

IOWA CONSERVATIONIST

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THE ABC'S OF FOX TRAPPING

Br'er Fox, Wise Guy of the Fables, Is Dumb About Traps

BUSINESS GOES TO THE DOGS

By Tom Farley

Ever since man's best friend joined the family circle on equal terms, he has been under the admiring scrutiny of countless thousands of merchants and professional men who know well enough that dogs mean business—at present, several hundred million dollars' worth annually. The figure gets somewhat larger every few years, for as man steps up his own standard of living, he elevates his dog's, too.

Anyone who thinks that Rover lives on table scraps, provides all his own clothes, sleeps where convenient, and heals himself when he's sick, is out of step with the times. Today, 17 million dog owners (2 million more than in 1940) write their 22 million dogs into the budget for such items as feeding, clothing, housing, registering, grooming, photographing, showing, amusing, doctoring, and burying. For some statistics:

Dog owners bought in the neighborhood of a billion pounds of canned dog food, and about 360 million pounds of various types of dry food, during 1950.

"The Fancy," as dog fanciers are known in the trade, paid \$622,577 last year to register 251,813 dogs of gentle birth in the American Kennel Club, the canine equivalent of Burke's Peerage. They paid another \$233,892.02 to the A.K.C. to cover a variety of handling fees and book work.

In an average year, the Fancy spends \$2 million just to attend dog shows. Last year 634 such shows were held around the country, in which 172,000 dogs competed for prizes ranging from \$2 to nearly \$20,000. Plus, of course, one of the thousands of blue ribbons which are mass-produced to add color to the occasion.

Those who regard the relation between pooch and master as a private affair will be startled to learn the facts of organized dog-

(Continued on page 175)



Traps in place in the double-trap set with pan cloth being placed over the pan and under the jaws. Jim Sherman Photo.

Evolution and History of the Steel Trap

By Nick Drahos

Regardless of personal sentiment for or against the trapping of wild animals, there are certain facts relating to traps and trapping which are of significance to everyone:

(1) The trap was a vital tool in the march of civilization from the Atlantic seaboard to the Pacific. Going before the axe and the plow, the trap—even more than the rifle—forced the beaver and the bear to give way to the wheat field, the library and the piano. (2) This state and many others, including Wisconsin, Minnesota, Oregon, Kansas and Colorado, might well adopt the steel trap in their coats of arms; in any case, they owe that much of their settlement and development to the trap. (3) New York State is still the second largest fur producer in the nation; its women are the largest (in money

value) fur coat buyers; and New York City is the center of the world fur trade as well as of fur importation. (4) The trap entirely changed the standard of living of many Indian nations, as well as of white men. (5) The steel trap is still essential for the harvesting of a wildlife crop and for the control of animals that threaten the interests and health of humans—animals ranging from orchard-killing mice to rabies-infected foxes and deer-killing coyote hybrids.

A sixth fact is that large scale commercial manufacture of steel traps in this country began at Kenwood, N. Y., in 1855. This places the origin of the modern trap business right here in New York State—which is logical, considering the past and present position of the state with regard to the Fur Industry.

Father of this trap business was

(Continued on page 174)

By Tom Berkley
Area Game Manager

Anyone who can set a trap can, with proper scent and equipment, catch this supposedly super-intelligent creature. In the past, perhaps no other phase of wild animal control has been made to appear more difficult than that of fox control with the use of the steel trap. The few trappers that had the ability to catch fox were so secretive in their trapping that it was impossible for the beginner to learn their methods.

In order to remove the mystery and misinformation from the really simple art of trapping, the State Conservation Commission has conducted a series of trapping schools in counties where the highest populations of fox have been found. Over 1,000 farmers have been instructed in down-to-earth trapping methods, with the mysteries removed.

If there is any real "secret" in trapping successfully, it is in locating the trap set in the proper place. The proper location is either within a few yards of a fox trail or "crossing," or in an area that is being used by the animals for their hunting. No matter how effective the scent, it can only be depended upon to attract fox a short distance. To determine the best spot for a set, the trapper should scout his territory, searching for sign, either tracks, droppings, or spots where foxes have been digging for mice, and after finding an area that shows the presence of the animals, the time is ripe to take the needed equipment and catch some foxes.

Perhaps the most important part of the equipment is the steel trap. Either No. 2 fox traps or No. 2 or No. 3 double spring traps may be used with success. Contrary to popular belief, the traps need not be waxed or dyed, and may be handled with the bare hands. The one advantage in waxing traps is that it protects from rust, and waxed traps will outlast untreated ones.

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THE "BACKBONE" IN PAMMEL PARK

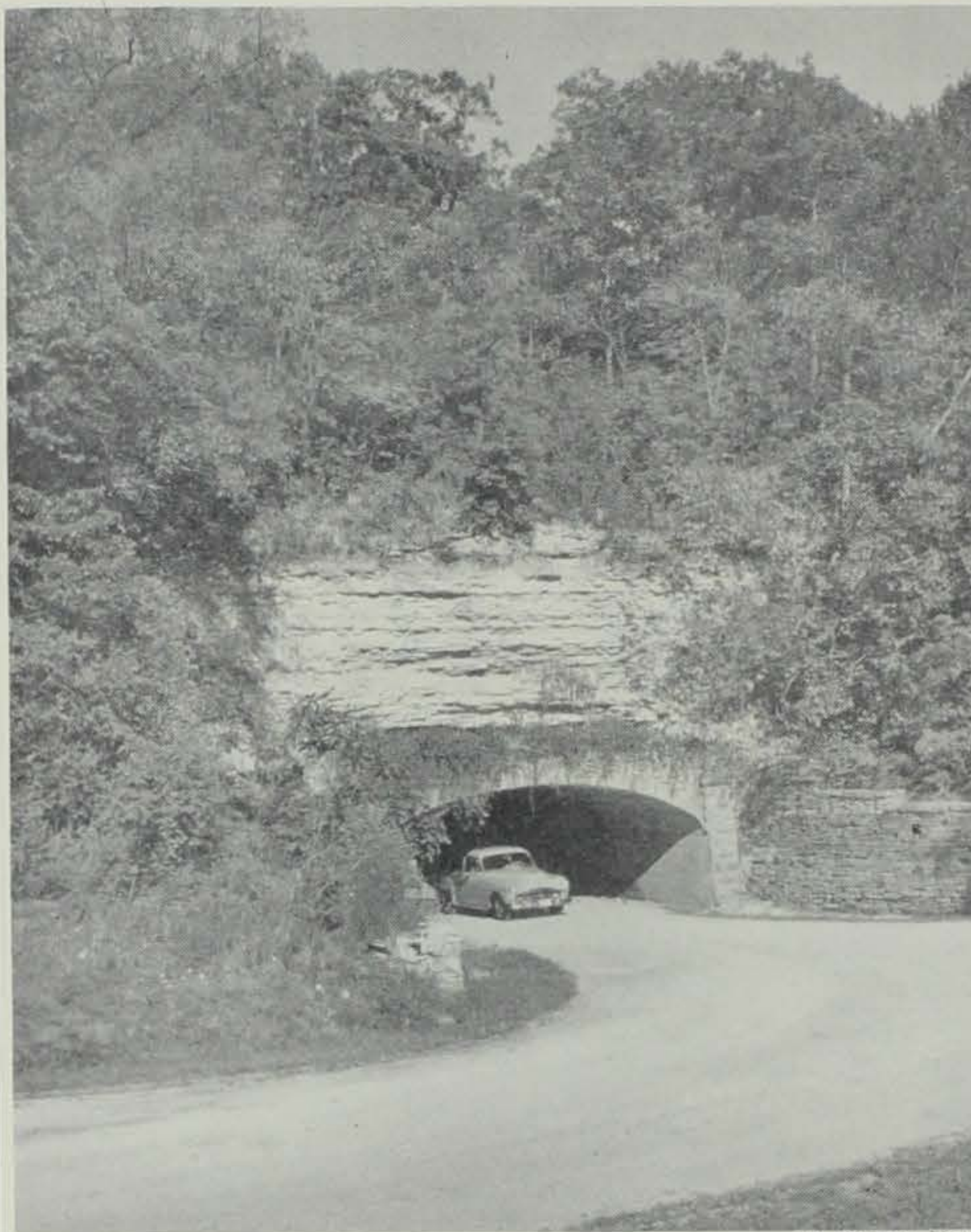
By Charles S. Gwynne
Associate Professor
Department of Geology
Iowa State College

Pammel State Park, on the Middle River about 3 miles southwest of Winterset in Madison County, is another park with a "backbone." This one has been known as the Devil's Backbone. It is similar to the one in Backbone Park in Delaware County, but composed of a different kind of rock.

Middle River enters the west side of the county, and has a winding course toward the east. In the vicinity of the park it forms a big loop toward the north. Within the park the opposite sides of the loop are close together for a short distance, separated only by a narrow ridge of rock. This ridge is the backbone. The river flows north-westward on the west side and southeastward on the east side.

This curious course of the stream probably got its start long, long ago, when running water cut the valley of what is now Middle River. Later this part of Iowa was covered by glacial ice, not once, but twice. Running water has been at work since. It has removed from the valley much of the deposit left by the glacier. It has also widened the valley. The river has developed a crooked course, with a number of loops called meanders. The current is swift on the outside of such meanders. Gradually the big meander to the north has been increased in size by the stream cutting into the side of the valley, on the outer side of the meander. The stream also has worn against both sides of the neck of the meander until the backbone has been left.

But what about the rock of which the backbone is composed? This again is material that was deposited as a sediment in an ancient sea, and since hardened to a rock. Most of it is a limestone, called by geologists the Bethany Falls limestone. It is named from a town in Missouri where it occurs. Below it lies the Hushpuckney shale, named from



The famous "backbone" in Pammel State Park. The tunnel, now used for a road, was originally built for a mill race to turn the stones that ground the grain of pioneer Madison County residents.

a creek in eastern Kansas where it outcrops. The shale is simply a hardened clay.

Underneath the shale lies the Middle Creek limestone, named from a location in Kansas. Here it is less than a foot thick, but elsewhere it attains a thickness of 5 feet. This formation can be traced into Nebraska, Kansas and Missouri. This shows in part the extent of the sea in which it was deposited as a sediment. All of these formations are part of what geologists call the Missouri series.

These layered rocks may be seen where the road goes through the tunnel. A tunnel was cut many years ago to divert the stream into a mill race. In this way the mill owner was able to secure about a twelve-foot waterfall for his mill. The points on opposite sides of the tunnel are about a mile apart by stream. The tunnel has since been enlarged so that cars can pass through.

These beds of limestone and shale lie above the coal-bearing rocks of Iowa. They are exposed in many places along streams in this part of the state. In the vicinity of Winterset, and near Earlham in the northern part of the county, the Bethany Falls limestone is quarried for the manufacture of Portland cement. It is a soft rock and very suitable for this purpose. The cement plants are at Des Moines and West Des Moines.

The Bethany Falls limestone is also crushed to provide road-surfacing material. Agstone, used to correct the acidity of soils, is also made from it. Thus, the Bethany Falls limestone is an important source of wealth.

Fossils, the imprints of ancient sea life, can be found in many of the outcrops of this rock. These include corals and animals related to oysters and clams. There are also brachiopods; some of these look somewhat like butterflies with wings outstretched and so are often called butterfly shells.

The glacial deposits are not at all conspicuous in this park, as they lie hidden beneath the soil. But the rocks strange to this part of the country, brought down from the north by the ice, are found along the river and in the ravines. These are the "glacial erratics" and are of many kinds. They are of course entirely different from the rock which forms the "backbone."

There is also a deposit of loess, the brown wind-blown silt, over the upland area of the park. This varies in thickness, and is absent where running water has washed it away.

The wide, flat valley-bottom, the "backbone," the slopes to the upland, and the ravines are the work of the river and its tributaries. They have combined to make this area of about a half square-mile a place of interest and recreation.

CLEAR LAKE CARP

By Kenneth D. Carlander and
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Research Unit
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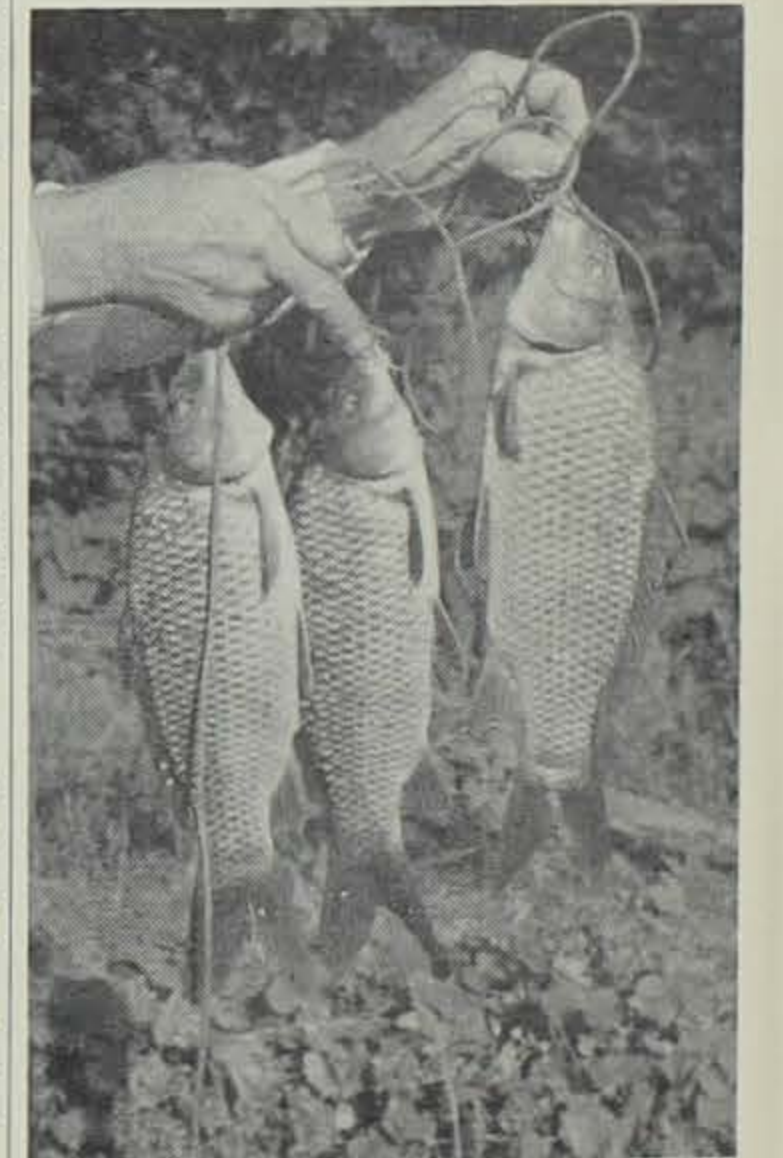
Carp in Clear Lake are among the fastest growing carp reported from any natural water. A study of the scales of over 600 carp from Clear Lake indicates that at the end of the second year the average carp is 18.6 inches long and weighs a little over 3 pounds. Each year thereafter, the carp add better than 2 pounds.

Comparatively few of the Clear Lake carp are over three years old, however. The rough fish removal operations during 1950 took mostly two-year-old fish. Less than 8 per cent of a sample of 263 fish, some of which were selected to include the larger fish, were over 3 years old and almost 75 per cent were of the single age group—two years old.

Carp usually spawn in relatively shallow water among the weeds, often in marshes or flooded fields and the young carp spend the early part of the summer among the weeds where they are relatively free from predation by the game fish. By the end of the first summer they are over 6 inches long and too big for any but the largest northern pike to feed upon.

It is during the second summer that the greatest growth is attained, however, with an average Clear Lake carp adding 2.66 pounds. Since they weigh only about 5 to 8 ounces at the beginning of the year this means more than 500 per cent increase in bulk. The male and female carp grow at the same rate in length, but the females tend to be slightly heavier than the males.

At the beginning of the third
(Continued on page 176)



A study of the scales of over 600 carp from Clear Lake indicates that at the end of the second year the average carp is 18.6 inches long and weighs a little over 3 pounds.



Jim Sherman Photo.
Pittman-Robertson funds are used to acquire and develop marsh areas to help build up the supply of duck nesting and shooting marshes.

PITTMAN-ROBERTSON FUNDS TOTAL \$17,800,000

A \$17 million bonanza of federal aid for wildlife projects during the coming year is going to mean a headache for many state game administrators and for the federal supervisors of the fund. That was the prediction today of Carl D. Shoemaker, conservation director of the National Wildlife Federation.

Last year American hunters stampeded the sporting goods counters as never before to buy shotguns, rifles and ammunition. War clouds threatened to shut off production and the sportsmen were simply stocking up. On every purchase the federal government collected an 11 per cent excise tax under the Pittman-Robertson Federal Aid Wildlife Act of 1938.

The collections totaled \$17,846,423, highest on record and \$8 million more than the preceding year. After the U. S. Fish and Wildlife Service deducts 3 per cent for administrative costs and fixed amounts are allotted to Alaska and other territories, a sum of \$17,191,031 will be left for apportionment to the 48 states.

The headaches will come, according to Shoemaker, in trying to spend the money wisely. Several states will be unable to put up the necessary matching funds—25 per cent per project. Many states will have difficulty finding suitable projects which can qualify under the Pittman-Robertson law.

The money is apportioned to the states by a formula taking into consideration the area of the

state and the number of hunting licenses sold. No state can receive more than 5 per cent of the total fund, or no state less than one-half of one per cent.

At one extreme we find Nevada, with 110,540 square miles and only 25,135 hunting licenses, eligible for \$328,550, or \$13.07 for every license. Nevada will be unable to put up the \$109,516 required in matching funds. This sparsely-settled state reverted \$73,445 of the federal allotment last year and probably will have to turn back more in 1951-1952.

At the other extreme we find Michigan, large and populous, limited by the 5 per cent ceiling to an allotment of \$859,550. For Michigan this amounts to only 83 cents per licensed hunter. Average for all states is \$1.36 per hunter.

Rhode Island, with only 1,214 square miles, may receive \$85,955—the one-half of one per cent minimum—but this is \$7.48 for each of the state's 11,488 licensed hunters. Last year Rhode Island

reverted \$18,904. The reverted money goes automatically into the federal migratory bird conservation fund.

Iowa, with 56,280 square miles and 339,460 paid hunting licenses in 1950 receives \$1.15 per hunting license holder.

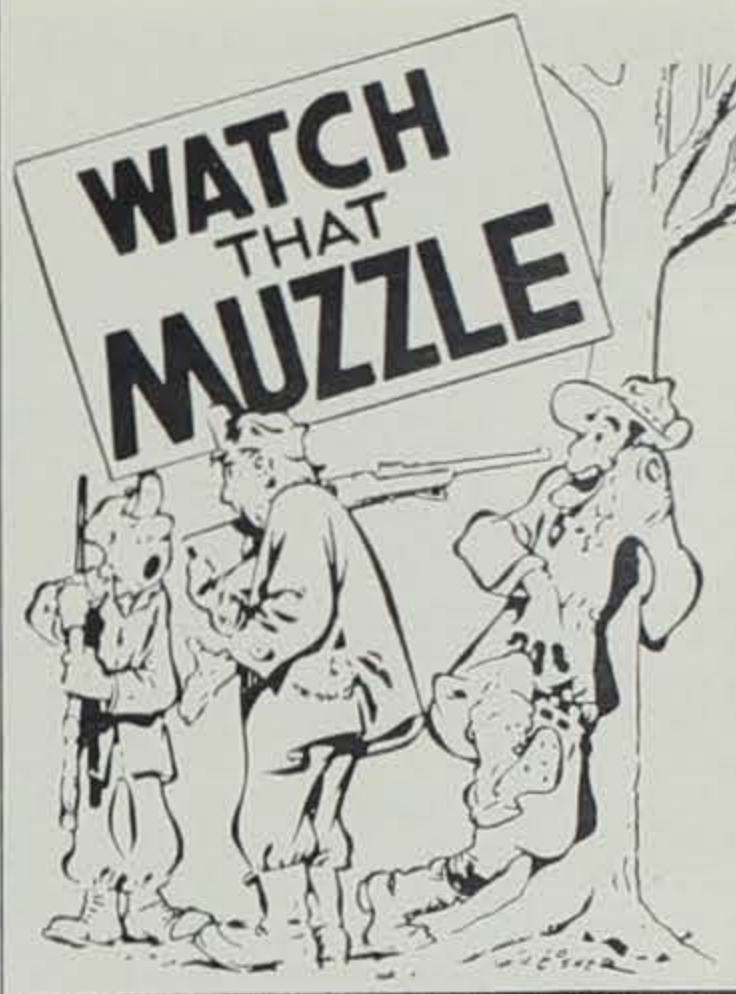
Under the Pittman-Robertson law, federal aid funds can be spent for wildlife restoration projects including "the selection, rehabilitation and improvement of areas of land or water adaptable as feeding, resting or breeding places"; for the acquisition of such areas; and for "research into problems of wildlife management as may be necessary to efficient administration affecting wildlife resources."

The funds cannot be used for fisheries projects. The Dingell-Johnson Act of 1950, with an excise tax on sport fishing tackle, takes care of that end. Dingell-Johnson receipts are relatively modest—about \$2,900,000 last year—and no spending problems are foreseen.

Getting back to the Pittman-Robertson headache, Shoemaker pointed out that acquisition of new game areas isn't easy to accomplish in these times. Real estate values are at an all-time high and industry and agriculture are making unprecedented demands on available lands. Several western states have little or no need for additional game lands, because much of their area already is public domain, or available for wildlife purposes in national forests and parks.

In some states game research also has reached a virtual saturation point. It is difficult to set up new research studies without duplication and over-lapping.

The solution may lie in a more liberal interpretation of the law, according to Shoemaker, who as secretary of a special Senate committee on wildlife conservation, helped draft the Pittman-Robertson act. He believes the funds should be used for certain necessary game-management practices, such as checking and tabulating



SHOOTING IS FUN FOR THOSE WHO ARE CAREFUL

the harvest by hunters, which in the past have not been approved by the federal supervisors. Game management procedures not interpreted as "research" have to be financed entirely from State license funds. This in turn limits the ability of the state to match the federal allotments.

"The act was designed to help, and not hinder, the states in the management of their wildlife resources," Shoemaker said.

"One place where the law fails now," the Federation director added, "is in not providing for information and education programs." Pointing out that conservation is "nine-tenths education," and that research avails little if the facts it discovers are not publicized, he said that "sooner or later the Pittman-Robertson Act may have to be amended to permit this very thing."

WILD GAME COOK BOOK

Mulligan Stew, Duck a la Creole, Quail with Mushrooms, Broiled Venison, Caribou Collops, Hasenpfeffer, Roast Bear. No, this is not the menu to be found in the better restaurants of the present day. But, none of these items is beyond the realm of possibility of the sportsman who wants them enough to take his gun and go after them himself.

After he's secured 'the makin's,' he can find out how to prepare these dishes by referring to the booklet, "How to Dress, Ship, and Cook Wild Game," produced by Remington Arms Company, Inc., and just off the press in its third edition. It can be secured by writing the Advertising Department, Remington Arms Company, Inc., Bridgeport, Conn., and enclosing ten cents in coin.

The smallest Iowa bird is the tiny ruby-throated hummingbird. He is about 3½ inches long and weighs about as much as a dime. The largest wild bird found in Iowa is the whistling swan. This swan is 4½ feet long from the tip of the bill to the end of the tail and weighs 12 to 18 pounds.



Jim Sherman Photo.
A part of Iowa's Pittman-Robertson money is used to plant trees and shrubs, much needed for wildlife cover. With the use of a tree planter several thousand trees may be planted in a single day.

Iowa's share of Pittman-Robertson funds is \$389,799. The money is used to buy and develop marsh and other wildlife areas. The total is a 98 per cent increase over that received in 1950.



By test netting, biologists have determined that large populations of catfish of all sizes dwell in our inland streams. A net-full of channel catfish raised from the Raccoon River near Walnut Woods State Park in 1951. *Jim Sherman Photo.*

Vinton, Iowa
State Conservation Commission,
East 7th and Court,
Des Moines, Iowa
Gentlemen:

I have been very skeptical about the catfishing in this part of the Cedar River since the first of July, 1950. Up until that time we had done fairly well, but a small flash flood the first week in July seemed to do something that no one could analyze. Everything stopped absolutely and has not come back up to the present time.

During last winter I did a great deal of exploring after the river froze over and I only saw one fish, a carp about 16 inches long. By the time of spring breakup we were convinced that there were no fish here.

When I heard that Bob Cleary, fisheries biologist was going to begin his annual test netting here in the Cedar, I was very much interested. I did not go with him to set his nets, but did go out twice when he ran them.

The first three nets produced a few catfish, the fourth showed possibilities yielding 15 channel catfish ranging in size from 1½ to 4 pounds. The fifth net contained about the same number. The next day one of the nets contained 67 nice channel cat, none of them under a pound and very few this small. The largest was a neat 12 pounds, 4 ounces.

Right here's where Bob sold me. He'd taken a good-natured ribbing on the blank hauls, grinned through the fair trap catches and when he hit the really big ones, was matter of course and cool as a green cucumber about it. Two days with the biologist made a convert of me and I did not need to see any more to know that the Cedar had plenty of channel catfish.

The payoff came for me that second evening. What could pos-

sibly be more humiliating than to spend three hours of fishing that strip of water where Cleary had proved that catfish were present in numbers and large sizes and end up at 10:00 at night, six miles from home and not even a lousy nibble to pay for all the effort. That is exactly my experience on June 14 this year on the Red Cedar.

Sincerely yours,
Red Gordon.

DEER DANGEROUS TO TRAFFIC

If the deer in Jasper County continue to be traffic hazards on Highway 14 south of Newton maybe there ought to be an open season on the critters. The other night a four point buck tangled with a car and wound up the loser. The car sustained considerable damage, however. Saturday night's incident was the third such happening in recent months. Why go to Minnesota to hunt deer when they come hunting you in Jasper County.—*Newton News.*

**GUNPOWDER
& ALCOHOL
DON'T MIX**



SQUIRRELS HIGH IN GUNNING POPULARITY

A lot of sportsmen overlook Mr. Bushytail as fair game, but still the squirrel ranks second in gunning popularity.

About 13,000,000 nut-crackers are bagged each year. In size of kill, squirrels are game species No. 2, being exceeded in number only by the cottontail rabbit. Yes, sir! More squirrel than pheasants, quail or doves are shot every fall. Only cottontails are hunted by more people; and only the rabbits, deer and waterfowl are hunted over more of the North American continent.

Among wild animals, the squirrel is below the elephant, horse, dog and some others, in ability to learn. But old Bushytail has other attributes—he is among the most agile of mammals; he is of well-blended rufus of salt-and-pepper color, mighty helpful in hiding. All these, and an arboreal way of life, give him a fancy bag of tricks. And practicing them is his profession . . . a gun-shy old grandpa red is one of the cagiest pieces of small game on the hoof.

QUIET AND STILL! is the first rule in the squirrel woods. The strategy is particularly effective when one is hunting alone, without

a partner to drive hiding squirrels around the tree; in dry woods when it's impossible to walk quietly; and in old, over-mature timber where den cavities—and hunter-proof sanctuaries—are unusually abundant.

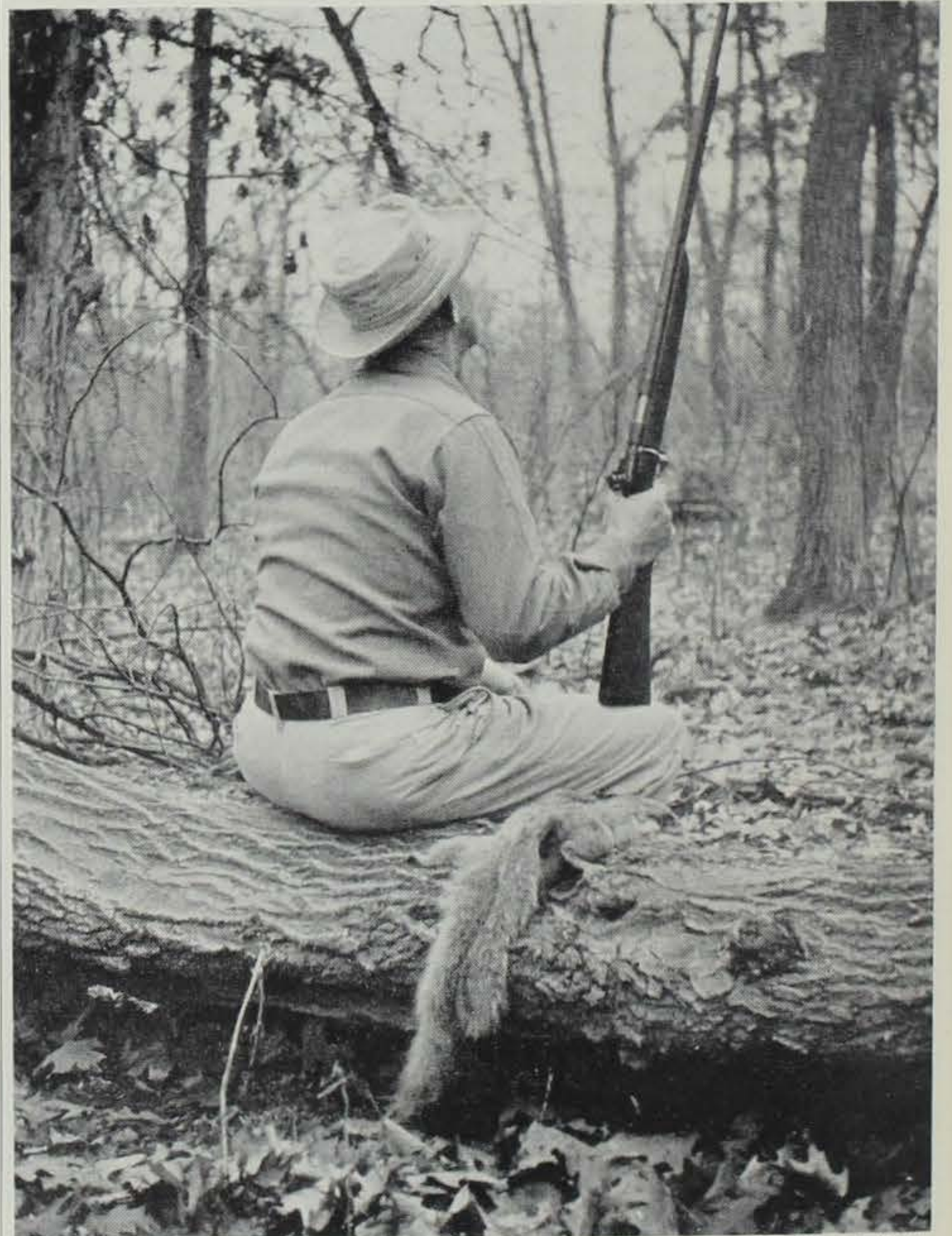
Waiting tactics call for acute training of ear and eye. Before leaf-fall you usually hear squirrels before you see them, and certain highly telltale sounds let you know. The crash of a leafy branch is perhaps the most common, and on still days it can be heard a long way off.

The legal limit on squirrels is pretty high, but when you have enough for the dinner table, it's time to call it quits for the day, there will always be another day.—*Bellevue Herald.*

PARKS HOST TO MILLIONS

Iowa's park system plays host each year to increasing millions of visitors with a total in 1950 of 3½ million. Here is the July attendance for the past six years.

July, 1946	603,000
July, 1947	626,000
July, 1948	748,000
July, 1949	1,149,000
July, 1950	1,084,000
July, 1951	1,150,000



Throughout the United States, squirrel shooting ranks second in popularity among the hunting fraternity. The number being taken each year is exceeded only by cottontail rabbits. *Jim Sherman Photo.*



Jim Sherman Photo.

Br'er Fox, the wise guy of the fables, is dumb about traps. With a little know-how the amateur fox trapper can run up a surprising total.

Fox Trapping . . .

(Continued from page 169)

Steel drag hooks, made from 28" of 7/16" cold rolled steel are used, with the traps fastened in pairs to each drag. The drag offers the advantage of permitting the animal to drag the traps away from the set, thus keeping the set from being torn up and spoiled for another set.

In addition to the traps and drags, a hatchet will be needed for digging, a clean piece of canvas three feet square for use as a ground cloth to kneel upon while making the set, and to remove all surplus dirt, some pan covers of clean cloth, 5" x 7", a dirt sifter made from a square foot of 1/4" hardware cloth, and a bottle of suitable fox scent. Many companies bottle and sell animal scent, one of which is The National Scent Company of Chilhowee, Missouri. Their fox and wolf scent has proven to be very successful in Iowa. As much of the fox trapping is done during the closed season for many other fur-bearers, scent is recommended over bait, as it is more

selective, and attracts fewer protected fur-bearers.

While traveling to the area to be trapped, it is well to leave as little human "sign" as possible, and smoking, spitting, and otherwise leaving evidences of trapping activities should be avoided.

Upon reaching the site of the set, which has been determined by the presence of sign, the exact spot for the set should be located from some distance away, then with the equipment and traps, one should walk directly to the site, spread the ground cloth, kneel upon it, and stay there as much as possible during the operations involved.

The following will describe the installation of the double-trap set. The first step is to dig a flat-bottomed trench seven inches wide, 1 1/2" deep, and 30" wide. Be sure that all dirt and vegetation removed is placed on the ground cloth. The next step is to place the drag in the center of the trench, set the traps, and place one in each end of the trench, so that each trap is 1/2" below the surface of the ground. Using dirt taken from the trench, fill in around the traps, covering the springs, the chains, and the drag. Be sure that the traps are firmly bedded, so that they will not tip under an animal's weight. Place dirt around the jaws, using care that no dirt collects under the pan. Place the 5" x 7" pan cloth over the pan and under the jaws of each trap. A slit in one end of the pan cloths permits the trigger to be free of the cloth, and insures positive operation when the pan is depressed. The next step is to cover the entire set with fine dry earth, using the sifter. This is smoothed over with a small twig, and when completed the traps should be covered with not over 1/2" of sifted dirt. If the dirt from the trench is not suitable, it may be necessary to remove this dirt from the area and bring more good dirt in, using the ground cloth for both

operations, and using care to leave little sign in the vicinity. It is well to collect a quantity of dry earth at this time, so that it will be on hand for the winter's trapping.

The scent post itself may be a chunk of rotten wood, fox droppings, or dry cow or horse manure. Either is good, if it is rotten and dry so that it will absorb and hold the scent. This is placed between the traps, and about ten drops of scent is placed upon it. Then after a careful check to see that no sign has been left, the scented set may be left to do its work. Additional scent is added every other day.

After this basic set has been learned, it will be easy for the new trapper to figure out new and special sets to cope with the different conditions which may arise, and it will be found that Br'er Fox is not much harder to take than is the cottontail. Here's to luck on your trap-line!

GUN SAFETY WEEK

November 11-18

"Shooting is fun—for those who are careful" will be the theme of statewide talks and demonstrations during the Second Annual Gun Safety Week, November 11-18. The Iowa Safety Congress is leading the campaign, assisted by State Conservation Officers, Izaak Walton League and other sportsmen's organizations, the American Legion, V. F. W., Amvets, Boy Scouts, S k e e t Shooters, Trapshooters, peace officers, Farm Bureau and other interested groups.

The campaign, in addition to focusing public attention on proper gun handling through posters and news stories, will feature a free gun safety speakers' service. Over 600 able volunteers from the ranks of the above organizations will present free programs, demonstrations and literature on gun safety to schools, luncheon clubs, and other groups on request during Gun Safety Week, November 11-18 and the week preceding, November 4-11. Gun Safety programs may be scheduled through local State Conservation Officers, Safety Congress representatives or local sportsmen's clubs.

The annual death toll from gunshot wounds in Iowa is about 37 persons. Additional Iowans are injured and crippled by careless gun handling. Most of these accidents are preventable. Gun accidents occur when the simple safety rules of gun handling are violated. Every person who has occasion to handle guns or be near guns should know and observe the following rules—ALWAYS.

1. Treat every gun with the respect due a loaded gun. This is the cardinal rule of gun safety.
2. Carry only empty guns, taken down or with the action open, into your automobiles, camp and home.
3. Always be sure that the bar-

rel and action are clear of obstructions.

4. Always carry your gun so that you can control the direction of the muzzle, even if you stumble.
 5. Be sure of your target before you pull the trigger.
 6. Never point a gun at anything you do not want to shoot.
 7. Never leave your gun unattended unless you unload it first.
 8. Never climb a tree or a fence with a loaded gun.
 9. Never shoot at a flat, hard surface or the surface of water.
 10. Do not mix gunpowder and alcohol.
- Hunting, target shooting and "plinking" provide safe year-round, enjoyable recreation — for those who are careful.

Take part in the 1951 Gun Safety Campaign—

1. Know and observe gun safety rules.
2. Bring gun safety rules to the attention of others by scheduling a gun safety program for your school, luncheon club or other groups.

DAMASCUS BARRELS MAY BE DANGEROUS

A young sportsman, Dick Hauck, reminded me the other day that I should mention the Damascus barrel. Now the Damascus barrel is a twisted shotgun barrel of doubtful test. It is beautiful to behold, but with modern heavy loads might be a first-class ticket to the hospital or even further. You may be proud of her, brother, but if she's yours, put her out of action. I recommend that you remove the stock, cut the barrel in two, and bury all the parts in the depths of the sea. If you don't believe me, just ask some good gun expert. Ten to one he'll throw his hands up in terror at the very sound, Damascus!—Bellevue Leader.

Preventable fire is more than a private misfortune, it is public dereliction. At a time like this of emergency and of manifest necessity for the conservation of natural resources, it is more than ever a matter of deep and pressing consequence that every means should be taken to prevent this evil.—Woodrow Wilson (1918).



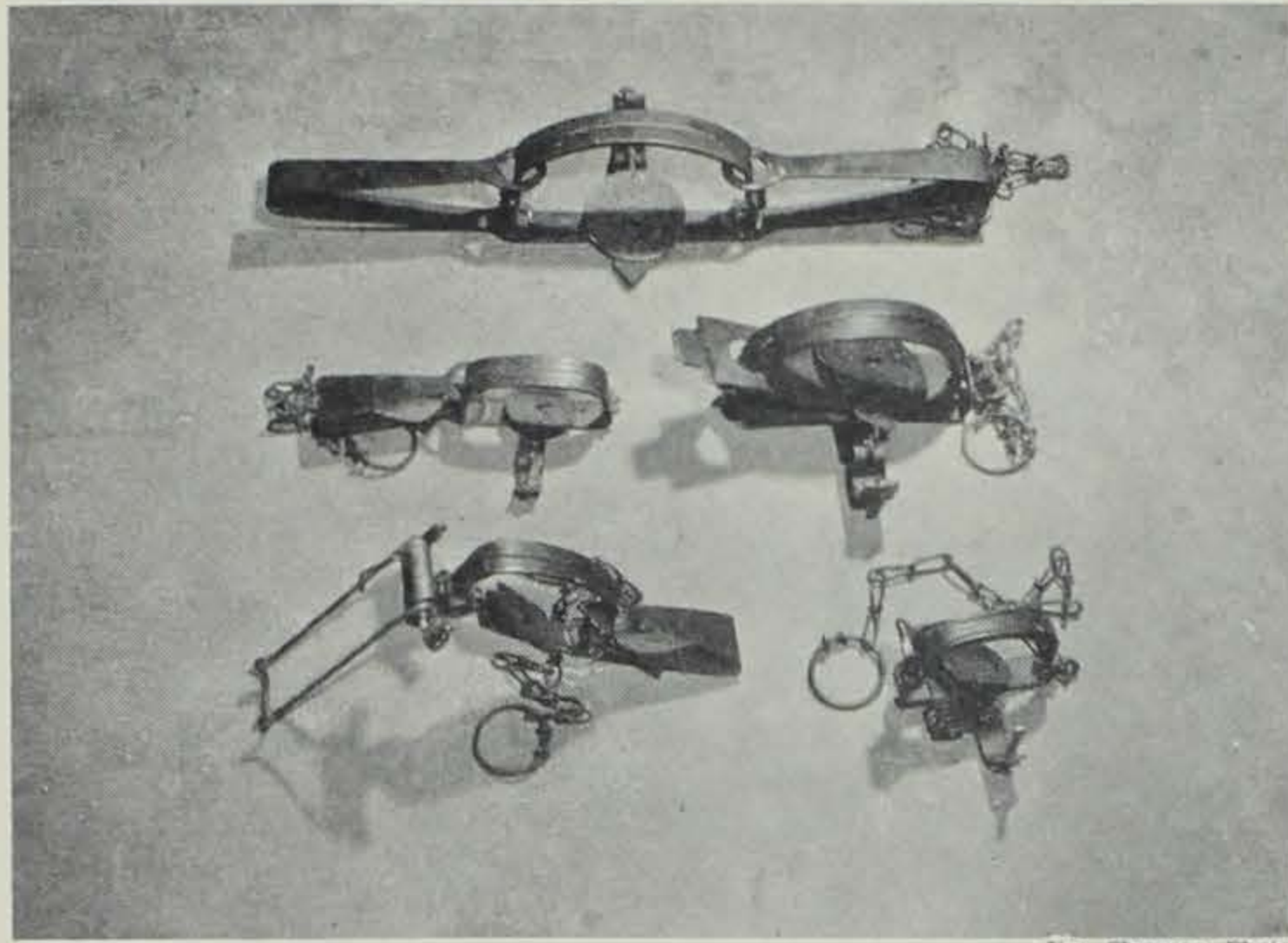
Jim Sherman Photo.

During the past few years in areas where fox populations are highest, the Conservation Commission has conducted a fox trapping school.

WATCH YOUR STEP

WITH A LOADED GUN

SHOOTING IS FUN FOR THOSE WHO ARE CAREFUL



Although many varieties of steel traps have been made during the past 200 years, the basic principle is the same as that of the man traps used to catch poachers in early Continental Europe.

Steel Trap . . .

(Continued from page 169)

Sewell Newhouse. As a 17-year-old lad he began making traps at Oneida Castle, following the 1768 English trap design. Each year he made a new set of 50 tempered traps out of old axe heads, scythes, files, rasps and bolts. These he used himself, then sold to the Oneida Indians for 62 cents apiece. (He became a famous trapper and gunsmith in his own right, and readily spoke the Oneida language.) The Oneidas took their highly prized Newhouse traps with them when they moved to Green Bay, Wisconsin, on July 4, 1833, after selling their lands in New York State. And from Green Bay, the fame of the Newhouse trap spread westward.

Prior to 1848, Newhouse and his assistant blacksmith, John Eddy, were making 1,000 to 2,000 traps a year, all hand forged. But in 1848 the Newhouses joined the Oneida Community, an experiment in communal living at Kenwood, and shortly thereafter the steel trap business—financed by the community and supervised by Newhouse—really got under way. The Newhouse trap was put on a mass production basis. Later a factory was built at Sherrill, and between 1864 and 1872 production of traps by the Community ran over the three-quarter million mark. Not many people realize that the steel trap for many years financially supported one of the most famous social experiments in our country's history.

The Newhouse trap provided trappers with a standard pattern in sizes, a product of precision work, light in weight, durable and reliable. Every trap a perfect trap—that was the Newhouse watchword.

The only time the Oneida Community's trap business was in jeopardy was when the Blake, Lamb & Company's "Jump" trap came out in 1865. This was the first major departure from the English design and did away with the long single

and double springs of Newhouse traps. It was short, compact, and light, with springs under the pan enabling the trap, when sprung, to jump about an inch off the ground to grasp the animal's leg higher up. Its lighter weight was also a boon to trappers, since it meant they could carry more. The Community immediately copied the principle and came out with the Oneida Jump, a trap with one under-the-pan spring.

In 1880, the Community was forced by pressure of public opinion to break up and re-organize minus the controversial communal aspects under the name of Oneida Community, Ltd. Newhouse died on December 28, 1888, but trap manufacture continued to flourish, with four styles in production: the Newhouse (1855), the Oneida Jump (1868), the Hawley & Norton (1874), and the Victor (1886). A Canadian factory was built in



The steel trap is essential for harvesting wildlife crops and in protecting mankind's interest from wild animals.

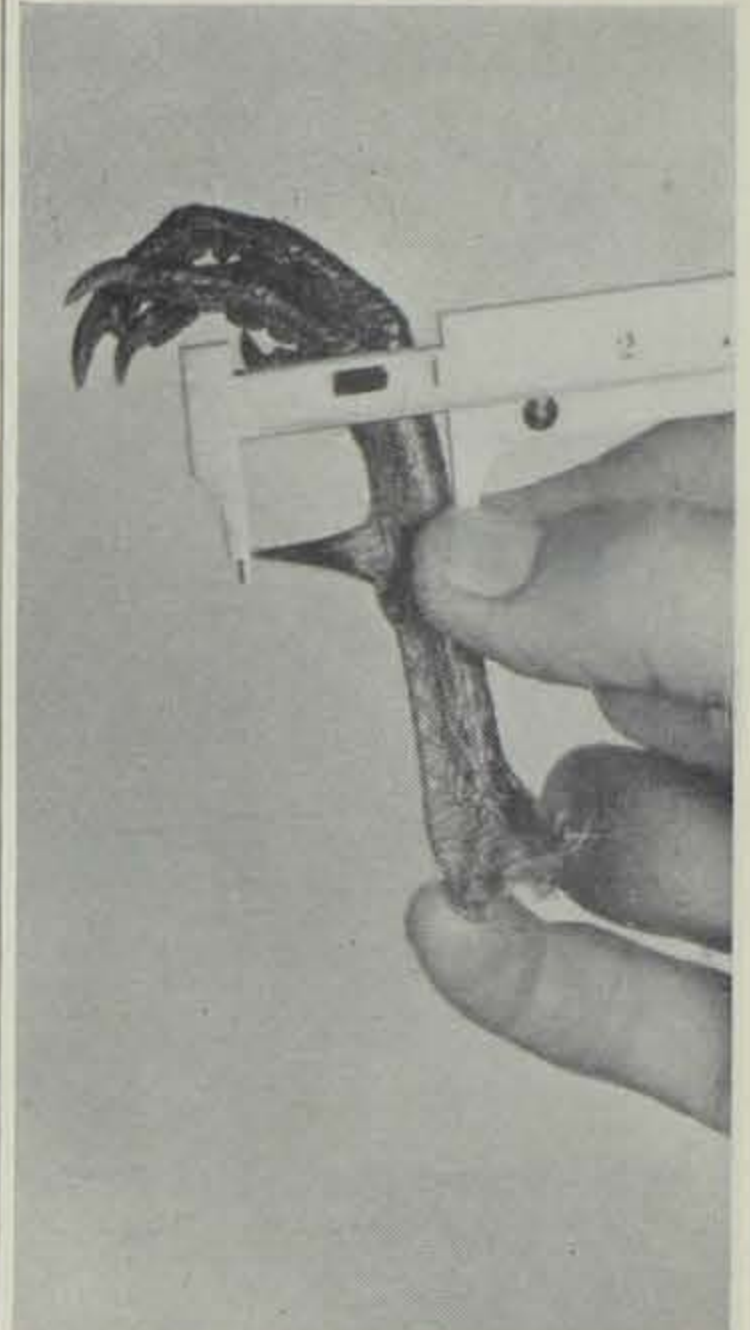
1896, and Oneida expanded into the mouse and rat trap business in 1906. Peak production of Oneida was reached in 1910, when 6,812,000 traps were made.

After the first World War Oneida decided that the trap business had served its purpose well, but that the future looked brighter in other fields. It sold its mouse and rat trap business in 1924 to the Animal Trap Company of America, organized that year at Lititz, Pa., and in 1925 Oneida sold out its entire trap line to the same company. Oneida today is known as Oneida, Ltd., makers of fine silver.

After Oneida's exit, the Animal Trap Company of America quietly started to buy up trap makers. It bought out Lester A. Beardsley's Diamond Brand, March 30, 1941; W. A. Gibbs & Son with their Triumph and Gibbs traps in 1936; the trap businesses of Pratt Mfg. Co., Joliet, Illinois in 1937, of Charles D. Birdsell, Inc., Crisfield, Md. in 1939, and of Lovell Mfg. Co., Erie, Pa. in 1947.

There is still, of course, a bustling business in traps. And the end is not in sight. Furbearers continue to play vital roles in many aspects of contemporary civilization—in the clothing industry, in medical research, in vermin and predator control, in their own right as valued and respected citizens of the wild. And whether we like it or not, until we find something better, the trap remains the surest and most economical means of controlling our dynamic furbearer populations—for their own good as well as man's.

Recognizing this, the American Humane Association (which has one of the best collections in the country) does not oppose the trap. Instead, it seeks a better, more humane trap—certainly a worthy objective.—*New York State Conservationist.*



To determine the age of male pheasants the spur is measured.

BIOLOGISTS SEEKING HUNTER HELP

Hunters may again make a valuable contribution to the study of Iowa's leading game birds by collecting pheasant legs and quail wings this year.

Several techniques are used to measure pheasant and quail populations. Adult birds are censused by the fall roadside count, counts by rural mail carriers, spring crowing, summer whistling, covey range surveys, farmer interviews and winter sex-ratio counts.

Nesting success is determined each year by the per cent of successful nests, per cent of hens with and without broods, number of birds in the broods, and ratio of young to old birds in the hunter's bag.

Hunters often ask the question, "Why are you concerned about the nesting success after the crop is made and the season is set?" The

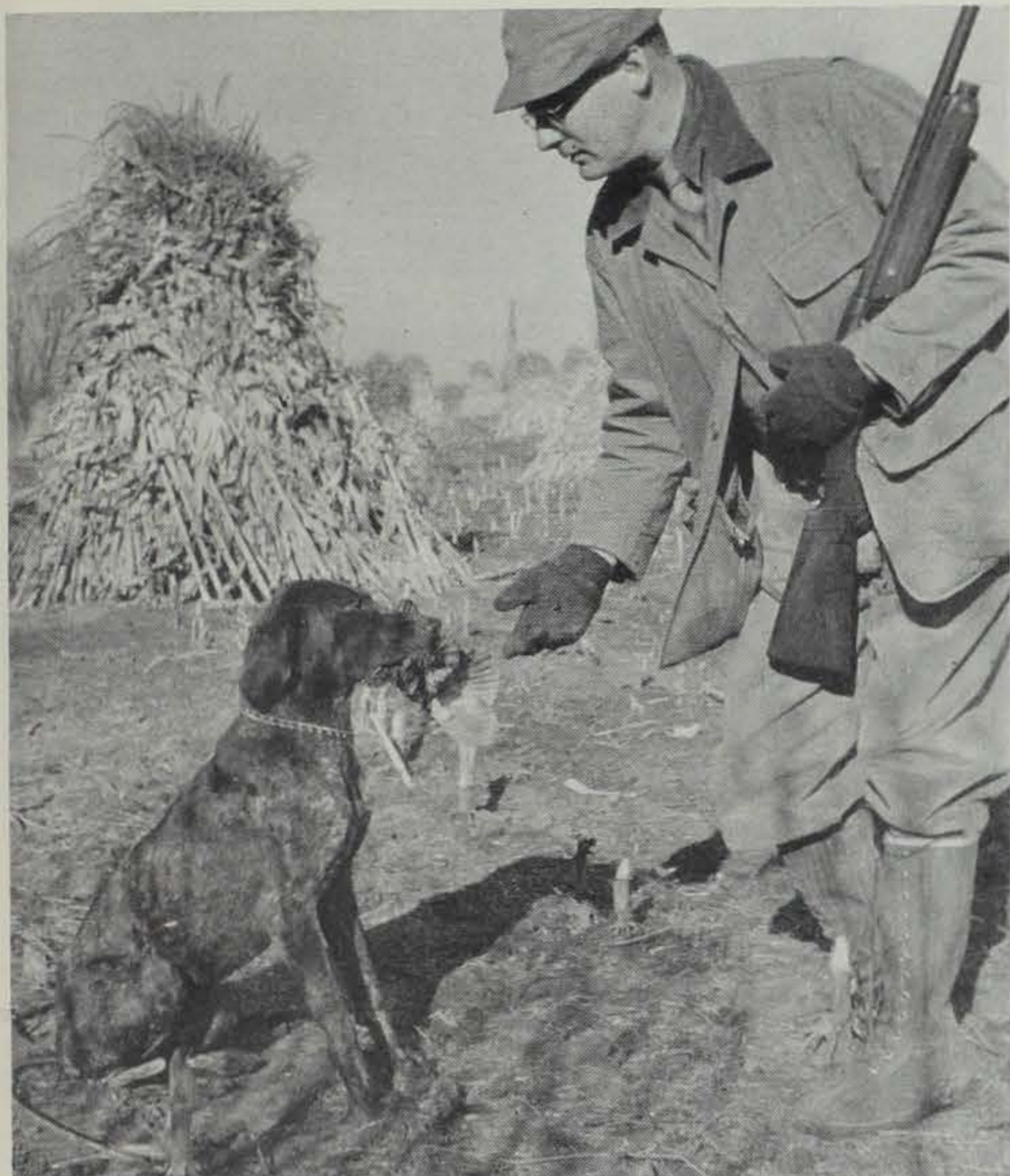
(Continued on page 176)

KEEP YOUR GUN CLEAN



MAKE SURE THAT THE BARREL AND ACTION ARE FREE OF OBSTRUCTIONS

SHOOTING IS FUN FOR THOSE WHO ARE CAREFUL



kept specifically for the purpose. Several of the companies have records of generations of dogs that have existed on a single formula from the day they were weaned until they died, years later, of plain old age. A few years ago, one company announced the results of tests on 300 dogs of different breeds in which measurements, bone structure, coat, rate of growth and size of litters were all recorded. Theoretically, the food could have achieved the same results on human beings with the addition of Vitamin C, which dogs do not require.

Government gets into the act, too; an entire section of the Department of Agriculture is devoted to inspecting and certifying better brands of canned foods. Manufacturers who accept this service and meet the rather high specifications for content and cleanliness are entitled to carry the Department's seal of approval. In 1950, more than 486 million pounds of these better (and slightly more expensive) foods were produced. This was more than 2½ times the amount produced in 1947, the year in which permissive inspection of certified dog foods was begun by the Department of Agriculture.

Food manufacturers and grocers are not the only businessmen interested in dogs. Dog boarding-house keepers charge about \$30 a month for the care and feeding of Rover when the family goes away, and 1,200 hotels stand ready to serve him if he travels with his master. The half dozen top dog handlers in the U. S. earn close to \$25,000 a year teaching showdogs how to behave. Newest development in canine education is the instruction of owners in modern principles of dog pedagogy. Several hundred teachers hold regular classes in which the dogs are enrolled with their masters. In the course of eight or nine sessions, dogs learn the basic rules of good manners, including toilet training



and respect for nylons. Masters learn how to command and punish in a way that will inspire the dog's confidence.

Doctors as well as teachers render professional services to dogs. Many of the nation's 14,000 veterinarians work in dog hospitals where the latest drugs and aseptic techniques are used. Most of the operations performed on humans are also performed on dogs, including Caesarian sections. Fees are about one-fourth those for human surgery.

A natural result of the expensive care, feeding and thought devoted to dogs has been an increasing dollar valuation of the animals themselves. Prize winning aristocrats of fashionable breeds like Cocker Spaniels, Boxers, Chihuahua, German Shepherds, Beagles, and Collies bring upwards of \$1,000, and sales at \$5,000 have been recorded. Dogs have been valued as high as \$7,000 for purposes of taxation. However, very good dogs can be bought for less than \$500, and well descended puppies are often sold for less than \$100.

Jim Sherman Photo. Anyone who thinks Rover now lives on table scraps and heals himself when he is sick is out of step with the times.

Business . . .

(Continued from page 169)
dom. In addition to the A.K.C., there's the American Field which records the pedigrees of 25,000 sporting dogs a year, and the United Kennel Club which registers some dogs that the others don't recognize. In addition, there are over 100 associations dedicated to the preservation, promotion and purity of individual breeds.

The American Kennel Club, incidentally, recognizes 111 different breeds of canine purity, and the A.K.C. registration figures are the accepted index for the rise or fall in popularity of each breed. At the end of 1950, American Cocker Spaniels continued to enjoy a very commanding lead in the popularity poll; Cockers in 1950 made up nearly 25 per cent of all registered dogs. Behind them, with less than half as many registrants, came Beagles. The next eight breeds, in the order of their popularity, were Boxers, Collies, Dachshunds, Bostons, Chihuahuas, Pekingese, Shepherds and Pomeranians.

More than 100 American and British magazines are devoted to dogs, and two popular columns on dog care and training are widely syndicated among newspapers. The Tom Farley radio shows, a series of 26 weekly forums which are aimed at educating, entertaining, and assisting dog owners, are aired over some 500 stations in the U. S. And many other newspapers and radio stations run features by local authorities on dogs.

National Dog Week, with Lauritz

Melchoir as general chairman, was observed in 1950 in more than 3,000 communities and the National Dog Welfare Guild, which sponsors it, maintains a year-round office to carry on its work. The Dog Welfare Guild has a standing offer of \$1,000 reward to the individual who can come up with a satisfactory treatment or cure for rabies, chronic chorea, or any of several other canine diseases.

Although urban living presents many problems to dog owners, 38 per cent of the U. S. dog population lives in cities. Half the nation's dogs live on farms, and the remaining 12 per cent in rural non-farm areas. The average dog, figuring in everything from Great Danes to Pekingese, eats a pound of food a day, or half as much as a person. Of 6,000 dog-owning families studied by the Psychological Corporation, 26 per cent reported that brother fed the dog; 22 per cent said sister, 24 per cent gave the job to Dad. But pinch-hitter for them all was Mother, who feeds the family pet about 73 per cent of the time.

Makers of dog food are currently spending impressive sums not only on advertising and promotion but on nutritional research and taste preference.

Manufacturers of first grade canned types, for instance, claim their product is the only completely balanced diet for man or beast sold in a single package. Canners test a dog-food formula first on fast-breeding white rats and hamsters, and only later, in kennels



Jim Sherman Photo. Dog fanciers paid \$622,000 in 1949 to register 251,000 dogs of gentle birth.

Carp . . .

(Continued from page 170)
 year, the carp are mature and ready to spawn. In 1950, however, it was found that many of the carp did not spawn in Clear Lake. Carp taken in late July had hard, glossy eggs which were being resorbed. The State Conservation Commission's rough removal trap prevented most of the carp from entering Ventura Marsh where they usually spawn. Conditions in the lake proper were apparently not suitable for spawning carp. No young carp were found in Clear Lake, i.e. in the lake proper not including Ventura Marsh. Since very little successful spawning of carp in the lake had been discovered from 1947 to 1950, it was thought that the excluding of carp from Ventura Marsh and the other small marshes around the lake might completely control the species. In 1951, however, the carp have apparently spawned successfully at several points in the lake. Fairly large numbers of young carp were also recorded from Clear Lake in 1945 and 1946. We do not know why carp will reproduce successfully in the lake some years and not others.

Clear Lake is almost separated into two lakes by a long peninsula and bar from McIntosh Woods State Park to Lone Tree Point. The growth rate of the carp taken from the east end of the lake appears to be slower than that of those from the western end. Apparently the carp in the two portions of the lake remain in the same end even though the connecting portion of the lake is broad and deep enough to permit free, unhampered passage of fish.

It is rather difficult to determine the age of carp from their scales. Carp scales have many false annuli, or extra rings which are difficult to distinguish from the true year marks. Attempts were therefore made in our Clear Lake investigations to determine whether there might be better ways of aging carp. Cross-sections of spines or fin rays are sometimes used in aging catfish, bullheads, and sturgeon. The saw-toothed spine at the front of the dorsal fin was therefore collected from many of the carp. When a thin section was cut from the base of the spine, it was found to have rings from which the age could be told, at least for carp one to two years

old. With older carp, however, there appeared to be false rings similar to the false rings on the scales and therefore the spine was not the answer to our problem.

In England, biologists have recently used the opercular bone (the bone which covers the gills) to age perch. Opercles were therefore collected from many of the carp and upon examination it was found that these flat bones have rings on them from which the age and past growth of the fish can be determined quite readily. This technique may well replace the scale method for studying carp growth and may give more accurate information which will help in controlling the carp and in managing the carp populations for the greatest good.

has been good. *The average life of the cock pheasant is less than one year, and the hen is less than two years.* In other words, in the management of this species, and other upland game birds as well, *the success of each hunting season depends almost wholly upon the nesting success during the summer.*

In the case of the pheasant, the spurs on the right leg of the cocks are measured to the nearest millimeter in length. Although the length of the spur may vary slightly from year to year, most young-of-the-year birds measure less than 20 millimeters.

In the case of the quail, young birds are distinguished from old birds by the pointed primary wing feathers and cream or buff color at the tip of the wing coverts.

A sample of at least 50 birds is needed from each county having an open season. Hunters can do their part by saving the right pheasant legs and right quail wings this fall. These wings and legs can be turned over to your local conservation officer or mailed to the State Conservation Commission, East 7th and Court, Des Moines, Iowa. Your help will be appreciated.

Biologists . . .

(Continued from page 174)
 age-ratio survey made during the hunting season is a final check on the reproductive success, and serves as a check against all other reproductive counts made earlier in the season. If the per cent of young birds is high, the nesting success

**1951
 IOWA CONSERVATION COMMISSION
 STATE OF IOWA—30 MINUTES BEFORE SUNRISE AND 1 HOUR BEFORE SUNSET SCHEDULE
 CENTRAL STANDARD TIME**

(Note: This table has been compiled from official schedules furnished by the Weather Bureau Stations listed. A schedule from the Omaha, Nebraska, Station is used because there is no station in southwestern Iowa. The difference in time between stations should be taken into consideration in figuring the exact time at your particular location.)

	DAVENPORT		BURLINGTON		DUBUQUE		KEOKUK		CHARLES CITY		DES MOINES		OMAHA, NEBR.		SIOUX CITY	
	30 Min. Before Sunrise	1 Hour Before Sunset	30 Min. Before Sunrise	1 Hour Before Sunset	30 Min. Before Sunrise	1 Hour Before Sunset	30 Min. Before Sunrise	1 Hour Before Sunset	30 Min. Before Sunrise	1 Hour Before Sunset	30 Min. Before Sunrise	1 Hour Before Sunset	30 Min. Before Sunrise	1 Hour Before Sunset	30 Min. Before Sunrise	1 Hour Before Sunset
Oct. 12	Noon	4:27	Noon	4:29	Noon	4:27	Noon	4:31	Noon	4:34	Noon	4:38	Noon	4:49	Noon	4:49
13	5:41	4:25	5:43	4:27	5:43	4:25	5:45	4:30	5:52	4:32	5:54	4:36	6:04	4:47	6:05	4:47
14	5:42	4:24	5:44	4:26	5:44	4:24	5:46	4:28	5:53	4:31	5:56	4:35	6:05	4:45	6:07	4:46
15	5:43	4:22	5:45	4:24	5:45	4:22	5:47	4:27	5:55	4:29	5:57	4:33	6:06	4:44	6:08	4:44
16	5:45	4:20	5:46	4:23	5:46	4:20	5:48	4:25	5:56	4:27	5:58	4:31	6:07	4:42	6:09	4:42
17	5:45	4:19	5:47	4:21	5:47	4:19	5:49	4:24	5:57	4:26	5:59	4:30	6:08	4:41	6:10	4:41
18	5:47	4:17	5:48	4:20	5:49	4:17	5:50	4:22	5:58	4:24	6:00	4:28	6:09	4:39	6:11	4:39
19	5:48	4:16	5:50	4:18	5:50	4:16	5:51	4:21	6:00	4:22	6:01	4:27	6:10	4:38	6:12	4:38
20	5:50	4:14	5:51	4:17	5:51	4:14	5:52	4:20	6:01	4:21	6:02	4:25	6:11	4:36	6:13	4:36
21	5:52	4:14	5:52	4:15	5:52	4:12	5:53	4:18	6:02	4:19	6:04	4:25	6:12	4:35	6:15	4:35
22	5:53	4:13	5:53	4:14	5:53	4:11	5:54	4:17	6:03	4:18	6:05	4:23	6:14	4:33	6:16	4:34
23	5:54	4:11	5:54	4:12	5:54	4:09	5:55	4:16	6:04	4:16	6:05	4:22	6:14	4:32	6:18	4:32
24	5:55	4:10	5:55	4:11	5:56	4:08	5:56	4:14	6:06	4:15	6:07	4:20	6:16	4:30	6:19	4:31
25	5:56	4:09	5:56	4:09	5:57	4:06	5:58	4:13	6:07	4:13	6:07	4:19	6:16	4:29	6:21	4:29
26	5:57	4:07	5:57	4:08	5:59	4:05	5:59	4:12	6:08	4:12	6:08	4:18	6:17	4:28	6:22	4:28
27	5:59	4:05	5:59	4:07	6:00	4:03	6:00	4:10	6:10	4:10	6:11	4:16	6:20	4:26	6:23	4:26
28	6:00	4:04	6:00	4:05	6:01	4:02	6:01	4:09	6:11	4:09	6:11	4:15	6:20	4:25	6:24	4:25
29	6:01	4:02	6:01	4:04	6:02	4:01	6:02	4:08	6:12	4:08	6:13	4:13	6:22	4:23	6:25	4:24
30	6:02	4:01	6:02	4:03	6:03	3:59	6:03	4:06	6:13	4:06	6:14	4:12	6:23	4:22	6:27	4:22
31	6:03	4:00	6:03	4:01	6:05	3:58	6:04	4:05	6:14	4:05	6:14	4:11	6:23	4:21	6:28	4:21
Nov. 1	6:04	3:58	6:05	4:00	6:06	3:57	6:05	4:04	6:16	4:04	6:17	4:09	6:26	4:19	6:28	4:20
2	6:06	3:57	6:06	3:59	6:08	3:55	6:06	4:03	6:17	4:02	6:18	4:08	6:27	4:18	6:31	4:18
3	6:07	3:56	6:07	3:58	6:09	3:54	6:08	4:02	6:19	4:01	6:19	4:07	6:28	4:17	6:32	4:17
4	6:08	3:55	6:08	3:57	6:10	3:53	6:09	4:00	6:20	4:00	6:20	4:06	6:29	4:16	6:33	4:16
5	6:09	3:54	6:09	3:56	6:11	3:52	6:10	3:59	6:21	3:58	6:21	4:05	6:30	4:15	6:34	4:15
6	6:11	3:53	6:11	3:55	6:13	3:50	6:11	3:58	6:22	3:57	6:23	4:04	6:32	4:14	6:36	4:13
7	6:12	3:51	6:12	3:53	6:14	3:49	6:12	3:58	6:23	3:56	6:24	4:02	6:33	4:12	6:37	4:12
8	6:13	3:50	6:13	3:52	6:15	3:48	6:13	3:56	6:25	3:55	6:25	4:01	6:34	4:11	6:38	4:11
9	6:14	3:49	6:14	3:51	6:16	3:47	6:15	3:55	6:26	3:54	6:26	4:00	6:35	4:10	6:39	4:10
10	6:15	3:48	6:15	3:50	6:17	3:46	6:16	3:54	6:27	3:53	6:27	3:59	6:36	4:09	6:40	4:09
11	6:16	3:47	6:16	3:50	6:19	3:45	6:17	3:53	6:29	3:52	6:28	3:58	6:37	4:08	6:42	4:08
12	6:18	3:46	6:17	3:49	6:20	3:44	6:18	3:53	6:30	3:51	6:30	3:57	6:39	4:07	6:43	4:07
13	6:19	3:45	6:19	3:48	6:21	3:43	6:19	3:52	6:31	3:50	6:31	3:56	6:40	4:06	6:44	4:06
14	6:20	3:44	6:20	3:47	6:22	3:42	6:20	3:51	6:32	3:49	6:32	3:56	6:41	4:06	6:45	4:06
15	6:21	3:43	6:21	3:46	6:24	3:41	6:21	3:50	6:34	3:48	6:33	3:55	6:42	4:05	6:47	4:04
16	6:22	3:42	6:22	3:45	6:25	3:40	6:23	3:49	6:35	3:47	6:34	3:54	6:43	4:04	6:48	4:03
17	6:24	3:42	6:23	3:44	6:27	3:39	6:24	3:48	6:36	3:46	6:36	3:53	6:45	4:03	6:50	4:02
18	6:25	3:41	6:24	3:44	6:28	3:38	6:25	3:48	6:37	3:45	6:37	3:52	6:46	4:02	6:51	4:01
19	6:26	3:40	6:26	3:43	6:29	3:37	6:26	3:47	6:39	3:44	6:38	3:52	6:47	4:02	6:53	4:00
20	6:27	3:40	6:27	3:42	6:30	3:37	6:27	3:46	6:40	3:44	6:39	3:51	6:48	4:01	6:53	4:00
21	6:28	3:39	6:28	3:42	6:32	3:36	6:28	3:46	6:41	3:43	6:40	3:50	6:49	4:00	6:55	3:59
22	6:29	3:38	6:29	3:41	6:33	3:35	6:29	3:45	6:42	3:42	6:41	3:50	6:50	4:00	6:56	3:58
23	6:31	3:38	6:30	3:41	6:34	3:35	6:30	3:45	6:44	3:41	6:43	3:49	6:52	3:59	6:56	3:58
24	6:32	3:37	6:31	3:40	6:35	3:34	6:32	3:44	6:45	3:41	6:44	3:49	6:53	3:59	6:58	3:57
25	6:33	3:36	6:32	3:40	6:37	3:33	6:33	3:44	6:46	3:40	6:45	3:48	6:54	3:58	7:00	3:56