

IOWA CONSERVATIONIST

Volume 6

NOVEMBER 15, 1947

Number 11

YOUR RED FOX IS WAITING

FISH MANAGEMENT FACTS FROM THE SHOW ME STATE

(Editor's Note: The recent removal of length limits from Missouri fish by the Missouri State Conservation Commission, as reported in the October "Iowa Conservationist," may appear to be a radical change in the long accepted plan of fish management. Actually, this change is the result of a long-time study of facts that have been pointing toward such action for several years. Authorities investigated the effectiveness of length limits on the fish population in the lakes and streams, and as a result of their research and the changing needs of management, the decision was reached to eliminate length limits on all species except channel catfish taken for commercial use.)

IN simplest terms, the Missouri Conservation Commission's aim in fish management is to make available the largest number of the best fish for the most people, without endangering the resource as a whole.

In the past, revisions have been made on open seasons, creel limits have been reduced and length limits increased. The Commission has greatly curtailed such methods as seining, gigging, netting, trapping, and handfishing and has turned increasingly toward the hook-and-line style of landing a good catch. This latter method allows the available stock to be spread among the greatest number of anglers and it is the inevitable turn to this type of fishing that calls for the removal of the length limit.

Tests in many waters of not only Missouri, but other states, have proved that it is practically impossible to "fish out" an area by using the hook-and-line method. In fact, by retaining the length limit in connection with this kind of fishing, it was certain to be difficult to fish it enough to prevent overcrowding the population and resulting in stunted, undersized fish. This is true due to the fact that most fish produce more young than the habitat can take care of.

Fishermen realize that large fish are only a small part of the total fish population in any section of

(Continued on page 184)



Br'er Fox is one of the prime game animals of the world, and again this year is abundant in every section of the state.

COOPERATION IN FISH AND WILDLIFE MANAGEMENT

By Thomas G. Scott, Leader
Iowa Cooperative Wildlife Research Unit

IOWA may well be proud of the accomplishments of its Cooperative Wildlife Research Unit. The Iowa State Conservation Commission, the Iowa State College, the Wildlife Management Institute and the United States Fish and Wildlife Service have been working together harmoniously in the research, extension and training of fish and wildlife management for over a decade. The results of this program have not only contributed to better management of fish and wildlife in Iowa but have reached out and taken their place among the best work done beyond the borders of the state. Wildlife managers trained under the Unit system in Iowa are employed in many other states and in Canada.

The first cooperative wildlife research program was undertaken in Iowa in 1932. It was the product of the foresight of Mr. J. N. ("Ding")

Darling, and was provided for in a three year agreement among Mr. Darling, the Iowa Fish and Game Commission and the Iowa State College. Headquarters for the work were established at Iowa State College in Ames. This cooperative program was the forerunner to the Iowa Cooperative Wildlife Research Unit which was established in 1935. Since October 1, 1935 the Iowa Unit has been actively engaged in the investigation, training, and field extension of wildlife management. In 1942, 10 years after the original cooperative agreement, arrangements were made to undertake a cooperative program in fisheries research. The fisheries research was established in an agreement between Iowa State College and the Iowa State Conservation Commission. The organization of this fisheries research program provided for coordination through the existing Cooperative Research Unit.

(Continued on page 182)

WHEREVER you live in Iowa and within a very few miles of your door one of the most fascinating and self-sufficient of all game animals is waiting to furnish inexpensive, high class, outdoor sport. This animal is none other than the red fox, Reynard of the fables.

It is not the purpose here to defend or condemn Br'er Fox, his personal habits, his choice of food, or his excellence as a sporting animal; but rather to point out that the fox is here in abundance and that he will provide plenty of sport if given the chance.

Whether next year the fox will be less numerous or more abundant is a question upon which the experts have not agreed. They do agree, however, that for at least 200 years the fox has at irregular intervals climbed the population ladder to a peak, then tumbled to scarcity.

Possibly the scarce period is a short distance away. Perhaps this hero (or villain if you choose) of song and story has several seasons before he takes his population nose-dive.

Whatever the immediate future for the red fox, now is the time to enjoy "fox fascination" in woods, on prairie, in rolling hills, or almost any other type of terrain. It's time to "take him while he's high."

A majority of the fox taken in Iowa each year are trapped. Once a few fundamental fox trapping principles are learned, success is assured. To be in the expert class as a fox trapper, a hundred of the bushy tails must be trapped in a single season. Some of the first water experts take more than 150 during the trapping period.

It has often been said that the tyro's first six foxes are the toughest—then you just keep doin' what comes natur'ly, depending upon the electric curiosity of the fox to trap himself. Almost any trapping book at the library will point out fundamentals and almost every fox trapper will share his knowledge with the beginner.

Let's take him while he's high.

(Continued on page 180)

Iowa Conservationist

Published Monthly by

THE IOWA STATE CONSERVATION
COMMISSION

914 Grand Avenue—Des Moines, Iowa
(No Rights Reserved)

ROBERT D. BLUE, Governor of Iowa

G. L. ZIEMER, Director

JAMES R. HARLAN, Editor

ENID BROWN, Associate Editor

MEMBERS OF THE COMMISSION

E. B. GAUNITZ, Chairman.....Lansing
MRS. ADDISON PARKER.....Des Moines
E. G. TROST.....Fort Dodge
ARTHUR C. GINGERICH.....Wellman
F. J. POYNEER.....Cedar Rapids
F. W. MATTES.....Odebolt

CIRCULATION THIS ISSUE.....30,000

Application for second class entry pending
at the Post Office at Des Moines, Iowa,
under the act of August 24, 1912.

Subscription Rate.....40c per year
3 years for \$1.00

Subscriptions received at Conservation
Commission, 914 Grand Avenue, Des
Moines, Iowa. Send cash, check or money
order.

SEPTEMBER COMMISSION ACTION

A meeting of the Conservation
Commission was held in the Des
Moines offices on September 22 and
23, 1947.

Members present were E. B.
Gaunitz, Arthur C. Gingerich, F.
W. Mattes, Mrs. Addison Parker,
F. J. Poyneer, and E. G. Trost.

The Commission:

Approved plan as presented for
distribution of the book, "Water-
fowl in Iowa."

Authorized an annual award to
be made through the Iowa Press
Association to the county news-
paper contributing the most to con-
servation during each year.

Accepted condemnation award of
\$11,916.66 on the Parker Tract at
Clear Lake, Cerro Gordo County,
subject to release of funds by the
Interim Committee and approval
of the Executive Council.

Authorized attendance of Ass't.
Supt. of Game and one biologist at
the Four-State Quail Conference at
Falls City, Nebraska, October 16,
17, and 18, subject to approval of
the Executive Council.

Appointed Charles R. Brookins
to position of Equipment Super-
visor, and Otis McCartney to posi-
tion of License Clerk.

Approved improvements be made
on the shore of Storm Lake in the
amount of \$17,160.

Authorized the converting of two
dredges to Diesel power.

Authorized that Dr. Ira N. Ga-
brielson, President of the Wildlife
Management Institute, be asked to
make a survey and inventory of
conservation activities in Iowa.

Granted non-commercial permit
to the town of Bellevue to con-
struct an outlet for their storm
sewer above the high water level of
the Mississippi River.

Approved transfer of \$460 from
the Lands and Waters Contingency

fund to the maintenance fund of
Wild Cat Den State Park.

Adopted a Resolution of Neces-
sity and Notice relative to raising
the water level of Rice Lake in
Worth and Winnebago counties.

Adopted a Reciprocal Agreement
with Illinois relative to the taking
of waterfowl along the Missis-
sippi River.

Approved increasing the size of
the Forney Lake Migratory Water-
fowl Refuge as recommended by
Supt. of Game and Chief of Fish
and Game Division.

Granted authority to Chief of
Fish and Game Division to adjust
the territorial limits of established
muskrat refuges.

Adopted Administrative Order
No. 104 extending the trout season
to November 30.

Accepted and exercised the Osh-
eim and Berryhill options on lands
in the Myre Slough project in Win-
nebago County.

Accepted and exercised the
Moehr option on 1.72 acres in the
Goose Lake tract in Clinton
County.

Approved a Coordination Proj-
ect Agreement in regard to partici-
pation in salary, travel and subsist-
ence for the Commission's Pittman-
Robertson representative.

Meeting adjourned.

OCTOBER COMMISSION ACTION

A meeting of the State Conser-
vation Commission was held at the
Des Moines office on October 20,
1947.

Members present were E. B.
Gaunitz, Arthur C. Gingerich, F.
W. Mattes, and F. J. Poyneer.

The Commission:

Approved and executed five land
options for addition to Geode State
Park.

Adopted a Reciprocal Agreement
with the state of Nebraska govern-
ing the taking of migratory water-
fowl on the Missouri River.

Approved establishment of the
areas known as Provost Slough
and The Inlet, both adjacent to
Black Hawk Lake in Sac County,
as open water refuges.

Granted permit to the Texas
Company to construct a commer-
cial dock on the west bank of the
Mississippi River at Bettendorf.

Accepted resignation of Engi-
neering Draftsman T. R. McDon-
ald, effective October 2.

Adopted Administrative Order
No. 105 setting the 1947 pheasant,
Hungarian partridge and quail sea-
sons.

Adopted Administrative Order
No. 106 setting the 1947-48 musk-
rat season.

Adopted Administrative Order
No. 107 setting the 1947-48 mink
season.

Authorized building of necessary
laying pens and other temporary
structures at the Game Farm at
Ledges State Park.

Confirmed the action of Director
and Assistant Director in the pro-
cedure set up for handling the engi-



There is a constant struggle for existence between the little fishes. This year, because of spawning success, one minnow will be the most abundant. The next year a different species will be most numerous for the same reason.

SOME NOTES ON THE SMALL FISHES OF THE UPPER MISSISSIPPI

By Dr. Raymond Johnson

Upper Mississippi River Conserva-
tion Committee

THERE are at least 85 kinds of
fishes living in the Mississippi
River between the states of Minne-
sota, Wisconsin, and northern Iowa.
Fisheries investigators from all
three states have been studying
both game and rough fish from the
Mississippi for more than four
years in an effort to determine the
abundance and variety of fishes
present. It is believed that when
these and other basic facts are
learned, more suitable fisheries
regulations will be adopted by the
various states.

A large majority of the 85 kinds
of fishes in the Mississippi River
are small species which mature at
four inches or less in length. These
little fishes are seldom seen by fish-
ermen, although they are abundant
in all portions of the stream. They
include the minnows, dace, darters,
chubs and others too small to be of
economic importance to anglers,
but they do play an important part
in the diet of the game fish.

There are at least 12 kinds of

suckers, ten kinds of sunfish in-
cluding the largemouth and small-
mouth bass. Few anglers realize
there are 15 members of the perch
family, with some maturing at less
than two inches in length, which
places them among the candidates
for the title of world's smallest
fresh water fish!

There is a constant struggle for
existence between these little fishes.
Some years, because of spawning
success, the river shiner will be the
most abundant, and other years the
spotfin shiner or some other species
will be the most common for the
same reason.

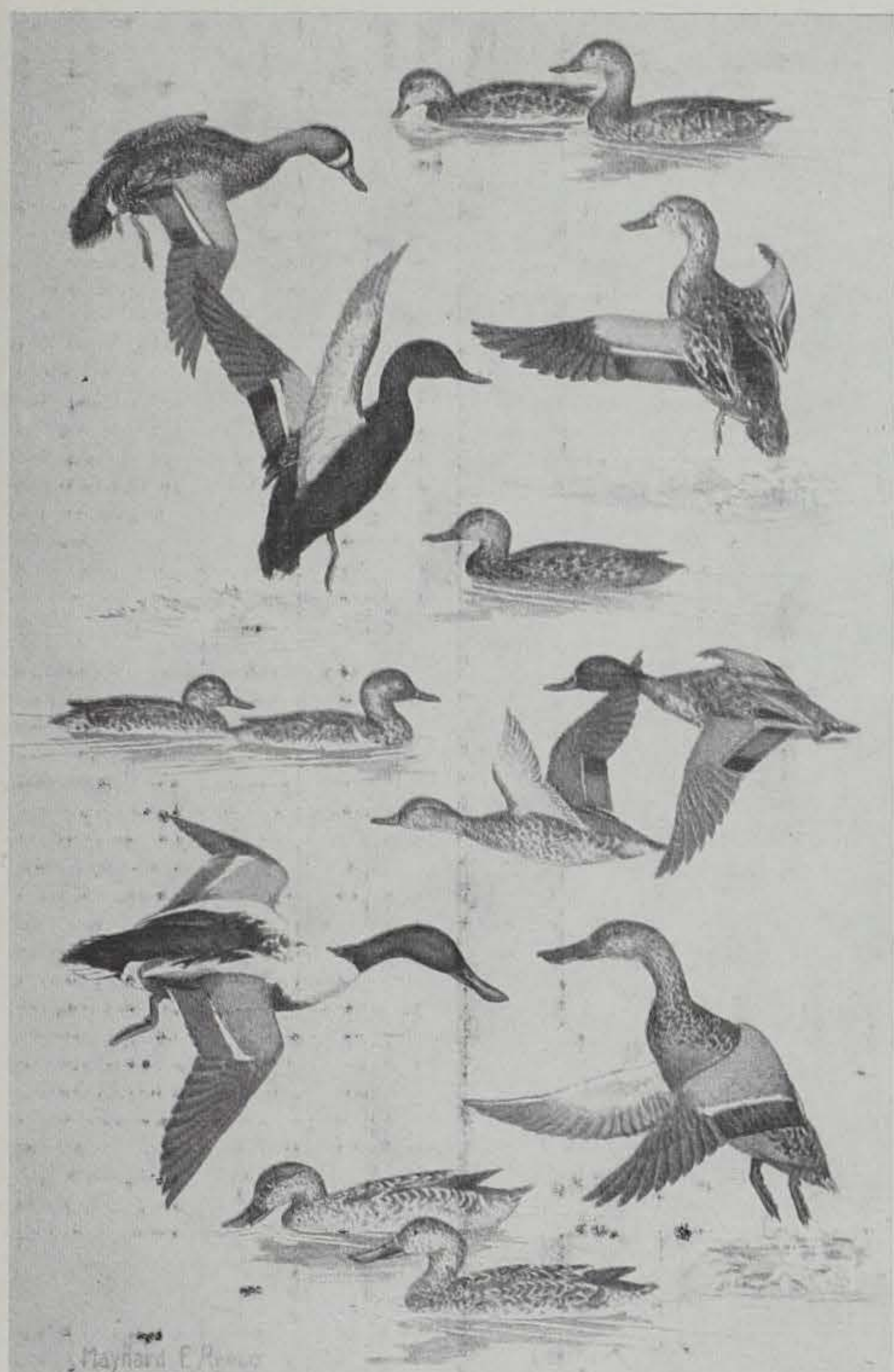
Apparently there is a slow but
definite extension northward of the
range of some of these small fishes,
and forms which were unknown in
the Wisconsin waters a few years
ago are now abundant in the vicin-
ity of La Crosse and Winona.

Don't overlook the importance
(Continued on page 179)

SPORTING FIREARMS STILL SHORT

Although more sporting firearms
were produced in the last twelve
months than any time in the 81-
year old history of one of the major
firearms companies, there is still a
shortage.

"In spite of tremendous produc-
tion, thousands and perhaps hun-
dreds of thousands of persons still
are unable to purchase the firearm
of their choice. We have made
only a dent in satisfying the de-
mand which was built up for
sporting arms during the five year
period when our plant was devoted
to the production of military arms.
To this backlog we have the addi-
tional demand created by ex-G.I.'s.
Millions of American troops be-
came acquainted with Winchester
produced Garands and carbines and
by seeing millions of rounds of mili-
tary ammunition stamped with our
initials. Our plant's entire pro-
duction is still being distributed to
jobbers and through jobbers to
dealers on an allocation basis and
will probably continue to do so
until the pipeline from the factory
to the consumer has been filled.
How long this process will take
cannot be predicted."



WATERFOWL IN IOWA

You Can't Miss This Christmas

It is difficult and even dangerous to attempt to pick Christmas presents for the outdoorsman unless you know exactly what he wants. This year your task of selection has been made simpler and easier by the republication of "Waterfowl in Iowa," the answer to the duck hunter's letter to Santa Claus.

"Waterfowl in Iowa" by Jack and Mary Musgrove illustrates in color all of the ducks, geese, and swan known to have occurred in Iowa and in their fall plumages so important to the

waterfowler. In addition to the color plates, the 130-page book contains numerous black and white drawings that enable the duck hunter to understand these birds more thoroughly.

"Waterfowl in Iowa" is published at cost by the State Conservation Commission and will be mailed, postage paid, to any address in the United States for one dollar.

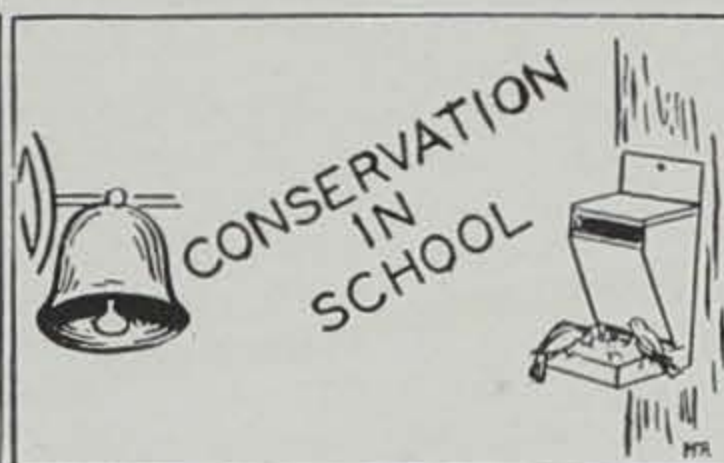
"Waterfowl in Iowa" fills the bill for an inexpensive Christmas gift.

Some Notes . . .

(Continued from page 178)

of the little fishes in the mighty Mississippi River. Tiny and insignificant as they may appear, they play an extremely important role in the complicated food chain of the game fish. Some of the larger fishes, like the bass, walleye, perch,

northern pike, crappie and others, depend almost entirely on the hordes of the little fishes for food. In subsequent issues of this publication we will go into other important phases of the work of the survey, which will include such items as game and non-game species, commercial fishing, etc.



(The "Iowa Conservationist" goes cost-free to more than eight thousand Iowa public schools each month)

BEGINNING this spring Iowa school children will see a new type circus on their own school grounds. The circus will be the new mobile Conservation Exhibit being prepared by the State Conservation Commission. The show is being built on and in a 34-foot trailer, drawn by a tractor.

The most striking feature of the new Conservation Exhibit will be ten double pens of live native animals and ten tanks of native live fish. There will also be an exhibit of live reptiles. The animals will be viewed from the outside of the trailer, which contains sliding panels on the sides and at the ends.

In addition to live specimens, movies will be shown and a loud speaker system will be used to give conservation short talks.

The trailer is to be used one week in a county, going to two schools each day during the week. It is planned to have a Saturday night showing in each county at which time speeches and movies for adults, as well as the animal exhibit, will be presented.

The conservation officer in charge of each county in which the exhibit is to be shown will be in charge of the show. Schedules for exhibits will be worked out by the county school superintendent, the local conservation officer and a staff member of the Conservation Commission.

During the county fair season, the exhibit will be routed to county fairs, and during the summer months the show will be available for other types of public events.

Although the new conservation

UNUSUAL GOOSE FLIGHT THROUGH STATE

Conservation officers reported the heaviest flight of geese through the state for many years, October 21-23. The flight was made more noticeable by the clamoring of large flocks confused by fog and low clouds. First reports of the heavy migration were from the Upper Missouri River and the northwest section. By the second day the birds had blanketed the entire state. Although the Canada goose limit is only one bird this year, many Iowans experienced the thrill of downing their first honker.

Of greatest interest to game officials and ornithologists is the fact that many of the geese were blue



Hundreds of Iowans this fall have had the supreme thrill of downing their first Canada goose.

geese. While blues migrate north in the spring up the Missouri River Valley in flocks of several hundred thousands, the fall flight, until a few years ago, was non-existent. (Continued on page 182)

circus is designed to entertain, it has a more serious basic purpose than pure entertainment. The entire show program will be developed around the fact that knowledge and understanding of the problems of conservation are necessary if the people of the United States are to remain prosperous and if this country is to continue as a have rather than a have-not nation, like so many of the starving peoples of the rest of the world.



The Conservation Commission's new exhibit trailer. Window panels on sides and end open to show live fish, birds and animals. Jim Sherman photo.



Courtesy Michigan Conservation Department.

Your Red Fox . . .

(Continued from page 177)

Still hunting the red fox in Iowa is productive. In this method the hunter finds a fresh track in the snow, carefully stalks the fox until a shot is presented. Still hunting is one of the cleanest, most sporting of all game pursuits, requiring stamina, marksmanship, and a profound store of fox knowledge.

Fox hunting with dogs falls into two distinct classifications in Iowa. The first is the fox chase where no fox are taken but merely trailed by bell-toned dogs for the thrill of hearing the rival dogs in the pack work out the age old riddles of foxdom.

In the second classification in which dogs are used, the fox is killed by the hunter. In this method, trailing dogs are usually used to start the fox; then the quarry is either maneuvered into range of firearms or is chased to a crossing where running dogs are stationed. When the dog crosses, running dogs that pursue by sight are released and in fair chase overtake (sometimes) and kill the fox much in the same manner as a terrier killing a rat.

Circle fox hunting has many modifications and in recent years has become very popular in the prairie and flat parts of Iowa.

The most common plan of circle hunt is the so-called section hunt. A mile square containing foxes is selected and a minimum of forty shotgun-armed hunters surround the area. Rifles are dangerous and are generally excluded. Usually ten hunters on each of four sides work toward a common union in the center of the section. As the lines converge to within a few hundred

yards the foxes attempt to break out of the living fence and as they pass between two of the human pickets the shotguns boom and the foxes roll.

Chasing foxes from airplanes and shooting them with shotguns, while productive, has been outlawed

BESIDES FURNISHING SPORT AND INCOME FROM PELTS FOXES PLAY ANOTHER PART IN THE WILDLIFE SCENE

DESTRUCTIVE RODENTS FORM BULK OF FOXES' DIET.



INSECTS AND FRUIT MAKE UP A SIZEABLE PORTION



AND HE TAKES HIS SHARE OF POULTRY AND GAME



Courtesy Michigan Conservation Department.

in Iowa and this dangerous sport is no longer considered a fox taking method in this state.

There are many other methods of out-foxing the old master, such as tolling, squeaking, and shadow hunting, all predicated on the fact

ANCIENT FISH PROBLEM

County Judge J. Allan Simpson, Racine, furnishes the following poem written by the Rev. Thomas Bastard in 1498 and it has a modern sound:

"Fishing, if I, a fisher, may protest
"Of pleasures is the sweet'st, of sports the best,
"Of exercise the most excellent,
"Of recreations the most innocent.
"But now the sport is marred, and wot ye why?
"Fishes decrease, and fishers multiply."

The report of a rifle or shotgun is caused by the impact of the expanding powder gas upon the atmosphere.

that Br'er Fox is a fur-covered bundle of curiosity.

With foxes high, the quail or rabbit hunter will do well to carry a heavy load or two, especially for fox. Shot size from number two to four buck is effective fox medicine for long distances, and again this year hundreds of Iowans will tumble their first fox with a common rabbit load.

Your fox is waiting, let's take them while they're high.



Courtesy Michigan Conservation Department.

Wardens Tales

Shop Talk From the Field

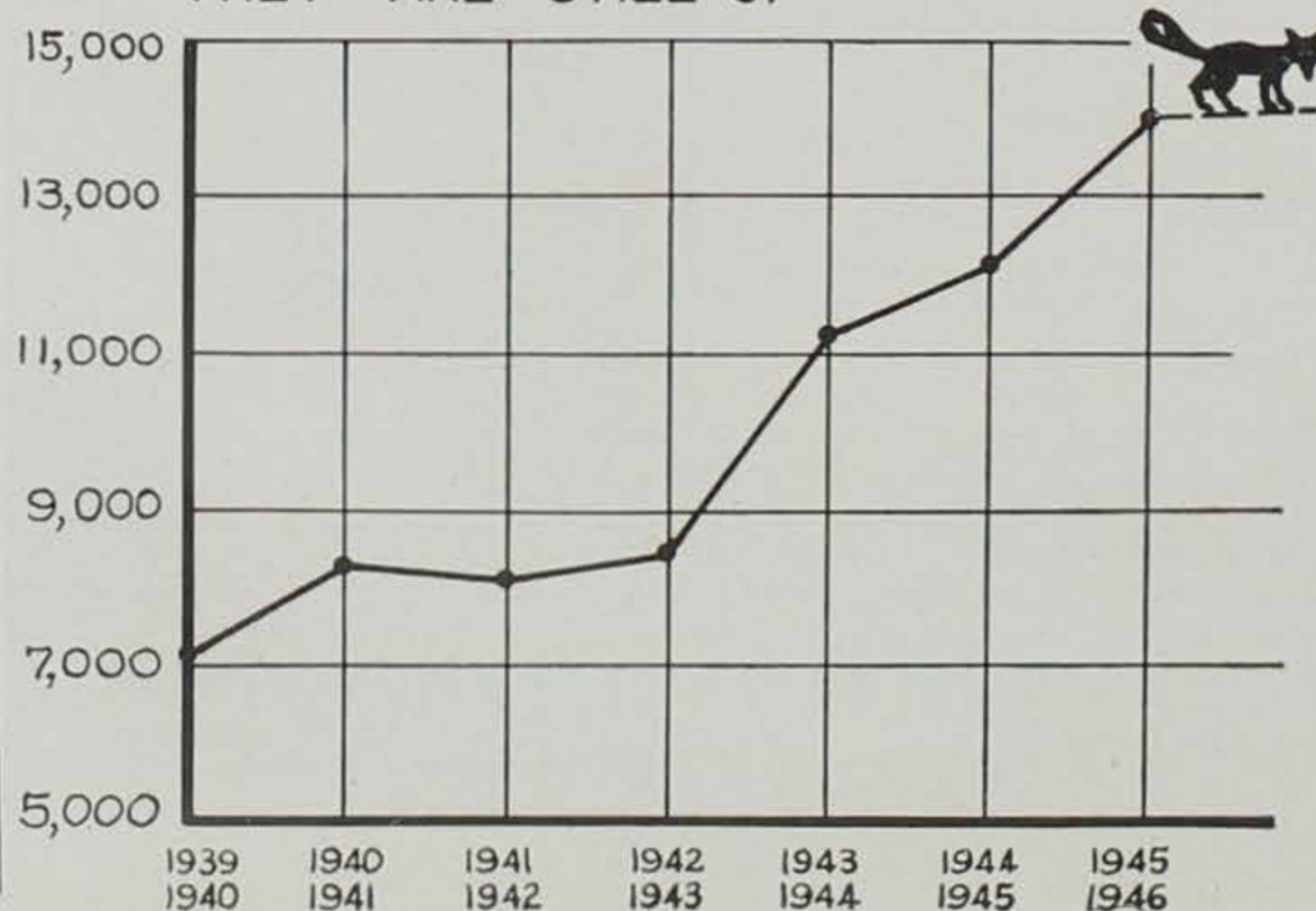
Conservation Officer Jim Gregory, in charge of Lyon, O'Brien, and Osceola counties, reports an unusual wildlife accident. Ted Herman, a farmer living near Lester in Lyon county, was picking corn with a big two-row cornpicker. Parts of the field were rather weedy, and as the picker went through a grass patch, it picked up a full-grown raccoon, ran it through the machine into the rollers. The machine was jammed and it was necessary for Herman to take it apart to remove the carcass of the dead animal.

Garfield Harker, State Conservation Officer for Jones and Jackson counties, had things reversed for him recently, according to the Monticello Express. Gus Von Sprecken, 76, of Wyoming, was fishing catfish when the officer stopped to check his license. The fisherman dug out his billfold, while Harker held the pole. Mr. Von Sprecken had a series of licenses for several years back but finally dug out the 1947 issue. During the interval a fish bit and Gar landed an undersized catfish. Von Sprecken watched the small fish returned to the water and asked Harker if that was the size he usually caught. Gus thoroughly enjoyed the discomfort of the popular officer who considers himself a whiz of a catfisherman.

Conservation Officer Stubb Severson, in charge of Clay and Palo Alto counties, has heard many eerie sounds in the wild, including the howl of a coyote, mourn of the loon, and wail of the great-horned owl. But he says the distress cry of the early pheasant shooter when caught cold is the wildest of all. He writes:

"I was driving cross country one evening, when I came over a sharp rise on a dirt road. About a quarter of a mile ahead a car was creeping along and on the front fender sat a man holding a shotgun. I released the clutch of my car and coasted right up behind the poachers. Just as I put on my brakes to avoid bumping the car ahead the shotgun came up and down went a rooster pheasant that had flushed from the roadside. The man jumped off, picked up the bird, turned around, saw me, dropped the bird, dropped his gun, took two steps towards me, and stopped. Then came the almost hair-raising wail 'Oh-h-h-h!' At the end of his cry of pain he reached over, picked up the pheasant, and his gun, brought them to me. He had another rooster and three hens in the trunk of his car which cost him \$300. But even his wail when the judge pronounced sentence was anti-climactic."

FOX POPULATIONS IN IOWA HAVE THEIR UPS AND DOWNS THEY ARE STILL UP





One need only expose the average American youth to the outdoors and the attractions of the hunt to imbue him with a desire to become a sportsman.

HUNT WITH HIM NOT FOR HIM

By Henry P. Davis

GO HUNTING with your boy this year, then you won't have to go hunting for him. This advice is worth the serious consideration of every father, guardian, or friend of a teen-age American boy. All healthy American boys have a surplus of energy which they must work off. Sometimes this youthful exuberance carries them into dim and dangerous places, strewn with

hunt grows stronger, for every sportsman must exercise a greater amount of skill than ever before if he is to reap a share of the annual wildlife harvest.

One has only to expose the average American youth to the charms of the outdoors and the many attractions of the hunt to imbue him with the desire to become a sportsman.

Teach him that the greatest fun is to be found in finding the game not in taking, although the latter in a fair measure is the final desire. Point out the many little things which contribute to the pleasures of the hunt. Show him how the hand of nature weaves her many wonders, small things entirely overlooked by the casual observer. Answer his countless questions as best you can, for you can rest assured his quick young eyes and grasping mind will bring simple queries, which indeed will tax to the utmost your knowledge of woods lore and natural history.

When you take a boy hunting you pay him the highest compliment. You are treating him like an equal and no boy can fail to appreciate the tribute. He knows that possession of a gun carries with it a grave responsibility and he is anxious to learn to use it safely and properly. He is proud of the fact that you expect him to act like a man and he revels in your confidence.

Hunting will not only give him a sense of responsibility but will teach him fair play in his relations with mankind and wildlife alike. It will create a respect for the property rights of others and will bring him to a realization of the necessity of conserving our natural resources. It will set his feet in the path of clean living and clear thinking. If you have fair luck, all well and good; but cause him to realize that good sport is to be truly appreciated and that whether the game bag be full or empty

there's a lot of fun in just hunting.

He'll glory in recounting his experiences to his pals and he'll grow closer to you and you'll be even a bigger hero to him than you are now.

You will not have to go hunting for him if you take him hunting with you.

OUTBOARD WINTER STORAGE

PREPARING an outboard motor for winter storage is a simple procedure, but the few necessary steps are important in that they insure the engine being in top operating condition for the first spring fishing trip.

A thorough cleaning is the first step. It simplifies the succeeding operating operations, and will reveal any possible defects. A damp cloth will usually suffice, but in the case of stubborn deposits use of a little motor fuel on a cloth will almost always loosen them.

If the motor is to remain for the winter in an unheated area where there is danger of freezing it is most important that the water jacket be completely drained before freezing weather occurs. Many motors have a drain plug on the lower unit. This should be removed as well as the vent and grease plugs. If the flywheel is rocked back and forth a few times and the motor turned from side to side, all water will be dispelled. Any water which has worked into the gear case also will usually drain. Water left in a motor can cause as much damage as can water freezing in the cooling system of a car.

Fresh grease in the gear case will insure all working parts in the lower unit being protected from corrosion. The new grease will also expel the last of any water which

has collected there. Use the grade of grease recommended by the motor manufacturer.

A careful inspection of the clean motor will determine if any repairs are necessary. If such is the case it is important that it be taken to the motor service station now and not permitted to remain unpaired during the winter. Dealers now have the time to make an estimate of what is required and then do the work in an unhurried manner.

If the motor does not require either overhaul or repair, the interior of the power head should be given a coat of oil to prevent corrosion. The fuel tank should be drained to eliminate the possibility of any gummy deposits forming in the fuel lines or carburetor. Use a little fresh fuel to rinse out the tank. If there is a fuel strainer at that point clean it.

Fuel lines can be disconnected and blown out to free them of any sediment. The carburetor bowl likewise will require draining and the fuel screen cleaned with air. Replace all parts, and use only a wrench on fuel line fittings. Pliers will badly mar the soft metal of the fuel system.

To protect the interior of the motor remove the spark plugs. Place about two tablespoons of good oil in each cylinder. Then ground the sparkplug wires on any part of the motor and turn the flywheel slowly several times. This will coat the piston and cylinder walls with the oil. Unless the sparkplugs are very new, it is a waste of time to clean them. It will be much better to replace them in the spring. But put them back in the motor now to keep dampness out of the cylinders.

The final step is to wipe the entire motor with an oily cloth. Store it in an upright position and keep it from contact with a damp wall. Basement or garage are likely storage places.



All healthy American boys have a surplus of energy which they must work off.

vicious habits; but no one ever heard of a boy who loves to hunt or fish becoming a juvenile delinquent.

Real sportsmanship, fair play, and a sense of responsibility, all a part of the two sports, cannot walk hand in hand with juvenile delinquency. They speak a different language.

Hunting is the oldest of all sports. Long before it became a sport man was forced to hunt for his very existence. For centuries the sport has had a strong appeal to men, women, youngsters, rich and poor alike. Every section of this country, even though comparatively new, is deep in the traditions of the chase.

Despite the fact that game supplies are no longer as plentiful as in former years, the thrill of the



Proper winter storage of your outboard motor will pay dividends in trouble free trips next year. Jim Sherman photo.

Cooperation . . .

(Continued from page 177)

The research of the Cooperative Unit has been concerned with many problems in fish and wildlife management. As a result of the study given these many problems, a great fund of information useful to managers of fish and wildlife has been accumulated. The magnitude of these data can best be appreciated through examination of the some 368 publications prepared by workers associated with the Unit.

Nearly all the fish and wildlife of Iowa have received attention. However, only certain important groups and species have been made the subject of intensive research. Among the birds that have been given particular attention are the following: Bobwhite, coot, blue-winged teal, redhead, ring-necked pheasant, mourning dove and great-horned owl. The muskrat, cottontail, red fox, spotted and striped skunks, mink, fox squirrel, and raccoon are among the mammals that have been studied intensively. In addition to a survey of Iowa fishes, detailed investigations have been made of the yellow pike perch, and the silver bass. Current fisheries research includes work on the management of the bullhead, yellow pike perch, smallmouth bass, forage minnows and farm pond fishes. A study of the distribution and ecology of plants significant to waterfowl has been continuous since 1934. Substantial contributions have also been made on such general problems as predation, population phenomena and the meaning of the interspersed of open water and emergent aquatics to waterfowl production.

The training of students in Fish and Wildlife Management is based on a program of course work in the Iowa State College. For those who



In 1942 a cooperative fisheries research program was established in an agreement between Iowa State College and the State Conservation Commission.

major in Wildlife and Fishery Management specialized courses are offered; Game Birds and Mammals, Fishes, Fishery Management, Limnology, Techniques in Wildlife Management, Parasites of Animal Wildlife, Bird Study, Amphibians and Reptiles, Wildlife of the World, Wildlife Management, Fish Propagation and Pond Management, Fishery Resources of North America, and Animal Ecology. The above courses are supplemented and supported by courses in Zoology, Entomology, Forestry, Botany, Soils, Land Management and Statistics. Large representative collections of birds, fishes and mammals are available for observation and study. Other facilities for such studies include a well-trained faculty, excellent research equipment, and a large library, as well as opportuni-

ties for field observations and experiments.

Several degrees are offered. After receiving a bachelor's degree some students continue their studies toward advanced degrees. Qualified students may pursue research studies leading to the degrees of Master of Science and Doctor of Philosophy. Teaching fellowships and graduate assistantships are open for superior students with good background training and personal qualifications for a career in wildlife work.

Emphasis is placed on training, and each student is given free opportunity to develop and demonstrate ability to carry on independent research related to the management of fish and wildlife. Each student is assigned a field problem of general scope. An opportunity is thus afforded for the student to demonstrate initiative in preparing an outline of procedure for a particular phase of research within the scope of this general problem. Temporary stations are located in the field in localities where these problems can best be pursued. The preparation of data for publication in technical and popular articles is encouraged and guided as a part of the growth and development of the student manager.

During the life of the Unit 71 degrees have been granted to students of wildlife management. The records show that these degrees were granted as follows: Bachelor of Science, 33; Master of Science, 24; and Doctor of Philosophy, 14. Of the 33 men who obtained the Bachelor of Science degree in wildlife management, 29 found employment in the field; of the 24 with the Master of Science degree, all are employed in the field or closely associated with it; and all of the 14 with the Doctor of Philosophy degree obtained employment in wildlife management or closely related work. Former students are now

Laceyisms

Excerpts From Speeches of
Major John F. Lacey
Iowa Member of Congress
1880-1907

The forest, which has done so much to prepare the earth for man's use, was encountered by the early settlers along the whole Atlantic shore. The necessity of clearing away this vast mass of vegetation led the pioneer to look upon the woods as the enemy of man.

Where the bison turned his head to the storm and fought it out with the blizzard, the American cattle of today turn tail to the wind and drift to destruction. The bison was clothed expressly to resist the severity of the climate in which he was living.

Prehistoric man, in his long warfare against the mammoth, left no one to tell the tale. Necessity for food, no doubt, was his excuse, and the slow breeding of these gigantic beasts made the extermination comparatively easy.

No wealth is so enduring as that which finds its roots in the soil, but in America the very rich have generally preferred a more productive though less lucrative, form of property.

The old families of New York City who have grown rich by the wisdom of their ancestors, are now busy tracing their genealogical trees back to Alfred the Great. None of them care to go back to Noah, for that would connect with their uncles, Shem and Ham.

For more than three hundred years destruction was called "improvement" and it has only in recent years come to the attention of the people generally that the American people were like spendthrift heirs wasting their patrimony.

The public conscience has become quickened, and the attempt to preserve and restore some of the wildlife of America is no longer looked upon as a fad or idle sentiment.

The builders of nations may be rough, but they must be strong. The very faults of the old settlers may be classed among their virtues. Men complain now about what these old men would have called trifles. They worked and cared for themselves and would have scorned to ask the government to take care of them. Put those men on an island and they would soon organize a free government, and put it in running order. They had an abiding faith in their ability to take care of themselves and to get the best of everything.

Goose Flight . . .

(Continued from page 179)

ent in Iowa. Each year since the advent of the mechanical corn-picker the fall flight of blue geese in Iowa has increased in size and shifted farther west from the prehistoric non-stop flight lane east of this state. Each year greater numbers of blue geese stop during the hunting season and this year's flight is larger than any in previous history. It is hoped that ultimately the entire flight will move west and stop in Iowa during the fall.

employed in 20 of the 48 states and in Canada.

Thus, through its effective program of research, training and extension the Iowa Cooperative Wildlife Research Unit has contributed on a state, regional and national scale to better management of fish and wildlife and to greater harmony among the agencies and individuals concerned.



Scientists of the Iowa Cooperative Wildlife Research Unit have made studies of nearly all species of native fur and game animals. Outstanding contributions have been made to the knowledge of America's number one fur animal, the muskrat. Jim Sherman photo.

WHAT DOES MERE MAN KNOW ABOUT THE PERILS OF A NON-STOP FLIGHT?

By Albert M. Day, Director
U. S. Fish and Wildlife Service

MR. DUCK HUNTER—You have had or will have a chance to enjoy your favorite sport for not more than 30 or 35 days this year, depending upon whether your state

has a continuous or split season, and whether you are in the eastern half of the United States, or the western. That isn't much, compared to past years. You feel sorry for yourself and quietly, some of you noisily, complain about those dratted regulations and what they have done to you.

How about pausing for a moment to give thought to the duck? For the past four years he has been plagued first with drouths that sucked his northern potholes and sloughs dust dry, and then with floods. This year an unusually late cold spring was followed by heavy rains that flooded vast areas of marsh nesting lands in the eastern half of Canada.

As he began the long migration southward, could he contemplate—if ducks do contemplate—becoming the center of attention in the sporting world for 30 or 35 days only? Not by a long shot. He had to keep a sharp eye peeled for blinds, decoys, and guns beginning September 1, if he spent the summer in eastern British Columbia, Manitoba, or the Northwest Territories.



Albert M. Day, Director, U. S. Fish and Wildlife Service. U. S. Fish and Wildlife Service photo.



For six months during the year, somewhere on the continent, North American waterfowl must be on the alert for hunters hidden in innocent looking groups of rushes. Jim Sherman photo.

Other provinces opened from September 6 to October 1. This makes a maximum of 36 open days before he crossed the line into the United States on his southward journey.

Then what happens? This year he is being met by the greatest army of U. S. hunters in history. Duck stamp sales last year amounted to more than 2,000,000; and this figure is probably being equalled or exceeded this fall. Think of it! Three times the number of hunters this year that were in the blinds when the recent duck decline began.

Does Mr. Duck face this army of hunters for only 30 or 35 days in the United States? He does not. Some hopeful and enthusiastic hunter is on the watch for him from October 7 in the northern tier of states to January 6 in the southern. This makes another 92 days of blazing guns, or a total of 128 by the time he reaches the Gulf or the Mexican border.

Then if he has survived the gauntlet and decides to go on into the Caribbean or Mexico or Central America, he faces more hunters. In some spots hunting continues until the migration urge sends the birds winging back to the nesting grounds. Add the rest of January and all of February for such areas and we bring the total period of shotgun hazard to 181 days. Thus, those hardy birds that travel the perilous route down the West Coast from British Columbia to Yucatan, or through the Mississippi Valley from Manitoba to Cuba, spend just half of the year avoiding hunters, to say nothing of illegal trappers, poachers, predators, and botulism. No wonder the birds squawk appreciatively as they dive into the safety of the all too few Federal and State refuges set apart to provide food and protection for them.

So you, Mr. Duck Hunter, when you indulge in that gripe about the season this year being too

short, too early, or too late for your own particular spot, remember this: For the ducks the season runs from September 1 to March 1—six months—with 2,000,000 hunters in the United States lying in wait, plus the hunters of Canada, Mexico, Cuba and Central America, augmented by many visitors from the United States.

As Ding so aptly puts it, "What Does Mere Man Know About the Perils of a Non-stop Flight?"

SOME FIREARMS MUST BE REGISTERED

B. F. Wilson, Investigator in Charge of the Alcohol Tax Unit, U. S. Treasury Department of Des Moines, has asked the Conservation Commission to help publicize the fact that certain firearms must be registered with his department.

Under the National Firearms Act the following firearms must be registered: (1) All machine guns or machine gun pistols, that is, any weapon capable of firing more than one shot with a single pull of the trigger. (2) Rifles or shotguns, with a barrel less than 18 inches in length, except rifles of .22 caliber or smaller, if the barrel is 16 inches or more in length. (3) Pistol type weapons that are equipped with a shoulder stock attachment. (4) A silencer or muffler for any firearm.

Standard rifles, shotguns, or pistols do not require federal registration. Blanks for registration applications may be secured by writing Mr. B. F. Wilson, 202 Home Federal Building, Des Moines, Iowa.

WANT TO BE HAPPY? HERE'S AN OLD CHINESE RECIPE

If you wish to be happy for an hour, get intoxicated.
If you wish to be happy for three days, get married.
If you wish to be happy for eight days, kill your pig and eat it.
If you wish to be happy forever, learn to hunt and fish.



What Does Mere Man Know About The Perils Of A Non-Stop Flight?

Reprinted from "Our Great Out-Of-Doors," published by Iowa Division Izaak Walton League.

Fish Management . . .

(Continued from page 177)

water; the big majority is composed of young which are mostly of a size below what had been set up as a minimum legal length.

The Commission found that when fishermen were forced by law to take only the larger fish, they were contributing to a condition that ultimately can result only in unsatisfactory conditions—if some corrective action is not taken. The authorities also found that the crop of available fish was not being harvested.

It is common knowledge that any crop should be harvested as soon as it is in usable condition. In the fish crop, the harvesting should come when the young are large enough to furnish both sport and food and when the largest number of usable-sized fish are available. The Commission points out that the smaller the available crop, the fewer successful fishermen there will be.

In most waters, food for fish is limited. Increasingly more food is needed to add each ounce of flesh as the fish matures. This means that less food is available for the entire population and the results are seen in stunted fish. When only the larger fish are consistently taken and the small ones are considered illegal, it means that the breeding stock is constituting the entire harvest. This may be compared to a cattle breeder who would select his blue-ribbon cows and bulls for butchering and retain the culls to raise calves.

The principles of "no length limits" have been tested and proved on the Lake of the Ozarks and on other large bodies of water. Studies during the last four years on the Missouri and Mississippi rivers have confirmed the findings. These studies too, have shown that the mid-season closed period on channel catfish had little to do with reproductive success—and, when a restriction is not effective manage-



"It is the Conservation Commission's aim in fish management to make available the largest number of the best fish for the most people, without endangering the resource as a whole." Jim Sherman photo.

ment, the Commission feels it should be revised.

The capacity of Missouri's waters to carry fish has gradually reduced by erosion while fishing interest has grown greatly. Present regulations will lead to the taking of more of the harvest from the available crop and less from the breeding stock. The number of young fish is large, and it is from this group that the greatest part of the harvest should be taken. The size of the breeding stock, or the older fish, while adequate for reproduction is too limited to bear the brunt of both the harvest and production.

Fishermen are not required to keep every fish they catch, regardless of size, until their creel limit has been reached. The angler can now exercise discretion in his fishing. He can keep small fish that are injured in the taking and it is no longer necessary to put such fish back into the water to die. How-

ever, the angler may return small, uninjured fish if he wishes. The Commission recommends that fishermen keep all usable fish and it suggests that killed or injured fish be retained in possession.

UPPER PINE LAKE REPAIRS MADE

Drained early in July when the Commission started repair work on the spillway badly damaged by spring floods, Upper Pine Lake is again ready for water. The spillway work has been completed and fish screens installed in the main spillway.

When the lake was drained the fish were removed and the game fish placed in holding ponds nearby. All fish remaining in the lake and in the stream were destroyed with Cube root. The purpose in the complete fish removal was to free the lake from rough fish before restocking.

It is hoped that the lake will contain sufficient water before freeze-up so that it may be restocked this fall; however, if water levels do not reach the desired stage this fall it will be restocked early in 1948.

CARP TRAPS IN IOWA WATERS

By E. B. Speaker and O. J. Koch

AN ARTICLE appeared in the April 1947 issue of the "Conservationist" advising of the proposed use of the Modified Wisconsin fish trap in certain Iowa waters. The trap consists of a wooden slat fence equipped with a large square pound. These traps usually are placed across the outlet of bays or sloughs adjacent to lakes. Fishes migrating to their spawning areas strike the fence and as they attempt to swim around it are led into the throat of the trap. The carp and other non-game fish are



Twenty-five thousand pounds of carp and buffalo were taken in this trap at the inlet of Storm Lake during the spring.

disposed of and the game fish, principally bass, crappie, bluegill, northern pike, and bullheads, are lifted over the trap into the spawning area where they are permitted to spawn without interference from rough fish.

Since the article appeared we have had numerous requests to furnish data on the success of these traps. To date, most of the work has been done on lakes in still or slowly moving water. These traps are not designed for use in rivers, but the department is working on modifications which may be used successfully in streams at a later date.

The purpose of the traps is to augment the program of rough fish elimination by nets, seines and other conventional means. Where conditions are ideal for trap use, much success has been attained.

The following is a report of success of the traps in various waters from May 1 to July 1, 1947. In Iowa waters traps are most successful in spring and early summer.



"The fish crop should be harvested when the young are large enough to furnish both sport and food and when the largest number of usable sized fish are available."

Water	County	Species	Number
Spirit Lake	Dickinson	Carp	85,793
Silver Lake	Dickinson	Carp	82,820
Storm Lake	Buena Vista	Carp	18,905
Storm Lake	Buena Vista	Buffalo	7,063
East Okoboji	Dickinson	Carp	20,958
East Okoboji	Dickinson	Buffalo	80
Lost Island	Palo Alto	Carp	68,538
Outlet Tuttle Lake	Emmet	Carp	7,398
Outlet Tuttle Lake	Emmet	Buffalo	11,750
Outlet Tuttle Lake	Emmet	Quillback	365
Blue Lake	Monona	Carp	3,928
Blue Lake	Monona	Buffalo	3,703
Blue Lake	Monona	Shad	2,613
Silver Lake	Palo Alto	Carp	1,410
TOTAL			315,324