

IOWA CONSERVATIONIST

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Number 2

Rx PRESCRIPTION FOR MORE WILDLIFE

WHY FISH?

By R. W. Eschmeyer
Executive Vice President
Sport Fishing Institute

If we were to ask the twenty million American anglers why fishing is their favorite outdoor pastime, we would get a variety of answers. A majority would probably indicate that they fish to relax, to "Get away from it all." That's quite a change from the answer we would have received a hundred years ago. In the early days people fished for one purpose only. They fished to get fresh meat for the table.

Meat is available now, but today fishing is even more important than it was in pioneer days. The shift in our mode of living has been an extreme one. In the early days there was a tendency toward too much physical exertion, but today our problem is one of trying to avoid nervous exhaustion. Doctors tell us that mental ailments, heart disease, and gastric troubles are on the increase. We are living too fast.

Angling today is a tonic for frayed nerves. The fellow who can forget his troubles every now and then by going fishing can expect to have better perspective. He may be expected to think on a more even keel. He will be a little easier to live with, and he might even lengthen his life span a bit.

Fishing is an important nerve tonic. We go fishing to relax. But we go fishing for another purpose, too . . . we want to catch fish. If angling success becomes unsatisfactory, most people will lose interest in this most popular of all outdoor recreational activities.

In some areas fishing has become unsatisfactory. The national average has probably dropped to a catch of less than one fish per hour, and the average fish caught today has a length of less than ten inches.

There are a number of reasons for this decline in the average catch. Siltation and pollution have spoiled the fish habitat in many of

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The Plant Iowa Committee was organized to stimulate the thinking of all Iowans to a point of action "Plant Iowa to Help Plant America."

LAKE OF THREE FIRES STATE PARK

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

Lake of Three Fires State Park, a few miles north of Bedford in southern Taylor County, has as its main attraction the lake of that name. The lake basin, as is the case with most of those of southern Iowa, is partly nature-made, partly man-made. Nature made the valley in which the lake lies, man completed the job by placing a dam across the valley.

It took nature much longer for her part of the work than it did man for his. Over a period of some hundreds of thousands of years the water running off the land had been at work, carving out the valleys. Now southwestern Iowa is almost all "in slope."

The depression in which the Lake of Three Fires lies is one of these valleys made by running water. Bit by bit, through the years, the centuries, the material which once filled in the space of the valley has been carried down stream.

Man's job was relatively simple. All he had to do was find material suitable for a dam, place it, protect the upstream face, and provide a spillway. The fill for the dam probably came from the terraced area back of the bathhouse. Fortunately it was suitable for the project. Placing the dam completed the basin for a lake that has a maximum depth of 16 feet, and an estimated average depth of seven feet. The water is the runoff from the watershed area of about 5,000 acres.

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By John Madson
Education Assistant

Being homesick for the fresh oysters and cozy fields of Prince Edward Island, the Canadian botanist was prejudiced. But he had a point, and his statement stung.

"I'll be glad to get home. Iowa depresses me. There is no softness or beauty in this land; it is little more than a huge corn factory. . . ."

That's a bit strong, but a German might say the same thing, or a Dane, a Japanese or a Swiss. In their homelands they are accustomed to stately windbreaks and hedges bounding small fields, and jealously protected groves and forests that are seldom grazed or burned. And what can we say in answer? In our quest for Bumper Crops and bigger and better cornfields we are turning our backs on the land, and on its beauty and welfare.

For a hundred years we have broken, plowed and cultivated the richest dirt in the world. We plow back enough nitrates and calcium to keep the crops coming and they come well, making Iowa rich and famous. But grazing has left our forest floors with threadbare carpets, and nothing stands between most of our naked fields and the arctic but a few strands of woven wire.

So, early in 1953, a group of Iowans paid a visit to their governor. They asked Governor Beardsley to place Iowa among the other states cooperating in the "Plant America" movement. Soon after, the governor appointed a committee of eighteen youth and civic groups, among which was the Iowa Conservation Commission.

The committee's hope was this: that Iowa could be made a more beautiful and prosperous state by planting something in addition to Father Maize.

And their job is this: to interest Iowans in a new idea and dramatize the need for plantings of trees and shrubs, not only to protect the land but to add beauty to a plowed and cultivated monotony.

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Iowa Conservationist

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NEW WILDLIFE STAMPS NOW AVAILABLE

The 17th annual Wildlife Conservation Stamps published by the National Wildlife Federation are now being distributed from headquarters in Washington, D. C.

The 36 stamps in the 1954 edition include full-color illustrations of 14 species of North American birds, five mammals, five fishes, seven wild flowers and two trees, the red admiral butterfly, a timber rattlesnake and the Anderson tree frog.

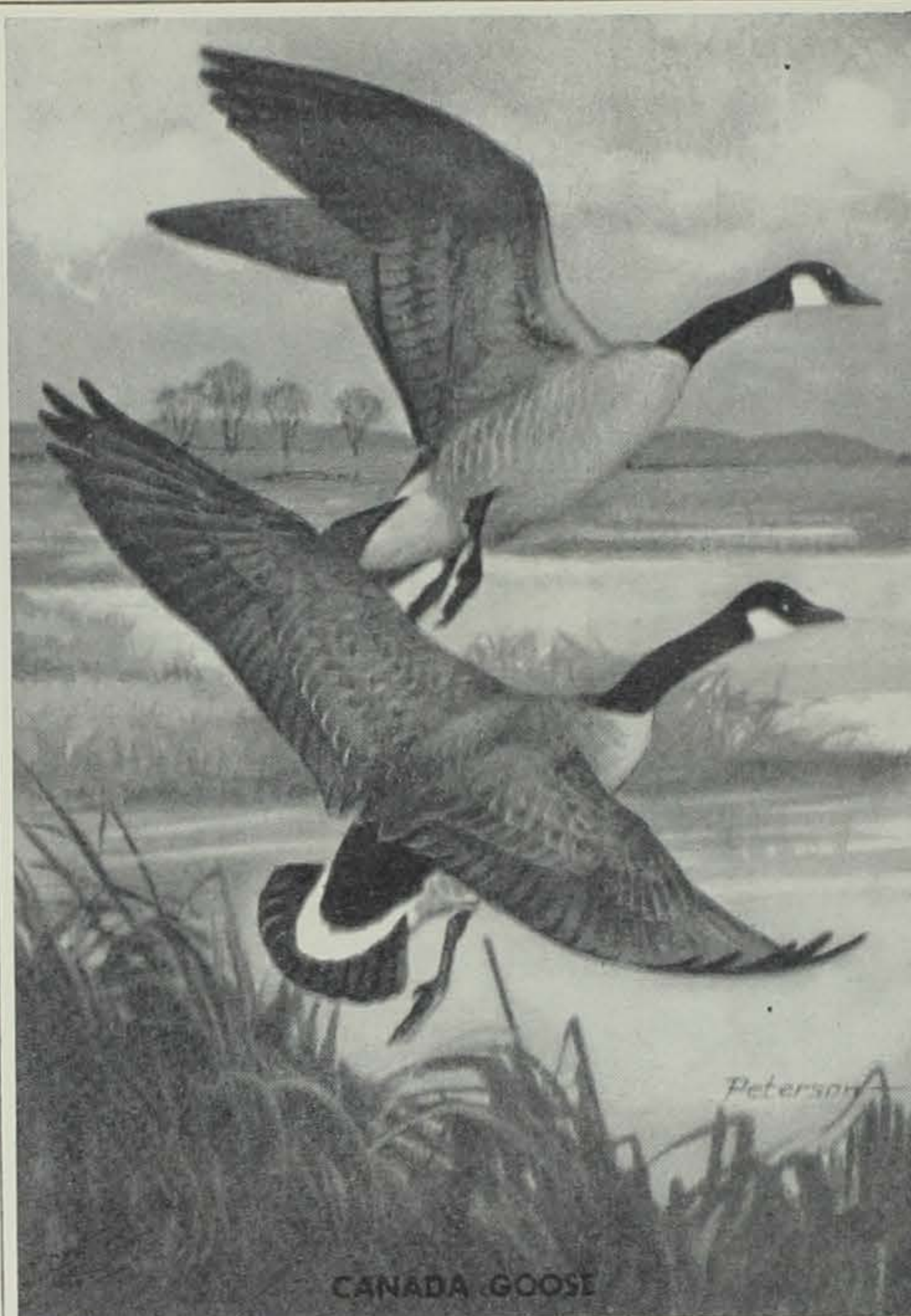
They were painted by four noted nature artists. Roger Tory Peterson, the Federation's art director and best known for his illustrated "Field Guide to the Birds," contributed nine of the birds, ranging from the lordly Canada goose and the popular bobwhite to the colorful scarlet tanager. He also painted the butterfly and some of the wild flowers.

The five mammals—black bear, walrus, gray fox, wood rat and coati—were painted by Francis Lee Jaques, for many years staff artist of the American Museum of Natural History. Jaques also contributed the fishes, five of the birds and the trees.

Some of the wild flowers were done by Leslie Ragan, one of America's foremost travel-poster artists. Michael Bevans, youthful New Jersey illustrator and a newcomer among the Wildlife Stamp artists, contributed the rattlesnake and tree frog.

Over 600 species of American wildlife have been portrayed in the National Wildlife Federation stamps since the series started in 1938. Reproduced by six-color lithography, the stamps are distributed by mail to individuals throughout the country. They are the means by which the non-profit Federation finances not only its own activities, but lends assistance for conservation projects sponsored by affiliated state organizations.

During 1953 stamp receipts



Black and white reproduction of one of the colorful new wildlife conservation stamps.

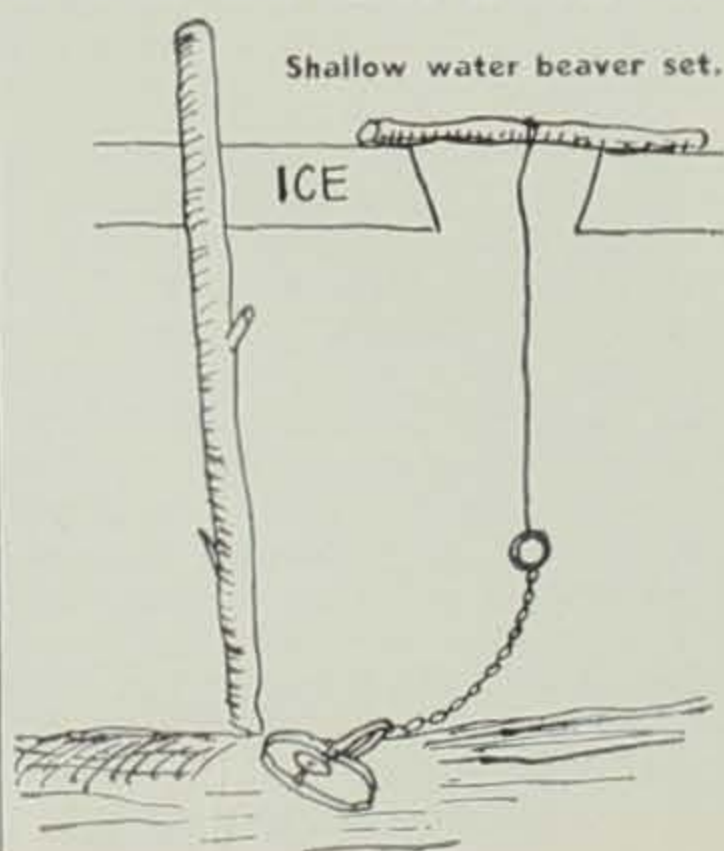
helped support more than a score of conservation workshops for school teachers and several youth camps, and provided graduate fellowships in six colleges and univer-

sities. The Federation also prepares and distributes conservation teaching aids and reference materials without charge to schools throughout the nation.

TWO WINTER BEAVER SETS

With a late winter beaver season, most rivers will probably be frozen and beaver will be trapped through ice. Here are a couple of sets that may come in handy, one for shallow water and one for deep water.

The shallow water set is seldom in water over three or four feet

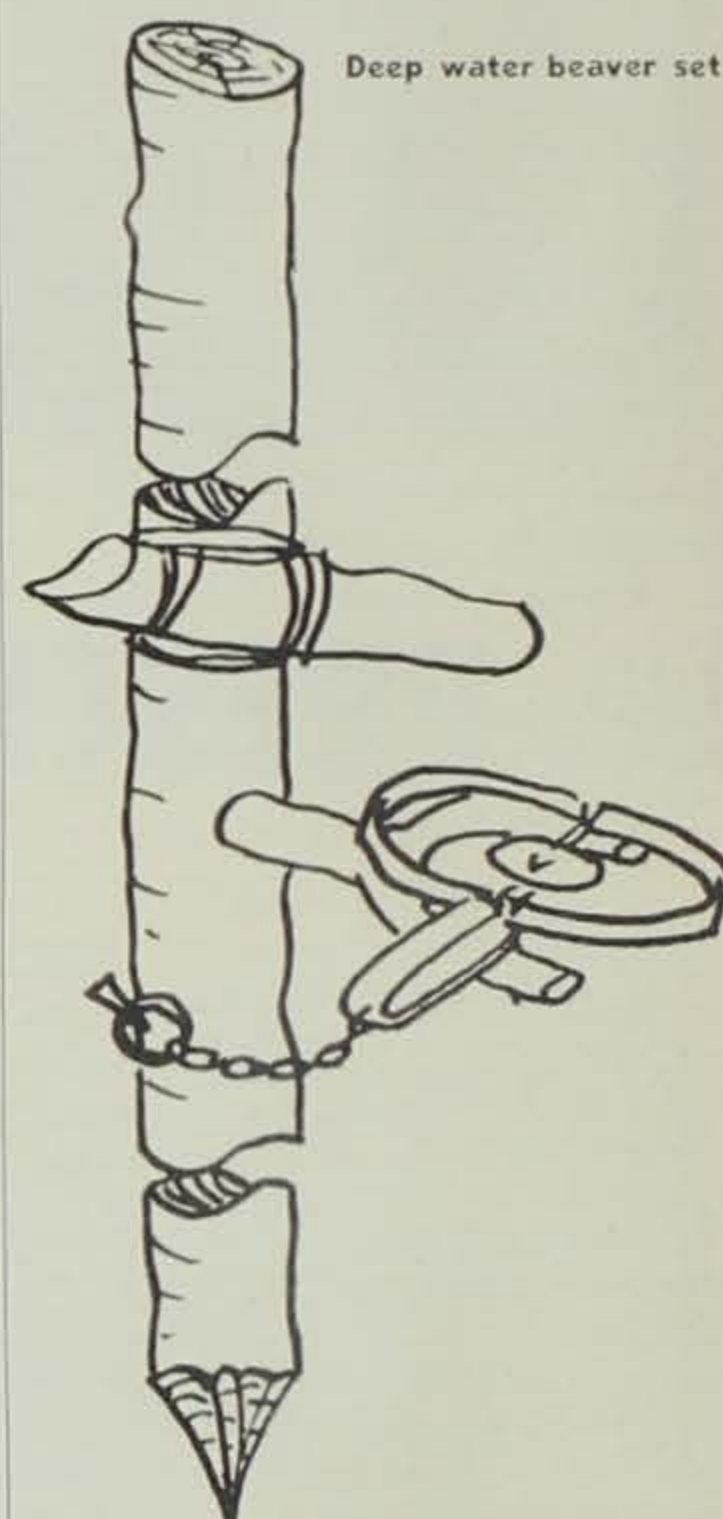


deep. Two holes are cut in the ice of a beaver pond and through one of them a poplar or cottonwood pole is shoved to the bottom. Allow the pole to extend up through the hole in the ice, where it will freeze solidly. Through another hole about three feet away, lower one or more Number 4 or larger traps to the base of the pole and attach the chains to a drag log on the ice. Beavers will attempt to cut the "food pole" of cottonwood or poplar free from the ice and feed on the bark, and in doing so will stand or move around the base of the pole and into the traps.

The other set is for deeper water. Cut a pole long enough to reach the bottom of the pond or stream with a little to spare. This pole must be dead, stripped of bark, or otherwise unsuitable for beaver food. Two or three feet above the bottom end drill a hole with a hand auger. Drive a crotched stick into this hole, with the V of the crotch close to the pole. Place a Number 6 trap on the crotch, wire it in place, and fasten trap chain to pole.

A foot or so above the trap wire

a short piece of poplar or cottonwood, with the bark in place. Beavers attempting to cut the bait loose will stand on the crotch platform and be trapped.



E. B. Gaunitz.

Ernest B. Gaunitz, 65, Lansing, former member and chairman of the Iowa Conservation Commission, died recently in a LaCrosse, Wisconsin, hospital of cancer.

He had been ill about two years and had been in the hospital since January 13.

Mr. Gaunitz served on the Conservation Commission from 1938 to 1950.

Born in Lansing, Mr. Gaunitz was associated there with his brother in the grocery business for many years, starting in 1913. His appointment to the conservation body was an outgrowth of his interest in fishing and hunting. He was a former member of the city council and was active in lodge work.

He is survived by his wife and a brother, Harold.—Des Moines Register.



The fox squirrel, as well as many other animals, are plentiful today because they have learned to live under the conditions established by man.

ADAPTABILITY

The open season on deer points out the remarkable adaptability of some of the wildlife of the country. Not too many years ago the deer, along with the beaver and numerous other animals, were almost a thing of the past. To save them from extinction in this section of the country, they were protected. They have so thrived under that protection that this year for the first time in many years there was an open season on both deer and beaver.

These animals have taken so well to the ways of civilization that they are now plentiful enough to hunt. Other wild animals have done equally well. The fox, the coon, the 'possum, the skunk, the rabbit and the squirrel, to name a few, are plentiful today because they have learned to live under the conditions established by man. Some of them have even moved into the towns and cities. The squirrel is perhaps the best example of this love for civilization, but the rabbit can get along right well in smaller communities.

Of course, there are a good many animals which have not been able to make the changes demanded by civilization and they have disappeared from the populated areas of the country, but for the most part, nature does right well by her wild children, even when they are surrounded by people.—*Atlantic News-Telegraph*.

WARDENS' TALES

A couple of years ago conservation officers, Warren Wilson and Floyd Rokenbrodt, were on Big Wall Lake checking up on some early duck shooting.

Wilson writes, "We pushed our boat out into an area before daylight so as to be in the thick of things if there was any early shooting.

"There was the sound of wings overhead and now and then the 'quack' of an old mallard. Suddenly the darkness was shattered by a shotgun blast, followed by

noises that sounded like a platoon taking a ridge. One man yelled 'Did you get him, Joe?' The answer was 'Too X&% dark to tell!'

"Someone else shouted to his buddy that the mallard was really a blackbird. Still another hunter yelled to a friend, 'When it's light enough so it's safe to travel let's get out of here.'

"As usual, this exhibition of 'cats-eye' shooting resulted in no one killing any ducks. A few trigger-happy characters had fouled up another morning's shoot for everyone."

P.S. "We had plenty of light to write a summons!"

Another of Warren's duck stories concerns a case of mistaken identity. While checking ducks on Big Wall Lake, Warren met a beautifully dressed hunter with a grin a mile wide. The nimrod slipped an expensive shotgun into a leather case and put it in his new automobile. He then pulled out four plump, black mudhens and placed them in the trunk of the car.

"Good hunting?" said Wilson.

"Fine hunting," replied the sport. "Got my limit of four."

"What kind of ducks?" asked the conservation officer.

"Oh, just average run," was the modest answer.

Whereupon the sport lit a large cigar, got into his large automobile and drove home. "One of my jobs," Warren writes, "is to help hunters identify their ducks, but in this case I just didn't have the heart."

One reason for the good survival of quail under favorable conditions was demonstrated by the quail on exhibit at the Iowa State Fair. On some days the male spent more time brooding the young than the female spent performing the same duty. In the wild, in case one or both of the parents are killed, there is always the possibility that an unmated quail will take care of the brooding duties.—E.S.

ROSE HEDGE IS CHEAPEST AND MOST PERMANENT FENCE

A shining example of the beauty and effectiveness of multiflora rose as a living fence and wildlife cover can be found on the Henry TeBockhorst farm just east of Washington.

Multiflora rose is a comparatively new form of hedge, at least it has been only recently that its advantages have become fully realized.

Mr. TeBockhorst planted his hedge four years ago. He planted about 80 rods of multiflora rose for a fence along the contour lines of his field. It is now almost head high and so thick that even a small dog would have a lot of trouble getting through it.

The rose fence is now a beautiful thing. It is in full bloom and the fence row is clean from unsightly weeds. It is safe to assume that many wild birds nest in the thorny protective cover.

Mr. TeBockhorst is an extensive dairy farmer. He is milking 18 cows at the present time. During the dry part of the summer last year, he was short of pasture and needed the use of an alfalfa meadow for pasture. The rose fence separated the alfalfa meadow from a field of green corn. The cattle grazing on the alfalfa made no attempt to reach the corn. This as any farmer knows is a supreme test of a fence during dry weather.

Unlike wire fencing, multiflora rose lasts a lifetime and will continue to serve your children. It never needs repair, tightening, or straightening. It is ideal for fencing on the contour, it is beneficial

to erosion control and is the least expensive fence to establish and the cheapest to maintain.

An advantage over osage orange hedge is the fact that multiflora rose does not shade crops or rob them of moisture through an excessive root system and it never needs trimming.

Henry TeBockhorst is a confirmed follower of the soil conservation program. He farms on the contour almost exclusively. Mr. TeBockhorst declared contour farming has doubled the value of his farm. "I used to have a lot of trouble crossing ditches and considered an average yield of 35 to 50 bushels of corn per acre a good crop," he stated, "but now I can raise over 100 bushels per acre, I have no trouble crossing ditches, plowing is easier as it is all done on the level and since we have our fences on the contour there is a minimum of point rows with which to contend."

Mr. TeBockhorst reasoned that the multiflora rose has aided him in planning different rotation systems for different ground. He now has his upland fields separated from the bottom or flat ground. This enables him to carry on the regular four year rotation plan on the heavy flat land, while the upland or lighter ground can be farmed less severely on a six year rotation plan.

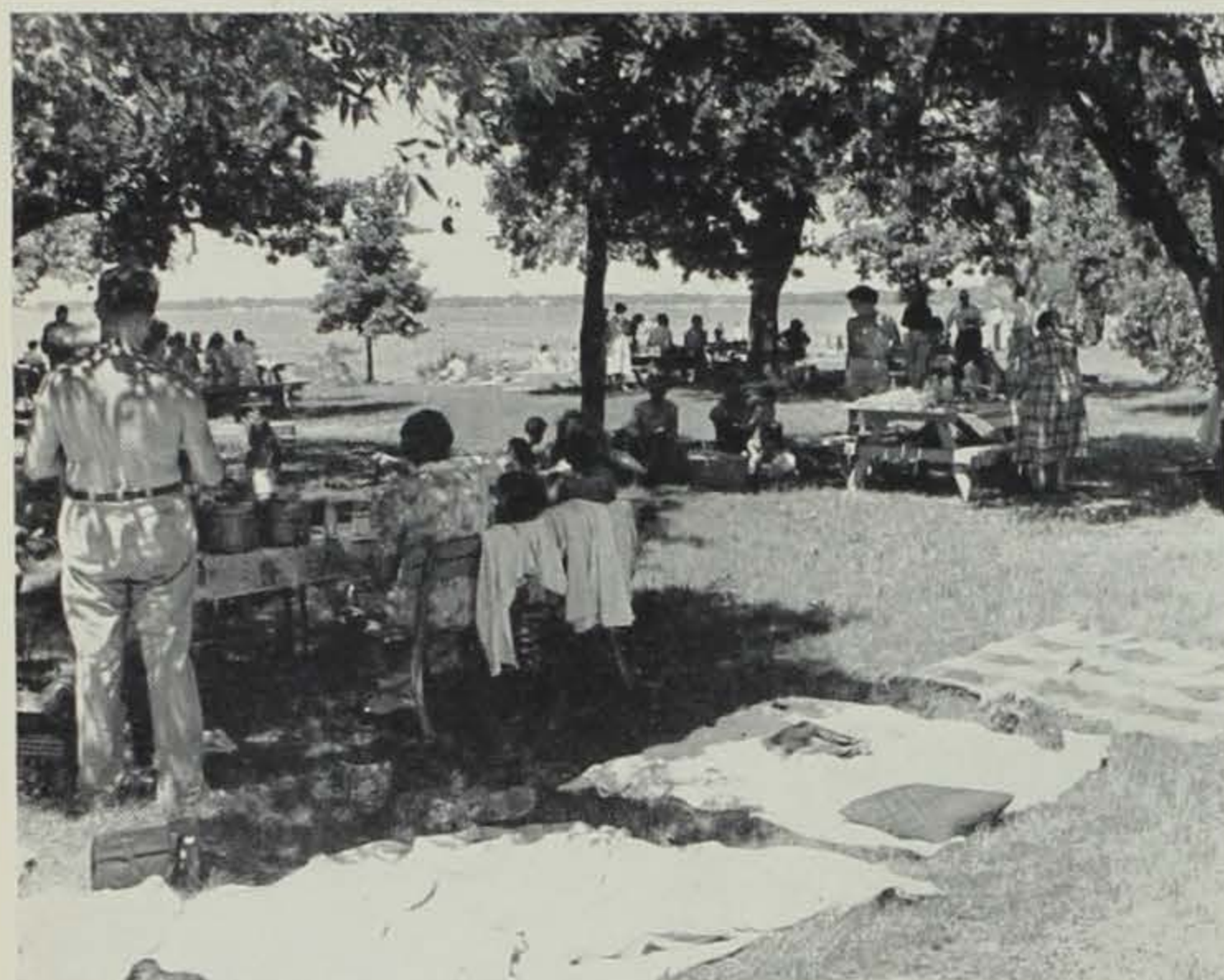
Along with thousands of other farmers, Mr. TeBockhorst praises the soil conservation service for the assistance they have given him in planning and carrying out conservation practices. He believes that Soil Conservation Week should be observed by appreciation of services rendered.—*Washington Journal*.



A fence of multiflora rose is beautiful when in full bloom. Vernon Bruce and Henry TeBockhorst stand beside a fence so dense "a small dog would have trouble wriggling through it."

I have found that those who love a deer, a dog, a bird, and flowers, Are usually thoughtful of the larger needs that may be ours; Who for God's creatures small will plan, will seldom wrong his fellow man.

—Anon



Jim Sherman Photo.
Iowa's state parks again broke the all-time attendance record, reaching the amazing total of 4,885,981 in 1953.

AN ALL-TIME HIGH IN STATE PARK USE

It was a hot, dry summer in Iowa, but the people didn't suffer in silence. Nearly five million of them did something about it and sought out the rivers, lakes and shaded valleys of their 88 state parks.

All previous attendance records were smashed as 4,885,981 people descended on state parks in Iowa to escape their sweltering living rooms. In one month alone the attendance of Iowa parks eclipsed the annual total of the Yellowstone National Park which had 1,291,689 visitors during 1953 as compared to Iowa's July figure of 1,405,167.

With 40-hour weeks and plenty of automobiles, people just didn't want to stay home. Added to this is the increased interest in outdoor activities, which is also apparent in increased national hunting and fishing license sales. Before the war the 40-hour week was an exception, but now it is the rule. Since the war, and particularly since new cars became available, weekend migrations of pleasure-seekers have reached a new peak.

And, as a goal of these weekend migrations, more and more Iowans are heading for their state parks. So are tourists, and in one state park on a summer Sunday 17 different states were represented by license plates.

In 1953, as might be expected from dry weather conditions, the areas having the most visitors were the "water" parks . . . parks with rivers and lakes. From all over the state visitors came to fish, swim and boat. The 1953 champ was Lake Manawa at Council Bluffs, which had a boom attendance of 436,773. Runners-up were Clear Lake with 321,635, Backbone Park with 285,525 and Lake Ahquabi with 231,990.

Total park attendance, by month, was:

January	14,995
February	9,931
March	38,302
April	87,169
May	601,424
June	1,092,517
July	1,405,167
August	946,767
September	364,440
October	216,945
November	72,809
December	33,649

Total 4,885,981

This impact of visitors placed a heavy strain on existing park facilities. Some of the parks were designed for 1935 attendances, and could not cope with the crowds of 1953. Parking lots and picnic areas were often completely inadequate on weekends, and park custodians were forced to close park gates and turn traffic away. Repair and maintenance problems soared with



Jim Sherman Photo.
The area having the most visitors were the "water" parks—parks with rivers and lakes. Clear Lake Park attendance totalled 320,000 during 1953.

THE 1953 QUAIL HUNTING SEASON IN IOWA

By M. E. Stempel
Quail Biologist

attendances, but maintenance funds provided for only seven cents per visitor, as compared to the national state park average of 17 cents.

Many Iowans are also discovering their state parks in winter, as shown by the 15,000 attendance figure for last January. Going to parks in the winter isn't as strange as it sounds. In some of them there is skating and skiing. And in many respects parks do not fall asleep in the winter, but awaken. Without vast crowds to frighten them, many wild animals and birds expand their activities to the delight of hikers and naturalists. Iowa's parks are never closed to visitors, although roads may be closed to traffic in the early spring.

Nor does the park year ever really end, and there is always something to see and enjoy in your 27,000 acres of lakes, rivers, cliffs and wooded hills. Four and a half million other people think so, and they can't all be wrong.—J.M.

The jack rabbit is said to receive its name from its extremely long ears, which resemble those of a jackass.—J. M.

"CONSERVATIONIST" INDEX

Two years have passed since an index has been compiled for the IOWA CONSERVATIONIST. We are working on one now covering 1952-53 and expect to have it completed about March 1. Many of our readers are planning to bind their CONSERVATIONISTS, and an index will be valuable. If you will mail us a card requesting the new index, it will be sent to you without cost when completed.

Last year's quail hunting success, as indicated by records of individual hunters, ranged from one hunter's high of .65 hour per quail in south central Iowa to a low of more than two hours per bird in the southeast. The scarcity of quail in some cover may have been due to drouth conditions or to the violent local wind and rainstorms during the quail hatching season.

In the early part of the season, many hunters throughout the state found their dogs handicapped by the extremely dry conditions. Conservation officers collected reports on 1,246 man hours of hunting and these reports reveal that an aver-



Jim Sherman Photo.
Forty per cent of the 1953 quail hunters thought the season was better than the year before; 35 per cent the same; 15 per cent believed hunting poorer.

age of 1.6 hours were required to bag a quail. During the middle part of the season, 1.5 hours were spent for every quail killed.

From December 1 to the end of the quail season the average hunter spent 1.7 hours in the field for each bird killed. Hunters not using dogs hunted 2.9 hours for each quail killed.

Although southeastern Iowa was high with an average hunting success of 1.4 hours per quail, poor hunting was reported in some southeastern districts. Hunters in south central Iowa had an average hunting success of 1.7 hunter hours per quail. Success in border counties was 1.8 hours per quail, and in the eastern counties the hunting success was 2.1 hours for each bird killed. Story and Montgomery Counties were opened to quail hunting for the first time in several years, and furnished fair quail shooting in suitable areas.

Hunting success was computed from information obtained by state
(Continued on page 14)



Jim Sherman Photo.

How can a pheasant survive a cruel Iowa winter when its only shelter is a steel fence post?

Prescription . . .

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Every year hunters complain of decreasing wildlife populations.

They point to a landscape with no more cover than a billiard table and angrily say "Look, no rabbits! Blasted foxes are getting them all!" That even foxes can survive in some parts of Iowa is nothing short of amazing. The carrying capacity of the land is low in many areas, and for good reason. How can an acre of land support fifty cottontails when there is hardly enough cover for two or three? How can a pheasant survive a cruel Iowa winter when its only shelter is a steel fence post?

This, then, is one goal of the Plant Iowa Program: to increase the game cover of the state and strike a blow for erosion control and scenery at the same time. One of the young committee's first moves in the program was the publication of a 16-page booklet that includes hundreds of plants and planting methods recommended for Iowa. For wildlife habitat the booklet recommends such species as multiflora rose and honeysuckle for border plantings, and ash, walnut, wild cherry, dogwood and wild plum for waste areas and odd corners of the farm. If just a small percentage of such areas was planted to wildlife cover and food plants, there would be a tremendous surge in our game populations.

Over 180,000 trees and shrubs will be planted this year on state game areas by the Conservation Commission. Its forestry section will plant more thousands of trees in other state areas, and farm-game habitat plantings will continue. But taking the state as a whole, this is only a drop in the wildlife bucket. There still won't

be enough desirable wildlife cover, and game stocking and more stringent laws won't cure the situation. *Until we have more game cover, we cannot have more game.*

The needs for planting are many, but most vital is the need to heal the running sores of erosion that plague all agricultural states. The old prairie sod, clothed with a heavy armour of roots and vegetation, was in little danger of washing or blowing away. Modern cultivated fields are vulnerable without this armour and our rivers and streams are muddied each spring by \$1,000-per-acre top soil.

For creek banks and other erosion sore spots the Plant Iowa Committee prescribes a treatment of such trees as jack pine, black locust, wild plum, pussy willow or other species. Such plantings can heal the raw, crumbling stream banks and give the creeks beauty and the land protection that both deserve.

It has been estimated that 650,000 acres of Iowa could be profitably planted to trees. These plantings would take no crop lands out of production, and are valuable for farm lumber and the control of watershed erosion.

It has also been estimated that 75 per cent of all Iowa farm homes have no windbreaks of any kind, and almost no protection from our harsh midwestern winters. Aside from cutting fuel bills, the value of trees around any home is apparent. Evergreens around a farmstead relieve the bleakness of an Iowa February, and hardwoods give cooling shade in August.

The Committee is also working to encourage ornamental plantings around schools, churches and farm and city homes. Iowa's soil and climate is ideal for grass, and suggestions for lawn and rose culture

are included in the Plant Iowa Booklet.

An active planting program should be based on a careful survey of the community need and the availability of planting sites. Second, evaluate community assets, what financial assistance can be secured, and what organizations, such as garden clubs, public service groups, sportsmen's clubs, Boy Scouts, SCS and FFA groups can be brought together in a planting program. Third, determine if organized planting programs are being carried out in the community, and if so, strengthen these programs by securing the cooperation of groups and individuals not participating.

If there are no planting organizations in existence, organize. Set up projects and assign duties. Then carry out the objectives by actual planting. The Plant Iowa booklet and other information can be secured from the State Conservation Commission in Des Moines. Farmers are urged to contact state conservation officers and ask about the Commission's farm-game habitat planting program.

How you handle a planting program is up to you. The important thing is to get more plants into the earth. It's a simple remedy for some of the most vital needs of the land, wildlife and man.

BORN 77 YEARS TOO SOON

While looking through an 1877 copy of *Forest and Stream* magazine the other day, we were impressed by a great new stride in fisheries management:

Washington, D. C., June 6, 1877.

"The introduction of carp in waters of the United States has engaged the attention of Prof. Baird

(chief of U. S. Commission of Fish and Fisheries), and he has already had imported some of the best varieties of German carp, which are regarded as the best in the world.

Four hundred and fifty of these fish were recently received by the steamer *Necker*, and they have been placed in the ponds at Druid Hill Park near Baltimore in charge of the Maryland Fish Commission. They will be kept for breeders and soon ponds will be constructed near Washington with the view of obtaining as many young fish as possible to stock southern waters. The carp does not promise to be as valuable as the mackerel, shad or salmon, but is a fish of great commercial importance, for the reason that many can be kept on a small body of water.

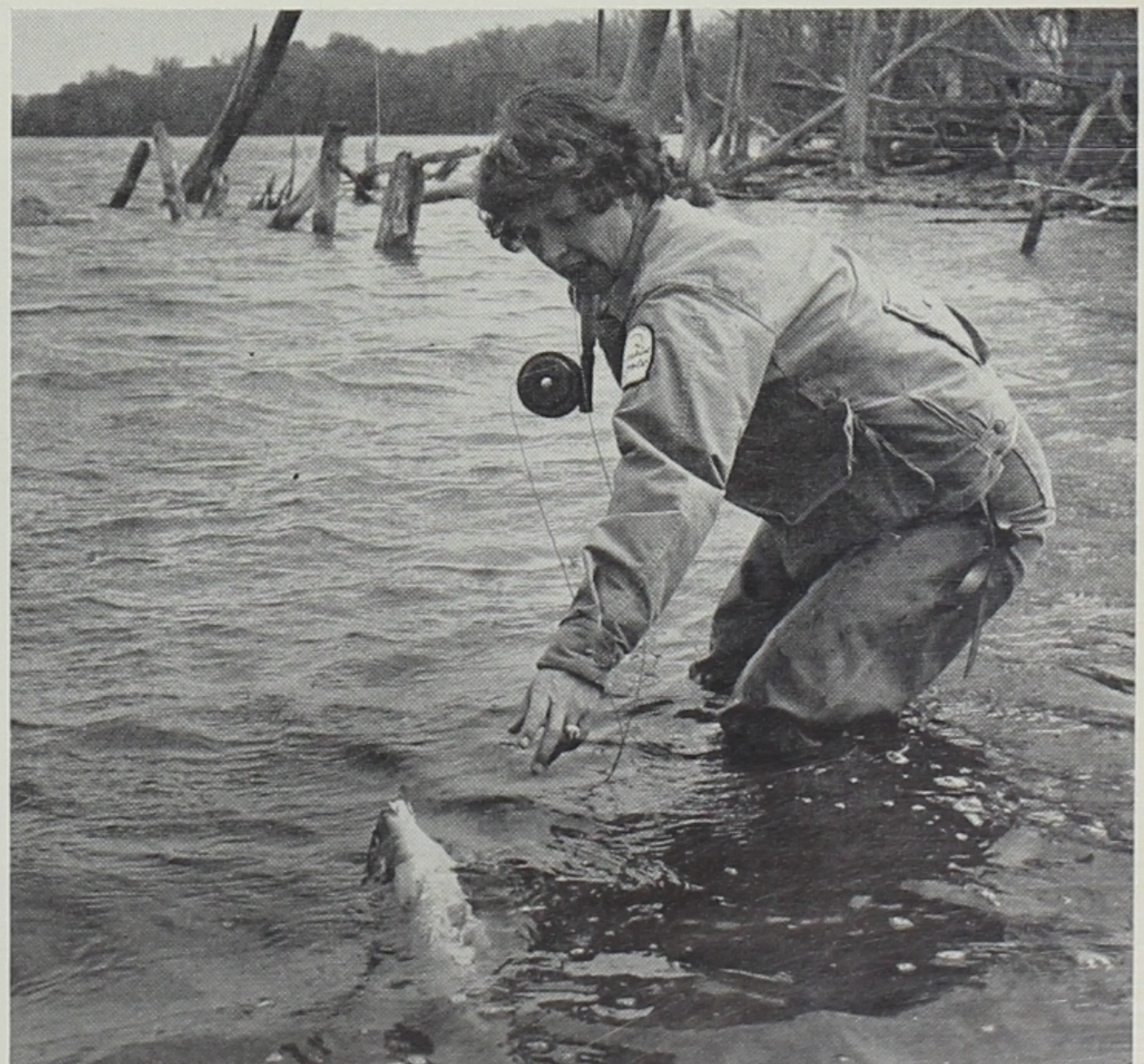
. . . It is a fish eminently suited for southern streams, and it is proposed to stock those streams with them . . . the meat of the carp is very palatable, and as a food fish it stands high though, as stated above, does not equal the mackerel or salmon."

This was the first large shipment of carp to America by any agency. Many shipments had previously been attempted by private concerns and individuals, and it is believed that carp existed in midwestern waters in the early 1870's.

In 1873 an Illinois fisheries worker named Sylvester Bartlett received a letter reporting a carp taken in the Mississippi River. The fisherman was highly excited, and wanted to know if Illinois or the U. S. Department of Fish and Fisheries were stocking carp in Illinois waters.

Bartlett wrote back: "As we value carp too highly to experiment with them by putting them into our rivers, it must have escaped from a pond or livebox."

Well, values change.—J. M.



Jim Sherman Photo.

Seventy-five years ago the carp was highly prized. Angling for this powerful fish is becoming increasingly popular in some parts of the state.



Jim Sherman Photo.
"If we were to ask the twenty million American anglers why fishing is their favorite outdoor pastime we would get a variety of answers."

Why Fish? . . .

(Continued from page 9)

our streams. Selective harvesting of certain species of fish has operated to the advantage of the less desirable species. Too, some waters which are producing as many fish as ever furnish unsatisfactory fishing because now the available crop is divided between too many anglers.

Fishing pressure has been increasing greatly each year. Some of the fish habitat has been destroyed. The problem of furnishing satisfactory fishing for the growing army of anglers is not an easy one to solve. But the fish conservationists are nearing a solution. There may be an improvement in the average catch in some states within the next decade.

Fish conservation is undergoing rapid change. A few decades ago it consisted mainly of semi-indiscriminate stocking with small fish and the passing of arbitrarily made regulations. Today, in a number of states, it has become a complicated science.

Like stocking and the other fish management tools, regulation of the fishing has been undergoing a rather drastic change.

In the past our tendency has been to increase the number and kind of regulations each time fishing declined. In addition, we increased the enforcement staff. For some reason or other we spent very little time in trying to learn what laws were really needed, and to learn whether or not the regulations in effect were really helpful.

Now the fact-finders are learning that some of the regulations were helpful and others were actually harmful. They are finding that our tendency has been to over-regulate in many instances.

So, today, we tend to have a big variety of regulations in the books. Some are desirable, while others are of questionable value. It has been said that in some states you

need a lawyer to find out what is, and what is not, permissible in the way of angling.

Fishermen will be relieved to learn that the trend now is toward fewer regulations. Those which are of doubtful value are gradually being discarded or changed as fact-finding programs demonstrate that they are not beneficial to fishing.

Our concepts on enforcement are changing, too. In the more advanced states, the trend is toward educating the public, less toward judging progress by the number of arrests made.

Of course, we do need regulations, and we must obey them. Regulating the catch is an important part of fish conservation. Anglers who want to help "shorten the time between bites" can help the cause not only by obeying the regulations but also by insisting that a part of their license fee be used to learn what regulations are really needed, through sound fact-finding programs.

The long lists of regulations

wouldn't have been a burden in horse-and-buggy days when most people fished only in their own back yards. But they do present a problem today when an angler fishes on a variety of waters and may spend his angling time on the lakes and streams of a number of states.

Now that fact-finding programs have been initiated in many of the states, and now that the fish conservationists are becoming more skilled in using their management "tools," we can expect fewer and better regulations. Too, because of the improvement in the fish conservation field, we can expect an improvement in the average catch.

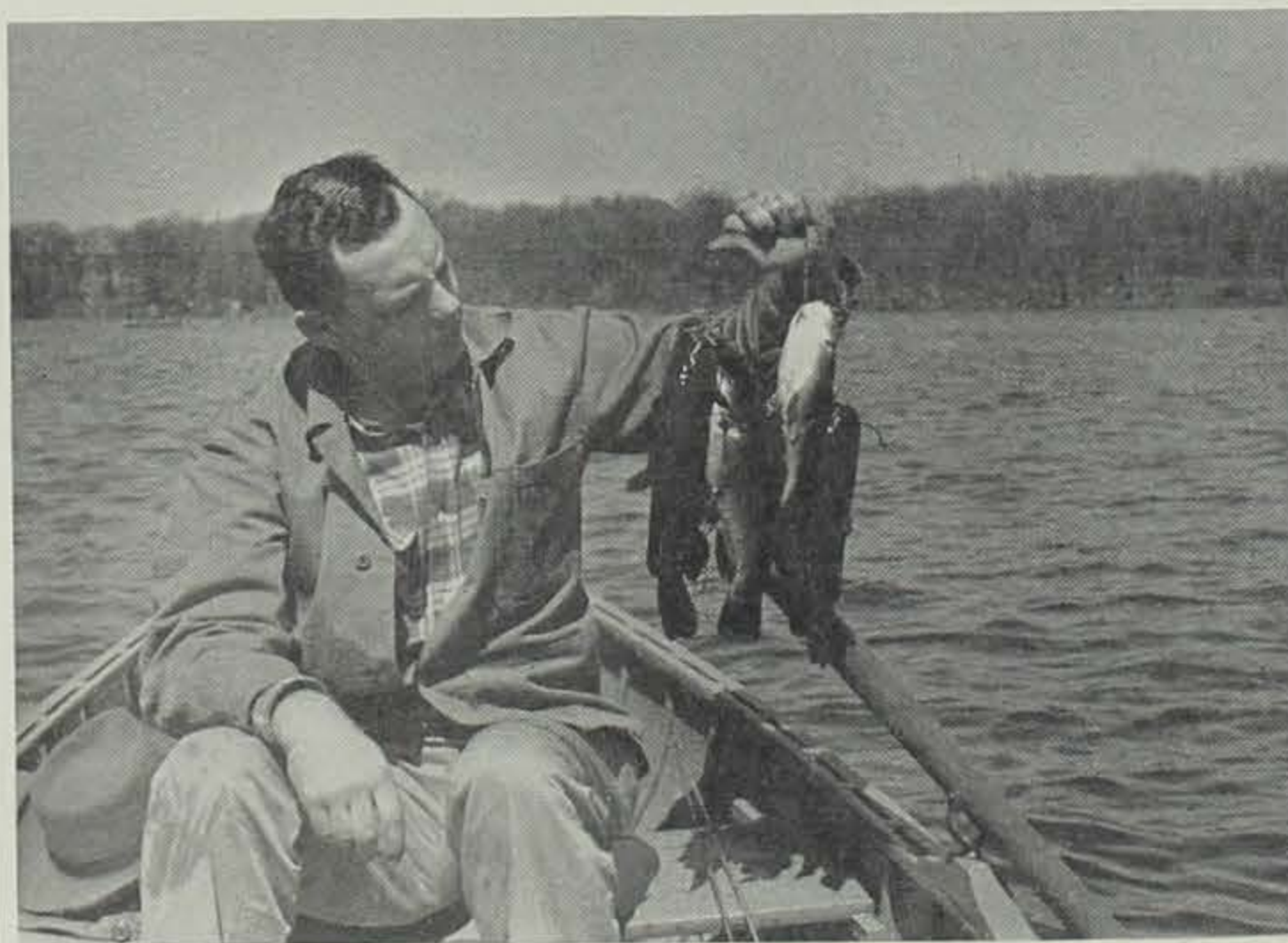
It seems to be normal procedure to do little or nothing about a natural resource while it is plentiful. We begin to show concern only when the resource declines. We did very little to preserve our fish supplies while the catch was satisfactory. It has declined to where both anglers and fisheries workers are showing increasing concern. That is a prerequisite to restoring the resources. Fish are prolific. Given a good environment and proper management, the numbers of desirable fish may be expected to increase greatly in a very few years. Indications are that things are "looking up" with respect to our favorite outdoor recreation. It's quite possible that we're over the hump . . . that the time between bites gradually will be shortened to where the average fishing trip will give us both relaxation and a mess of fish.

Quail . . .

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conservation officers, who contacted a total of 689 hunters. These hunters reported flushing 507 quail coveys and killing 1,432 birds.

Thirty-five per cent of these hunters thought that quail hunting was the same as in 1952, 40 per cent thought the hunting was better than in 1952, and 15 per cent believed the hunting was poorer.



Jim Sherman Photo.
"Fishing is an important nerve tonic. We go fishing to relax, but we go fishing for another purpose too; we want to catch fish."



Jim Sherman Photo.
"An Opossum hath an head like a Swine, and a taile like a Rat, and is of the bignes of a Cat."

'POSSUMS AND PERSIMMONS

By David H. Thompson
and Roberts Mann

At night, on a big steamboat plowing her way along the rivers, the roustabouts used to lounge on the bow deck, clogging the buck and wing to banjo music or singing some of the famous Negro folk songs, one of which starts out: *De racoon up in de' simmon tree, Dat 'possum on de groun', De 'possum say to the racoon: "Suh!"*

"Please shake dem 'simmons down."

Moonlight hunts, hound dogs, and possums grown fat on persimmons and roasted with sweet potatoes, are justly celebrated in songs and stories about country life down south. In October they sing: "It's 'possum time again!" About when we get our first hard frosts here in the Chicago region, persimmons are ripening in southern Illinois, Indiana and all of Dixieland. They change from hard green things which, if bitten, will pucker your mouth for hours, to yellow-orange with a purplish sheen, and finally to a mellow sugar-sweet reddish-orange fruit, over an inch in diameter, which may hang on the tree until mid-winter. However, during the last 100 years the stupid slow-moving opossum has gradually spread northward beyond the persimmon country until he has reached the Canadian border.

The opossum is in many ways the strangest of all our native American mammals. Captain John Smith of Jamestown Colony, who gave it its name, "Virginia Opossum," wrote one of the first descriptions of it in English: "An Opossum hath a head like a Swine, and a taile like a Rat, and is of the bignes of a Cat. Under her belly she hath a bagge, wherein she lodgeth, carrieth, and sucketh her young". The name, which prob-

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Jim Sherman Photo.

Lake of Three Fires State Park, a few miles north of Bedford in Taylor County, has as its main attraction the lake of that name.

Three Fires . . .

(Continued from page 9)

It was necessary to protect the upstream of the dam in some way. Otherwise the waves set up by the strong northwest winds would gradually have eroded it away. So limestone to service as rip-rap was secured. This limestone is the rock scattered on the upstream face of the dam. It has been badly broken up by weathering.

As with any dam a spillway had to be provided. This was to allow for the overflow. And, of course, the bottom and sides of this spillway had to be protected in some way. If this had not been done the outflowing water would have cut lower and lower and after a while there would have been no lake. Many a lake has disappeared through lowering of the outlet.

The spillway was constructed of concrete. Recently the west wall of the spillway has had to be replaced. Installed at the time the dam was built, in 1937, weathering in the form of freezing and thawing, had taken its toll. This is mentioned because it shows how swiftly weathering and erosion can proceed.

Much of the adjacent hillside has been scraped away in the course of reconstruction at the spillway. This has exposed some of the glacial drift, the material which underlies so much of Iowa and surrounding states. The drift can be recognized by its content of strange stones, brought here by the glacial ice in its travels from northern climes. The drift is mostly clay, but contains silt, sand, and pebbles, as well as larger rocks. No other exposure of drift is known in the park. Everywhere else it is covered with a blanket of loess. This is a silty substance, containing no stones. It is a deposit made by the wind. Probably the earth used in the construction of the dam is mostly loess.

The lake is undergoing the fate

of all lakes. It is being filled in. Most of the sediment is brought in by the stream flowing in from the north. This, the one across which the dam is placed, is a tributary of One Hundred and Two River, in turn a tributary to the Platte, which flows into the Missouri. The silt and clay particles which form the loess are easily picked up and transported by the runoff from the watershed. The lake is stated to be already one-third silted up. Erosion control measures are being taken upstream from the lake to prevent so much sediment from getting into the runoff.

Some of the filling-in comes from material washed off the shores. Note the bluffs here and there. They are made by the erosive action of waves, so they are likely to be present where the waves are largest. The waves in turn are largest where the wind gets a long sweep across the lake. Also,



Jim Sherman Photo.

Popularity of the state parks depend largely on availability of water for swimming, fishing and boating; Three Fires is no exception.

strong winds come from the north and northwest, so bluffs would be most likely on either the east or south. The formation of a bluff is also favored by steep valley sides. There is a prominent bluff on the lake shore at the cabin area.

The shape of the lake is a reflection of the pre-lake topography. The lake has two arms, of which the eastern is the largest. These were two joining the valley before the dam was erected and the eastern was the largest. All the indentations or inlets along the lake-shore are where small tributary valleys connected with the main one.

The limestone used in the construction of the shelter house and the bath house contains a great variety of fossils. This rock and probably also that used as rip-rap at the dam, is said to have come from a quarry near Corning in Adams county. This quarry is in a formation in the Virgil series of strata, in turn part of the Pennsylvanian system. The Pennsylvanian system was named from its widespread distribution in Pennsylvania. In Iowa it is divided into three series, from the bottom up the Des Moines, Missouri, and Virgil. The Des Moines series is the one containing most of the coal of Iowa and adjacent states. The park area is underlain, beneath the loess and drift, by the Virgil series, then the Missouri, then the Des Moines, and below that the rocks of other systems. Almost all of the rocks of these series were formed as sediments in ancient seas.

The limestone occurs in beds or layers. The tops and bottoms of the blocks used in the park buildings are bedding planes, the surface between beds. Other faces were made by chipping with a hammer. Note, however, that some faces are smooth, natural cracks in the rock, which extend across the bedding planes. The brown

stain is a compound of iron, deposited by subsurface water.

The foregoing are just a few of the thoughts that a geologist has as he visits Lake of Three Fires State Park. For anyone, here is a chance to reflect upon the past and to think about the immediate future of an attractive area. Let us hope that Lake of Three Fires will be with us for a long while.

'Possums . . .

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ably was "possum" preceded by a grunt, is of Algonquian Indian origin and meant "white animal." It has been spelled in many ways and it is now permissible to omit the "o." In 1500, in Brazil, the explorer, Pinzon who had been the captain of Columbus' ship, the Nina, caught another kind of opossum which, with her two young, he carried back to Spain and showed to King Ferdinand and Queen Isabella. In 1679, LaSalle saw his first opossum while portaging from the St. Joseph to the Kankakee in northern Indiana.

Besides the Virginia Opossum, the only other species found in the United States is the Texas Opossum of Texas and Mexico, but many other kinds live in Central and South America. Millions of years ago these primitive pouched mammals roamed over all the continents but now the only living relatives of the American opossums are found in Australia and nearby islands—the kangaroos, wombats, bandicoots, phalangers, the Tasmanian wolf, and others.

Our opossum has a stout, round body, short legs which give it a waddling gait, a pointed snout with stiff, sensitive whiskers, and a long, naked, scaly tail used in climbing and for carrying nest material. It weighs up to 12 or 15 pounds. The color is usually grayish with dense white underfur and black-tipped outer hairs. The feet, well adapted for climbing, have five toes all bearing strong claws except the "thumb" of the hind foot which is used and makes a print like the human hand. The jet black, beady eyes have no iris. The black ears are thin and naked. When attacked they often "play possum": utterly relaxed and apparently dead, with the tongue lolling out. The three to 17 young are born while mere embryos smaller than honeybees but able to crawl to the fur-lined pouch where each clings to a nipple and remains until about the size of a mouse. Then they begin to venture out and take excursions on their mother's back.

They cling to her fur—not to her tail—as many believe—*Forest Preserve District of Cook County Bulletin*.

The throat and ears of the beaver are equipped with valves which voluntarily close when the animal dives and open when it comes to the surface.



One of the fine programs of cooperation between the farmers, the State Conservation Commission and the Soil Conservation Service is the one of planting trees and shrubs on farms for conservation purposes.

COOPERATION IN CONSERVATION

One of the fine programs of cooperation between farmers, the State Conservation Commission and the Soil Conservation Service is the one of planting trees and shrubs on farms for conservation purposes.

It was announced this week that applications for the nursery stock may be made up until March 15, although they should be in as early as possible. In Jasper county leave your application at the Soil Conservation Office at the courthouse.

The shrubs and trees do not come free, but the cost is quite low. Persons who cooperate with the Soil Conservation Service on a conservation program receive a reimbursement for their costs. The motive behind the program is to promote conservation, and to prove that conservation pays.

All trees and shrubs obtained under this program must be used to provide wild life cover or as erosion control plantings. The two go almost hand-in-hand. But, if you are figuring on getting some trees or shrubs in this manner for use as ornamental nursery stock or in landscaping, forget about it. The stock cannot be used for that and, in fact, most of it is too hardy for such purposes.

This is an excellent program, not only in the display of cooperation between the two conservation organizations, but in its attractive approach to the problem of interesting more folks in more conservation. Here, for little or no cost, a farmer can get trees and shrubs for his farm which will provide good cover for game with resulting better hunting, and which will help to hold the soil and water on the farm where it belongs.

We would endorse these fine programs which aim at conserving our land and wild life. Conservation of the land is of such tremen-

dous importance that it cannot be emphasized enough. We believe the time has come when every farm will have a conservation plan. The Conservation Commission and the Soil Conservation Service are to be commended on this planting program designed to encourage more farmers into conservation practices.—*Newton News*.

COYOTES PROTECTED

By E. C. Shindorf

We ranchers in the vicinity of Toponas, Colorado, have posted our lands against the killing of coyotes. We also are opposed to the widespread destruction of weasels,

hawks, eagles, skunks, foxes, and other predatory animals.

The reason for this attitude is that for 10 years or so we have watched the steady increase of mice, gophers, moles, rabbits, and other rodents. Now we are at a point where these animals take up to one-third of our hay crop and have cut the carrying capacity of livestock on our range lands by as much as one-half.

It is indeed shocking to see the devastation being wrought by rodents on lands that were once highly productive. Despite reseeding and use of sound soil conservation practices on our land, we find that they are going downhill rapidly from the standpoint of growing vegetation.

To combat the combined work of moles, mice, pocket gophers, and other small rodents on our grasslands, this association advocates the natural control system. In the past a policy of individual and official action to eliminate the natural enemies of these rodents has been employed. As a result the balance between rodent and predator has been upset to the point of constituting a general menace to our natural resources. We advocate the protection and the promotion of all natural controls on the rodents.

What with government hunters and government poison, the predators have had a hard time. The coyote is nearly extinct in our part of the state. Foxes and bobcats have succumbed to the chain-killing poisons. There are fewer hawks and eagles every year, and weasels, which are one of the natural controls of moles, are very

scarce. It is little wonder that we have so many rodents.

This spring rodents have even killed sagebrush and quaking aspen trees, and some bunch grass is so badly undermined that it is dead. Serious erosion is taking place, even in the National Forests, and fishermen are finding beaver dams washed full of silt. Many sportsmen are predicting that more deer will die of starvation in the winter as the available forage decreases.

The Toponas Grassland Protective Association has been formed to take action in this crisis. We strongly oppose the use of chain killing methods for control of any animals. By this we mean use of any poison whereby another animal will suffer lethal effects from coming in contact with, or eating the carrion or exodus from an animal which has died as a result of consuming an initial poison dosage.

In view of this policy, our association vigorously opposes the use of 1080 poison in any form in the state of Colorado. Believing that 1080 poison is an extremely dangerous and deadly chain killer which constitutes the greatest menace to our natural predators, we advocate the outlawing of this poison, as well as thalium and cyanide guns, in Colorado.

Our association now represents more than 200,000 acres of land in this area. This means that on at least that much territory coyotes and most other predators are to have a chance to live without persecution and to increase in numbers so that they can once again play the role that nature intended, and be an effective check on the rodent population.—*Audubon Magazine*.

DEER WINS BATTLE WITH LONE HUNTER

Milo Tjoland of Spirit Lake was limping around his home Tuesday contemplating a busted up shotgun and a deer that showed nothing but contempt for a couple of shots.

Hunting in the Spooky Hollow area west of Spirit Lake Monday, Tjoland saw a six-point buck coming towards him. At 20 yards Tjoland fired and thought he hit the animal in the leg. The angered deer charged and Tjoland let him have another blast at 15 feet.

This didn't phase the brute so Tjoland, who had been kneeling by a tree stump, ducked behind the stump. The deer charged into him, locked antlers with the shotgun and stomped on the hunter's legs.

Then the animal took off, jumping over a fence and leaving behind a bruised and lame Tjoland with a bent shotgun and a broken stock.

Another hunter shot the beast, which game warden Joe Schomer said weighed 250 pounds—193 dressed—and was one of the largest shot in the area.—*The Spencer Reporter*.



Toponas County, Colorado, ranchers have learned by experience. They have posted their lands against killing coyotes.