

IOWA CONSERVATIONIST

Volume 12

DECEMBER, 1953

Number 12

SPELUNKING IN "LITTLE SWITZERLAND"

SOME THOUGHTS ON PREDATORS

Flat statements are dangerous in any branch of thinking, and wildlife management is no exception. About the only flat statement that can be made on wild animals is that no one knows everything about them, and no one ever will. This is especially true of predators, and their effects on other wild animals.

There will always be arguments about such predators and prey species as foxes and rabbits, and whether predators are good or bad. These arguments will never be settled, although some of us may think we have the answers pat and neatly sewed up. However, the study of predators is too complex to answer with a few isolated examples that we happen to run across while we are out hunting.

One of the most complete surveys on this business of predators and predation is a paper recently published by the Pennsylvania Game Commission.

The bulletin contains the findings of many scientists and game managers, and includes the most important modern papers on predators. One of the high points of the bulletin is its "cardinal points on predation", several of which are:

A predator is not necessarily a destructive animal. Many predators are beneficial to man.

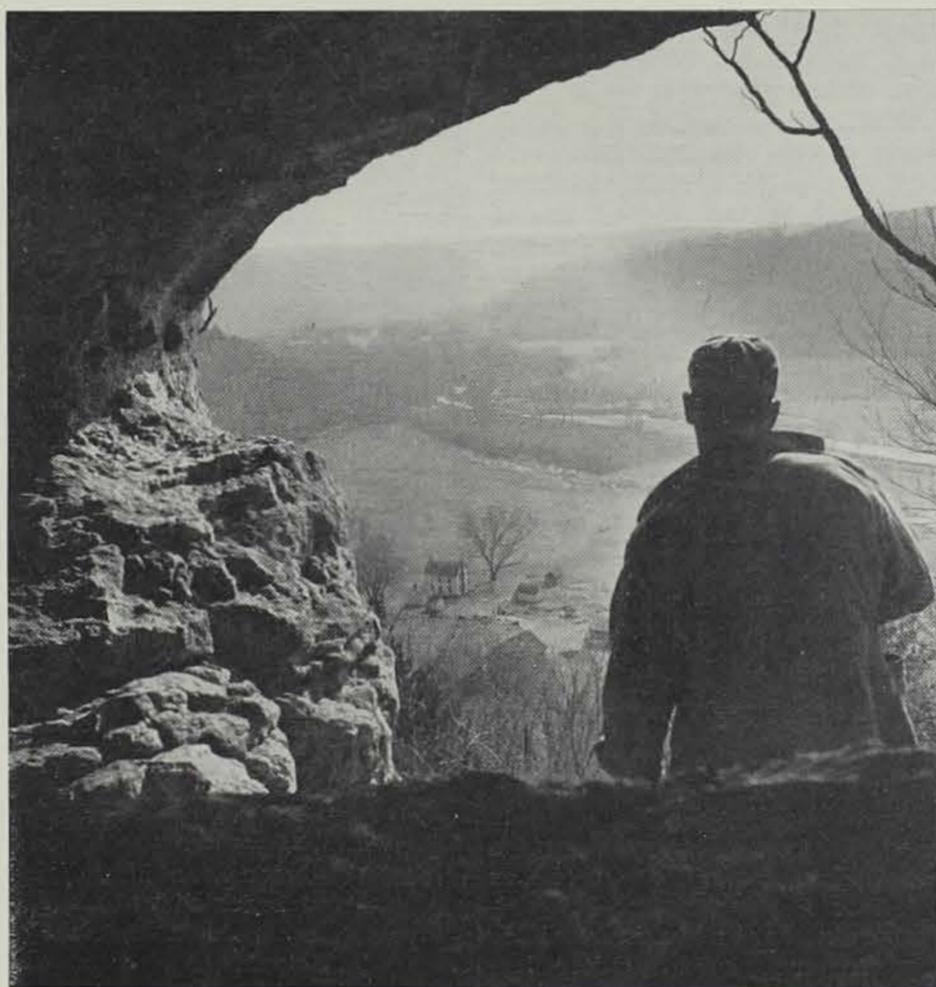
Predators considered harmful under certain conditions may be beneficial under other conditions, and vice versa.

If there are only a few highly destructive predators in an area, they may have little effect on game. If there are many slightly destructive predators in the same area, their effects on game may be disastrous.

Generally, predators live on the annual surplus of a prey species (such as mice or rabbits), and seldom cause serious reduction in breeding stock.

With only rare exceptions, no predator but man will ever com-

(Continued on page 192)



Ben Quillan stands at the mouth of one of the caves overlooking Big Paint Creek Valley.

INDIANS, ANIMALS, AND ETHICS

By John Madson
Education Assistant

One morning in late October the Editor dropped into a chair beside our desk, lit one of our cigarettes with one of our matches, and came up with a story assignment.

"Go to Tama and talk to some of the Indians there. Look up Frank Wanatee or George Youngbear, and ask them about an Indian's idea of killing animals. Find out why, for example, a white man will kill 20 coots and let them lie, but an Indian won't. What you hear should make a good feature."

That's the background, and a few weeks later we were sitting beneath a pin oak with Frank Wanatee, while he spoke quietly of red hunters and white.

To begin with, the story was not

(Continued on page 191)

Up in northeastern Iowa, where the land stands on its hind legs and shows its limestone muscles, there's plenty to keep a sportsman busy. There's something for everyone: hunters, fishermen, naturalists, photographers, and even "spelunkers".

The first four types are well known in Iowa, but the last, the "spelunker", is a relative stranger. He is a strange person who falls in about the same class as mountain climbers and rattlesnake hunters, and is a disciple of the science of speleology, or cave-hunting. The rugged hills of Allamakee and Clayton counties offer a playground for spelunkers, honeycombed as they are with natural caves, many of which have not been explored.

We stumbled across several of these caves recently in the hills behind Harper's Ferry, just above Little Paint Creek. We could find no one who had ever entered them, and even the farmer who lived at the foot of the hill admitted he had never climbed up to look at them.

At the base of the limestone rimrock that capped the hill there were four caves. Only one of them was visible from the dirt road below, but the others occurred within a distance of only one hundred yards.

The one that could be seen from the road was entered by a broad, low crevice that opened into a room probably ten feet in diameter and about three or four feet high. There was still some water seepage through its stone ceiling, as shown by the short stalactites that hung there like stone icicles.

The next cave opened into a small chamber eight or ten feet across, and several small passages led away from this main vestibule. Most of the tunnels were very small, but had been used for animals for years, judging from the bones that lay scattered about on the floor.

One of the passages would admit a crawling man, and we wormed our way along it for perhaps ten feet, when we were blocked by a low arch. A smaller man could probably have made it, but being a

(Continued on page 190)

Iowa Conservationist

Published Monthly by the
IOWA CONSERVATION COMMISSION
East 7th and Court—Des Moines, Iowa
(No Rights Reserved)

WM. S. BEARDSLEY, Governor of Iowa
BRUCE F. STILES, Director
JAMES R. HARLAN, Editor
JOHN MADSON, Special Writer
EVELYN COFFMAN, Associate Editor

MEMBERS OF THE COMMISSION
E. G. TROST, Chairman.....Fort Dodge
J. D. REYNOLDS, Vice Chairman.....Creston
C. A. DINGES.....Emmetsburg
GEORGE M. FOSTER.....Ottumwa
FLOYD S. PEARSON.....Decorah
MRS. EMMETT HANNAN.....Council Bluffs
JOE STANTON.....Des Moines

CIRCULATION THIS ISSUE.....51,500
Subscription rate.....40c a year
Three Years \$1.00

Entered as second class matter at the post office in Des Moines, Iowa, September 22, 1947, under the Act of March 24, 1912. Subscriptions received at Conservation Commission, East Seventh Street and Court Avenue, Des Moines 9, Iowa. Send cash, check or money order.

Help Fight TB



Buy Christmas Seals

PONDWEEDS

By David H. Thompson and Roberts Mann

There are three common types of aquatic plants in our lakes, ponds, and sloughs. One includes the conspicuous cattails, bur-reeds, rushes, arrowheads and shores. They have leafy stems rising above the surface. Another includes those plants which have no anchoring roots and float freely in or on the water: the algae, the tiny duckweeds, the hornwort or coontail, and the bladderwort. The third type is com-

posed of plants which are anchored to the bottom by their roots and have leaves which either float on the surface, like the water lilies, or are submerged like most of the pondweeds.

The true pondweeds and a number of other plants with similar habits, thrive in shallow lakes, ponds, sloughs, bays and streams where they root on the bottom and stretch upward like underwater gardens. If the water is clear enough for light to penetrate, some kinds flourish in depths of ten to twenty feet. Since all except the primitive Chara or Muskgrass are flowering plants, they must push their blossoms above the surface long enough to be pollinated and set seed. All but the chara have soft pliable stems that sway with the waves and are buoyed up by air-filled cells in the stems or leaves. Most kinds live in fresh water, some in brackish water, and a few in sea water.

Of the 65 species of true pondweeds known in the temperate parts of the world, more than half are found in the United States where they are the dominant group of seed-bearing aquatic plants, especially in the New England and Great Lakes regions. Some are large, with broad oval floating leaves, while others have delicate thread-like leaves. Some have both. All are relished by many kinds of wildlife—ducks, coots, geese, swans, shorebirds, muskrats, beaver, deer and moose. They furnish food or homes for hosts of aquatic insects, worms, snails, leeches and small shrimps that serve as food for fish.

The Sago Pondweed is perhaps the most important species as duck food because it produces large crops of little nut-like seeds and, at the base of the plant, numerous starchy tubers which they also seek. They eat all parts of the Naiad or Bushy Pondweed which is very abundant and may rival the Sago in our region. Other important typical kinds are the Floating-leaf and the Ruffle-leaf pond-



Jim Sherman Photo. In the ice houses generally used by ice-fishermen there are no windows and consequently no light.

FISHING THROUGH YOUR FLOOR

With the first hard freeze on Iowa's northern lakes, the ice-fishing shacks began to sprout. By the time the ice is four or five inches thick Spirit, Okoboji, and Clear Lakes each has a boom-town of anglers following one of Iowa's newest sports.

Maybe ice-fishing was a bitter sport once, but for the most part it is now solid comfort. Some of the shacks are works of art, being nothing more than portable dens. These usually have floors in which are cut openings about two and one-half by four feet in size. A corresponding hole is cut through the ice beneath. On the floor of the shack there is often carpeting, and the shack may be heated by oil or bottled gas. Some of the deluxe jobs even have pinups on the walls and a pot of coffee on the stove.

There are no windows, for the shacks must be kept completely dark to permit observation of the bait. There is no light except for the dim green glow diffusing up through the hole in the ice. This hole takes on the look of an illuminated aquarium and you can watch your bait chub swimming vigorously in ten or twelve feet of water. When a big walleye or northern pike comes along and ogles your bait, it is much the same sensation as watching a 3D color movie in a warm theater.

The presence of man in the warm shack above evidently doesn't bother fish. Some hardy anglers say that from the depths of the lake nothing can be seen of the

(Continued on page 189)



Jim Sherman Photo. One of the more conspicuous of the pondweeds are the arrowheads which often grow on shore with cattails, bur-reeds, and rushes.

weeds. Widgeon Grass is partial to alkaline and brackish waters, and all parts are eaten by waterfowl. Along the Atlantic coast, the mainstay for brant and many ducks is the marine Eelgrass which sometimes chokes the shallows with its long tape-like leaves. It is also gathered, dried, and used for packing soft-shelled crabs or to stuff upholstery. During the early 1930's it was almost wiped out by a fungous disease and the wildfowl suffered, but it is now coming back. The freshwater eelgrass or Wild Celery is a choice food for canvas-back and other diving ducks.

Pondweeds, coontail, milfoil and other submerged water plants can be both good and bad. They provide food and hiding places for young fish but, when overly abundant, allow too many of them to escape the larger predatory fish—with the result that the fish become overcrowded and stunted. In many places, pondweeds become so thick and tangled that an angler finds his hook fouled with bunches of them. Wads of them wind up on motorboat propellers and it may even become difficult to row. Bath-



The water lilies are one of the best known and most beautiful of our pondweeds.

ing beaches may become clogged with pondweeds. Worst of all, in shallow waters, they rot under the ice in winter and may so completely use up the oxygen that most fish suffocate.

Pondweeds are like pride and prosperity, you can have too much.—Forest Preserve District of Cook County Bulletin.



The basin of Blue Lake, the center of activity at Lewis and Clark State Park, is made by "Old Man River"—the Missouri River in this case. Jim Sherman Photo.

LEWIS AND CLARK STATE PARK

By Charles S. Gwynne
Professor
Department of Geology
Iowa State College

The basin of Blue Lake, the center of activity at Lewis and Clark State Park, is one made by an "Old Man River"—the Missouri River in this case. It is a deserted meander of the river. The lake is what is called an ox-bow lake. On the earlier maps it shows as a loop open to the south.

Rivers such as the Missouri, flowing on a wide bottomland or flood plain, develop courses that are twisting and winding. They are said to meander, and the loops are called meanders. Their channels slowly shift, and the Missouri channel has been all over this bottomland, at one time or another. When a meander becomes narrow at the neck the stream may break through, thus straightening its course and leaving the meander isolated. The ends gradually fill up, leaving the deserted meander as the basin for an ox-bow lake. No trouble about water for the lake, of course, with the river nearby and plenty of rainfall in this part of the country. The water for the lake comes partly from springs, but this water in turn came from rain.

Lewis and Clark State Park is an area of about 1,100 acres, of which about 900 are under water. Then adjacent is the public shooting ground of about 200 acres, all out on the Missouri River floodplain. The park is in western Monona County a few miles west of Onawa. It is close to the Missouri River and about nine miles from the Missouri River bluffs on the Iowa side.

Driving about the park one quickly becomes aware of the fact that the land is not level, as is so much of the floodplain. Also the material, the soil and subsoil, is different from that of most of the

floodplain. This is a sand dune area, and the low elevations are sand dunes. These were built up by the wind blowing across the floodplain. The receding floods of the river left plenty of sand for the wind to blow about. The insides of the meanders were particularly favorable places for it to pile up. Each dune started at some obstruction, and gradually built up to its present size. Also each dune was subject to slow movement, away from the direction of the prevailing wind.

Originally this area had few trees. These were cottonwoods, now grown to great size, of which there are a few in the park. The wind or the river in flood carried the sand away from some of these trees after they had become established. Gradually they came to stand farther and farther above their surroundings. Now some of them appear to be standing on their roots. One such tree is prominent near the bathing beach.

The sand would probably still be shifting about, urged on by the wind, were it not for the present cover of vegetation in the park. The trees, planted as a project by citizens of Onawa and the surrounding area, held the sand first. Gradually other vegetation took hold, and now the dunes are well stabilized. There is no lack of sand for the bathing beach, as there is in so many of the lakes of Iowa.

Sand dunes, as this occurrence shows, are not peculiar to arid countries. All that is needed is a good and continuing supply of sand, obstructions, and wind. The shores of seas, lakes, and large rivers are particularly favorable places for the development of sand dunes. The east shore of Lake Michigan has many sand dunes, as do also many of the rivers in Nebraska and Kansas.

The stone used in the construction of the park buildings has in itself a geological story. Most of it is limestone, blue, gray and

brown in color, and containing many fossils. The fossils are of several kinds. Brachiopods are abundant. These are two shelled animals somewhat like clams and oysters. Most of the fossil brachiopods in this rock are small, no more than an inch or two across. The small curved marks on the faces of the blocks are the edges of the fossil brachiopods.

Some of the blocks have masses of clear crystal calcite. This is the mineral of which the limestone is composed. In the course of the ages since this rock was deposited as a sediment in the ancient sea it has gradually hardened to stone. Some of the material went into solution in the ground water which permeated it. This later crystallized out, to form these fine crystals of calcite.

The limestone also contains masses of black chert. This is composed of the mineral quartz and is so hard that it will scratch steel. It either accumulated with the limey material on the sea bottom or was brought in later by the subsurface water, replacing the limestone.

Some of the limestone surfaces on the outside of the chimney at the shelter house are coated with pyrite. This mineral, popularly called fool's gold, weathers to the mineral limonite, which is essentially iron rust. The surfaces thus acquire a heavy brown stain. The brown color, wherever it is present on the rock surfaces, is due to limonite, formed by the weather-

ing of pyrite or other iron-containing minerals.

The rock of the Lewis and Clark monument is quite different from the limestone of the park buildings. It is granite, made up mostly of the minerals quartz, feldspar, and biotite (mica). Feldspar and biotite both have smooth cleavage surfaces, and so reflect light somewhat like a mirror. The quartz is rather gray and greasy looking and the biotite is black.

This rock was formed from molten material, solidifying as a great mass within the earth's crust. Then followed slow uplift for millions of years. All the while the rock over the granite was being eroded away. Finally, the granite was at the surface. Quarries from which such granite is secured are in Minnesota and the New England states.

The lake has a silting problem, for every time the river pours in it carries a load of sediment. In time the lake would fill up, were it not for a program of dredging. The lake was dredged in 1951 and 1952, and after the flood of 1952 a ditch was blasted to the river, so that the lake could lower to its proper level.

An attractive place, Lewis and Clark State Park, not only for its delightful forest and picturesque lake, but for the geological story that goes with them. A unique topography fashioned by the wind and the river, rocks in the park buildings and the monument, combine to tell their story of ancient happenings.



The cottonwoods at Lewis and Clark State Park have grown to great size. Wind and water have carried the sand away from their roots making them especially photogenic. Jim Sherman Photo.



Jim Sherman Photo.

There is far more to a hunting trip than the mere killing of game and good companionship is a part of it.

ON BEING A GOOD SHOOTING COMPANION

There is far more to a hunting trip than the mere killing of game and good companionship is just a part of it.

Being a good companion comes easily if one will bear in mind a single fundamental thought. Always be considerate of the other person. Whether that person be your hunting partner, four corn rows over, or the farmer who owns the cornfield that you are hunting, both are relative to a successful day afield.

When you kick up a big ring-neck and he catapults into the air, take him if he is on your side of an imaginary line dividing the two of you, but if he veers off in front of your companion, let him shoot the bird. This is the generally accepted principle, although individuals may deviate from it.

Whatever shooting procedure you and your companions use, be sure it is well understood before you enter the field. It then won't be necessary for blood pressure to become aroused.

Most hunters have been preached to and know the rules of safe gun handling. But knowing them isn't enough; make your knowledge known to your companions.

Although you may become aggravated beyond restraint at your companion's dog, remember he probably thinks him a fine bird dog. So, for the day, let the dog hunt the only way he knows how.

Enjoy close companionship and you won't have to bring home birds to make an outing worthwhile.—Bob Whitaker, *Boone News-Republican*.

Many ducks, including mallards and other "puddle ducks," are often inedible in the west. This occurs when the birds have been eating decaying salmon that have died during spawning runs, tainting the ducks' flesh.—J. M.

Wardens Tales

Shop Talk from the Field

Like any of us, a conservation officer sometimes fires a humorous shot and gets nicked himself.

On a late October Sunday, Conservation Officer Gene Newel and the marshal of a small town in northwestern Iowa were walking down the main street when Newel paused, and with a straight face asked the marshal, "What kind of town do you have here, anyway? Look at that car parked there, with two men drinking beer. They're drinking beer in town, on Sunday, and in an automobile, and you didn't even see them. For shame!"

The marshal walked over to the parked car while Gene watched in triumph. After a few moments the marshal returned, and motioned Newel to come with him. As the two officers looked into the car at the beer drinkers, they saw an enssembled rifle on the front seat, and from beneath the seat protruded the head of a pheasant.

Whereupon the town marshal happily made a few comments about state peace officers, and the two men made their arrests.

From Harold Morgan, Oak Grove State Park Conservation Officer, comes a story of deadly combat in which there wasn't a shot fired.

"During winter weather," Harold writes, "many skunks will live together peacefully in a single den. However, during breeding season the males may engage in battles to the death."

"Last winter I came across the signs of such a combat written in fresh, light snow. After following the trail for nearly half a mile, I came upon the scene of the battle. Two male skunks were engaged in

one of the most vicious fights I've ever seen. It was not a running fight...every inch was a battleground. The shoulders, necks and heads of the skunks were cut to pieces and both animals were bleeding profusely."

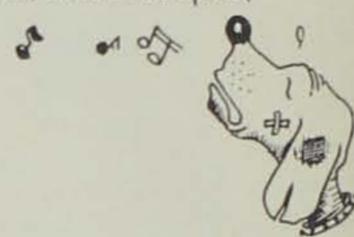
"I did not see the finish as they had gotten out on the clear, thin ice of the Big Sioux River. But as I watched unseen from the ring-side, strange as it may seem to us, at no time did either skunk use its famous weapon against the other."

Ward Garrett, Pottawattamie County's Irish game warden, has a new story about a dog-eating beaver.

It seems that a local dog breeder was running a pack of beagle hounds along a river bank near Council Bluffs when the dogs surprised a large beaver in the open.

The beaver dived into his bank den and the leader of the beagles charged in after him. There was a brief rumpus in the den and the beagle reappeared, not much the

"O WHERE, O WHERE HAS MY LITTLE TAIL GONE?"



worse for wear but with only three inches of tail remaining.

When Frank Tucker, Conservation Officer for Cass and Adams Counties, applied for a driver's license renewal recently, the clerk listed his occupation as "Conversation Officer".

When resting or alarmed, wild geese will sometimes lie flat with their necks outstretched and without the slightest movement. On sandbars they resemble sticks of driftwood, and on open water they resemble anything but a goose.—J. M.

PROMISCUOUS FISHING

The Iowa legislature has authorized the Conservation Commission, when they see fit in view of conditions, to permit "promiscuous fishing" in Iowa lakes where winter kill is inevitable.

The new legislation should be warmly received by residents of lakes regions who have "felt a little sick" at the close of the hard winter months when they viewed the wasted fish population following a winter kill in some of their shallow lakes. In some communities, the removal of these dead fish has been an expensive project. Rather than being of no value at all, these thousands of floating fish have been a debit.

Most people are familiar with the close check the Conservation Commission keeps on the oxygen

content of water in all sizeable lakes. It's a simple matter to know when that oxygen count is to the danger point, so far as fish life is concerned.

"Promiscuous fishing" will include taking these fish with equipment otherwise barred from use, such as the pitchfork, spears, etc. It is expected to provide the means of getting fish, otherwise wasted, into the channels of human consumption.

There's no real effective or efficient way to prevent "winter kill" unless we find some way to do something about the weather. Until then, there is something we can do.

And certainly there should be much more satisfaction to witnessing those fish on hundreds of dinner tables than there is seeing their wasted carcasses come floating in following the break-up of the ice.—*Spirit Lake Beacon*.



Under a new law the Commission is empowered to allow the public to harvest fish being winterkilled. As a result, tons of fish formerly wasted can now be utilized for food.

BLACK-CAPPED CHICKADEE

By N. R. Barger

If a vote were taken, no doubt the best known winter bird would be the chickadee. Take a walk afield on the coldest winter day and the chickadee will be among the few birds seen. Visit any patch of woods or shrubbery and if there are any birds present at all it will be the chickadee. Build a winter feeding shelf and the first visitor to arrive probably will be the chickadee.

In this way the trustful chickadee breaks the ice for the more wary species. Moreover, the chickadee is never found alone but will be accompanied by one or more individuals of its own species, or by nuthatches or downy woodpeckers.

Those persons who diligently feed birds in winter have found that chickadees can be trained to feed from the hand. Because it is so confiding it has also become one of our most beloved birds.

Chickadees are found throughout the state in both summer and winter, but records show that the species is partly migratory. It is seen most frequently in winter because the trees are leafless, and it may be that their numbers are somewhat smaller in summer because of a northward migration, at least as far as the southern counties are concerned.

Whenever observed, the chickadee seems to be continually busy searching for minute insects or their eggs. It flies from tree to tree or from branch to branch in acrobatic fashion and doesn't seem to mind which side is up in the process. It is one of the best destroyers of insect eggs known and eats large quantities of destructive insect species such as tent-caterpillars, various moths, canker worms, and plant lice. Because of its preference for food from ani-

mal sources it will eat suet and other meat scraps which are easily placed on the winter food shelf. It eats a small portion of wild seeds and fruits, naturally, so may be attracted to the food shelf also by sunflower seed.

The nest is built in cavities, frequently constructed by the birds themselves. An old decayed birch stump usually is selected, but they have been known to build their nests in other cavities, even bird houses. Both parents construct the cavity, working one at a time, and both assist in caring for the young. The cavity is built about eight inches deep and a nest of softer materials, such as moss, feathers, grass, et cetera, is constructed at the bottom. From six to eight eggs are laid as a rule and this is a large family when compared to those of other species.

In Wisconsin nest construction begins about the middle of April. Eggs may be found by the middle of May in the southern counties. It takes about 12 days for the eggs to hatch and the young remain in the nest for about 16 days. The family travels about in congenial groups at least for a portion of the summer. Winter flocks, on the other hand, usually are made up of unrelated individuals.

The chickadee always radiates cheer, both by its actions and by its call and song, no matter how inclement the weather may be. The best known call, of course, is the *chick-a-dee-dee* but it also has a song or whistle call which frequently is described as *pee-wee*. The latter whistle call is not heard regularly throughout the year but is the most noticeable in late winter or early spring. The best time to hear it is before sunrise as the bird sometimes will sing almost continuously at this hour.—*Wisconsin Conservation Bulletin*.

Seventy-eight per cent of a hog-dressed deer is edible meat.—J. M.



If a vote were taken, no doubt, the best known winter bird would be the black-capped chickadee.



Jim Sherman Photo.

"Through personal experience we know that the big majority of farmers, even those with posted farms, will allow the hunter on his land if properly asked."

TOO MUCH "NO HUNTING"

We've been somewhat troubled lately about the heavy sales we've made in "no hunting" signs. Not that we're down-hearted about doing business. We print the signs with the idea of selling them for a reasonable profit.

However, as a man who likes nothing better than pheasant or duck for dinner, we would rather not sell quite so many signs.

As in most everything else, there are two sides to the "no hunting" problem. Many farmers feel they have a legitimate reason to close their farms to hunters. In lots of cases they have reasons like trampled fences, unclosed gates, injured livestock, etc. The farmer who has seen the careless hunter operate can't be blamed too much for wanting to protect his property.

And the sportsman has his side, also. Through his purchase of licenses and his contributions to conservation he helps to keep our fence rows bustling with pheasants and our flyways at least partially populated with ducks. The sportsman resents being forbidden to harvest his share of what he has helped plant and protect.

In many cases a sensible approach by the hunter will get around the no hunting problem. Through personal experience, we know that the big majority of farmers, even those with posted farms, will allow the hunter on his land if properly asked, and assured that the hunter will use good common sense while on his land.

We've met lots of farmers who said "help yourself" when we asked permission. Others have gone into the fields with us, sometimes without guns but just to get in on the hunt. Still others have asked for part of the game, which is a perfectly legitimate request. But only twice have we run into farmers who refused to let us hunt, and both have had good reasons, as mentioned above.

We'd be happy if no sales were made on hunting signs anywhere in the country, but we know it will never happen. The best we can hope for is an improvement of relations between hunter and farmer, and the burden of proof must necessarily be with the hunter.—R. L., *Oakland Acorn*.

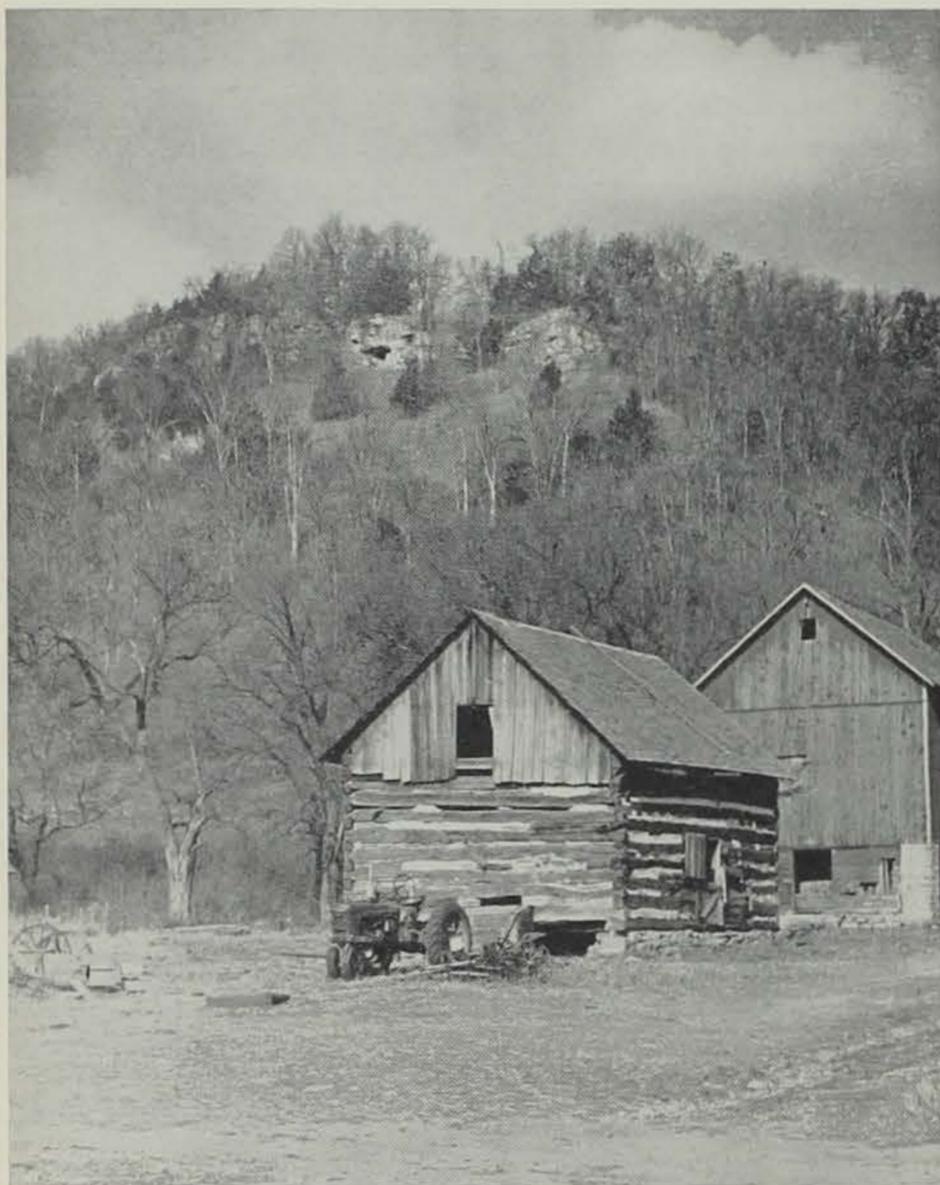
Fishing . . .

(Continued from page 186)

man, and a fish-eye view of the hole in the ice appears to be a black square on the ice above. And how do they know? They claim they have dived through their fishing holes and took a look just out of curiosity. This isn't recommended from a water safety angle, but it's doubtful that it will ever become an established part of ice-fishing.

There are still some rough and ready fishermen who cut holes in the ice and simply sit in the open until their tip-up rigs indicate a bite, *a la esquimaux*.

Most of the boys, however, have rigged up shacks that are really homes away from home. So the next time you drive by Clear Lake or Storm Lake and see these lonely winter shantytowns, don't pity the icy ice-fisherman. Chances are he's warmer than you are.—J. M.



Jim Sherman Photo.
Some of the caves in northeast Iowa are visible from the valley floor. More often they are hidden from prying eyes by dense vegetation.

Spelunking . . .

(Continued from page 185)

little thick through the cross-section, we were effectively blocked. Beyond the low arch the tunnel grew larger and could have been travelled through. It extended back into the hill for about 40 feet, and then turned away from our flashlight's beam.

The third and fourth caves in the rimrock were of about the same size, each being roughly 12 feet in diameter and four or five feet in height. They were both entered by low crevices that were not visible at any great distance. The entrance of the fourth cave was screened by basswood and cedar. From it's main chamber a short passage led into a smaller, but higher chamber, and then led off into the usual small crevices and tiny tunnels. Farther back these passages might open up into larger caverns or pinch out altogether, but no one knows.

These caves were all formed by water action, and small stalactites and flowstone could be found on their ceilings and walls. The chambers and tunnels are the result of water action, which for years has been leaching out veins and pockets of softer stone.

A prime example of this is Spook Cave, which was opened up on Bloody Run Creek in early October. Two Clayton County men were investigating "Spook Hole", a crevice in the hillside about a hundred yards upstream from Beulah Falls,

from which came a roaring sound that local residents had always attributed to wind.

Chipping open the crevice, the men entered a small cave for about four feet. They used dynamite and blew out the blank wall that faced them, and then alternately blasted and chipped their way for 60 more feet back into the hillside, where they broke through to a stream running through a large cavern.

At the point where they emerged, the stream fell over a 12-foot waterfall into a pool about six feet deep. They reported being able to wade back through the stream for about half a mile, when their passage was again blocked by a low ledge. At one point the spelunkers told of finding a large room about 35 feet high and a hundred feet long, its walls and ceiling composed of a black rock resembling onyx. They plan to completely explore the cave and eventually open it to tourists, conducting boat rides along the underground river.

Northeastern Iowa has a corner on the cave market because of its great limestone formations, the result of an uptilting of the limestone layer underlying Iowa. This limestone stratum tilts up from the southwest to the northeast, finally erupting from the surface in some of the northeastern counties, particularly Allamakee and Clayton. Many of the caves in these counties have never been entered, as shown by the fact that they still have stalactites and stalagmites. If

there had been many tourists along, these stony deposits would probably be on someone's mantle by now.

Aside from the basic thrill of exploring caves, we predict that someday a spelunker will get a bonus thrill by poking into a crevice and finding a cache of pottery and arrowheads. Indians knew of caves, and often used them for shelter and certain rituals.

Caves should not be taken lightly. They are a good way to get into bad trouble. Don't ever enter one alone, and then don't penetrate them too far. They are often filled with treacherous wells and crevices, some of which are extremely deep. Until you're an experienced spelunker, stay around the entrances and leave the depths of the caves to speculation. Caves in northeastern Iowa should also be treated carefully because of snakes. The rocky ledges in which the caves occur are often den sites of timber rattlers, and great care should be taken in entering them, especially in spring and fall.

But once you start spelunking, it's hard to stop. Take that passage in which we were blocked by the low arch, for example. Next summer, with fewer clothes and less belly, we're going to find out what lies around that bend of the tunnel.—J. M.

Cold winter nights may find a large covey of quail roosting in several small groups, indicating the possibility that only a limited number of birds will be benefited by the additional warmth gained when several quail huddle together.—E. S.

When roasting game birds, try wrapping them in aluminum foil. Basting is not necessary, and the juices are sealed in the meat. This works well with all game birds, but particularly with pheasant and quail.—J. M.

RABBIT HUNTING'S MYTH

There is a myth that snow is essential to rabbit hunting. Most Iowans don't go out after "Brer Cottontail" until it is cold enough to freeze a brass monkey, or something. Sure, rabbits are good eating in late December . . . if you can find them. Trouble is, nature has stepped in by that time and trimmed down the bunny populations.

Shooting rabbits only in snow is an old Iowa tradition that was given quite a push a few years back by tularemia or "rabbit fever". There were many sick rabbits, and experts advocated not hunting until these sick rabbits had died of the cold weather and none but the healthy cottontails were left.

Actually, many rabbits die before hunters can ever bag them. Rabbit populations hit their peak during the summer, and by late summer and early fall a number of things have killed many of the rabbits. Disease may have a hand in this decline, but predation hits the rabbits very hard. By the time the traditional rabbit hunting begins with the first snow, the summer populations are greatly thinned. In some areas, as many as two-thirds of the rabbits alive in late summer will not see Christmas!

In a normal year, there are plenty of rabbits in September and October, and they are excellent eating. They are fat and have not been subjected to the rough going that will later trim them down. Many of the rabbits killed during squirrel season are from late litters, not yet fully grown, and are as fat and tender as they'll ever be.

Try hunting rabbits a little earlier next year. If you don't get the surplus early, you can bet that Mother Nature will!—J. M.



There is a myth that snow is essential to rabbit hunting. Snow is fine, but it's the early hunters who find most cottontails.



To the Indian, with only rare exceptions, hunting meant meat for food, not sport.

Indians . . .

(Continued from page 185)

killed, while many whites killed for profit or just for the fun of it.

Wanatee, a broad, quiet Mesquakie, has a theory about the wasteful, wild hunting of some white men.

"When a hunting season opens," he said, "it is a Roman holiday for the white hunter, and he thinks of nothing but hunting, whether he needs the meat or not. To an Indian hunting means meat and food, not just sport."

"Then should we just forget about hunting seasons," we asked,

"and get away from these 'Roman holidays' by hunting anytime?"

Wanatee shook his head. "There are too many white men for the game. There were not too many Indians for the game that there was."

"But do you still hunt much?" Is game as important as it was in the old days?"

"It is important when and if we want it. We don't eat wild game all the time, but now and then. If we have not had some wild meat for a while and we are hungry for it, we go hunting. If we are not hungry for wild meat, we do not hunt."



Many of the Indians' food animals are not considered game by most white hunters. The woodchuck or ground hog is Indian food and many white hunters are now discovering what they have missed for so many years.

"My son who is in the navy came home on leave once, and wanted to hunt squirrels. He asked me and my wife and the other children if anyone wanted to eat squirrel. We didn't, so he didn't go squirrel hunting. . . ."

Traditionally Indians hunted whenever they wished. Such year-around hunting may alarm modern sportsmen, but Indians did not harm game populations much.

The Indian's tastes are also different, and many of his food animals are not considered as game by most white hunters. Muskrats and woodchucks are eaten, the latter furnishing grease and bowstrings as well as meat. In the old days many song birds were eaten, the favorites being thrushes, robins and meadowlarks. Members of the woodpecker family were seldom eaten, and so were seldom killed.

"Once when I was a little boy," Wanatee related, "I went bird hunting and killed some robins and

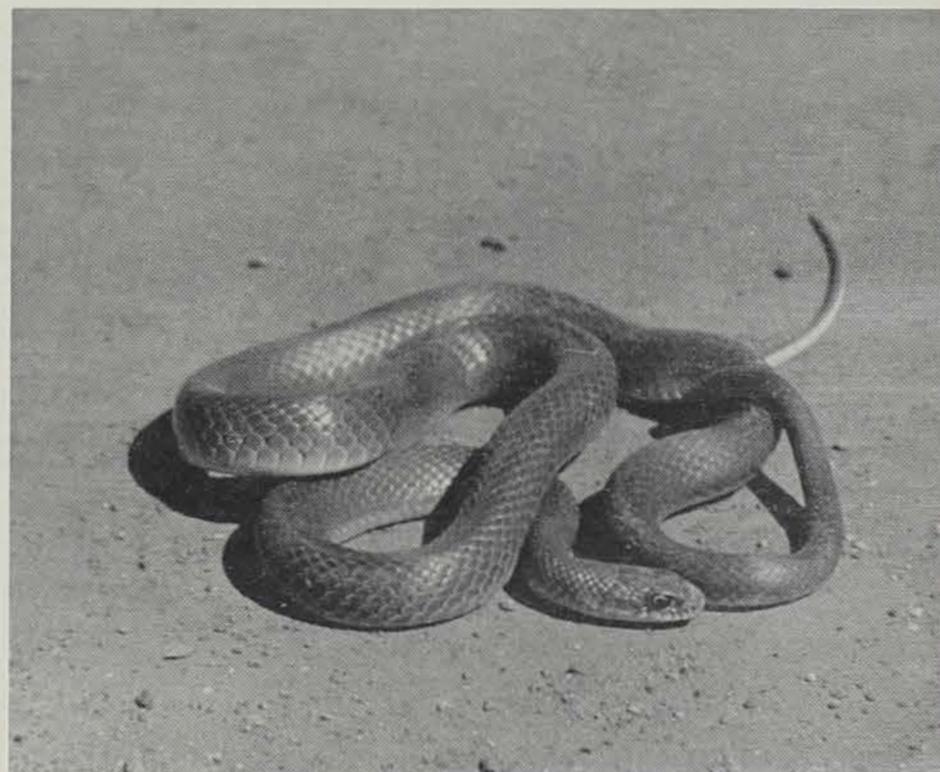
nests or broke their eggs for the fun of it.

"They will climb trees and look at eggs in the nests, but I have never known of them bothering a nest," he replied. "Last spring they found some nesting pheasants and told me about them. They watched the old hens on their nests, but they did not disturb them."

"How about critters like snakes? Won't an Indian kill them on sight, as do most white men?"

"Why should we?" asked Wanatee. "This house is in a place between the woods and the fields, and every spring and fall the snakes move through the yard to and from their dens. We leave them alone . . . they are just passing through, and will soon be gone. Most of them are good snakes like the old bullsnake, and do no harm."

"My grandfather never had to kill snakes because he could make a potion that the snakes did not



Jim Sherman Photo.

"Why should we (kill snakes), they are just passing through and will soon be gone."

two flickers. I was being raised by my grandparents and I knew I shouldn't have killed the flickers, for woodpeckers were not used for food. I took them home anyway, expecting trouble from the old people, but my grandparents were happy. The tailfeathers of flickers have a religious meaning and are used in ceremonies, so everything was all right."

"When you were a boy, would you have killed those birds just for the fun of it?"

"We killed for food," Wanatee answered patiently. If we needed it, we killed it."

As we sat in the sun beneath the oak tree in Wanatee's back yard, two of his sons played nearby. They were not noisy, but played quietly and without argument. Once Wanatee spoke to them, asking them not to stir dust upwind to us, and the boys moved quickly away.

We asked Wanatee about the boys, and if they ever robbed birds'

like, and would avoid. Once when he was climbing a path in the woods he came upon many snakes lying in the path. Instead of killing them he brushed some of the potion on his legs and walked through the snakes. They didn't bother him, but crawled away."

We had everything we had come for, and more, but there was one thing we still wondered about.

"But what is the reason for this difference between Indians and whites . . . this not killing for sport or fun, but only for food: Is it in the way you raise your children, or what?"

Wanatee answered this slowly. "It may be because of what we ask our children to do or not to do," he finally said, "or it may be that we have lived longer with animals than the white man has."

He paused a moment before he went on. "It can be many things, but I think the real reason is that the white hunter has never been hungry."



There will always be arguments about predatory species such as fox. Rex Pendry Photo.

Predators . . .

(Continued from page 185)

pletely exterminate a species of animal.

Some animals may increase so greatly as to destroy themselves if not held in check, and predation may be a benefit to such animals.

Within certain limits, availability governs the diet of most predatory animals. That is, the staple in the predator's diet is the prey most easily caught.

Reducing predators in a given area may not necessarily mean a reduction in predator pressure on a given prey animal.

Predator control may benefit a prey animal on areas where the environment is otherwise favorable for increase, especially when the numbers of the prey species are well below normal.

The Pennsylvania bulletin also points out the important fact that predation is one of the things that form a natural control of animal populations, and that it checks the increases of some animals that

might otherwise eat themselves out of house and home.

Wherever predators are talked about, there are usually arguments over the pros and cons of predator control, usually the former.

Many sportsmen and most farmers advocate all-out control of predators, often for good reasons. Many naturalists and biologists, on the other hand, propose predator protection. Both sides may be right or wrong, depending on circumstances.

Those against predator control give the following arguments:

1. That predators help maintain the "balance of nature."
2. That predators maintain a "sanitation service" by killing off the diseased, unfit and crippled members of a prey species.
3. That predators help control insects. This is a minor point in the value of predators although it is recognized, particularly with such species as skunks.
4. Fur value. This may be a strong argument against all-out predation.



A cottontail rabbit exposed to its enemies by lack of suitable cover is soon a dead rabbit; good cover increases the cottontail's chances of survival.

THE CHRISTMAS HUNT

'Twas 2:00 p.m. Christmas, when we gave up and crawled
Off to the parlor to die.
All stuffed to our chins with roast turkey and cake,
Baked ham, potatoes and pie.

I stirred in my chair as a resolute voice
Rang through the tobacco smoke fog,
"Who wants to hunt? I have plenty of boots,
Three shotguns, with shells, and a dog!"

Three staggered up, three fat men and true,
With gravy stains fresh on their vests.
(The fact that we stood after such a repast
To our great love of hunting attests.)

We dug up some sheepskins, and wool stockings, too,
And went gamely out into the frost,
With shotguns and shells and three bellies so round
That they dragged on each fence that we crossed.

We hunted all day and took plenty of game,
Six rabbits, a crow and a fox,
And came home at evening with bellies now lean,
With no shells, but with holes in our socks.

In the three hundred and sixty-four lean days that passed,
My Christmas hunting I rued,
For why will a man, for just two cottontails,
Walk off forty bucks worth of food?—J.M.

tor control, since furs taken from predatory animals may exceed values of \$25,000,000 in the United States in peak years.

5. Predatory animals have a great esthetic and recreational value. What would our wilderness areas be without wolves, bears and cougars?
6. Predators remove only the surplus game over the "carrying capacity" of the habitat. (Or only the animals above the number that a range can safely support.)
7. Predators may contribute to the welfare of other animals by preventing them from becoming greater than their food supply, by preventing epidemic spread from diseased animals, by killing off other predatory animals, and by killing animals which might harm the habitat by the destruction of vegetation.

The other side advocates predator control on these grounds:

1. That predators cause much livestock and poultry damage. This may amount to several millions a year.
2. That certain game species may be increased by predator control and so furnish increased game for recreational purposes. This is especially true of slow-breeding big game animals.
3. For protection of near-extinct prey animals.
4. To control the destruction of newly released, artificially propagated game birds and animals.
5. Because of the "harassing" effect of predators on prey animals. This can interfere with the normal lives of desirable

animals and indirectly contribute to their deaths.

6. Because predators carry diseases, such as rabies, which endanger the lives of other animals and even man.

Any of these statements for or against predator control can be proven wrong under certain conditions, and it can be seen that increasing or reducing predators is treading on thin ice. Beware of anyone who has all the answers on predation problems. Anyone who flatly states that foxes or wolves are all good or all bad does not know what he is talking about.

Roger Latham, author of the Pennsylvania report on predators and predation, sums it up well: "There are thousands of questions yet unanswered. Only research can fill the gaps in our knowledge, and until these are filled, predator management and its place in wildlife conservation will remain a function characterized by blind gropings and clumsy blunderings." —J.M.

IS YOUR PROBLEM WEEDS?

If it's fishing you want from your pond, you're pretty safe in removing your weeds. Usually a small pond is underfished rather than overfished. When weeds and protective vegetation are removed, fry have fewer places to hide. They present an easier target for larger fish. As the adults prey on the juveniles, the population is thinned, the big fish grow sassy and bigger. Besides, it's a heck of a lot more fun to toss a plug when you don't have to clean moss and weeds off the hooks before every cast.—The Fisherman Magazine.