

# IOWA CONSERVATIONIST

Volume 8

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Number 4

## BULLHEADS—THE PEOPLE'S CHOICE

### DOVES AND PIGEONS

By Roberts Mann

There are several hundred kinds of doves and pigeons distributed around the earth, including approximately 150 varieties of domestic pigeons, varying from the giant crowned pigeon of New Guinea to the little eastern ground dove, which is about the size of a bluebird, native to our South Atlantic and Gulf coasts. The terms "dove" and "pigeon" are used interchangeably in the common names given them.

They have two peculiarities. One is that, in drinking, they do not sip and raise their heads as other birds do, but take long draughts. The other is that their naked helpless young are fed with a secretion, known as "pigeon milk," from the parents' crops; later with regurgitated half-digested food. A naturalist, attempting to raise a young dove by hand, was unable to get it to eat until he discovered and pressed a little swelling at each corner of its mouth. Then the mouth flew open and the throat muscles began to work spasmodically. Apparently, when the old bird and the young bird interlock bills, these swellings are pressed and the squab is enabled to swallow.

The dove has become the emblem of peace and love, probably because of the devotion of a mated pair to each other and to their young, the familiar strutting, billing and cooing of the male during courtship, and their gentle timid nature. Doves and pigeons have been used as messengers and food since earliest time. In the Bible we are told that Noah sent forth a dove and, when she returned with an olive leaf in her mouth, he knew that the water had receded from the earth. The early Hebrews were commanded to offer turtle doves and young pigeons as sacrifices in atonement for sin. In

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No fish caught on hook and line enjoys more widespread popularity than the bullhead. J. F. Berry Photo.

By Tom Moen  
Fisheries Biologist

From the time the ice goes out in the spring till freeze over in the fall, bullheads are sought after by all classes of people—young and old, rich and poor, purist and "one-gallused" anglers, men and women, and we do mean women. Yes, bullheads are popular with the women in spite of the fact that most of them balk at running a hook into a big, fat nite-crawler or removing the catch from the hook. Men are handy and available gadgets for doing such chores.

No fish that is caught on a hook and line enjoys a more widespread popularity. A summary of the census figures compiled by E. T. Rose, Conservation Commission biologist, during the past four years on several northwest Iowa lakes reveals that bullheads comprised 75 per cent of the total catch recorded. The number of bullheads taken from an individual lake often reaches phenomenal figures. Lost Island Lake fishermen caught over 700,000 bullheads in three years. Bullheads caught last year outnumber all other fish combined by three to one. These same figures indicate that bullhead fishing is at its best from May 15 through September 1. (See "Iowa Conservationist" for April 15, 1948.)

Although much has been written about the life habits, sporting qualities and food values of the various members of the catfish family, it might be well to review the group in order to better understand just where the bullheads fit into the family picture. In general the members are distinguished from other fish by their smooth, scaleless bodies and "whiskers" on the upper and lower jaws.

About 35 species are known from the United States and Mexico. Nine are found in Iowa waters, of which three are commonly referred to as catfish (channel, blue and shovelhead), three as bullheads (black, brown and yel-

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### THE JOB OF CONSERVATION COMMISSIONER

By Ewald G. Trost

Chairman  
State Conservation Commission

To introduce my subject a few quotations from the Code of Iowa are necessary.

"There is hereby created a State Conservation Commission, which shall consist of seven citizens of the State, who are interested in and have substantial knowledge of the subjects embraced in this Chapter. Not more than four of said members shall, when appointed, belong to the same political party."

"The department of conservation herein created shall consist of the following divisions: 1. A division of fish and game which shall include matters relating to fish and fisheries, waterfowl, game, fur-

bearing and other animals, birds, and other wildlife resources. 2. A division of lands and waters which shall include matters relating to state waters, state parks, forests and forestry, and lakes and streams, including matters relating to scenic, scientific, historical, archaeological and recreational matters. 3. A division of administration which shall include matters relating to accounts, records, enforcement, technical service and public relations."

"It shall be the duty of the commission to protect, propagate, increase and preserve the fish, game, fur-bearing animals and protected birds of the state and to enforce by proper actions and proceedings the laws, rules and regulations relating thereto. The commission shall

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"We have argued here if it is  
(1) legal for a person hunting over  
decoys to have two guns and use  
them both, by firing with one gun  
until all the shells were expended,  
laying it down, picking up the  
other gun and firing it. (2) Is  
there a regulated distance that one  
hunter can spread his set of decoys  
from yours?"

Donald Allen,  
Ralston, Iowa.

**Answer 1.** As long as all guns  
used are plugged and limited to  
three shell capacity, it is not  
against the law to use more than  
one gun.

**Answer 2.** There is not. Only  
the ethics of sportsmanship govern  
the annoying practice of one hunter  
crowding in on another.



With increased numbers of hunters and crowded hunting areas the ethics of sportsman-  
ship is more important than ever before. Jim Sherman Photo.



The esthetic value of a clean, healthy stream is certainly greater than its value as a  
conveyor of sewage. The Iowa River at Iowa City. Jim Sherman Photo.

## AN OPPORTUNITY WE MISS

In our minds eye, we visit the  
cities of Iowa and Minnesota that  
are fortunate enough to have a  
river running through them or  
along their edge.

We see Charles City, Iowa City,  
Fort Dodge, Humboldt, Cedar Rap-  
ids, Mankato, Redwood Falls, St.  
Troy, Jackson, and many others.  
Walks along the beautiful banks of  
those rivers, picnics in well kept  
little parks along the stream, can-  
noe trips on some of them bring  
pleasant pictures to our mind. Na-  
ture gave those cities an asset.

In many places, the river banks  
have been left in their natural  
beauty with native trees and grass  
left undisturbed. In other places,  
man has trimmed and built a road  
or two and some picnic tables to  
make the beauty of the natural  
setting more available to man.  
Many of these river towns have  
built parks on the banks, open to

all people who enjoy the music of  
running water, who glory in look-  
ing skyward through the big trees,  
and who like to get their feet on  
acres of grass, and enjoy a meal  
out-of-doors.

Now, we look at our own asset:  
the Little Sioux River running by  
our door. Places along it are lovely.  
The walk along Leach Park gives  
a good, but high-up view of the  
river. Our bluffs southeast of town  
are full of memories of school chil-  
dren and adults alike who have  
tramped there, through the woods,  
and picnicked on the banks. The  
Cornwall dam in southwest Spen-  
cer, some of the lovely gardens  
that run down to the water edge  
are places of beauty.

And then, again there are other  
places. Some folk made a tin can  
dump out of our river. Those eye-  
sores loom out of the landscape  
marring its beauty. The beavers  
have felled a good many trees  
along the river within our city.  
Other trees have been cut down.  
We can't regrow those trees on  
short notice. It will be years be-  
fore new ones can grow up. People  
who live along the river, though,  
can clean up its banks. It should  
be a thing of beauty... not a back  
alley where tin cans and garbage  
are dumped.—Spencer Times.

## HUNTING PRESSURE

For the first time in history, Mis-  
souri's 1949 game regulations call  
for closed season on cottontails.

## FOR ALL TIME

If we work marble, it will  
perish; if we work upon  
brass, time will efface it; if  
we rear temples, they will  
crumble into dust; but if we  
work upon the immortal  
minds and instill into them  
just principles, we are then  
engraving upon tablets which  
no time will efface, but will  
brighten and brighten to all  
eternity.—Sylva.

## IT'S THE LAW

(Editor's Note: For the next few  
months, under the above head, we will  
carry sections of the state law under  
which the State Conservation Commission  
operates. Readers who wish to have sec-  
tions interpreted may write to the Con-  
servation Commission, 914 Grand, Des  
Moines.)

**Section 107.14—Conservation of-  
ficers.** No person shall be appoint-  
ed as a conservation officer until  
he has satisfactorily passed a com-  
petitive examination, held under  
such rules as the commission may  
adopt, and other qualifications  
being equal only those of highest  
rank in examinations shall be ap-  
pointed. (Code of 1946.)

**Section 107.15—Peace officers.**  
Conservation officers shall have  
the power of, and be deemed peace  
officers within the scope of the  
duties herein imposed on them.  
The conservation officers are like-  
wise given the power of peace of-  
ficers with respect to all violations  
of the motor vehicle laws and all  
public offenses committed in their  
presence. (Code of 1946.)

**Section 107.16—Removal.** The  
appointees and employees afore-  
said may be removed by the said  
director at any time subject to the  
approval of the commission. (Code  
of 1946.)

**Section 107.17—Funds.** The  
financial resources of said commis-  
sion shall consist of three funds:

1. A state fish and game pro-  
tection fund.
2. A state conservation fund.
3. An administration fund.

The state fish and game protec-  
tion fund, except as otherwise pro-  
vided, shall consist of all moneys  
accruing from license fees and all  
other sources of revenue arising  
under the division of fish and  
game.

The conservation fund, except  
as otherwise provided, shall con-  
sist of all other funds accruing to  
the conservation commission.

The administration fund shall  
consist of an equitable portion of  
the gross amount of the two afore-  
said funds, to be determined by  
the commission, sufficient to pay  
the expense of administration en-  
tailed by this chapter. (Code of  
1946.)

**Section 107.18—Report of funds.**  
The conservation director shall, at  
least monthly, make returns and  
pay to the treasurer of state all  
moneys then in his hands belong-  
ing to the aforesaid funds. (Code  
of 1946.)

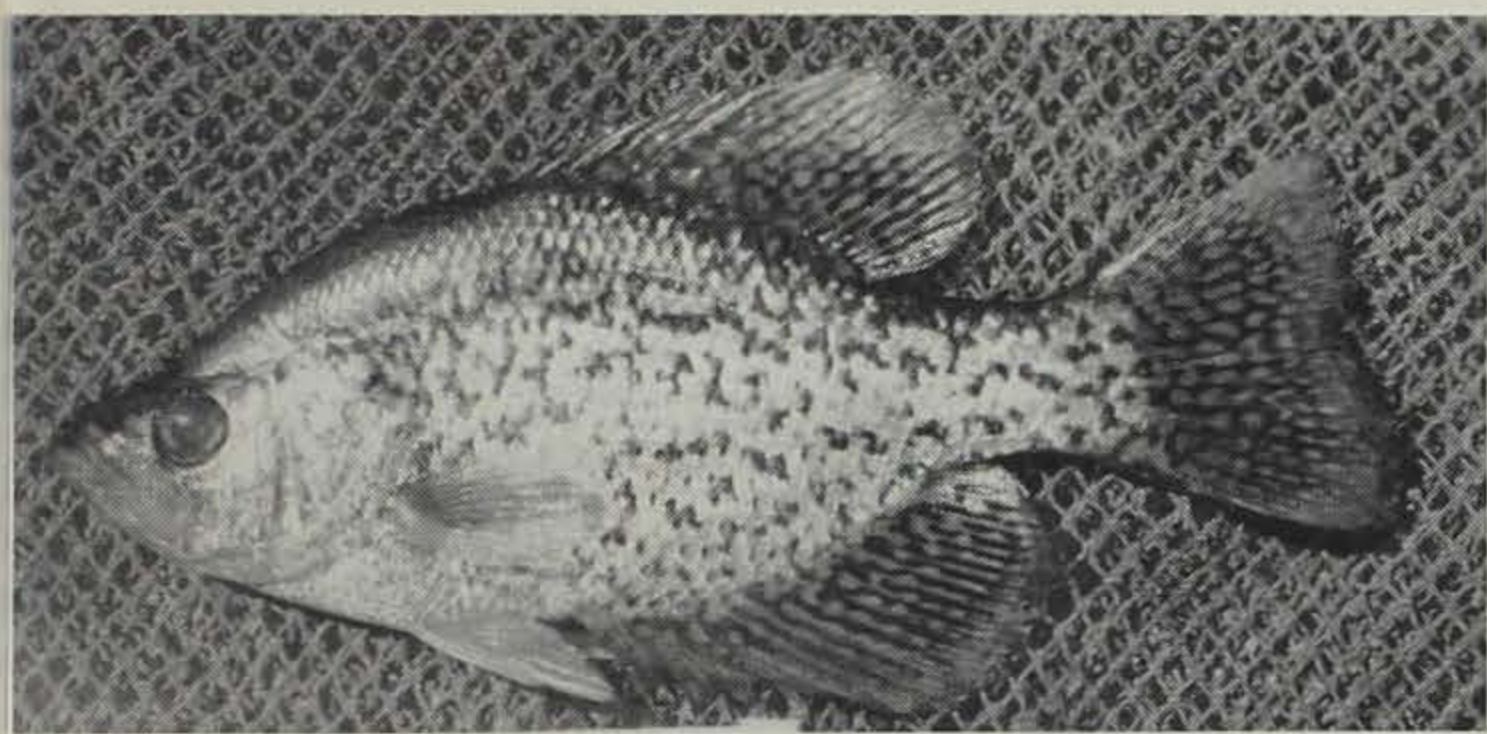
**Section 107.19—Expenditures.**  
All funds accruing to the fish and  
game protection fund, except the  
said equitable portion, shall be ex-  
pended solely in carrying on the  
activities embraced in the division  
of fish and game.

All administrative expenses shall  
be paid from the administration  
fund.

All other expenditures shall be  
paid from the conservation fund.

All expenditures under this act  
(46 GA, ch. 13) shall be subject to  
approval by the state comptroller.  
(Code of 1946.)





The black crappie is abundant in many of the south Iowa lakes and reservoirs. William Lewis Photo.

## HIGHLIGHTS ON CRAPPIE FISHING

By William M. Lewis

Iowa Cooperative Fisheries  
Research Unit

The schooling habit of crappies is well known. In almost every lake there are one or more points where crappies tend to concentrate. A person not familiar with a lake may locate these "crappie beds" by slowly trolling around the lake until he has a strike, then fish the area until he determines the limits of the productive water. It is usually possible and much simpler, however, to ask a local fisherman where these areas are or to observe where other fishermen are doing business with the crappies.

Most crappies are caught by bait fishing or fly fishing.

Fly rod, casting rod or cane pole are equally effective in bait fishing. In either case the rest of the equipment consists of a light line, a size three or four hook, two or three split BB shots for sinkers and a light float. Some fishermen use a small spinner ahead of the hook.

In bait fishing minnows up to

two inches are accepted as, and are without doubt, the best bait. The hook is baited for still fishing by hooking a minnow through the back just below the top fin, being careful not to hook the bait too deeply, killing it and spoiling its attractiveness. For trolling the hook is passed through the mouth out the gill opening and then hooked through the back just below the top fin.

Crappies may, of course, be taken by bank fishing. With the hook baited for still fishing and the float set at three to four feet from the hook, the fisherman simply sits and awaits strikes. It is to be remembered, however, that sometimes crappie feed at or near the surface, other times near the bottom, and the float must be changed accordingly. One of the still fisherman's biggest jobs is to keep his hook supplied with live minnows as needed.

Even when fishing along a bank where crappies are known to feed, two points are worth remembering. The crappie will not feed all day; the best fishing will usually be during the last two hours before sunset. A second point is that the fish will tend to be concentrated at different points along the bank, so fish and move until you find them.

As a rule a boat is desirable in crappie fishing. The usual procedure in boat fishing is to set the float at three to four feet, put out twenty or thirty feet of line, and troll slowly over the schooling areas. When you get a strike circle back over the area and continue to fish by trolling or ease down the anchor and still fish.

On many occasions, crappie can be taken very successfully by fly fishing. The best time for the fly fisherman is when the crappie are feeding at the surface early in the morning or, more often, late in the afternoon.

The fish may rise fairly near the bank or in the center of the lake. They may rise individually or as a school. In any case, the disturbance the fish make on the water surface is quite apparent if the lake is not rough. Upon ob-

serving the rises, a fly fisherman eases his boat to within maximum casting distance and drops a small wet fly among the dimples. One particular school of fish will not continue to feed at the surface for long. When they quit hitting the angler should move on until another school is located.

The best flyrod lures for crappies are small wet flies on long light leaders. Cork-bodied bugs on size eight hooks will often take crappies, but for fishing the rises, hair-wing flies or hair streamers on size eight or ten hooks will usually catch more fish. The fly or streamer should have plenty of white in it. A little experimenting with different flies of the above general description will quickly show which of the available lures are the most attractive for that particular time.

In addition to the crappies, bullheads furnish good spring fishing in state-owned lakes. A big gob of worms lying on the bottom is a sure killer for the bullhead. Some "bullheaders" believe that garden worms are better than night crawlers. Others think that night crawlers, when broken into sections an inch and one-half long and piled on the hook, improve their fish catching qualities.

The hook may be as large as size one and a large sinker is permissible. This type of rig is best suited to a casting rod, although the cane pole is very popular with bullhead regulars.

From experiments carried on at Iowa State College, it is apparent that the bullheads have a keen sense of smell and are attracted to food by its odor. Further experiments indicated that bullheads find

food more readily when it is lying on the bottom than when it is suspended in the water.

If your luck has not been too good in catching crappies or bullheads, try some of these suggestions and see if you cannot cash in on your opportunities to fish this spring in the reservoirs and state lakes.

## THE RECKONING WILL COME

Our game enforcement officers will be a long time in forgetting the poachers who slaughtered the wild mallard ducks on Round Lake after the hunting season closed. A couple of them were still mad about it the other day, angry because they have insufficient proof (as yet) to arrest the game hogs, whom they say they know, and because anyone would be so lacking in sportsmanship that they would do a stunt like that.

The hunting was over and the ducks remaining felt secure on Round Lake, a refuge. Cold weather froze all of the lake except a small hole near the road and this was black with trusting birds. Then, one night, the poachers crept up close to the half-tame roosting ducks and blasted away with shotguns. They left in such a hurry several dead ducks were dropped in the snow on the way to the car. The snow around the water hole was red with blood and littered with dead shotgun shells.

We hope the wardens' slow burn bears fruit and the offenders some day will get the heaviest penalty the law provides. — Emmetsburg Democrat.

## HAW HAW, HEE HEE

By Carl Stempel

There's been nary a time since fishermen fished,  
Or since salmon ran out to the sea,  
That the luckiest fisherman ever could boast  
That he could catch fishes like me.

Oh, they've fished in the ocean, they've fished in the lakes,  
And they've fished in the Mississippi;  
They knew the best places and the right bait,  
But they never caught fishes like me.

And there was Ike Walton who fished in the brooks,  
And he fished in the Old River Dee;  
With the finest of tackle and the choicest of lures  
He couldn't catch fishes like me.

Then up spoke my neighbor: "I'm new at the game,  
But, by golly, I'm ready to try;"  
So a fishing we went and we stayed until dark,  
And he caught two more fishes than I.

Then he hee'd and he haw'd and he jabbed my ribs;  
"So I couldn't ketch fishes like you;  
I ketched a round dozen and you have ketched ten,  
So you see what you claim isn't true."

But he who laughs last, the louder he laughs  
And I said, "You old fool, can't you see?  
That all I have said is the absolute truth,  
'Cause there ain't any fishes like me."

"Haw haw, hee hee, haw haw, hee hee,  
Did you ketch any fishes like me?  
Haw haw, hee hee, haw haw, hee hee,  
There ain't any fishes like me."



Crappie are one of the favorite sport fish for the flyrod fisherman and will often take small wet flies when all other lures fail. Jim Sherman Photo.



### CORN FIGURES IN LEAD POISON

Scientists have found that when a duck picks up a few stray pellets of lead shot along with a steady diet of corn he is practically a dead duck before he knows it.

Dr. Harlow B. Mills, chief of a survey conducted by the Illinois Natural History laboratory at Havana, found that when corn-fed mallards were fed only four No. 6 pellets each, nine out of ten birds died within twelve to thirty days. But when ducks having well balanced diets were fed twenty-five No. 4 lead pellets each, not a single lead-poisoning case was recorded.

The cottontail rabbit will not breed successfully in captivity.

### ILLEGAL DEER COSTS \$900

The New York legislature provided that state's conservation department with an enforcement weapon against illegal shooters that has real teeth. The legislature has made jack lighting deer at night an indictable misdemeanor. The first conviction under the new jack lighting law cost two Essex County violators a total of \$900 and the loss of a deer rifle for shooting a doe at night. In addition they received a jail sentence of one year each which was suspended upon payment of the fine.

Some of Iowa's largest fish, the paddlefish and the buffalo, feed almost exclusively on organisms barely visible to the human eye.

## ANTHRACNOSE BLIGHTS SYCAMORE TREES

By Paul Schultdt

Anthracnose is caused by a fungus and is quite common throughout the state, especially on sycamore trees. Very little is known about how it over-winters and attacks trees in Iowa or what relationship exists between anthracnose on sycamores and on oaks, or its relationship to other similar fungi that attack walnut, elm and ash trees.

In the spring the blight resembles frost injury. The young leaves are blighted and turn brown. The tree is often almost completely defoliated. Usually the disease is confined to the leaves of the lower limbs but in severe cases may progress almost to the crown of the tree.

Normally, trees affected will produce a second crop of leaves within two weeks to one month. The young twigs and branches of infected trees are often killed and

a "witches broom" is produced as some twigs die out and others develop to take their place. On larger limbs cankers are formed.



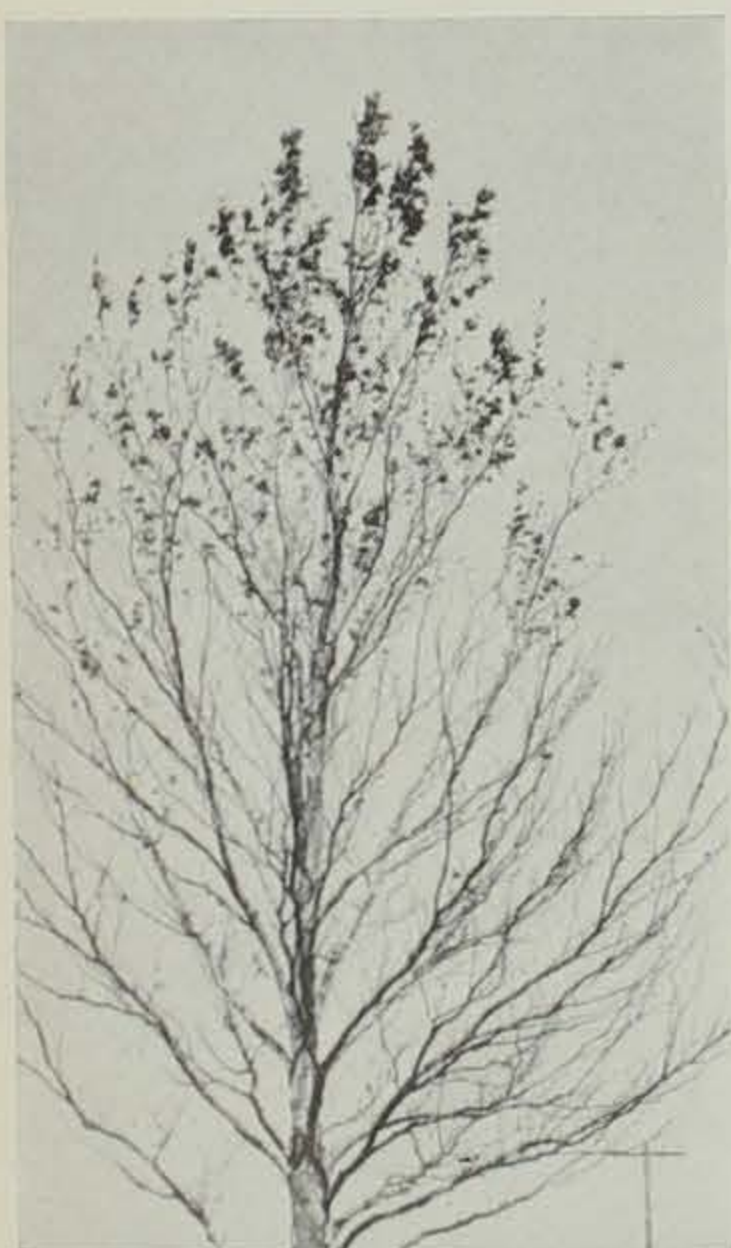
Sycamore leaf, showing typical symptoms of sycamore anthracnose. Iowa State College Photo.

In the fall anthracnose will often cause premature defoliation.

During the spring and summer of 1948 a survey was made over the state and in many of the state parks to determine the severity and distribution of this infection. Of 100 sycamore trees observed, 97 were infected and the defoliation ranged in a few mild cases from four to eight per cent up to from fifty to ninety-five per cent in the majority of trees observed. A similar condition existed on the white oak. However, defoliation was less severe on the oaks.

A white oak or sycamore completely free from the disease was difficult to find; however, local weather conditions regulate the severity of the infection.

Artificial inoculating experiments are being worked out to determine host range, conditions necessary for infection, and the similarities and differences of the various organisms involved.



A sycamore tree, showing advanced stage of spring defoliation. It will produce a second crop of leaves within two weeks to a month. Iowa State College Photo.



Guns in storage during the summer months should be periodically inspected for rust signs. A little attention may save costly gun repairs or even loss of favorite firearms. Jim Sherman Photo.

## INSPECT YOUR FIREARMS NOW

At the end of the last hunting season millions of hunters cleaned their guns and stored them away, secure in the knowledge that their firearms would be in excellent shape when the hunting season opened last fall. Yet thousands will be unpleasantly surprised in the next few months when they look at their guns again and find the bores rusted or disfiguring rust spots on the outside finish.

The National Rifle Association advises hunters to look now and make sure. The association advises, "Get a cleaning rod, some cloth patches, a brass brush to fit a good cleaning rod, some water solvent, a rifle bore cleaner, and rust preventive grease. These items can be purchased at a local hardware or sporting goods store.

"Saturate a cloth patch with powder solvent and run it through the bore of the gun. Screw the brass brush on the rod, dip it in the powder solvent, and run it through the bore a couple of times. Then take a clean, dry patch and run it through until the bore is bright and clean.

"Wipe the outside of the gun with a clean cloth until all dirt, fingerprints, and moisture are removed.

"The gun is now clean and the next step is to prevent rust. To do this the experts recommend a rust preventive grease of about the consistency of vaseline. Take a cloth patch, work some grease well into it, and run through the bore. Although only a thin coat of grease will be deposited in the bore it will prevent rust under almost any condition. Next, take a small cloth, work some grease in it, and rub the cloth over the outside finish so

as to leave a thin film of rust preventive grease. Store the gun in a rack in the driest part of the house."

A couple of Rifle Association don'ts are "Don't put the gun in its cloth or leather case for storage. Both cloth and leather collect moisture and rust spots are likely to appear where the cloth or leather touches the gun." "Don't use any of the various devices on the market supposed to prevent bores of guns from rusting. These anti-rust devices are porous, rope-like affairs, saturated with oil. They are supposed to be left in the bore of the gun to exclude air and keep the bore oily. However, they collect moisture and many times when they are taken out the bores are ruined."

Take a look at your gun now. A little attention may save you costly gun repair bills or even the loss of your favorite firearm.

The remains of more than 5,000 midge larvae, a highly important food of other fish, were found in the intestinal tract of one carp.

"JOE BEAVER"

By Ed Nofziger



"Is this the forest litter you're always talking about, Joe?"



# SUPPLEMENT TO IOWA CONSERVATIONIST, APRIL 1949

## CHECK LIST OF IOWA BIRDS

By Jack Musgrove

Museum Director

State Department of History and Archives

The following is a list of birds that to date have been recorded for the state of Iowa. All are represented by specimens. It is a generally accepted rule that no species of birds shall be admitted to a state list unless a specimen has been taken and is either preserved in some collection or has been critically examined by a competent ornithologist.

The species are listed with their scientific name according to the nomenclature from the fourth edition of the A.O.U. Check-List and supplements to this check-list that have been made in recent years.

On this list the status is simply the over-all picture of the species in this state. Some listed as migrant may remain throughout the year; some listed as migrant may also nest in the state in small numbers. In this paper the status is meant only to give the over-all concept of the species in this area.

The last list for birds in the State of Iowa was published in 1934 as a Revised List of Iowa Birds by Philip A. DuMont. Since that time numerous changes have been made in the classifications of birds and several new species have been added to the state list.

The purpose of this paper is to make available a complete list of the birds of Iowa and to give the relative abundance of each species.

### LEGEND FOR BIRD STATUS

A—Accidental  
C—Common  
E—Extinct  
R—Rare  
CM—Common migrant  
IS—Introduced specie  
PE—Probably extinct  
PR—Permanent resident  
RM—Rare migrant  
RR—Rare resident  
RV—Rare visitor  
UM—Uncommon migrant  
UR—Uncommon resident  
VR—Very rare  
WV—Winter visitor  
APR—Abundant permanent resident  
ASR—Abundant summer resident  
CPR—Common permanent resident  
CSR—Common summer resident  
CWR—Common winter resident

CWV—Common winter visitor  
RPR—Rare permanent resident  
RSR—Rare summer resident  
RSV—Rare summer visitor  
RWM—Rare winter migrant  
RWV—Rare winter visitor  
USR—Uncommon summer resident  
UWV—Uncommon winter visitor  
AMSR—Abundant migrant and summer resident  
CMSR—Common migrant and summer resident  
ISCR—Introduced species—common resident  
RMSR—Rare migrant and summer resident  
UMSR—Uncommon migrant and summer resident  
AMCWR—Abundant migrant and common winter resident  
WMPR—Winter migrant and rare permanent resident

## IOWA BIRDS

Common Name	Scientific Name	Status
Common Loon.....	<i>Gavia immer immer</i> (Brunnich)	R.M.
Lesser Loon.....	<i>Gavia immer elasson</i> Bishop	U.M.
Pacific Loon.....	<i>Gavia artica pacifica</i> (Lawrence)	A.
Red-throated Loon.....	<i>Gavia stellata</i> (Pontoppidan)	R.M.
Holboell's Grebe.....	<i>Colymbus grisegena holbollii</i> (Reinhardt)	R.M.
Horned Grebe.....	<i>Colymbus auritus</i> Linnaeus	U.M.
Eared Grebe.....	<i>Colymbus nigricollis californicus</i> (Heermann)	U.M.
Western Grebe.....	<i>Aechmophorus occidentalis</i> (Lawrence)	R.M.
Pied-billed Grebe.....	<i>Podilymbus podiceps podiceps</i> (Linnaeus)	C.S.R.
White Pelican.....	<i>Pelecanus erythrorhynchos</i> Gmelin	C.M.
Eastern Brown Pelican.....	<i>Pelecanus occidentalis carolinensis</i> Gmelin	A.
Double-crested Cormorant.....	<i>Phalacrocorax auritus auritus</i> (Lesson)	C.M.
Water-Turkey.....	<i>Anhinga anhinga leucogaster</i> (Vieillot)	A.
Man-o'-war-bird.....	<i>Fregata magnificens rothschildi</i> Mathews	A.
Great Blue Heron.....	<i>Ardea herodias herodias</i> Linnaeus	C.M.S.R.

Ward's Heron.....	<i>Ardea herodias wardi</i> Ridgway	R.
American Egret.....	<i>Casmerodius albus egretta</i> (Gmelin)	C.S.R.
Snowy Egret.....	<i>Leucophoyx thula thula</i> (Molina)	R.S.V.
Little Blue Heron.....	<i>Florida caerulea caerulea</i> (Linnaeus)	R.S.V.
Eastern Green Heron.....	<i>Butorides virescens virescens</i> (Linnaeus)	C.M.S.R.
Black-crowned Night Heron.....	<i>Nycticorax nycticorax hoactli</i> (Gmelin)	C.M.S.R.
Yellow-crowned Night Heron.....	<i>Nyctanassa violacea violacea</i> (Linnaeus)	R.V.
American Bittern.....	<i>Botaurus lentiginosus</i> (Montagu)	C.M.S.R.
Eastern Least Bittern.....	<i>Ixobrychus exilis exilis</i> (Gmelin)	U.M.S.R.
Wood Ibis.....	<i>Mycteria americana</i> Linnaeus	R.V.
White-faced Glossy Ibis.....	<i>Plegadis mexicana</i> (Gmelin)	R.V.
Whistling Swan.....	<i>Cygnus columbianus</i> (Ord)	U.M.
Trumpeter Swan.....	<i>Cygnus buccinator</i> Richardson	E.
Common Canada Goose.....	<i>Branta canadensis canadensis</i> (Linnaeus)	C.M.
Lesser Canada Goose.....	<i>Branta canadensis leucopareia</i> (Brandt)	U.M.
Hutchins's Goose.....	<i>Branta canadensis hutchinsi</i> (Richardson)	U.M.
White-fronted Goose.....	<i>Anser albifrons albifrons</i> (Scopoli)	C.M.
Lesser Snow Goose.....	<i>Chen hyperborea hyperborea</i> (Pallas)	C.M.
Blue Goose.....	<i>Chen caerulescens</i> (Linnaeus)	C.M.
Common Mallard.....	<i>Anas platyrhynchos platyrhynchos</i> Linnaeus	C.M.S.R.
Black Duck.....	<i>Anas rubripes</i> Brewster	C.M.
Gadwall.....	<i>Anas streperus</i> (Linnaeus)	C.M.
Baldpate.....	<i>Mareca americana</i> (Gmelin)	C.M.
European Widgeon.....	<i>Marcea penelope</i> (Linnaeus)	A.
American Pintail.....	<i>Anas acuta tzitzihua</i> (Vieillot)	C.M.
Green-winged Teal.....	<i>Anas carolinense</i> (Gmelin)	C.M.
Blue-winged Teal.....	<i>Anas discors</i> (Linnaeus)	C.M.S.R.
Cinnamon Teal.....	<i>Anas cyanoptera cyanoptera</i> (Vieillot)	R.M.
Shoveller.....	<i>Spatula clypeata</i> (Linnaeus)	C.M.
Wood Duck.....	<i>Aix sponsa</i> (Linnaeus)	C.M.S.R.
Redhead.....	<i>Aythya americana</i> (Eyton)	C.M.S.R.
Ring-necked Duck.....	<i>Aythya collaris</i> (Donovan)	C.M.
Canvas-back.....	<i>Aythya valisineria</i> (Wilson)	C.M.
Greater Scaup Duck.....	<i>Aythya marila</i> (Linnaeus)	R.M.
Lesser Scaup Duck.....	<i>Aythya affinis</i> (Eyton)	C.M.

The Whooping Crane, now almost extinct in the United States and extinct in Iowa for many years, formerly nested in the large marshes of northern Iowa. Jack Musgrove Photo.







A company of Cedar Waxwings, especially in a bird bath, is one of the most spritely and buoyant of doorway spectacles. Jack Kennedy Photo.

American Golden-eye	Bucephala clangula americana (Bonaparte)	C.M.
Buffle-head	Bucephala albeola (Linnaeus)	C.M.
Old-squaw	Clangula hyemalis (Linnaeus)	R.M.
Western Harlequin Duck	Histrionicus histrionicus pacificus Brooks	A.
American Elder	Somateria mollissima dresseri Sharpe	A.
King Elder	Somateria spectabilis (Linnaeus)	A.
White-winged Scoter	Melanitta fusca deglandi (Bonaparte)	U.M.
Surf Scoter	Melanitta perspicillata (Linnaeus)	U.M.
American Scoter	Oidemia nigra americana Swainson	R.M.
Ruddy Duck	Oxyura jamaicensis rubida (Wilson)	C.M.S.R.
Hooded Merganser	Lophodytes cucullatus (Linnaeus)	C.M.
American Merganser	Mergus merganser americanus Cassin	C.M.
Red-breasted Merganser	Mergus serrator Linnaeus	U.M.
Turkey Vulture	Cathartes aura septentrionalis Wied	C.S.R.
Black Vulture	Coragyps atratus atratus (Meyer)	A.
Swallow-tailed Kite	Elanoides forficatus forficatus (Linnaeus)	V.R.
Mississippi Kite	Ictinia mississippiensis (Wilson)	V.R.
Eastern Goshawk	Accipiter gentilis atricapillus (Wilson)	U.M.
Sharp-shinned Hawk	Accipiter striatus velox (Wilson)	C.M.
Cooper's Hawk	Accipiter cooperii (Bonaparte)	C.M.S.R.
Eastern Red-tailed Hawk	Buteo jamaicensis borealis (Gmelin)	P.R.
Krider's Hawk	Buteo borealis krideri Hoopes	C.M.
Western Red-tailed Hawk	Buteo borealis calurus Cassin	U.M.
Harlan's Hawk	Buteo harlani (Audubon)	U.M.
Northern Red-shouldered Hawk	Buteo lineatus lineatus (Gmelin)	C.P.R.
Broad-winged Hawk	Buteo platypterus platypterus (Vieillot)	C.M.
Swainson's Hawk	Buteo swainsoni Bonaparte	U.R.
American Rough-legged Hawk	Buteo lagopus s. johannis (Gmelin)	C.W.V.
Ferruginous Rough-leg	Buteo regalis (Gray)	R.M.
Harris's Hawk	Parabuteo unicinctus harrisi (Audubon)	A.
Golden Eagle	Aquila chrysaetos canadensis (Linnaeus)	U.M.
Northern Bald Eagle	Haliaeetus leucocephalus washingtonii (Audubon)	U.M.
Southern Bald Eagle	Haliaeetus leucocephalus leucocephalus (Linnaeus)	U.M.
Marsh Hawk	Circus cyaneus hudsonius (Linnaeus)	C.M.S.R.
Osprey	Pandion haliaetus carolinensis (Gmelin)	U.M.
Prairie Falcon	Falco mexicanus Schlegel	R.M.
Duck Hawk	Falco peregrinus anatum Bonaparte	R.S.R.
Eastern Pigeon Hawk	Falco columbarius columbarius Linnaeus	U.M.
Richardson's Pigeon Hawk	Falco columbarius richardsonii Ridgway	R.V.
Western Pigeon Hawk	Falco columbarius bendirei Swann	U.V.
Eastern Sparrow Hawk	Falco sparverius sparverius Linnaeus	C.P.R.
European Partridge	Perdix perdix perdix (Linnaeus)	I.S.

Brinnish's Murre	Uria lomvia lomvia (Linnaeus)	A.
Rock Dove	Columbia livia Gmelin	I.S.C.R.
Eastern Mourning Dove	Zenaidura macroura carolinensis (Linnaeus)	C.R.
Western Mourning Dove	Zenaidura macroura marginella (Woodhouse)	C.R.
Passenger Pigeon	Ectopistes migratorius (Linnaeus)	E.
Louisiana Paroquet	Conuropsis carolinensis ludoviciana (Gmelin)	E.
Yellow-billed Cuckoo	Coccyzus americanus americanus (Linnaeus)	C.S.R.
Black-billed Cuckoo	Coccyzus erythrophthalmus (Wilson)	C.S.R.
Groove-billed Ani	Crotophaga sulcirostris sulcirostris Swainson	A.
Barn Owl	Tyto alba pratincola (Bonaparte)	U.R.
Eastern Screech Owl	Otus asio naevius (Gmelin)	C.R.
Aiken's Screech Owl	Otus asio aikenii (Brewster)	R.
Arctic Horned Owl	Bubo virginianus wapacuthu (Gmelin)	W.V.
Great Horned Owl	Bubo virginianus virginianus (Gmelin)	C.R.
Montana Horned Owl	Bubo virginianus occidentalis Stone	W.V.
Snowy Owl	Nyctea scandiaca (Linnaeus)	W.V.
Western Burrowing Owl	Speotyto cunicularia hypugaea (Bonaparte)	U.S.R.
Northern Barred Owl	Strix varia varia Barton	C.R.
Great Gray Owl	Strix nebulosa nebulosa (Forster)	R.V.
Long-eared Owl	Asio otus wilsonianus (Lesson)	C.W.V.
Short-eared Owl	Asio flammeus flammeus (Pontoppidan)	C.W.V.
Saw-whet Owl	Aegolius acadicus acadicus (Gmelin)	U.W.V.
Eastern Whip-poor-will	Caprimulgus vociferus vociferus (Wilson)	C.S.R.
Nuttall's Poor-will	Phalaenoptilus nuttallii nuttallii (Audubon)	R.V.
Eastern Nighthawk	Chordeiles minor minor (Forster)	C.S.R.
Sennett's Nighthawk	Chordeiles minor sennetti Coues	C.M.
Chimney Swift	Chaetura pelagica (Linnaeus)	C.S.R.
Ruby-throated Hummingbird	Archilochus colubris (Linnaeus)	C.S.R.
Eastern Belted Kingfisher	Megascops alcyon alcyon (Linnaeus)	C.S.R.
Northern Flicker	Colaptes auratus luteus Bangs	C.S.R.
Red-shafted Flicker	Colaptes cafer collaris Vigors	R.
Northern Pileated Woodpecker	Hylatomus pileatus abieticola Bangs	R.R.
Red-bellied Woodpecker	Centurus carolinus carolinus (Linnaeus)	C.R.
Red-headed Woodpecker	Melanerpes erythrocephalus erythrocephalus (Linnaeus)	C.R.
Lewis's Woodpecker	Asyndesmus lewis Gray	R.V.
Yellow-bellied Sapsucker	Sphyrapicus varius varius (Linnaeus)	C.M.
Eastern Hairy Woodpecker	Dendrocopos villosus villosus (Linnaeus)	C.R.
Northern Downy Woodpecker	Dendrocopos pubescens medianus (Swainson)	C.R.
Arctic Three-toed Woodpecker	Picoides arcticus (Swainson)	R.V.
Eastern Kingbird	Tyrannus tyrannus (Linnaeus)	C.S.R.
Arkansas Kingbird	Tyrannus verticalis Say	U.S.R.
Northern Crested Flycatcher	Myiarchus crinitus boreus Bangs	C.S.R.
Eastern Phoebe	Sayornis phoebe (Latham)	C.S.R.
Say's Phoebe	Sayornis saya saya (Bonaparte)	R.S.R.
Yellow-bellied Flycatcher	Empidonax flaviventris (Baird and Baird)	U.S.R.
Acadian Flycatcher	Empidonax virens (Vieillot)	U.S.R.
Alder Flycatcher	Empidonax traillii traillii (Audubon)	C.S.R.
Least Flycatcher	Empidonax minimus (Baird and Baird)	C.S.R.
Eastern Wood Pewee	Cantopus virens (Linnaeus)	C.S.R.
Olive-sided Pewee	Nuttallornis borealis Swainson	U.M.
Hoyt's Horned Lark	Eremophila alpestris hoyti Bishop	C.W.R.
Northern Horned Lark	Eremophila alpestris alpestris (Linnaeus)	U.W.R.
Prairie Horned Lark	Eremophila alpestris praticola Henshaw	C.S.R.
Tree Swallow	Iridoprocne bicolor (Vieillot)	C.M.
Bank Swallow	Riparia riparia riparia (Linnaeus)	C.S.R.
Rough-winged Swallow	Stelgidopteryx ruficollis serripennis (Audubon)	C.S.R.
Barn Swallow	Hirundo rustica erythrogaster Boddaert	C.S.R.
Northern Cliff Swallow	Petrochelidon pyrrhonota (Vieillot)	C.S.R.
Purple Martin	Progne subis subis (Linnaeus)	C.S.R.
Northern Blue Jay	Cyanocitta cristata bromia (Linnaeus)	C.P.R.
American Magpie	Pica pica hudsonia (Sabine)	U.M.
American Raven	Corvus corax sinuatus Wagler	E.
Eastern Crow	Corvus brachyrhynchos brachyrhynchos Brehm	C.R.
Clark's Nutcracker	Nucifraga columbiana (Wilson)	A.
Black-capped Chickadee	Parus atricapillus atricapillus (Linnaeus)	C.P.R.
Long-tailed Chickadee	Parus atricapillus septentrionalis (Harris)	C.W.R.
Carolina Chickadee	Parus carolinensis carolinensis (Audubon)	A.
Tufted Titmouse	Baeolophus bicolor (Linnaeus)	C.R.
White-throated Sparrow	Spizella monticola (Linnaeus)	C.S.R.
Western House Wren	Troglodytes aedon parkmanni Audubon	C.S.R.
Eastern Winter Wren	Troglodytes troglodytes hiemalis (Vieillot)	C.M.



Western Pigeon Hawk	Buteo borealis (Linnaeus)	U.V.
Greater Prairie Chicken	Tympanuchus cupido pinnatus Brewster	W.M.R.P.R.
European Partridge	Perdix perdix perdix (Linnaeus)	I.S.
Eastern Bob-white	Colinus virginianus virginianus (Linnaeus)	C.R.
Ring-necked Pheasant	Phasianus colchicus Linnaeus	I.S.
Eastern Turkey	Meleagris gallopavo silvestris Vieillot	E.
Whooping Crane	Grus americana (Linnaeus)	P.E.
Little Brown Crane	Grus canadensis canadensis (Linnaeus)	R.M.
Sandhill Crane	Grus canadensis tabida (Peters)	R.M.
King Rail	Rallus elegans elegans Audubon	C.M.S.R.
Virginia Rail	Rallus limicola limicola Vieillot	C.M.S.R.
Sora	Porzana carolina (Linnaeus)	C.M.S.R.
Yellow Rail	Coturnicops noveboracensis noveboracensis (Gmelin)	U.M.S.R.
Black Rail	Laterallus jamaicensis pygmaeus (Blackwall)	R.M.
Florida Gallinule	Gallinula chloropus cachinnans Bangs	U.M.S.R.
American Coot	Fulica americana americana Gmelin	C.M.S.R.
Belted Piping Plover	Charadrius melodus circumcinctus (Ridgway)	R.M.
Piping Plover	Charadrius melodus Ord	R.M.S.R.
Semipalmated Plover	Charadrius hiaticula semipalmatus Bonaparte	C.M.
Killdeer	Charadrius vociferus vociferus (Linnaeus)	C.M.
American Golden Plover	Pluvialis dominica dominica (Muller)	C.M.
Black-bellied Plover	Squatarola squatarola (Linnaeus)	U.M.
Ruddy Turnstone	Arenaria interpres morinella (Linnaeus)	R.M.
American Woodcock	Philohela minor (Gmelin)	U.M.S.R.
Wilson's Snipe	Capella gallinago delicata (Ord)	C.M.
Long-billed Curlew	Numenius americanus americanus Bechstein	R.M.
Hudsonian Curlew	Numenius phaeopus hudsonicus (Latham)	R.V.
Eskimo Curlew	Numenius phaeopus borealis (Forster)	E.
Upland Plover	Bartramia longicauda (Bechstein)	C.S.R.
Spotted Sandpiper	Actitis macularia (Linnaeus)	C.S.R.
Eastern Solitary Sandpiper	Tringa solitaria solitaria Wilson	C.M.
Western Willet	Catoptrophorus semipalmatus inornatus (Brewster)	R.M.
Greater Yellow-legs	Totanus melanoleucus (Gmelin)	C.M.
Lesser Yellow-legs	Totanus flavipes (Gmelin)	C.M.
American Knot	Calidris canutus rufus (Wilson)	R.V.
Pectoral Sandpiper	Erolia melanotos (Vieillot)	C.M.
White-rumped Sandpiper	Erolia fuscicollis (Vieillot)	C.M.
Baird's Sandpiper	Erolia bairdi (Coues)	C.M.
Least Sandpiper	Erolia minutilla (Vieillot)	C.M.
Red-backed Sandpiper	Pelidna alpina sakhalina (Vieillot)	C.M.
Eastern Dowitcher	Limnodromus griseus griseus (Gmelin)	R.M.
Long-billed Dowitcher	Limnodromus griseus scolopaceus (Say)	C.M.
Stilt Sandpiper	Micropalama himantopus (Bonaparte)	C.M.
Semipalmated Sandpiper	Ereunetes pusillus (Linnaeus)	C.M.
Western Sandpiper	Ereunetes mauri Cabanis	R.M.
Buff-breasted Sandpiper	Tryngites subruficollis (Vieillot)	R.M.
Marbled Godwit	Limosa fedoa (Linnaeus)	R.M.
Hudsonian Godwit	Limosa haemastica (Linnaeus)	U.M.
Sanderling	Crocethia alba (Pallas)	U.M.
Ruff	Philomachus pugnax (Linnaeus)	A.
Avocet	Recurvirostra americana Gmelin	R.M.
Black-necked Stilt	Himantopus mexicanus (Muller)	R.V.
Wilson's Phalarope	Steganopus tricolor Vieillot	C.M.
Northern Phalarope	Lobipes lobatus (Linnaeus)	R.M.
Parasitic Jaeger	Stercorarius parasiticus (Linnaeus)	R.V.
Long-tailed Jaeger	Stercorarius longicaudus Vieillot	A.
Glaucus Gull	Larus hyperboreus hyperboreus Gannerus	A.
Herring Gull	Larus argentatus smithsonianus Coues	C.M.
Ring-billed Gull	Larus delawarensis Ord	C.M.
Franklin's Gull	Larus pipixcan Wagler	C.M.
Bonaparte's Gull	Larus philadelphia (Ord)	U.M.
Atlantic Kittiwake	Rissa tridactyla tridactyla (Linnaeus)	A.
Sabine's Gull	Xema sabini sabini (Sabine)	R.V.
Forster's Tern	Sterna forsteri Nuttall	C.M.
Common Tern	Sterna hirundo hirundo Linnaeus	U.M.
Interior Least Tern	Sterna albifrons athalassos (Lesson)	U.S.R.
Caspian Tern	Hydroprogne caspia (Pallas)	U.M.
Black Tern	Chlidonias niger surinamensis (Gmelin)	C.M.S.R.

Brown Creeper	Certhia familiaris americana Bonaparte	C.M.
Western House Wren	Troglodytes aedon pacificus (Audubon)	C.M.
Eastern Winter Wren	Troglodytes troglodytes hiemalis (Vieillot)	C.M.
Bewick's Wren	Thryomanes bewickii bewickii (Audubon)	R.S.R.
Carolina Wren	Thryothorus ludovicianus ludovicianus (Latham)	U.S.R.
Prairie Marsh Wren	Telmatodytes palustris iliaceus (Ridgway)	C.S.R.
Short-billed Marsh Wren	Cistothorus platensis stellaris (Naumann)	U.S.R.
Common Rock Wren	Salpinctes obsoletus obsoletus (Say)	R.S.R.
Eastern Mockingbird	Mimus polyglottos polyglottos (Linnaeus)	U.R.
Catbird	Dumetella carolinensis (Linnaeus)	C.S.R.
Brown Thrasher	Toxostoma rufum rufum (Linnaeus)	C.S.R.
Eastern Robin	Turdus migratorius migratorius Linnaeus	A.S.R.
Wood Thrush	Hylocichla mustelina (Gmelin)	C.S.R.
Eastern Hermit Thrush	Hylocichla guttata faxonii Bangs and Penard	U.M.
Russet-backed Thrush	Hylocichla ustulata ustulata (Nuttall)	A.

Many of the winter feeding station birds become very tame. Here a Tufted Titmouse feeds on a walnut meat held in the hand of its benefactor. Myrle Jones Photo.



Olive-backed Thrush	Hylocichla ustulata swainsoni (Tschudi)	C.M.
Gray-cheeked Thrush	Hylocichla minima aliciae (Baird)	C.M.
Willow Thrush	Hylocichla fuscescens salicicola Ridgway	U.M.
Eastern Bluebird	Sialia sialis sialis (Linnaeus)	C.S.R.
Mountain Bluebird	Sialia currucoides (Bechstein)	A.
Blue-gray Gnatcatcher	Polioptila caerulea caerulea (Linnaeus)	U.S.R.
Eastern Golden-crowned Kinglet	Regulus satrapa satrapa Lichtenstein	C.M.
Eastern Ruby-crowned Kinglet	Regulus calendula calendula (Linnaeus)	C.M.
American Pipit	Anthus spinoletta rubescens (Tunstall)	U.M.
Sprague's Pipit	Anthus spragueii (Audubon)	R.
Bohemian Waxwing	Bombycilla garrulus pallidiceps Reichenow	U.M.
Cedar Waxwing	Bombycilla cedrorum Vieillot	C.M.S.R.
Northern Shrike	Lanius borealis borealis Vieillot	U.W.V.
Northwestern Shrike	Lanius borealis invictus Grinnell	C.W.R.
Migrant Shrike	Lanius ludovicianus migrans Palmer	C.S.R.
Starling	Sturnus vulgaris vulgaris Linnaeus	I.S.C.R.
White-eyed Vireo	Vireo griseus griseus (Boddaert)	U.S.R.
Bell's Vireo	Vireo bellii bellii Audubon	U.S.R.
Yellow-throated Vireo	Vireo flavifrons Vieillot	C.M.
Blue-headed Vireo	Vireo solitarius solitarius (Wilson)	C.M.
Red-eyed Vireo	Vireo olivaceus (Linnaeus)	C.M.
Philadelphia Vireo	Vireo philadelphicus (Cassin)	U.M.
Eastern Warbling Vireo	Vireo gilvus gilvus (Vieillot)	C.S.R.
Black and White Warbler	Mniotilta varia (Linnaeus)	C.M.
Prothonotary Warbler	Protonotaria citrea (Boddaert)	U.S.R.





A Redstart nest,  
deftly concealed in  
a low oak, cradles  
four ever-hungry  
young.

Worm-eating Warbler.....	Helmitheros vermivorus (Gmelin).....	R.S.R.
Golden-winged Warbler.....	Vermivora chrysoptera (Linnaeus).....	R.M.
Blue-winged Warbler.....	Vermivora pinus (Linnaeus).....	U.M.S.R.
Tennessee Warbler.....	Vermivora peregrina (Wilson).....	C.M.
Orange-crowned Warbler.....	Vermivora celata celata (Say).....	C.M.
Nashville Warbler.....	Vermivora ruficapilla ruficapilla (Wilson).....	C.M.
Northern Parula Warbler.....	Parula americana pusilla (Wilson).....	U.M.
Eastern Yellow Warbler.....	Dendroica petechia petechia (Gmelin).....	A.S.R.
Magnolia Warbler.....	Dendroica magnolia (Wilson).....	C.M.
Cape May Warbler.....	Dendroica tigrina (Gmelin).....	R.M.
Black-throated Blue Warbler.....	Dendroica caerulescens caerulescens (Gmelin).....	R.M.
Myrtle Warbler.....	Dendroica coronata coronata (Linnaeus).....	C.M.
Black-throated Green Warbler.....	Dendroica virens virens (Gmelin).....	U.M.
Cerulean Warbler.....	Dendroica cerulea (Wilson).....	U.S.R.
Blackburnian Warbler.....	Dendroica fusca (Muller).....	C.M.
Sycamore Warbler.....	Dendroica dominica albilora Ridgway.....	R.S.R.
Chestnut-sided Warbler.....	Dendroica pensylvanica (Linnaeus).....	C.M.
Bay-breasted Warbler.....	Dendroica castanea (Wilson).....	R.M.
Black-poll Warbler.....	Dendroica striata (Forster).....	C.M.
Northern Pine Warbler.....	Dendroica pinus pinus (Wilson).....	U.M.
Northern Prairie Warbler.....	Dendroica discolor discolor (Vieillot).....	R.M.
Western Palm Warbler.....	Dendroica palmarum palmarum (Gmelin).....	C.M.
Oven-bird.....	Selurus aurocapillus (Linnaeus).....	C.M.S.R.
Northern Water-Thrush.....	Selurus noveboracensis noveboracensis (Gmelin).....	U.M.
Grinnell's Water-Thrush.....	Selurus noveboracensis notabilis Ridgway.....	C.M.
Louisiana Water-Thrush.....	Selurus motacilla (Vieillot).....	U.S.R.
Kentucky Warbler.....	Oporornis formosus (Wilson).....	R.S.R.
Connecticut Warbler.....	Oporornis agilis (Wilson).....	U.M.
Mourning Warbler.....	Oporornis philadelphia (Wilson).....	U.M.
Northern Yellow-throat.....	Geothlypis trichas brachidactyla (Swainson).....	C.S.R.
Yellow-breasted Chat.....	Icteria virens virens (Linnaeus).....	U.S.R.
Hooded Warbler.....	Wilsonia citrina (Boddaert).....	R.M.
Wilson's Warbler.....	Wilsonia pusilla pusilla (Wilson).....	C.M.
Canada Warbler.....	Wilsonia canadensis (Linnaeus).....	C.M.
American Redstart.....	Setophaga ruticilla (Linnaeus).....	C.M.
English Sparrow.....	Passer domesticus domesticus (Linnaeus).....	I.S.C.R.
Bobolink.....	Dolichonyx oryzivorus (Linnaeus).....	C.M.S.R.
Eastern Meadowlark.....	Sturnella magna magna (Linnaeus).....	C.P.R.
Western Meadowlark.....	Sturnella neglecta Audubon.....	C.M.S.R.
Yellow-headed Blackbird.....	Xanthocephalus xanthocephalus (Bonaparte).....	C.S.R.

Eastern Red-wing.....	Agelaius phoeniceus phoeniceus (Linnaeus).....	U.S.R.
Giant Red-wing.....	Agelaius phoeniceus arctolegus Oberholser.....	C.M.S.R.
Thick-billed Red-wing.....	Agelaius phoeniceus fortis Ridgway.....	C.M.
Orchard Oriole.....	Icterus spurius (Linnaeus).....	U.S.R.
Baltimore Oriole.....	Icterus galbula (Linnaeus).....	C.S.R.
Rusty Blackbird.....	Euphagus carolinus (Muller).....	C.M.
Brewer's Blackbird.....	Euphagus cyanocephalus (Wagler).....	U.M.
Bronzed Grackle.....	Quiscalus quiscula versicolor (Vieillot).....	A.M.S.R.
Eastern Cowbird.....	Molothrus ater ater (Boddaert).....	C.S.R.
Nevada Cowbird.....	Molothrus ater artemisiae Grinnell.....	U.M.
Scarlet Tanager.....	Piranga olivacea (Gmelin).....	U.S.R.
Summer Tanager.....	Piranga rubra rubra (Linnaeus).....	R.S.R.
Eastern Cardinal.....	Richmondia cardinalis cardinalis (Linnaeus).....	C.P.R.
Rose-breasted Grosbeak.....	Pheucticus ludovicianus (Linnaeus).....	C.M.S.R.
Western Blue Grosbeak.....	Guiraca caerulea interfusa Dwight and Griscom.....	R.V.
Indigo Bunting.....	Passerina cyanea (Linnaeus).....	C.M.S.R.
Lazuli Bunting.....	Passerina amoena (Say).....	A.
Dickcissel.....	Spiza americana (Gmelin).....	C.S.R.
Eastern Evening Grosbeak.....	Hesperiphona vespertina vespertina (Cooper).....	R.W.V.
Eastern Purple Finch.....	Carpodacus purpureus purpureus (Gmelin).....	C.W.M.
Canadian Pine Grosbeak.....	Pinicola enucleator leucura (Muller).....	R.W.V.
Gray-crowned Rosy Finch.....	Leucosticte tephrocotis tephrocotis (Swainson).....	A.
Common Redpoll.....	Acanthis linaria linaria (Linnaeus).....	U.W.V.
Greater Redpoll.....	Acanthis linaria rostrata (Coues).....	R.W.V.
Northern Pine Siskin.....	Spinus pinus pinus (Wilson).....	U.M.
Eastern Goldfinch.....	Spinus tristis tristis (Linnaeus).....	C.P.R.
Red Crossbill.....	Loxia curvirostra minor (Brehm).....	R.M.
Bendire's Crossbill.....	Loxia curvirostra bendirei Ridgway.....	R.M.
White-winged Crossbill.....	Loxia leucoptera leucoptera Gmelin.....	R.W.V.
Red-eyed Towhee.....	Pipilo erythrophthalmus erythrophthalmus (Linnaeus).....	C.M.S.R.
Arctic Towhee.....	Pipilo maculatus arcticus (Swainson).....	U.M.
Lark Bunting.....	Calamospiza melanocorys Stejneger.....	R.M.
Eastern Savannah Sparrow.....	Passerculus sandwichensis savanna (Wilson).....	C.M.
Nevada Savannah Sparrow.....	Passerculus sandwichensis nevadensis Grinnell.....	R.M.
Eastern Grasshopper Sparrow.....	Ammodramus savannarum pratensis (Vieillot).....	U.S.R.
Western Grasshopper Sparrow.....	Ammodramus savannarum perpallidus (Coues).....	C.S.R.
Leconte's Sparrow.....	Passerherbulus caudatus (Latham).....	U.M.
Western Henslow's Sparrow.....	Passerherbulus henslowii henslowii (Audubon).....	U.M.
Nelson's Sparrow.....	Ammodramus caudatus nelsoni (Allen).....	U.M.
Eastern Vesper Sparrow.....	Poocetes gramineus gramineus (Gmelin).....	C.M.
Eastern Lark Sparrow.....	Chondestes grammacus grammacus (Say).....	U.S.R.
Slate-colored Junco.....	Junco hyemalis hyemalis (Linnaeus).....	A.M.C.W.R.
Montana Junco.....	Junco oreganus montanus Ridgway.....	R.W.V.
Cassiar Junco.....	Junco hyemalis cismontanus (Dwight).....	R.W.V.
Eastern Tree Sparrow.....	Spizella arborea arborea (Wilson).....	C.W.R.
Western Tree Sparrow.....	Spizella arborea ochracea Brewster.....	C.M.
Eastern Chipping Sparrow.....	Spizella passerina passerina (Bechstein).....	C.S.R.
Clay-colored Sparrow.....	Spizella pallida (Swainson).....	C.M.
Eastern Field Sparrow.....	Spizella pusilla pusilla (Wilson).....	C.S.R.
Western Field Sparrow.....	Spizella pusilla arenacea Chadbourne.....	C.M.
Harris's Sparrow.....	Zonotrichia querula (Nuttall).....	C.M.
White-crowned Sparrow.....	Zonotrichia leucophrys leucophrys (Forster).....	C.M.
Gambel's Sparrow.....	Zonotrichia leucophrys gambelii (Nuttall).....	C.M.
White-throated Sparrow.....	Zonotrichia albicollis (Gmelin).....	C.M.
Eastern Fox Sparrow.....	Passerella iliaca iliaca (Merrem).....	C.M.
Lincoln's Sparrow.....	Melospiza lincolni lincolni (Audubon).....	C.M.
Swamp Sparrow.....	Melospiza georgiana georgiana (Latham).....	C.M.
Mississippi Song Sparrow.....	Melospiza melodia euphonia Bangs.....	C.M.
McCown's Longspur.....	Rhynchophanes mccownii (Lawrence).....	R.M.
Lapland Longspur.....	Calcarius lapponicus lapponicus (Linnaeus).....	C.W.R.
Smith's Longspur.....	Calcarius pictus (Swainson).....	R.M.
Chestnut-collared Longspur.....	Calcarius ornatus (Townsend).....	R.M.
Eastern Snow Bunting.....	Plectrophenax nivalis nivalis (Linnaeus).....	U.W.V.





The number of bullheads taken from an individual lake may reach phenomenal figures. Seven hundred thousand bullheads were taken by anglers from Lost Island Lake during the past three years.

## Bullheads . . .

(Continued from page 121)

low), one stonecat, and two madtoms.

There are only four species of bullheads in the entire United States. Six of the nine catfish listed for Iowa are important as hook and line or food fish, and of these six the channel catfish and black bullhead make up the bulk of the catfish taken on hook and line.

Although not considered of importance to the angler, stonecats are often caught in the rocky areas below dams. They have the general appearance of a bullhead but can usually be distinguished by their slender shape and by the fact that the adipose fin is continuous with the tail. Almost unknown to the pole and line fisherman are the madtoms. These small tadpole-like catfish usually run less than three inches in length and are occasionally taken by fishermen while seining for minnows. Poison glands at the base of the spines enable these small fish to inflict painful wounds.

We find that the popularity of bullheads is due to several factors in addition to their abundance. One of the most important reasons is the fact that special skill and special tackle is not necessary. Anyone equipped with a rod, a line, a hook, and a can of worms is ready to go bullhead fishing. A second important factor in favor of bullhead fishing is their readiness to take your bait, regardless of the time of day or night. They are

far less temperamental in their feeding habits than most other species of fish. Bullheads are apt to eat whatever is available, including insect larvae, worms, snails, aquatic vegetation, and occasionally small fish and eggs of fish.

The spawning habits of the bullheads are interesting. They usually make a nest on shallow sand or mud bottoms in early summer. When the young hatch, a matter of a few days to two weeks, depending on the water temperature, they are jet-black in color and are often seen in large schools, swimming at the surface and along shallow shores. These schools of tadpole-like bullheads resemble a swarm of aquatic black bees as they "roll" along in a sort of "cloud" formation. During the time the young are in these schools the parent, male fish, and often both parents, are on guard, ready to ward off intruders.

Thoreau of Walden Pond had this to say about bullheads or horned pouts as he called them: "The horned pouts are dull and blundering fellows, fond of the mud and growing best in weedy ponds and rivers without current. They stay near the bottom, moving slowly about with their barbels widely spread, watching for anything eatable. They will take any kind of bait, from an angleworm to a piece of tomato can, without hesitation or coquetry, and they seldom fail to swallow the hook. They are very tenacious of life, opening and shutting their mouths

for half an hour after their heads have been off. They spawn in spring and the old fishes lead the young in great schools near the shore, caring for them as a hen cares for her chickens. A blood-thirsty and bullying set of rangers with ever a lance at rest and ready to do battle with their nearest neighbor."

The bullhead's ability to live under all conditions is almost legendary. They inhabit lakes so shallow and weed grown that few other fish can live there. These shallow lakes often freeze almost solid, yet when spring again comes we find at least some of the bullheads surviving. This helps to account for the wide distribution of bullheads in our shallow lakes, ponds and streams; other fish "freeze out," leaving only bullheads.

There are many stories of how bullheads were found alive after freezing, thawing, drying, and all sorts of hazards, any one of which would have killed most kinds of fish. They can live out of water for many hours when on ice. During cool weather the Conservation Commission often transports bullheads many miles from one body of water to another "dry," i.e., without the usual tank of aerated water necessary to haul other fish.

The food qualities of the bullhead, like many other fish, are often debated. In general the flesh is firm and well flavored when the fish has been taken out of clean water. Bullheads taken from muddy water may have a disagreeable, muddy flavor. The flavor can be improved by keeping the bullheads alive in clean waters

for a week, stock water tanks often being used for this purpose.

If you have trouble skinning your bullheads, the best advice is to ask someone who knows how; it will pay you dividends. With a sharp knife, a pair of pliers, and the "know how," preparation of bullheads for the frying pan is a matter of less than a minute's work per fish.

## THE IMPORTANCE OF BIRDS

I hope there will be a wide reading of a recent article by C. J. Toner, an Ohio tree authority, in which he points out how important birds are as a curb on destructive insects.

Birds, he observes, are nice to have around for their eye and ear appeal. But they serve a highly practical purpose in protecting your trees and shrubs. They are nature's answer to the bug menace, acting as winged insecticides.

As such, they are true benefactors of shade trees by gulping insects, digesting scale pests, and even digging out borers that otherwise couldn't be dislodged, Mr. Toner states.

The top ten of our feathered friends in the insect destroying category are generally considered to be the song sparrow, house wren, downy and hairy woodpeckers (mistakenly called pests by some home owners), nut hatch, bluebird, brown thrasher, catbird, oriole and flicker.—Mason City Globe-Gazette.

Water insects make up the preponderance of the food of channel catfish.

FISH & WILDLIFE SERVICE  
UNITED STATES DEPARTMENT  
OF THE INTERIOR

# Conservation In Action

## UP 12%

MALLARDS COMPRISED ALMOST ONE THIRD OF THE WINTERING FLOCKS; PINTAILS ALMOST ONE SIXTH.

COOT POPULATIONS SHOWED A HEAVY DECREASE.

THE WINTER WATER-FOWL CENSUS INDICATED AN INCREASE OF APPROXIMATELY 12% IN DUCKS

THIS INDICATES THAT THE STRINGENT REGULATIONS OF THE PAST FEW YEARS HAVE BEEN WORTHWHILE

SWANS AND GEESE SHOWED AN INCREASE

THE SURVEY WAS MADE BY 1300 PEOPLE IN ALASKA, CANADA, UNITED STATES AND MEXICO. COOPERATING WERE DOMINION, STATE AND FEDERAL PERSONNEL AND THE ARMED SERVICES.

Bob Hines





Although most turtle or mourning doves go south in winter, some remain in the state even during periods of heavy snow and sub-zero temperature. Jim Sherman Photo.

## Doves . . .

(Continued from page 121)

3000 B.C. the Egyptians were raising them for food. They were employed by the early Greeks and Romans, and in the first Crusade, to carry messages—just as carrier or "homing" pigeons were used in our two world wars.

All of our domestic pigeons have been developed, by selective breeding, from the blue rock pigeon—the rock dove which nests in the rocky cliffs along the coasts of Europe. Millions of domestic pigeons are virtually wild. In many cities they have become a nuisance but efforts to eliminate them by city and park administrators are defeated by the public which feeds them. In the suburban and rural districts flocks commonly fly to and fro in close formation, apparently just for the fun of it, wheeling in unison like soldiers at drill.

Previously we told of the slaughter and extinction of the passenger pigeon which formerly inhabited the forested regions of this country in billions. Today, except for the band-tailed pigeon of Canada and western United States, the ground dove and a few kinds found in southern Florida or southern Texas, the only native pigeon is the mourning dove or turtle dove. It is a slim brownish bird, smaller than most domestic pigeons, with long pointed tail and wings, conspicuous white tips on the tail feathers, and a small black spot behind the eye. A bird of the open country, it is valuable because in addition to waste grain and insects it feeds chiefly on weed seeds. Two glossy white eggs are laid in a nest which is merely a crude thin platform of sticks, usually in a small tree or a tall bush.

The turtle dove is one of our early spring arrivals, and then we hear the low mournful mating call of the male: "Ooah-cooo-cooo-coo." They rise swiftly from the ground

with a twittering whistle of wings and are swift fliers that travel long distances to drink and bathe. . . .

"The flowers appear on the earth; the time of the singing of birds is come, and the voice of the turtle is heard in our land." Turtle? Dove?

## IN THE GOOD OLD SUMMER TIME

One thing about "nigger" fishing. You can really relax. Find a sunny spot with a great big shade tree near a good fishing hole. Then lean your old weather-beaten back against the trunk of the tree and set your line. Attach a small bell so that when you sleep and the fish bites you'll be awakened. Avoid loud snoring because scary fish may leave the area. Have a light lunch and coffee jug near at hand—not too far so you'll have to stretch for it. Take your wife along to bait the hooks and have her tread around softly lest she disturb you. She's handy for cleaning the fish too—even carrying the duffle to the car. After a man has relaxed against a tree it might prove shocking to have to carry anything back to the car.

One obstacle presents itself here again—some wives are not cooperative on such gestures. They won't even clean the fish. Gentlemen, it all depends on how you got started, and here is a word of caution to young lovers. Have some of these important things settled before you say, "I do."

Seriously we can hardly imagine a better company for fishing than a family. A man and his wife. Or a man and his wife and children. Clean air, good sport, beautiful water, blue skies, tricky fish, hungry mouths, hot coffee, and welcome sandwiches. That's sport deluxe. Try it some time.—Bellevue Leader.

## SPORTSMEN RESORT TO OWL-ICIDE IN CROW CONTEST

How far does sportsmanship extend? Can a man trust his friends? Does anyone want to attend a funeral for an owl?

These are questions that are bothering Paul Klinger these days.

Vern Darnell, Speed Philips and Game Warden Tom Berkley asked permission of Mr. Klinger to borrow his owl.

To you non-crow shooters this may seem like a peculiar request, but any good crow shooter knows that a live owl, tethered in a tree, is the best bait to attract crows that a man can get.

Of course, there was one complicating factor. The hunters were all members of the rival "Bill Philips" team of sworn pest eradicators, and every crow they got would count against Paul's team in the hot and heavy contest that is being waged by the Sportsman's Club.

But Paul, being a good sport, said, "Sure, take the owl."

So off went the merry hunters with the owl safely locked in the trunk of Warden Berkley's car, his tether tied to the hinge prop.

As they jogged merrily along the country road, unbeknownst to them, the lid of the trunk flew open and the owl hopped out.

This was the owl's misfortune, for when he came to the end of his tether he was dragged along behind the car, through mud and slush, until the boys came to a suitable crow shooting site.

"We may have even backed over him, too," Vern recalls. "At any rate, he was barely breathing when

## IOWA LEADS I. W. L. A.

Members of the Izaak Walton League who reside in Iowa have every right to feel very chesty these days. Of the ten largest chapters in the nation, Iowa has six, or sixty per cent.

The Des Moines chapter ranks second in the nation, with 1,201 members, then comes Clinton, 1,172 members. That gives Iowa two out of the first three places. Marshalltown has 719 Ikes in good standing. Fort Madison, 633; Cedar Rapids, 620, and Burlington is in 10th spot nationally with 541 members. Iowa leads the nation in total number of chapters and also in membership. Not bad for a little old farmer state where the tall corn grows.—Davenport Democrat.

## REMINGTON ANNOUNCES TWO NEW GUNS

Remington Arms Company has announced "two completely new auto-loading shotguns, streamlined inside and out," known as Model 11-'48 and the Sportsman '48. The guns will be built in 12, 16 and 20 gauges.

Fish have ears and the earbone of the sheephead or freshwater drum is the "lucky stone" of many a youthful fisherman.

we picked him up, and, of course, the next morning he wasn't breathing at all."

Just to top it all off, the hunters proceeded to get their car stuck in a ditch before they finally got back to town and returned the limp remains to Mr. Klinger.

All in all, it was an afternoon for everyone but the owl. Last rites were held at the Klinger home that evening.—Fayette County Union.



To non-crow shooters, crow hunting sounds like a waste of time and effort. For those addicted to this sport it is the fastest, most fascinating of all. Jim Sherman Photo.





Most sportsmen are fanatics and will admit that they are experts at the cock of a hammer or flick of a fly. Jim Sherman Photo.

## Commissioner . . .

(Continued from page 121)  
collect, classify and preserve all statistics, data and information as in its opinion shall tend to promote the objects of this Chapter, shall conduct research in improved conservation methods and disseminate information to residents of Iowa in conservation matters."

What do these quotations mean? Simply that we are to administer certain resources, considering the needs of the present and future generations, as well as the needs of the resources themselves. We are to do this at a time when natural resources generally are becoming less and less abundant because of accelerated use.

We must at the same time please and satisfy the most fanatical group of self-appointed experts to be found in this great democracy. This is said advisedly. Most sportsmen are fanatics and will admit at the cock of a hammer or flick of a fly that they are experts. I am a quail hunter and readily admit that I am one of those fanatics and experts. I am not being critical but stating an indisputable truth.

We as a Commission must manage our resources so that we produce the greatest good for the greatest number of people, and at the same time conserve and build in order to leave a heritage for the future. Now let us see how this is done.

### Composition of the Commission

The Commission consists of seven members, four of whom may be from one political party. I have not known of a decision made by the Commission along political lines. We meet once a month, usually in Des Moines, for one, two, rarely three, days. Meetings begin at 9:00 a.m. and often continue until 6:00 or 7:00 in the evening. The matters discussed vary greatly and it seems we are always facing new problems. Fifty or sixty different items may be taken up at one meeting. Ordinarily there are hearings with groups from va-

rious parts of the state. Personnel matters and regulations are taken up, finances are discussed, and a host of other subjects.

The Director and the heads of the various departments are present, and when technical matters are discussed, the various technicians themselves are present. Suppose we look at some of these matters more in detail.

### Personnel

Nothing is more important in a business than the personnel, and our job is to run a business. We have 225 regular employees and hire well over 1,000 during the course of the year. The personnel must be qualified and is carefully selected. They are instructed that they are servants of the people, and that they must be polite and courteous in their public contacts.

From the Director on down through the department, it is our responsibility to see that we have capable, efficient employees. We believe we have the best men and women available. We do not hesitate to go outside of the state in our search for employees if that seems to be necessary. Iowa has no monopoly on brains. California took Seth Gordon from Pennsylvania; and Mexico took Starker Leopold from us. The University picks its brains from many states. It is ridiculous to believe that the Commission should not also make use of such outside talent.

At every meeting there are some changes in personnel. Perhaps there are resignations; perhaps there is a need for the filling of a new position; and rarely there has been the need to dismiss an employee.

Conservation officers are selected purely on the basis of fitness and ability. They must pass both written and oral examinations. A field check and thorough investigation is made of the moral and physical fitness of applicants for any position. One thing the Commission will not tolerate is any mention of the political faith or the religious creed of any applicant.

These are never mentioned either before the individual is hired or afterwards. Personally, I do not know the political beliefs or the religious creeds of a half dozen employees in the department, and I do not care to know.

### How Our Hiring Is Done

When any division undertakes to employ anyone, the head of that division submits a written recommendation to the Director. The Director either approves or disapproves the recommendation, but at the next Commission meeting the recommendation is submitted to the Commission; the department head and Director are both present, and the matter is then settled by the Commission.

Personnel is varied in type and ability. We require foresters, nurserymen, engineers, draftsmen, biologists, editors, auditors, photographers, architects, peace officers, as well as many other technical and semi-technical employees, plus a host of skilled and semi-skilled laborers to operate our five million dollar business.

We are very proud, frankly, of the caliber of our employees. We believe they compare favorably with any similar department any place in the United States. We have seen and heard them on national programs and in frequent contact with the employees of other states—they gained in stature.

### Our Finances

The financial resources of the Conservation Commission consist of three funds: (1) a state fish and game protection fund, (2) a state conservation fund, and (3) an administrative fund.

"The state fish and game protection fund, except as otherwise provided, shall consist of all monies accruing from license fees and all other sources of revenue arising under the division of fish and game. The conservation fund, except as otherwise provided, shall consist of an equitable portion of the gross amount of the two aforesaid funds, to be determined by the Commission, sufficient to pay the expense of administration entailed by this Chapter." When the budget is once set, we attempt to live within it.

In these days of fourth round wage increases and spiraling inflation it is a Herculean and disheartening job to see that our employees are paid even a bare living wage. My personal opinion is that very few public servants in any department are paid appropriately. We do the best we can with the money available, and frankly, that isn't enough. We lose capable people because we cannot afford to pay them more, and some favored state is given funds from general revenue, pays salaries we can't and they take our top people away from us.

### And Now—Regulations!

There is also a subject known as "Regulations." Perhaps you have heard of it. This is a thorn in our sides and is a thorn in your sides. We don't like them any more than you do. There seems to be an impression that the Commission takes pride in promulgating as many restrictive regulations as it can devise. This is wholly false. Unfortunately, regulations are a necessity, and restrictive regulations must be passed.

(Continued on page 128)



Work problems of the Conservation Commission are varied and require specialists in almost every field of endeavor. Jim Sherman Photo.





A hundred years ago there were no regulations pertaining to fish and game in Iowa. Passenger pigeon, elk, prairie chicken and wild turkey could be found in abundance.

## Commissioner . . .

(Continued from page 127)

A hundred years ago in this state we had no regulations pertaining to fish and game. The streams of the state were clear-water streams abounding in fish. The fields and woods were full of game. Passenger pigeons swarmed in unnumbered millions; elk abounded in the state; bear were to be found in great numbers; and the ruffed grouse, the turkey, and other game were to be had for the taking. Yes, we had no regulations, and what happened?

Man, the most predatory, destructive animal known to nature, by gun, plow, ax, and tiling spade, decimated the buffalo, the pigeon, and much of the other game. Where once rivers flowed with crystal clear waters, mud flats appeared. The soil was eroded. Clear water streams lost their deep pools and filled in with silt. Man increased his numbers time and time again, and those numbers are still increasing. Regulations became a necessity.

Modern civilization is a complexity. Practically every phase of our lives is regulated. Certainly the financial aspect of our life is extremely well regulated. We are regulated concerning our automobile; some states have even undertaken to regulate the hours of sleep required for all citizens, and the length of beds. Game and fish regulations are simply part and parcel of an over-all picture. Like taxes and death, they are always with us.

No game or fish regulations have ever been made or ever will be made which please everyone. We simply take the facts as they

are presented, consider them on a statewide basis, and promulgate such regulations as to us seem proper. We try to keep abreast of the increasing technical knowledge available throughout the country, and we try to make our regulations fit existing conditions. Some are not perfect; some require change; and some must be changed each year.

### Some Basic Illustrations

To give you a few concrete examples of what the Commission faces in regulations, consider the fox and the quail. Many of our citizens feel that all foxes should be killed. Perhaps an equal number feel that all foxes should be protected. Obviously, we can't please both sides; so whatever regulation is passed is subjected to criticism, and yet there must be a regulation harmonizing, if possible, the views and needs of both.

Not so very long ago the Commission was advised by a certain group of beagle hound enthusiasts that in the area where they had field trials there were no rabbits. At the same time the truck gardeners in that identical area were criticizing the Commission because an increase in rabbit numbers caused crop damage.

Unfortunately, the average sportsman looks at these matters from a selfish standpoint. He sees conditions in his particular locality. If he gets what he wants, he is happy. If he doesn't, the Commission is wrong. We must make regulations considering the needs of the state as a whole. We must make regulations which will afford the greatest amount of sport to the greatest number of citizens, and also afford proper protection to the fish and game.

Faced as we are with increasing agricultural use of the land, with an increasing human population, and with lessened supplies of game for the individual, we have founded our program upon the basic fact that man is but another animal; that good soil makes good animals; and that what is good for the soil is good for the animal. We work with the farmer; we educate the children; we preach conservation of the soil, reforestation and proper land use, because we feel that land well cared for will produce the game that cannot possibly be produced by hatcheries or game farms.

Now for a personal comment. My fellow Commissioners have not seen this article. If there is in it something which you approve, credit that to the joint views of the seven of us. If you do not like some of the comments, ascribe those comments to me. I have served a little better than four years. I have served with six other Commissioners. I have never once found them to be anything but courteous, considerate and fair-minded; and I have never once seen the Commission yield to pressure groups or political groups.

## Wardens Tales

### Shop Talk From the Field

Conservation Officer Lloyd Huff, in charge of Polk County, recently observed a well-dressed man sprinkling some material from a small box into the Raccoon River from one of the Des Moines bridges. He stopped and asked the gentleman what he was doing. Without batting an eye, the citizen replied, "I just dumped a man in here." The conservation officer was taken by surprise and thinking that a chaperone or looney wagon must be nearby he looked the man over carefully without saying a word. Presently the stranger volunteered, "I just dumped a man and his wife in over at the other end of the bridge."

Thinking the comedy had gone far enough, Huff produced his credentials and said, "I am the conservation officer in this territory.

Now just what were you doing?" The stranger replied, "Just what I told you. I'm a local undertaker and I have just sprinkled the ashes of three people on the water. It is not uncommon that ashes are not claimed and this stream seems to me to be a fitting last resting place for them."

Dave Fisher, conservation officer in charge of Henry and Des Moines counties, sends along a dog eat dog story. He writes:

"Mrs. M. J. Nafziger of West Burlington caught a fish, a small perch, which her husband placed on a stringer and put back in the water. Two hours later when they went to retrieve the fish the couple found a four-foot watersnake on the stringer. It had swallowed the fish and part of the stringer. It was the watersnake's last meal. Shortly afterward Lewis Mehaffy caught a three and a-half pound bass. Noting a bulge in its stomach when he dressed the fish, he opened it and found that it had swallowed an eight-inch watersnake."

It has never been suggested by any Commissioner that something should or should not be done for political reasons, or because a certain group favored it. Invariably each question has been presented on its merits, discussed on its merits, and decided on its merits. That has been our job, is our job, and will continue to be our job.

Mistakes have been made—and will continue to be made in the future. All the answers in conservation are not yet known. We are attempting by research to improve conditions in Iowa, and we must continue to do so even though certain individuals or groups disagree with us when our methods are contrary to their ideas. Most people will accept the advice of their physician when ill, or the counsel of their attorney when in legal difficulties; but, sad to say,

all too many will not accept the practices and findings of technicians and biologists in fish and game work. Despite opposition from individuals, groups or sections, benefits will continue to accrue and posterity will thank conservation commissions who, in the face of adverse public opinion, had the courage to plan for the future in the face of bigoted opposition.

You may wonder what we conservation commissioners get out of serving in this capacity—nothing much financially. We do, however, meet and rub shoulders with the grandest group of people in the state. We love them even when they disagree with us. And we have the self-satisfaction of administering a program in which we deeply believe, and of being of service to our state and to our fellow citizens.



We preach conservation of soil, forests and proper land use and we know that land well cared for will produce game that cannot be provided otherwise. Jim Sherman Photo.