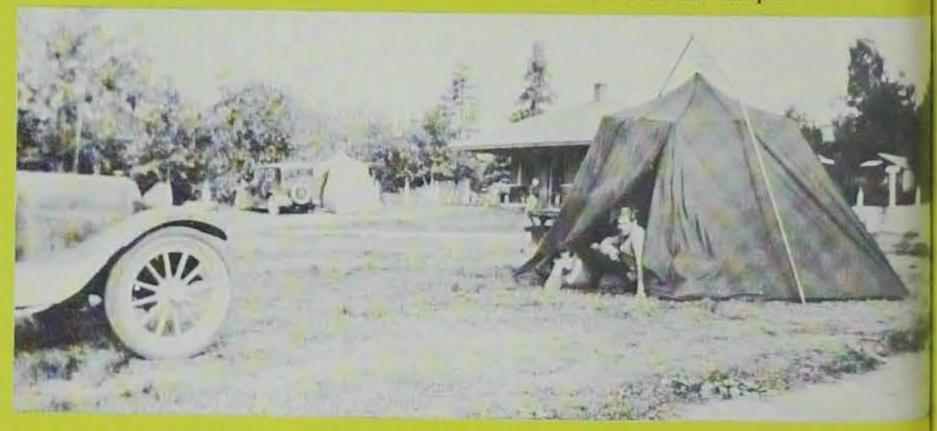
ountry)

irst year

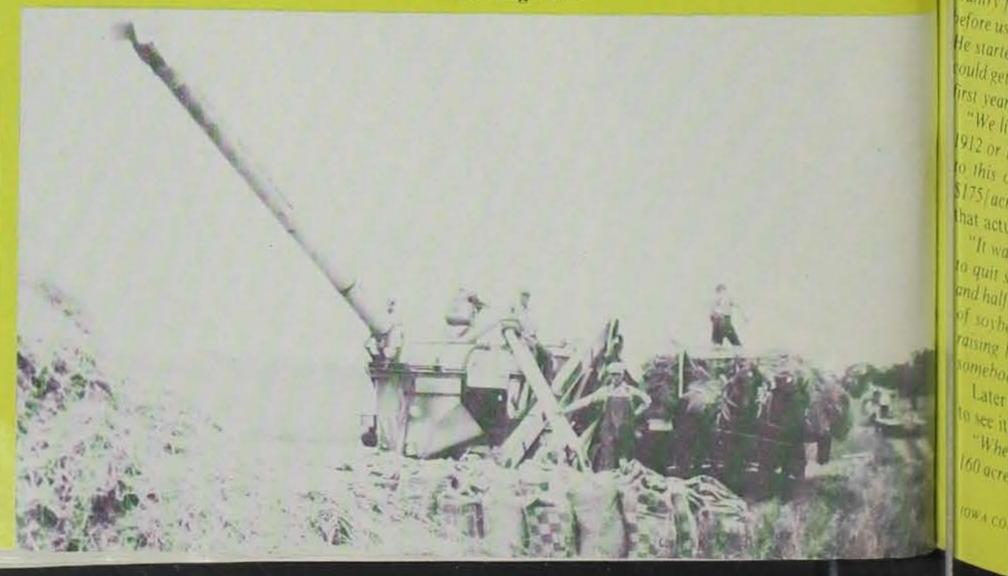
o quit



The word "Harcourt" is visible on sweater of this camper.



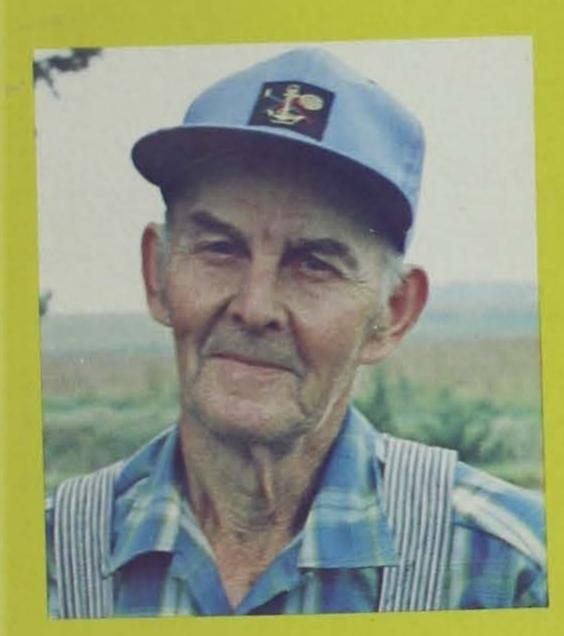
Threshing oats.





In some ways horses were better than tractors and trucks.

st around 1920.



His name is GUST A. SANDBERG and he is 74 years old. He is lived in north central lowa nearly all of his days. I had the pportunity to talk with him a few weeks ago.

"I was three months old when my mother brought me to this ountry from Sweden. My father had come over several months efore us and started farming about seven miles north of Gowrie. le started here by buying stuff that was up on a farm sale. You ould get loans with little or nothing down and no interest for the rst year."

"We lived there for about nine years and then moved in about 912 or 1913. My father bought yet another farm and we moved o this one in 1920. This farm is still in the family. We paid 175 | acre for this land." We both laughed at the price, but he said

hat actually it was pretty high at the time. "It was just after this move in 1920 that my dad died and I had o quit school and start farming full time. We raised about half and half oats and corn but a lot of it went for feed. We first heard of soybeans about forty years ago. People started out by just raising little patches and most of the crop was sold as seed to

omebody else." Later I asked him about the land. He looked around as if trying o see it as it was years ago.

"When I was a little boy this land was sloughs. We had about 160 acres but I doubt if there was over 70 that we actually farmed.

The rest was what we called wild hav land-it was prairie. There were also seven big sloughs on our farm alone." I questioned him about the wildlife and he smiled.

"When the people came over from Sweden and other places-they thought the land was like Africa, there were so many strange animals. There were many ducks and geese around here. And lots of quail and prairie chickens. I remember the neighbors running and velling to chase the wild geese out of the wheat.

"As I was growing up there was nothing to shooting the geese and ducks, but the prairie chickens were pretty smart birds. They would fly ahead of us, and we would have to try to sneak up on them. My mother always told us never to bring home more than we could eat. We never wasted a thing." It was easy to see that the birds were gone; I asked him why.

"In the early teens they came through here with a dredging machine and put through a main drainage system. The farmers could tile into it, and soon they cleaned up all the great big ponds."

"When the sloughs were gone, the wildlife started going but the animals stuck around quite awhile since not all the farms were tiled right away. That's why you didn't notice it all at once." When the land was dry, its days as wild hay land were numbered.

"Soon the men were putting more of the prairie under the plow and change was coming. But it didn't seem to affect much until after World War II. Then the bigger machinery came, and people started farming more land. Older people sold out and went to town. The young people took over more responsibilities and more

He talked awhile longer about his family and other personal things. Then he remembered how the pheasant came along when other things were disappearing. He liked the pheasants but he said that now even they were scarce in his area.

"One thing that is gone is the wild flowers. I am sure there are some left here and there, but back when we had wild hav ground it was made up of strawberries and all sorts of pretty flowers. I cannot remember the names of them all, but you don't see many nowadays."

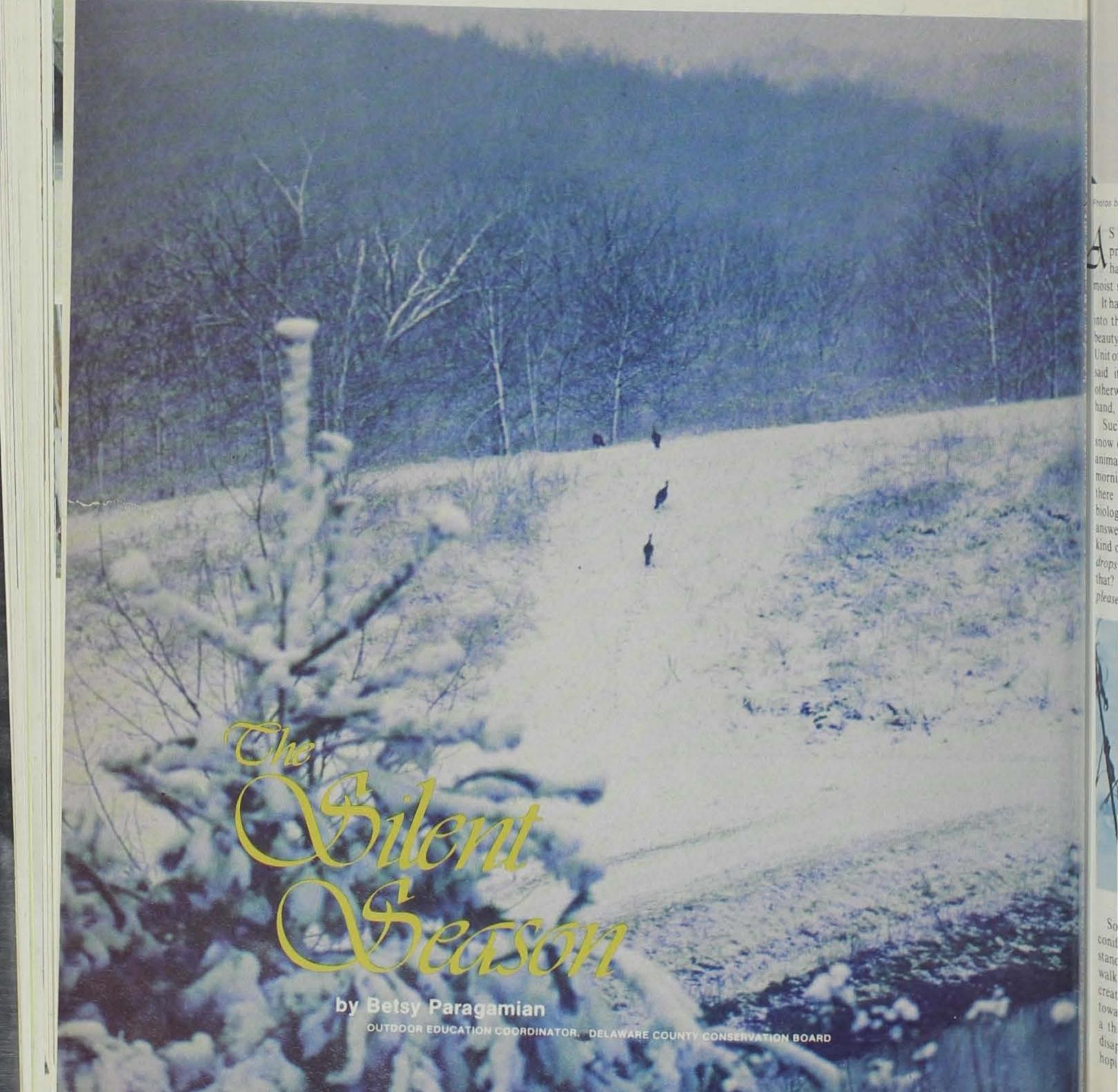
I asked him about the mistakes we have made.

"I kind of question these pesticides. I think part of the problem is that the good insects are gone. I think we have more of the bad ones nowadays than ever before. You have to just keep killing them more and more every year."

We walked over near a tree by his house and he looked across the field

"I think the farmer has also made a mistake in planting all the land he had. It seems a little wrong to ask that much from the land. Iowa has been good to me and my family. We always had enough to eat and enough to wear. We were happy and this land made us happy."

As I drove away from Gust's farm I had a warm, pleasant feeling. Yes, this land can make you happy.





hotos by the Author

S I LOOKED OUT the window of our camper, I was not prepared for the sight that greeted me. The entire world had been transformed into a winter wonderland; a layer of noist snow covered everything.

It had been snowing the night before as my husband and I drove nto the forest area, but the darkness of night had masked the beauty. We had planned an overnight outing in the Whitebreast Unit of Stephens State Forest in south-central Iowa. The calendar said it was the first day of spring but the weather proved otherwise. We emerged from our camper at 8:30 a.m., camera in hand, and headed down one of the scenic roads.

Such a morning was surely a nature lover's delight, with fresh snow covering the ground, its surface broken only by numerous animal tracks. The game trails were heavily traveled that morning, for this was the silent season and, except for ourselves, there was no sign of human activity. Being the spouse of a biologist was a bonus for, as such, he was expected to know the answers to some very important ecological questions: 1. What kind of tracks are those? Answer: Indentations in the snow from drops falling off tree branches. 2. What kind of animal sign is that? Answer: I don't know which animal is responsible, but please watch your step next time.



Soon after beginning our walk, I remember studying a grove of conifers heavily laden with snow. I was thinking that a deer or two standing in the midst of trees would complete the picture. We walked a few yards farther and I did indeed sight those graceful creatures. We froze in our tracks as the deer hesitated, glanced toward us, and bounded away. Behind the first came a second and a third, all repeating the same behaviour. As the three deer disappeared over a ridge, we moved forward silently and slowly, hoping to chance upon another deer still in the clearing. There

were two more deer sighted there before they turned and waved their white flags of farewell. We walked up to the deer crossing and found not only the tracks of the deer that had just passed, but another deer trail made earlier in the morning.

Farther along the road, we picked up the trail of a turkey. The tracks were large, precise, and headed down the roadway. "It must have been a tom," my husbnad whispered excitedly. I envisioned a cocky tom turkey strutting out in the snow, owning the road, inspecting first one side, then the other, before finally ducking into the thick growth of vegetation. Several turkey trails crossed the main one and along the shoulder of the road, pheasant tracks paralleled those of the tom turkey.

Rounding a bend, I noticed some movement under a large tree that edged the road. We stopped and the camera instantly went into action. Several hen turkeys were busy scratching at the ground. We edged closer and the birds (still unaware of our presence) slowly rambled into the trees. As we came upon their feeding grounds, a loud cluck and sudden beating of wings told us we had invaded too closely. Immediately after, we were busy photographing a quartet of jakes (immature tom turkeys) making their way up a distant hillside in single file formation.

We followed the route of those turkeys, down one slope, across the rim of a glossy lake, and up that distant hillside. The path was now a wooded snowmobile trail and the turkeys had since turned off in their own direction, but we still were alert to signs of wildlife. A rabbit bounded across the road. A squirrel skipped across the tree branches. Both were very silent in their going, noticed only by the movement in the snow. Even when the animals were no longer present, they left behind identifying marks. A single rabbit track in the roadway seemed out of place, but upon further exploration the continuing tracks were found. each spaced about four feet apart. The squirrel tracks were small, shaped like a horseshoe with two knobs at the curve. Tracks of field mice were everywhere, so feathery and delicate that it was a temptation to scoop them up and preserve them. We passed over a mole trail, where the disturbed earth signaled a tunnel. We followed the winding trail of a fox. The foot prints, small and rounded with four distinct toes, were much like those of a cat, but the stride was longer. Looking at those tracks, it seemed to me that no artist could have chiseled a more perfect masterpiece.

Finally, we reached our campsite and climbed into our vehicle. Perched high on a tree limb sat a majestic hawk, straight and stately as any sentinel guarding the gates of paradise. The hawk took wing as we passed and there was no doubt in our minds that we had been welcomed into a silent wonderland.



### OTTER CREEK CREEK VARSIA

by Robert Kurtt

WILDLIFE MANAGEMENT BIOLOGIST

TO M

he riverb

Marengo Oldtime ind occas

hey cam hooting to he river, mallards, species of provided

the river

lt wasn

shoot te lowa



O MANY OLDTIMERS and natives of east-central lowa, waterfowl hunting brings back vivid memories of jump-shooting mallards on the oxbows, ponds, and marshes along lowa River. Hundreds of these ol' mallard holes used to dot e riverbottom from Marshalltown all the way downstream to arengo in Iowa County.

Oldtimers recall floating the river in wooden boats and rafts id occasionally flushing hundreds of ducks from sandbars as ey came around a bend in the river. But the best mallard ooting came from the sloughs, ponds and marshes to the side of e river. These were the choice spots for the puddle ducks like allards, pintails, teal, gadwalls, and widgeons, because these becies of ducks prefer shallow-water marsh areas. Nature had rovided these shallow-water wetlands by occasionally flooding he river and replenishing the lowland areas along it.

It wasn't hard to get ducks to use these natural wetlands. Their neestors had been migrating down the Iowa River valley for nousands of years. This "tradition" had been handed down for enerations, with the adult birds leading the young-of-the-year long the major waterways south to the wintering grounds. Iundreds of ponds and marshes along the river provided ample eeding and resting areas for thousands of waterfowl.

IT BIOLOGIST

But this state of harmony could not last forever. Man's desire to improve" his land started to have an adverse effect on waterfowl avens along the Iowa River. Beginning back in the early 1900's nd continuing through the 1940's and 1950's, wetland areas were trained and/or filled to make more cropland. Ponds, sloughs, and marshes were drained, tiled, and filled in an attempt to gain nore acres for corn and soybean production. One by one, the vater areas along the Iowa River disappeared.

But, thanks to the foresight of conservation personnel in lowal and throughout the country, the traditional ways of waterfowl were not doomed. Iowa Conservation Commission personnel saw he need for a large waterfowl area upstream from Coralville Reservoir, and started planning for such an area in the 1950's. This was the basic plan for most artificial waterfowl areas in lowa, to locate them at fairly regular intervals along the major waterways of the State, thereby assuring the conservation of the migrating tradition.

The area along the Iowa River from Belle Plaine to Tama has always been very inviting to waterfowl, mainly because it was typified by a wide floodplain dotted with ponds and sloughs. The floodplain varies from a half mile to over two miles wide in places, and lends itself well for development of a large waterfowl marsh.

Land purchases for the area to be known as Otter Creek Marsh began in 1960. By 1963, about 2,280 acres had been purchased on the Iowa River floodplain 2 miles northwest of Chelsea. Construction on the massive earthmoving project started in 1965, but wet weather delayed the project until the following year. By the time initial development was completed in October of 1966, over a half million yards of earth had been moved. When completed the marsh consisted of a 2½ mile channel, 500 feet wide, with four marsh segments on the north side of the channel and three on the south. Otter Creek, draining about 18,000 acres of land east and north of Toledo, provided the water for the marsh.

After the marsh dike system was completed, conservation personnel established a refuge on part of the area to hold ducks and geese. Prior experience had indicated that a marsh without a refuge is quickly burned off by hunters, and waterfowl are unable to build up in numbers. So segments #5 and #7 were designated as the inviolate refuge area, with no trespassing during the fall waterfowl season.

The refuge has proved to be moderately successful with peak populations of over 20,000 ducks in 1970 and 1972. Other years when duck populations peaked at over 10,000 were 1969, 1973, 1974 and 1975.

The development of the marsh dike system has given us the capability to produce quality waterfowl habitat. Luxuriant growth of waterfowl food and cover plants is the result of periodic drawdowns and reflooding. Biological conditions, such as germination of the food and cover plants, indicate when water should be diverted into the marsh segments.

The end result of marsh development and management can be seen in early fall. Vast "beds" of smartweed, sedges, duckweed, cattail, arrowhead and other plants emerge from the marsh surface, interspersed with areas of open water.

An additional dike that created 80 more acres of marsh habitat was constructed in 1975. This gives us a total of eight marsh segments and about 1,000 acres of surface water at optimum conditions.

Where did all the money come from to construct and maintain the marsh? Once again, the sportsmen of Iowa were responsible and paid the entire bill. Land for Otter Creek Marsh was bought and developed through Pittman-Robertson funds, from the federal excise tax on sporting arms and ammunition. Iowa hunting license sales also account for part of the money. The breakdown is 75% federal (P-R) and 25% State. No special appropriation or general tax money was used to develop or maintain the marsh.

Some people may ask, "Is it worth all that money?" The answer can be found in the spring and fall when thousands of migrating ducks and geese use the marsh to follow the tradition of their ancestors. How can you place a dollar value on preserving a tradition?

Photo by Larry Pool



### by Glenn Jones

WILDLIFE BIOLOGIST

Photos by the Author

# OOSE DAKE

### THE MARSH THAT WAS AND IS

OOSE LAKE is a state-owned marsh, 5 miles north and 1 mile west of Jefferson in Greene County. Total acreage is 456 with 109 acres of land and the remainder, or 347 acres, of water or marsh.

It was a natural marsh up until 1920 when the State Legislature authorized a drainage district and it was drained. A little more than three decades later it was decided that complete drainage was not possible, so in 1953 the main tile was plugged, a drop inlet type of stop-log structure was installed and it once again became a marsh.

It is ironic that, in 1925, only 5 years after it was drained, the then Board of Conservation asked the Executive Council for permission to restore the area to its original condition. Yet, it took another 28 years before the action was consummated.

A fact of waterfowl biology, which is not known by many hunters, is that the instinct to return to a certain area to nest must be imprinted on young ducks. With so many variables present as to whether or not they will return to nest, it takes many years to replace a nesting duck population once an area has been drained. Now, it has been 24 years since the tile was plugged so we should be approaching the time when more ducks will be raised here and return to nest on the area.

However, we also are in the midst of the 20-year weather cycle and we are on the dry side of that cycle as we were in 1957. The present drought started in 1975 and by late fall the water was only about 6 inches deep. In fact, there was only one large pothole open in the center of the lake. By the first of August in 1976 the lake was completely dry and remains so today.

The historical record of this lake is quite interesting to read. It was meandered by the government survey about 1855. Beginning in 1863 and continuing until 1906 several different land companies claimed title to it and wanted to drain it. This was stopped in 1906 by a Court Injunction and settled in 1912 at which time the Court decided that the State held title to the land.

Then in 1920 it was drained by the State. Drainage assessments made against the State were quite high and totaled \$91,605.25 or an average of \$300 per acre for 305 acres. This was the accumulative cost up to 1932 which the State paid. All this money paid for drainage fees; the area ruined as a marsh; and yet it was too wet to be good farm land. Will man never learn?

Looking at the historical record again we see that in 1919, when the 38th General Assembly was debating a bill to drain the lake, there was a petition filed against such an act with 15,000 signatures.

In September 1947. Lester Faber, Game Biologist, and Tom Moen, Fisheries Biologist, made a survey of the area to determine the feasibility of restoring it to a marsh condition. Their report contains an attachment of a report made by G. L. Ziemer in 1944. Mr. Ziemer made a very comprehensive report. In his report he quotes a letter from H. M. Marker in 1924 extolling the beauty of the marsh prior to its drainage four years earlier. Mr. Marker's closing sentence is a classic: "The drainage of the lake was a sacrilege and it has been well and truly branded by the sportsmen of Iowa as 'The Blackest Spot in Iowa'."

And so it went—report after report stating what should be done, but little or no action. However, as stated before, in 1953 the tile was plugged and a drop inlet with stop logs was installed. Once again it became a marsh and is so today (if it ever rains again). Three years later in 1956 we hit a dry cycle and the area dried up, but the rains came, so by January 1958 the marsh was back up to crest level.

The best nesting year ever was in 1961. Bob Barratt, then Area Game Manager, made a survey of it in June of that year and found: 237 coot nests, one redhead duck nest and two ruddy duck nests. His report stated that grebes, black-crowned night herons, redwing black-birds, and yellow-head blackbirds were all nesting there in abundance. (This was a good waterfowl nesting year in all of northwest Iowa, as all the marshes in the Ruthven area produced a large number of ducks as well as other kinds of marshnesting birds.)

Barratt's report of 1962 was similar to the one of 1961 although he stated that there weren't quite as many nesting as the year before. We have no detailed reports for the area for the rest of the 60's. I took over supervision of the area in 1972. At that time and through 1973 water levels were optimum and interspersion of cattails was ideal both for nesting and hunting. Muskrat populations were also high on the area.

We started on the dry cycle of weather in 1974 which is continuing. This cyclic drying up of the marshes is good for them according to research. It exposes the marsh bottom to the sun and air and makes essential elements more available to plants.

We improved the area some in 1973 by blasting another boat channel from the north parking lot out to deeper water. An attempt was made in the mid-60's to improve the area for nesting by adding some nesting platforms of hardware cloth placed about 3 feet above water on steel pipe. Use of these by ducks was only fair and ice heaving eventually pushed them over.

This is a good marsh in Central Iowa and is heavily used by duck hunters. About 200 hunters are there on a typical opening day of duck season. It will average about 10 hunters per day on the remaining days and they all get good shooting.

I was there making a waterfowl bag check on Saturday, November 15, 1975. This seemed to be a peak flight day as ducks were coming in groups of 10 to 15 birds and these flights came through about every 20 minutes. The water level was so low that the hunters had to slog out there and push their feather boats. These hunters lined themselves up around the one remaining pothole in the center of the area and all parties got shots as the ducks decoyed in over first one spread of decoys and then another. I was there all day and never heard one complaint from hunters about the water level. In fact, they felt like concentration of the water also concentrated the birds and greatly improved their hunting success that day.

Goose Lake IS a marsh today and it is my hope that it will remain so for many generations to enjoy.

lone

Marsh is in good balance in 1973.



Low but still good in 1975.

Marsh was dry early this year. By July work could be done.





Main channel was deepened this year.



nould h in 195 nstalled er rain

GIST

the are arsh ww ien Arei ear and ldy duci herons

nestini earinal en are marsh lthough the year st of the

ime and rsion of

Muskral or them sunand nesting dabout

as only

used by pening y on the turday. s ducks ts came ow that boats

naining s as the id then nt from tration it will



# Tuning In In On the Huns

by Steve Aldrich

WHAT HAS two legs, two wings, eats corn and wears a whip antenna? If you know the answer to that one, you probably already know Pat McCrow. McCrow is a graduate research assistant working toward his PhD in wildlife biology at Iowa State University in Ames. The two-legged, two-winged, corn-eating bird that McCrow is studying is the European gray partridge, also called the Hungarian partridge or "Hun."

Since December, 1974, McCrow has been live-trapping gray partridge and strapping tiny radio transmitters and H-inch whip antennas onto the backs of the female birds.

Live-trapping is dependent on heavy snow cover, according to McCrow. When the partridge can't scratch through the snow to feed, they look for alternate food sources. He baits an area with corn and sets a circular, walk-in live-trap. The birds just walk in, looking for grain, then can't find their way out again. The trap has a nylon roof so the birds won't injure themselves if they try to fly.

Each trap is capable of holding 20 partridge. However, in a nearly snowless winter like 1975-76, McGrow was unable to catch birds with the live-trap.

Fortunately, female partridge are very devoted to their nests after they begin incubating their clutch. Last summer. McCrow was able to walk right up to a nest with a female Hun sitting on it and net her by hand. He put a radio and antenna on her and then set the bird free.

The unique radios, which weigh only 16 grams and cost \$120 each, contain a solar panel which recharges the radio's battery with energy from the sun. With the aid of a 24-channel receiver and an antenna mounted through the roof of his pickup truck. McCrow is able to accurately record the movements of the partridge to a distance of one mile.

The radios don't seem to affect the birds ability to survive in the ld. McCrow tracked one bird for 203 days before the partridge ed and the radio was retrieved. One bird that McCrow tracked his test area near Britt. Iowa, was equipped with a radio and itenna in July, 1976.

Only female partridge are given radios so that they may be llowed through the nesting and brooding seasons. All birds that re eaptured and not equipped with a radio are weighed, given a umbered neck tag and aluminum leg band, and are identified cording to age and sex. McCrow can then spot the numbered eck tags from a distance, using a spotting scope or binoculars, unters bagging a banded bird are asked to return the tag to 1cCrow for identification.

By tracking the females through the spring and early summer, 1cCrow is able to determine nesting success and brood size of the artridge. He supplements this information with frequent road ounts and sightings of tagged birds to determine the population ze, range and habitat requirements of the birds in his study area.

McCrow's work is funded by the Iowa Conservation ommission in an effort to learn more about the ecology of the ray partridge. With pheasant numbers declining in northern owa due to intense row-crop farming. Conservation ommission officials hope to increase the number of partridge in he area.

Introduced in Iowa in 1910, the gray partridge is a popular European game bird. The buff-colored "Huns" are larger than a pobwhite and smaller than a hen pheasant, and they have a short anned tail. Huns weigh from 12 to 15 ounces when mature. Because they prefer open-field cover, such as grain stubble and tayfields, gray partridge have done well in areas where pheasant and quail populations have been adversely affected by the trend toward "clean farming."

Females begin nesting late in April in grassy cover, such as fencerows, roadsides or hayfields. "Probably the most serious threat to 'Huns,' and to other upland game birds as well, is the lack of spring nesting cover," McCrow said. Early mowing of hayfields and road ditches, prime nesting cover for many wildlife species during May and June, destroys a large number of young birds each year.

Within two weeks after hatching, the young birds are capable of flying. A pair of partridge and their brood usually remain together to form a covey. Several coveys may group together during the winter into large flocks to feed and roost.

"Huns' are quite hardy and are capable of surviving extremely cold winters." McCrow explained. "The birds will allow themselves to be covered during a snowstorm to preserve body heat, or they may burrow into the snow like ruffed grouse. They often roost in plowed fields where the wind blows away enough snow to allow the birds to feed on waste grain. If the snow is too deep for the birds to feed, they will readily approach a farmstead in search of grain." he said.

Although they are sporty game birds, often running and flushing out of range, "Huns" haven't yet caught on well with lowa hunters. According to McCrow, most of the 26,400 partridge shot in 1975 were taken by pheasant hunters as a bonus to their pheasant shooting. Of the 364,360 upland game hunters in lowa last year, only about 16,000 bagged a partridge—an average of 1.6 per hunter.

The best way to hunt the fast-flying gray partridge is with a good dog in likely looking cover—cornfields, road ditches, railroad right-of-ways and along grain fields. Another method is to wait for a deep snow and stalk the birds in open fields.

"Gray partridge are really a challenge to hunt." McCrow said.

"They are also very tasty. I think that they will become more popular in northern Iowa as hunters find fewer and fewer pheasants."

Whether you're a hunter or a bird watcher, try tuning in on "Huns" this winter.

# CASRON by Robert Rye

WHEN PLANNING YOUR FIRST outdoor class in which you put students in visual or actual contact with animals, what animal will you choose for study? Knowing that most people do not enjoy venturing into an entirely untried area, first stop and think: which animals do you yourself know about? This will at least give you some idea upon which to base the class instruction. Further thoughts will follow: which animals are the students interested in?, which animals are accessible?

Students generally are interested in all animals. Some animals rank higher in interest because the members of the class have had contacts with them.

This increases the students' knowledge, and they are therefore more interested. A notable example which has occurred many times here at the education center is the study of leeches. Most students start with only bad memories and little information—once class is underway, the interest is immeasurable.

In surveying interest during a group hike, there is always an increase as mammals appear or are incorporated into the discussion. Mammals are easy for people to associate with. They have hair and produce young which are dependent on an adult for care. In Iowa the high interest animals usually include deer, raccoons, squirrels and chipmunks.

Rodents such as the squirrels, chipmunks and mice are widely found. These were recently studied near the center by a group containing varied aged people. Very little preparation was given to the group. To make walking easier, a nearby field was chosen. The group spread out to various sites and observed.

Some of the facts determined by the group were shared. They found the best places to find rodents were either near nut trees or in shrubby undergrowth. This provided information on what the animals eat and where they live.

The group also discovered the value of the edge affect where grass and trees, or shrubs and trees, provide habitats for mammals.

They also found that some "facts" are hard to explain. Many said that squirrels and other rodents live in separate places; while others found both at their observation site.

This type of activity is suited to all times of the year. You might specifically try to study one type of rodent. By the time you have combined facts from all sites, a wealth of information will be at hand. You will know what they eat, how they eat, where they live and don't live, how they move, and how the appearance of the rodent might change.

As snow appears on the ground, another challenge is opened. Sometimes the snow reveals the dramatic story of food chains. Mice tracks often lead to a burrow in the snow which leads to the grass the mouse eats. Mice tracks that end abruptly in a semicircle of wing feather scrapes mean a hawk has eaten the mouse.

Mammals—even a small mouse—can provide an exciting class—a class where any teacher can feel comfortable and the students abound with interest.

These classes do not apply merely to school groups—scouts, 4-H, or garden clubs also can learn and enjoy. Assistance can be obtained from the Conservation Education Center by contacting the staff. Mammals can be found easily; so lead your group out to study these animals now.

to that one.
McCrow is a hD in wildlife o-legged, twoindying is the in partridge of

trapping gray

the snow to san area with a just walk in.
The trap has ney try to fly.
However, in a nable to catch

to their nests ner. McCrow in sitting on it ther and then

and cost \$120 adio's battery annel receiver pickup truck, ments of the

ECEMBER 1977

## TROUT STREAM IMPROVEMENT

### by Gaige Wunder and Don Degan

FISH MANAGEMENT BIOLOGISTS

I OWA'S GREATEST resource, her soil, is also her streams greatest nemesis. From the old "Nish" in the southwest to the Upper lowa in the northeast, all of lowa's streams and their inhabitants are losing the battle. The once deep, cool, fish-harboring pools have been clogged with lowa's topsoil. Insects and crayfish which are an important fish food source are covered with silt and sand and disappear. Game fish find less and less protective habitat, fewer rocky riffles in which to spawn, and their populations decline. Fishing suffers and lowa's anglers are the losers.

Two factors are responsible for the heavy silt loads in Iowa streams, intensive row cropping and heavy grazing near streams. Soil conservation practices and landowner pride in his operation can help curb this problem, but erosion has increased in recent years as more and more marginally productive land has been put to the plow. Steep hillsides and ravines have been cleared and cropped, providing landowners a shot-term gain but also allowing long-term destruction of the soil.

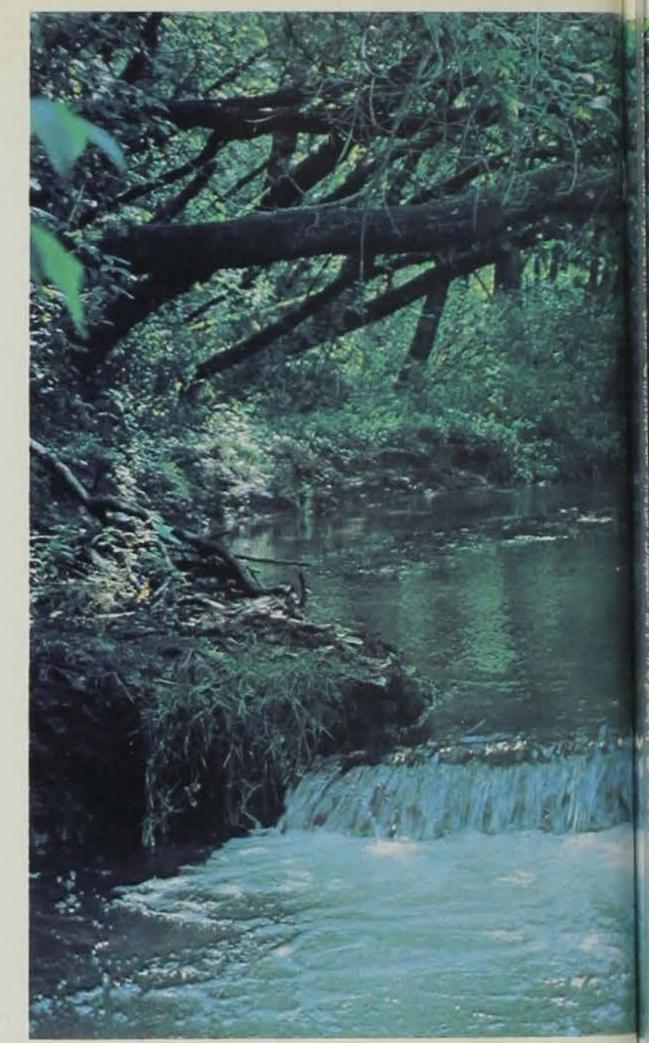
Unfortunately, the eroded soil ends up smothering our streams and lakes and growing nothing. With most areas that a tractor will negotiate being plowed, only woodlots and stream corridors are left for grazing. Over-grazing by livestock often removes the much needed vegetative cover along a stream and flooding soon removes a large portion of the surrounding soil depositing it in the Mississippi River and every tributary along the way.

Solutions to soil erosion and stream degradation are not easy or inexpensive. Good soil conservation practices are an important first step, but are slow. In the interim, stream habitat improvement methods can be applied to small state-owned streams to enhance the fishery. Trout streams in northeast Iowa have been given top priority because of the disappearance of trout habitat in many streams. These streams have small watersheds, year-round water flow, and underlying rock-rubble stream bed and banks making them easy to work.

Much of the effort in a stream improvement project on a stateowned lowa trout stream is directed toward restoring stream conditions that existed as recently as thirty years ago. An approved soil conservation plan is used when farming the upland areas to provide the best wildlife habitat while controlling erosion. Trees and shrubs are transplanted along the stream banks for stabilization and to provide cooling shade. Steep, cut banks are stabilized using tire mats, woven wire, and fast-growing grasses.

As the watershed is stabilized and soil erosion minimized, the stream itself can be altered to maximize its fish-holding potential. In-stream structures such as rock gabions, log deflectors, bank hides, and hewitt ramps can be installed to narrow the stream bed, speed the current, and reverse the siltation process. Old pools are restored and new ones are created as the swifter current washes the silt downstream and restores the clean, rock-rubble stream bed. Aquatic invertebrates repopulate the stream providing an important source of fish food, aquatic plants germinate and move in to provide cover and additional invertebrate production areas, and trout are stocked to round off the restoration project.

Habitat improvement is very costly and doesn't treat the real cause of the degradation of Iowa's streams and fishing, but it provides better fish habitat in streams where conditions are poor. Soil erosion practices can be implemented and Iowans must begin to work on the problem before more damage is done.



Hewitt ramp scouring a pool.

### Public-Owned Trout Streams

	Length	200 0
Stream	Owned	County
Bankston Creek	2 miles	Dubuque
Big and Little Paint Creeks	6 miles	Allamakee
Big Mill Creek	2 miles	Jackson
Coldwater Creek	1 mile	Winneshiek
Coon Creek	6 miles	Winneshiek
Fountain Springs (Elk Creek)	I mile	Delaware
French Creek	1 mile	Allamakee
Glover's Creek	1 mile	Fayette
Grannis Creek	1 mile	Fayette
Joy Springs	1 mile	Delaware
North and South Bear Creeks	8 miles	Winneshiek
Richmond Springs	2 miles	Delaware
Sny Magill and North Cedar Creeks	10 miles	Clayton
Swiss Valley	I mile	Dubuque
Spring Branch	1 mile	Delaware
Trout River	1 mile	Winneshiek
Trout Run	1 mile	Winneshiek
Turkey River	1 mile	Clayton
Twin Springs	1 mile	Winneshick

# Warden's diary

### by Rex Emerson

LAW ENFORCEMENT SUPERVISOR

I stopped in to see the old man who lives down by the river. It is no wonder his wife is usually in a bad mood, what with him being around home all the time. Today he told her that her panty hose were sagging which probably wouldn't have made her angry.

except she wasn't wearing any.

Most of the day was spent checking pheasant hunters. The first group that I checked coming out of a field appeared to be legal so far as the numbers of birds were concerned, and they each had a resident hunting license. But something just wasn't quite right. While I still had all four licenses in my hand I asked for further identification from them. One hunter didn't have any other identification with him. After asking him over to my car-so the others couldn't answer questions for him-I soon determined that he was a non-resident trying to get by on a resident license instead of buying the twenty-five dollar one that he should have had. It was that "corn-pone" accent that had first made me suspicious. Then, the lack of any other identification plus the lack of knowledge about the city of Davenport where he supposedly lived did him in. Actually, if I hadn't been in the mood to play "cat and mouse" with him, I could have saved some time and checked him out on the new radio system that we have. Our new two-way radios are really great. Once you learn what all the push buttons and other "gizmos" are for, that thing will do about everything except milk cows.

The next pheasant hunter checked said, "I've been huntin' for thirty years, and this is the first time anyone has ever checked my license." We hear that many times each year, and no wonder when there are only sixty game wardens in the state and 366,182 licensed hunters. We even get a day off occasionally, which means there are not always sixty officers on duty at all times.

However, if a Conservation Officer gets a call about a violation in progress, or sees a violation of the game laws while on a day off, no one has to tell him to go back to work. It's just a way of life with him. There are no set hours and no one except the officer's wife would believe the crazy hours that the officer works. It's not at all uncommon for an officer to work twelve to fourteen hours, or even more during a day. If he does take an hour off during the middle of the day to do a little hunting or fishing, someone will be sure to complain.

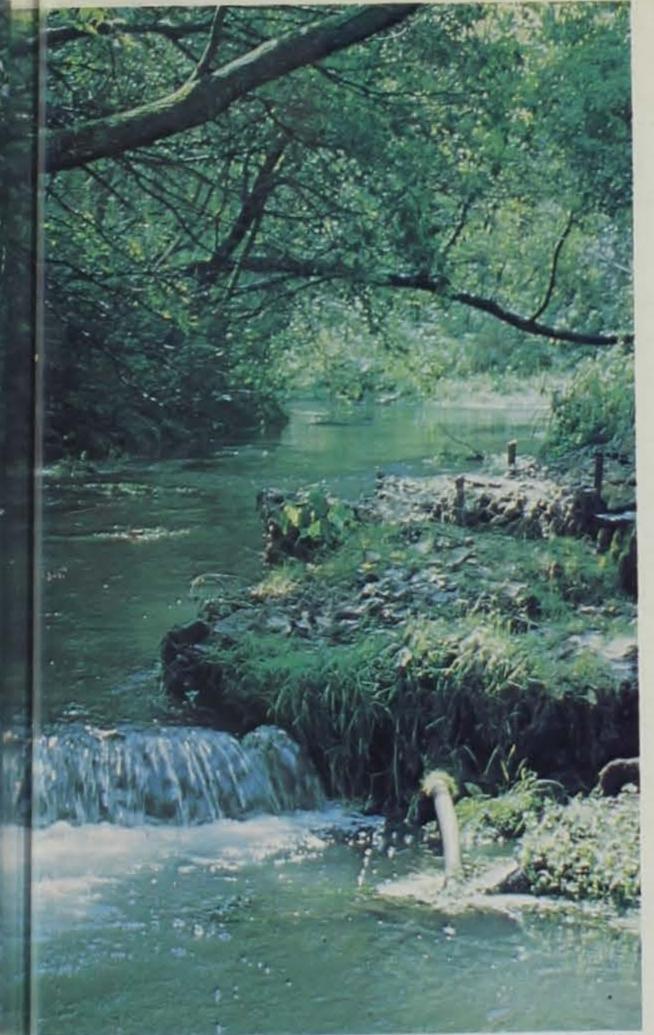
People will usually remark, "Gee, I wish I had a job like that so I

could hunt and fish all the time!"

Maybe some day the legislature will see fit to let us have more than sixty officers for the state. Having more officers would not cure every problem that we have by any means, but it would surely help. People would still violate the laws, and people would still hunt without permission, but a lot more of them would be apprehended. More important, we could do more public relations and thus prevent some of the violations and help promote a better farmer-sportsman relationship. Last year the lowa officers attended 2,821 meetings trying to accomplish this very thing, but we seem to be losing ground.

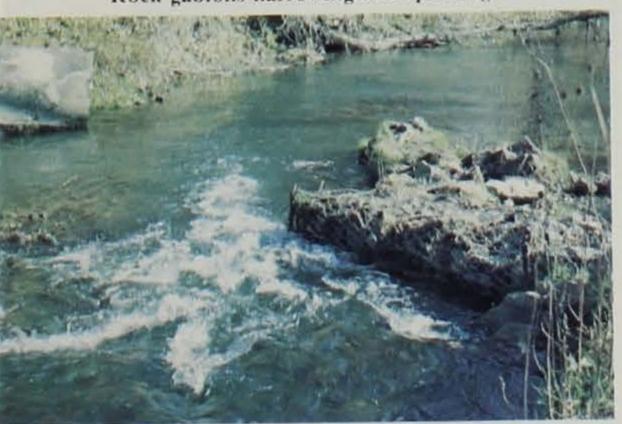
The officer in the next county got a call on the radio about three young men shooting from a car. It was unusual and quite helpful that the person who called in the report to the law center had the license number, make and color of the vehicle. When the officer

(Continued on Page 15)



Photos by Authors

Rock gabions narrowing and speeding the stream.



### Predator Calling

### by Tom Berkley

THE ART of calling a predator within close range can be classified as a fascinating drama of the wild during which the hunter is no longer the hunter but becomes the hunted. Iowa predators which are most vulnerable to calling are the coyote and the red and grey fox. Raccoons may be called under favorable conditions. Hawks and owls will also respond to calling and crows will sometimes show interest. But, when predator calling is mentioned, most often people think of coyotes and foxes.

The predators mentioned have all been exposed to the sound of an injured or dying rabbit or the squeak of a field mouse in the clutches of another predator. Several commercial call manufacturers design and build calls which will closely imitate these sounds. Most of these calls are made to copy the scream of either a jack rabbit or a cottontail. The cottontail call is higher pitched than the jack rabbit, and is probably the most effective call to use in Iowa as fewer jack rabbits are present as a prey species. The calls that mimic a mouse, usually called "mouse squeakers", do just that. These calls are usually operated by a rubber bulb and are very effective for close range work. All foxes prey on mice and will sometimes come to the squeaker call when the rabbit call fails.

Predator calling isn't hard to learn. The basics of calling are patience and persistence. The best way to learn the calling technique is to work with a master of the art and then get plenty of practice. If you are not acquainted with such an expert, the next best thing is to buy a record or tape of calling and a mouth call from one of the commercial outlets.

A high percent. To f hunters who buy predator calls use them a few times, with or without reading the instructions, draw a blank and then toss the call in the drawer with other game calls they have never learned to use. So give yourself a chance to learn.

The best time to call predators is when you have time, although the first couple of hours after dawn and before darkness are usually best. It should be noted that foxes and coyotes can be called any time of the day.

to the same

It's best to

reater the c

pables two

peaking wh

will pick

alling begin

top calling If you sh

cent. your

Your app

nis is the go

redator is

o come. Fo

ometimes

cold, they

Goasdin

begin callin

vander abo

tange will s

skyline vou

on a slope

direction p

idvantage

of the area

tree if you

o call and

Never st

looks like;

sitting pos

ground co

To find good areas for varmint calling, begin by obtaining permission to hunt on private land, and that is rarely a problem. It is a different deal than seeking permission to hunt other wild game. Most landowners, especially those owning pigs or sheep have suffered some losses and are willing to have the predator populations thinned down a mite. While you're at it, learn everything that you can from the landowner regarding the predators in that area.

Look for coyote and fox signs. The best way to check for the presence of these animals is to look for droppings and tracks along roads and trails the morning after a rain or fresh snowfall. Fox and coyote tracks are usually egg shaped and the tracks of either in sand or snow are usually in a straight line when compared to the more staggered track left by a dog.

Camouflage clothing is worth the investment. You should also camouflage your face and hands. Your face is like a mirror in the sun to a predator. On snow, you will need white coveralls, white gloves and a white stocking cap. It also helps to camouflage your rifle or shotgun with strips of white tape.

A critical step is the approach to the calling site. It is important to keep the wind in your favor when making the approach and to call into the wind. Coyotes and foxes have a keen sense of smell and calling downwind is a waste of time.

All talking must cease before you get out of your vehicle and begin your approach. Ease the door closed; never slam it. Don't try to drive as close as possible to your hunting set-up. Leave your vehicle out of sight of the area in which you plan to do your calling. Park downwind from where you plan to hunt and walk there into the wind. From now until you finish your final calling sequence, there must be no talking. Communicate with your buddies by hand signals. The hunter does well to sit among bushes

although other cover tall enough to break his outline. In short cover, lie ness at tone. On rocky hillsides sit in front of, not behind, a big boulder. can be the same with a thick clump of brush. From that position the nter can watch in all directions without moving.

blaining It's best to call by yourself. The more hunters on one stand the eater the chance for a fumble. A series of short notes on the call lables two hunters to signal each other without moving or eaking when an animal is sighted. The caller will be in charge; will pick out the calling site, place his companions and after lling begins he will make all the decisions, including when to op calling.

if sheen

predato

ding th

d track

nowfa

racks

ac wher

nuld also

or in the

s. While

age you

h and ti

Of SHIP

ncie and

t. Deal

ave vom

do you

nd wall

th you

z-busher

If you show yourself, make noise, or let the animals get your ent, you're wasting your time.

Your approach to the calling site will vary with the location but is is the general procedure to follow: First, figure out where the edator is likely to be and from which direction you expect him come. Foxes and covotes usually rest in cover during the day, metimes on hillsides, in gullies, draws or swales. If the weather cold, they're likely to lie in the sun; if it's warm they seek shade.

Go as directly and quietly as possible to the place where you will egin calling. Don't mill around and be indecisive. The longer you ander about, the greater the chance that covotes within calling inge will see you. When selecting a spot from which to call, never cyline vouself. Always keep below the horizon-preferably high n a slope or other overlook, but not on top of it. If the wind irection permits, sit with the sun at your back and take dvantage of the shadows. Always have a good visual command f the area in front of you. Sit with your back against a rock or ree if you can, or lie down with your head propped on one hand o call and watch.

Never stand up while calling. Most animals fear any object that ooks like a human standing but pay little attention to a caller in a itting position, provided his clothing blends with the color of the ground cover and he remains absolutely motionless.



#### WARDEN'S DIARY (Continued from Page 13)

found the car it had three juveniles in it. They had three loaded shotguns in the car, and two of the gun barrels had been sawed off to less than the legal eighteen inch length. A radio check proved they had been in trouble many times, including possession of stolen property. The officer will do his job and take them in and turn them over to the juvenile authorities, who will in turn have a talk with them, and probably turn them loose.

Some of the legislators have told us that we should really get tough with the violators. They should be talking to the courts. They should also check on what the legislature has been doing. Starting the first of January, 1978, the legislature has reduced the penalties for fish and game violations. And they tell us to get tough!

I heard about one game warden who caught a little boy with a young squirrel that he was about to put into a cage. The officer decided that he could take care of the situation.

He said, "Young man, whatever you do to that squirrel I am going to do to vou."

The young lad thought about it a little while and then with a twinkle in his eye he said, "I think I will kiss his little behind and turn him loose!"

Sometimes this business gets a little discouraging, but it is also interesting enough to just want to stick around to see what will happen next!

### LOOKIN' BACK

Thirty Years Ago



the Conservationist examined the sport of ice fishing on the Iowa Great Lakes. It was estimated that nearly 34,000 trips were taken by ice fishermen on Spirit and West Okoboji

Lakes in the winter of 1966. The growing problem of crowded parks was explained in another article. It was easy to see even then that, despite additional parks, the park user would have to become more tolerant of other campers and picnickers.

Twenty Years Ago



there was another look at ice fishing. At that time it was pointed out how little ice fishing was done on the manmade lakes in southern Iowa. The ice fishing tradition has

built up quickly, however, and today ice fishing is a big sport in the south. There was also a look at Allerton Lake State Park. Those in the know will remember that was the first name for the area known today as Bob White State Park.

Ten Years Ago



the magazine featured a story on upcoming lake projects. On the drawing boards were: Nine Eagles, Cold Springs, Rock Creek and Geode. Also mentioned were lakes in Washing-

ton County which apparently meant Lake Darling and one in Shelby County which must be Prairie Rose. The idea was to have a recreational body of water within 25 miles of every Iowan's home.

