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IOWA CONSERVATIONIST

Volume 6

JULY 15, 1947

Number 7

THERE IS STILL HOPE

NEW LAWS

By Bruce F. Stiles
Assistant Director

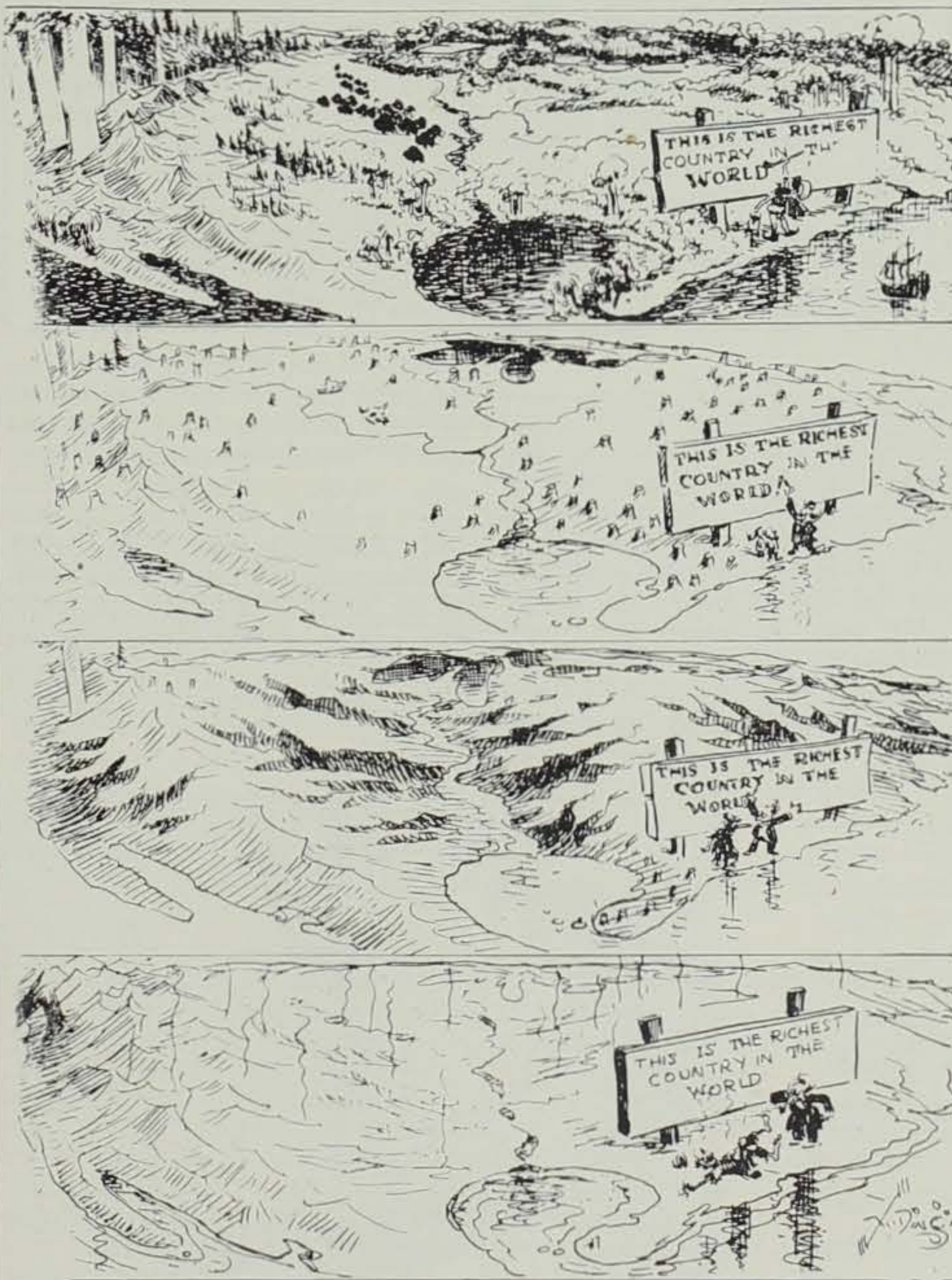
JULY 4 is a cornerstone as far as laws are concerned, for on that date of each legislative year all of the new laws enacted by that legislature become effective with the exception of those deemed to be of immediate importance that may become law at an earlier date under special provisions.

Our last legislative session was a busy one, and 1,074 bills were considered. Less than half of these finally were enacted into law, however. As private citizens and also as a state agency, naturally, the Conservation Commission had a general interest in all of these measures. However, the bills that might be termed conservation measures and in which the State Conservation Commission had a direct and immediate interest were much fewer in number. There were, however, 94 conservation measures that required the attention of the Conservation Commission, and these were followed with great care through their introduction, committee discussion, debates, and final disposition.

Oddly enough, 47 of these originated in the House and 47 of them in the Senate. Many of them, of course, appeared in both bodies in nearly identical form. Of these 94 bills 27 were finally enacted into law. Not all of these 94 bills were considered to be good measures from the sportsman's standpoint and more often than not the interest of conservation was promoted by the defeat of a measure rather than by its enactment.

Certainly the Fifty-second General Assembly was conservation minded, and it is likely that the sportsmen fared better in its hands than in that of any previous assembly.

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It Used to Be

FARM CROPS TEMPER PHEASANT PRODUCTION

By Lester F. Faber
Game Biologist

WHY don't we have more pheasants? What caused the pheasant population to drop? I don't see one bird where I used to see twenty. What happened to the

pheasant in Iowa? These are the questions asked by sportsmen and farmers alike the past few years. The supposed answers to the problem follow in the same breath. The foxes got 'em! The crows are eating all the eggs! Hunting sea-

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Soil and Water Program Needs Interpretation

By Dr. Hugh H. Bennett

Chief of the Soil Conservation Service, U. S. Department of Agriculture. Dr. Bennett is recognized as one of the world's outstanding soil experts. He is the author of countless scientific and popular essays and several books on soil and soil uses.

TAKE a good look at Jay Darling's cartoon before you read this; Ding is one of the world's best cartoonists and his drawings always are worth study. This one is no exception—in fact, I think it's one of his most effective.

In this drawing, Ding compresses the history of North America's soil and other natural resources during the last 350 years into four small panels. That's why it's so effective; when you condense three and a half centuries into four little drawings it's bound to have punch. And Ding's cartoon, which he calls "It Used to Be", certainly has punch.

The history of our soil, water and forest resources, as Ding pictures it, is not very pleasant, but there's a lot of truth in it—too much truth, in fact. Of course, he's had to exaggerate a little—cartoonists usually do, to get their points across—but in the main he's drawn the truth in those four panels.

When the white men came they found a rich land, the richest in the world, everything considered. Well, most of Europe had been pretty well worked over for several centuries and this new continent was an El Dorado, and our ancestors proceeded to work it for all they could get out of it.

They moved from the Atlantic coast settlements back into the Piedmont country; then they crossed the Appalachian mountains and swarmed down into the

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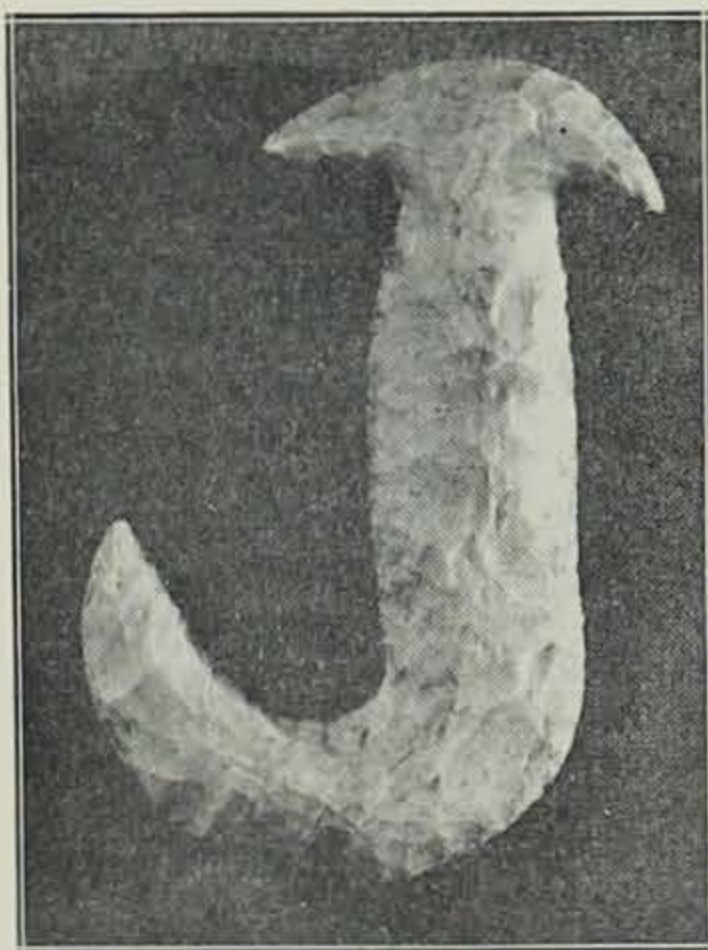
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ABOUT FISH HOOKS

DID you know that Indians made fish hooks of bone, flint, and abalone shells before the white man came?

That until 1940 this country imported most of its fish hooks from Europe, but that we now turn out more than half a million hooks for ourselves every day?

That during the war the government rated fish hooks so important that they were given an "A-1" priority rating?



This beautifully formed flint fish hook was found near the Fish Farm Mounds in Allamakee County in 1944 by Dale Hemming of Decorah.

That one American company filled an order for 120,000,000 cod and halibut hooks—and that Iceland was the customer?

That fish hooks, since the stone age, have been a vitally important implement for the human race?

That Leonardo da Vinci, among other inventions, devised a machine for sharpening fish hooks?

Catfish sometimes feed in very shallow water at night.

LACEYISMS

Excerpts From Speeches of
Major John F. Lacey
Iowa Member of Congress
1889-1907

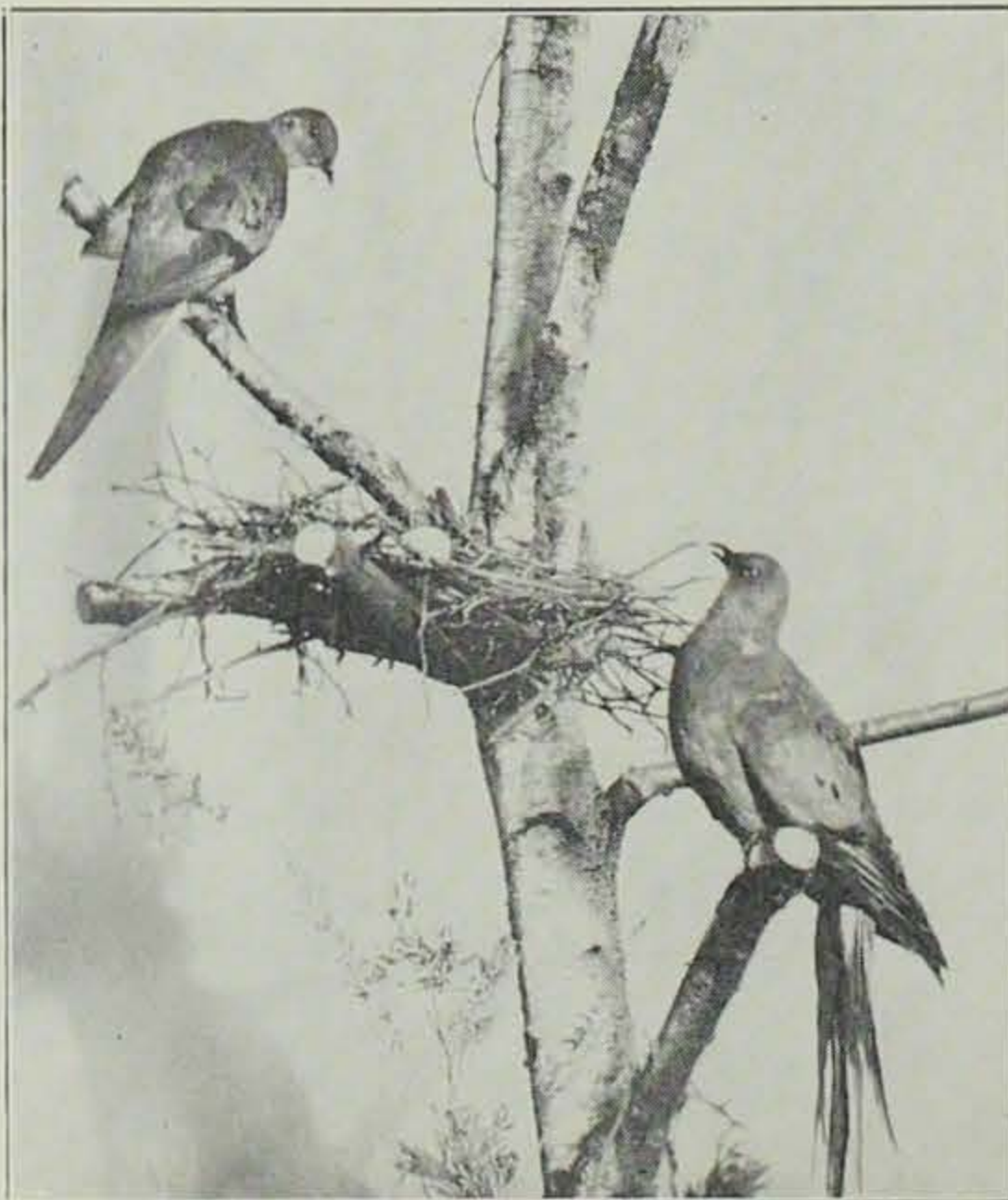
BY destroying the market the temptation to break the state laws was removed. It is this feature of the federal law which makes it effective. The various state game wardens should now be able to watch the market and prevent the unseasonable sale of all kinds of game. It is of no avail to the pot-hunter to kill birds if he cannot sell them, and he cannot market them without shipment, and when illegally shipped they become subject to seizure.

The last pigeon roost that we have any account of was in the Indian territory, and now it is a debatable question as to whether or not these beautiful birds are wholly extinct. An occasional report comes from Michigan, New York, and Mexico, that some of them have been seen, but the number is always small and the accuracy of the reports in doubt. The millions of these birds, which once darkened the air, have disappeared. It is to be hoped that the reports of a few small remaining flocks may prove to be true. (Last one died in Cincinnati Zoo, 1914.)

Those laws in the old world were enacted for the comfort of a privileged class, and it was hardly to be expected that the poor would obey, without complaint, laws which protected the wild creatures from the fowling pieces and snares of the poor, in order that there might be sport for the nobility.

But in America no such invidious distinction exists, and the preservation of our birds and game be-

★
The
extinct
passenger
pigeon
has
become
one
of the
symbols
of
man's
wanton
wildlife
destruction.
★



comes a matter of general interest to all, to rich and poor alike.

National forestry is tree cultivation upon a large scale, covering long periods of time, for which the lives of individuals would be inadequate. Scientific forestry has taken a firm hold in France and Germany. The destruction of streams and farms by the washing of sand and gravel, caused by the wholesale cutting down of the woods, has called the attention of the people of the old world to the necessity of reforesting the waste lands. The people of the United States are awakening upon this question at a much earlier period than did our kinfolk across the sea.

1,000 NEW BENTON COUNTY SUBSCRIBERS

The largest single block of subscribers to the "Iowa Conservationist" since the birth of the magazine in 1942 has been received from Kenneth E. Shirley, Secretary of the Benton County Fish and Game Club. This live-wire club, headed by President John Robison believes in conservation through education and has provided each of its 1,021 members with a full year's subscription beginning with this issue. Welcome to the family, fellows, and thanks!

The red fox is much faster than the grey fox. He has been known to cover a given distance at the rate of thirty miles per hour.

The proportion of women to men in the fishing waters of Missouri has increased nearly three times, according to figures based upon creel census reports by Conservation Commission agents in the field, between 1942 and 1946.

In '42, only one out of every 11 anglers was a woman; in '46, nearly one out of every four checked was feminine.

Wardens Tales

Shop Talk From the Field

ELDEN STEMPEL, conservation officer in Adams, Page, and Taylor counties, tells this story on a duck hunter with a guilty conscience:

"While checking licenses at Corning Lake I saw one individual working feverishly with a disassembled shotgun. Thinking perhaps I could help him repair his firearm, I came up and asked what was the trouble. The hunter replied, 'I guess you've got me'. I noticed then that he had a short tubular stick, the kind used for plugging shotguns, and then he explained to me that he meant to plug the gun earlier but hadn't got around to it. Then, for the first time, I noticed his shotgun. It was a new three-shot Remington Sportsman, incapable of holding more than three shells and consequently didn't need to be plugged."

George Kaufman, conservation officer in charge of Clayton and Allamakee counties, writes:

"Under separate cover I am sending you a beautiful black beaver skin. I have seen a number of dark beavers along the Mississippi River but this particular one is much darker than any I have seen before. It was drowned in a fisherman's net. I am sorry about this beaver because I have been watching it for more than a year. When I first saw it I was going through a Mississippi slough in a canoe. The water was high. When floods come beaver leave their regular houses and dens and build small nests on trees. As the water rises they add to the top of the temporary houses and climb on top. By careful paddling you can get within 15 or 20 feet of these resting beaver before they take to the water. This day I noticed a big brown beaver on one nest and another large, dark, almost black object beside it. I thought at first that the dark one might be an otter but I did not think that a beaver and an otter would be that chummy. As I got closer, the brown beaver took to the water and the black one stayed for quite a while. When I first discovered it, it would weigh about 45 pounds. As you will see from this skin, it has eaten quite a little in the last year."

Frank Tucker, in charge of Audubon and Cass counties, writes:

"I had a complaint that dogs were running coons out of season near Atlantic and the first stop I made that evening I heard the dogs running. Shortly afterwards they barked 'treed'. I cut through a cornfield and as I came near the tree I heard someone say, 'Wait till the other boys get here.' I

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FARM CROPS . . .

(Continued from page 145)

sons are too long! Too many poachers!

What really happened to the pheasant? Why did we have fewer birds in the fall of 1946 than we had in 1941?

Several factors affect the natural production of wild birds. Conditions change vegetation on our Iowa farms in such a way that the numbers that can be produced vary from year to year, just as a forty-acre pasture can support a varying number of cows from year to year.

Another factor is the effect of rainfall and temperature on hatching success. Studies are now being made to determine how certain combinations of rainfall and temperature affect natural hatching. Weather need not be an unknown factor in pheasant management. We can do something about the effects of weather. For instance, by providing plenty of safe nesting areas on high ground we can soften the loss of nests and young birds from floods.

This article is intended to tell the story of the change in farming operations and cropping systems since 1941. This change is the decrease in acreage of crops that provide good nesting sites for pheasants and a sharp increase in acreage of row crops such as corn and soybeans. The row crops are of little value for nesting.

The farmer was asked to increase crop production prior to and during the war years. Increased prices paid for farm commodities encouraged increased production. The average farmer raised the crops that brought the greatest return. He put every possible square foot of his farm in production. Iowa farmers in many places produced part of their crops from lands that were not under cultivation prior to 1941.

One of the bottlenecks in raising more pheasants in Iowa is the shortage of good nesting cover.

GRAPH - Showing percent of the average farm in northwest Iowa in:

GOOD  POOR  MEDIUM 

for good nesting sites.

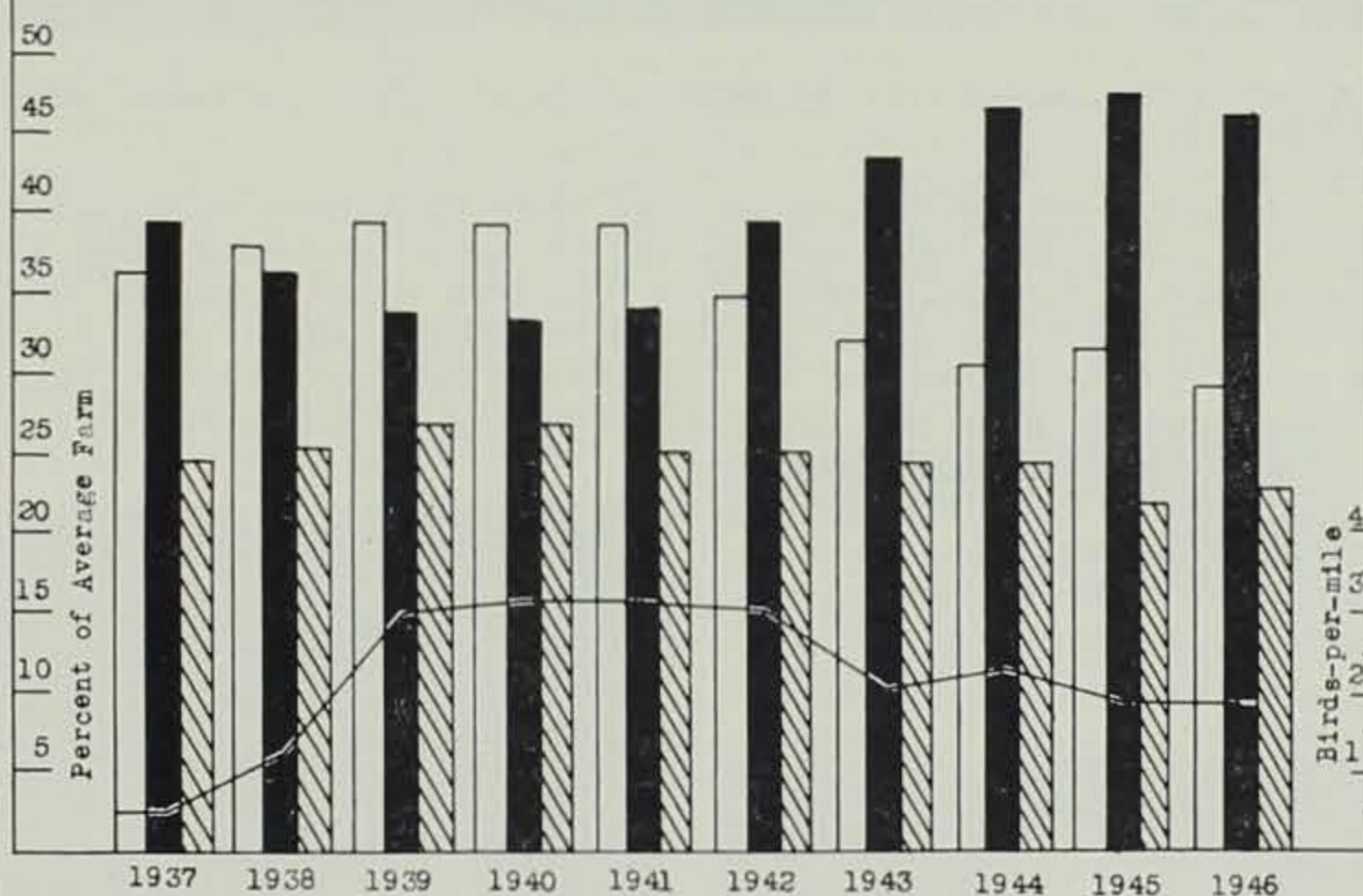
GOOD - Cropland not harvested or pastured.
Oats, Wheat, Barley, Rye, and Flax,
Tame and Wild Hay.

POOR - Corn
Soybeans

MEDIUM - Pasture
Buildings, roads and waste,
Incidental crops.

GRAPH - Shows population curve expressed in birds-per mile.

(All data applicable only to the pheasant)



Cropping systems used the past five years have squeezed this bottleneck tighter each year. Hay, pasture, and small grains offer most of the nesting cover in Iowa. These crops have decreased since 1941 while corn and beans have increased out of proportion to the favorable ratio that existed during 1938-41.

Fields were plowed as close to fences as possible. In many cases fences were removed to provide a few more feet of plowable ground. In many places the areas between the fences and roads were plowed or heavily grazed. Waste areas

were plowed and put into corn and beans. The decrease in pasture acreage resulted in the remaining pastures being overgrazed. Woodlots were removed or grazed more heavily than ever before. Fields were plowed nearer to ditches and gullies and further up the hills. All this can only result in a serious reduction of nesting cover and erosion. This condition would lend the remaining nesting areas less suitable because of more disturbance by farming or livestock.

Taking the state as a whole, table A indicates some of the changes in cropping. These figures

are a comparison between 1946 and 1941.

Table A:

2,600,000	acres more row crops than in 1941
120,000	acres less in woodlands
387,000	acres less in crops not harvested or pastured
132,000	acres less in waste land

In every case listed above the change has been to the detriment of pheasant production by reducing the areas where pheasants can nest safely.

The graph accompanying this article shows what happened on a smaller scale. The data used to prepare this graph were taken from The Iowa Agriculture Yearbook and are from twelve counties in northwestern Iowa. The classification of crops into "good", "poor", "medium" value for good pheasant nesting sites is necessarily general in nature.

In examining this graph, note that the percentage of "good" and "poor" crops were almost the same over the period 1938-39-40-41. Note also that the "good" crops were always slightly greater than the "poor". Then follow through to 1946 and see how the "poor" crops have jumped upward at the expense of "good" crops.

"The change for the worse" began in 1941 when "good" crops for nesting remained the same but "poor" crops increased one per cent. By 1946 "poor" crops made up 46 per cent of the average farm or almost half of all the farms were in corn and beans.

Apparently the crops classified as "medium" value for pheasant nesting had little effect on pheasant production or carrying capacity. The percentage of these crops changed but slightly over the ten-year period except that this group had increased 3 per cent from 1937 to 1940 and had fallen 3 per cent by 1946.

It appears that the proportion between "good" and "poor" crops for nesting is the important point. If "good" crops had in-

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HOPE . . .

(Continued from page 145)

rich central valleys, cutting and burning the timber—countless millions of dollars worth—as they went. And they plowed up land that shouldn't have been plowed, and when it was worn out they fanned out first across the prairies and then across Great Plains—natural grasslands—and plowed and overgrazed that part of the country. And then they headed for the Pacific coast and continued their exploitation. We're still continuing it today as a matter of grim and tragic fact, and if the Pacific ocean hadn't stopped us I suppose we'd still be working our way west.

Well, Ding has drawn that story in these four panels and he's done it well, but I wish he'd gone ahead and drawn three or four more

panels showing the next 350 years—or even the next 50 years—because **there still is hope** if we continue and intensify the effort we're making to spread our national soil and water conservation program across the land. The future needn't be quite as gloomy as Ding might have you think, but we've got to work to prevent it—hope, like faith, has to be backed up with work.

Now if I were going to draw four more panels to show the next 50 or 350 years, I think they'd be something like this:

Panel No. 1 would show some tree plantings being made here and there across the barren continent, and some contoured strip-cropping would begin to appear on some of the worst slopes—maybe some dams in some of the gullies.

Panel No. 2 would show another development: it would show soil

conservation districts being organized in various places over the United States—and more trees and shrubbery, and more farmers farming on the contour.

Panel No. 3 would show those bare, rocky mountain slopes once more covered with trees, and rivers once more clear normal streams, the woodlands of the north restored, and the great grasslands once again knee-high in forage, and conservation farming everywhere, and a glimpse of a nice farmstead here and there—because after all, all this effort is for the sake of people; we're not saving soil for the soil's sake but for the generations to come.

And the last panel, maybe, would not show just a bird's eye view of the whole continent, like the others, but some contented people, some happy people, giving thanks because **their** ancestors—meaning

us—**did** safeguard the land for their use. And in the background, of course, there could be some contouring, and some lush pasture, and some farm woodland. I think that would be about right.

As a matter of fact, I'd like to see Ding draw that cartoon—always keeping in mind, of course, that if we let up on the job, this other cartoon of his we've got here might come true eventually.

But as I said, there's still hope, and that hope is strong, because it's based among other things on some 1,800 soil conservation districts and on nearly a hundred million acres of farmland already protected; on the increasing demand from farmers for conservation work and on the increasing interest of all Americans in wise use of our natural resources.

So of course there's still hope—if we keep working at the job.

TAME YOUR BIRDS

By Allen Green

IF YOU really want to enjoy your birds, make them your friends. You can derive a great amount of pleasure merely looking at the birds about your home, but if you have patience enough you can induce many of them to alight upon your hand and even feed at your invitation.

For example: Take the ruby-throated hummingbird—it flashes through your garden seeking nectar from one flower after another. Certain flowers depend upon the hummingbird to carry pollen for their fertility. This bird has a very long tongue that extends way



Humming birds in migration often fly 500 miles nonstop. Allen Green Photo.

beyond its bill, and some persons are really frightened at the approach of one of these tiny birds. Don't be afraid of that sharp bill for this friend will not harm you no matter what some folks say. Try and get acquainted with one and you will soon find that you have a delightful companion who will follow you about the yard.

In order to entice the hummingbirds to your place, get some small vials or tube containers and decorate the tops with red cloth or paper so as to imitate a flower. Fill these tubes with sweetened water and hang them on some support in your flower garden. You will soon find that the birds will even prefer the sweetened water



Certain flowers depend upon the beautiful humming bird for pollination. Allen Green Photo.

to the hard-to-get nectar from the flowers. After they have become accustomed to the syrup, take all of the containers away and that is where the fun begins.

Seat yourself near the flowers and hold one of these tubes while being careful not to make any quick motion when you see a bird coming to feed. If you have the time and patience you will likely be rewarded by a bird sipping



With a little sweetened water in a small vial, humming birds may be induced to feed from your hand. Allen Green Photo.

from your hand. What a thrill you will get when you have gained the confidence of this smallest of our birds. They will soon come to know you and when they are hungry will fly about your head, begging for the syrup which you

can draw forth from your pocket (if you have previously designed a tube with a cork) and the bird will eventually alight upon your finger and dine to its content. Then it may perch upon a nearby branch



If you really want to enjoy your birds make them your friends. Allen Green Photo.

as if to say, "Thanks, for I have had my fill."

These tiny feathery bombers are known to fly as far as 500 miles to winter in Yucatan or Central America. They really have our helicopters bettered in some ways—they can fly upside-down, backwards, straight up, remain poised in the air, dive to within a few inches of the ground and suddenly put on brakes for a stop.

Hummingbirds have very sharp claws that can hold to their nests which are woven of many things like spiderwebs, lichens, down from the cottonwood trees, etc. The nests are very strong and we have observed a mother bird, during a ter-

rific wind and rain storm, cling so firmly to a nest of two eggs, that she kept the eggs from falling out when the nest was turned completely over by the wind.

So, get a little more pleasure out of your birds than simply looking at them. Gain their confidence. It may take a little time but you will be well repaid in the end.

WARDEN TALES . . .

(Continued from page 146)

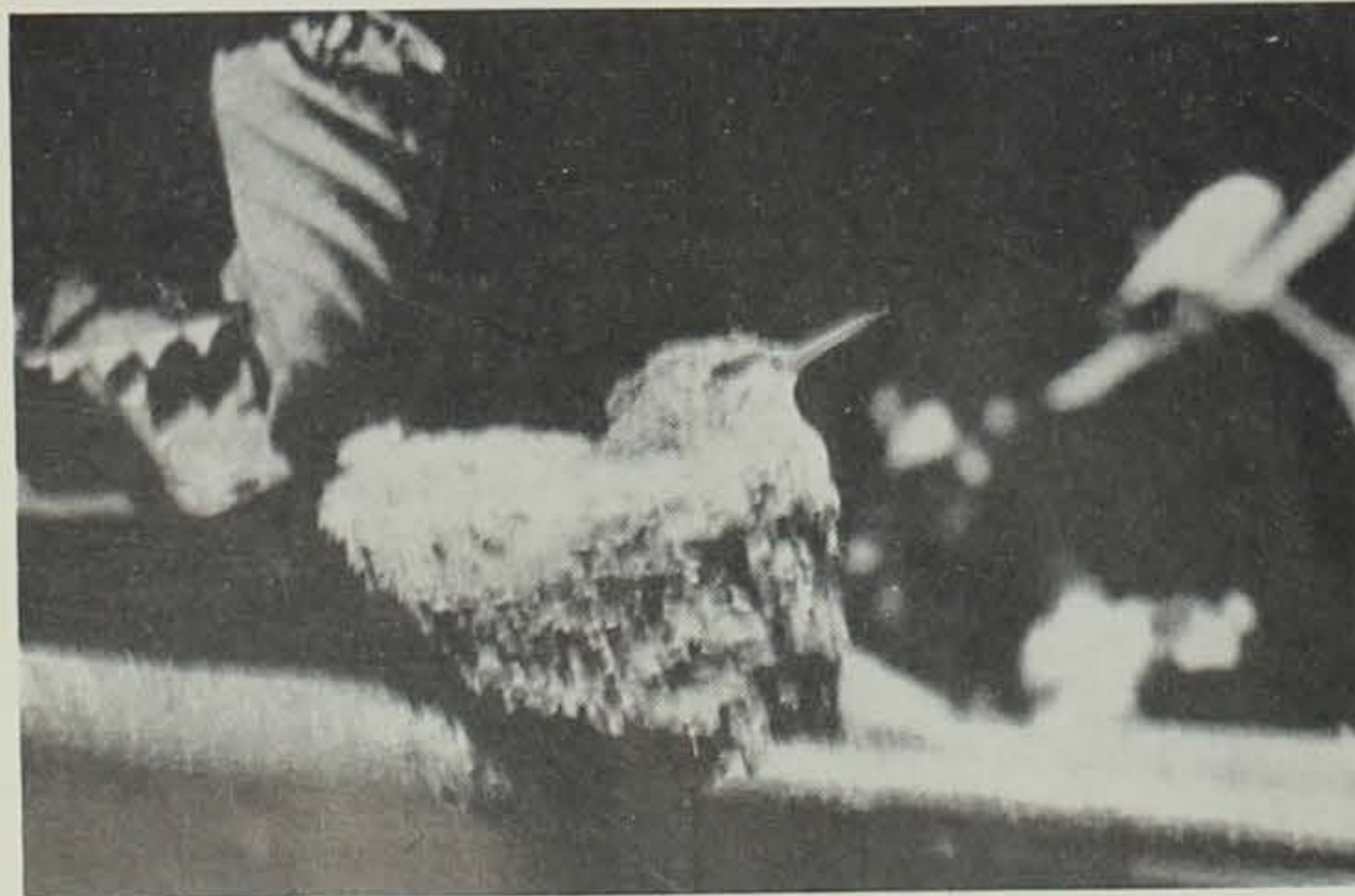
waited too, hiding in some high weeds about a hundred feet from the tree where the coon was. It was not long until the other boys came up and there was a discussion whether to shoot the coon. Some of the boys said 'No'; some said 'Yes'. One said, 'Tucker might be around.' Immediately the answer came, 'H--l, Tucker has hay fever. He won't be out.' That was a lucky coon. My hay fever stopped bothering two weeks earlier."

Tom Johnston, conservation officer in charge of Jefferson, Keokuk, and Mahaska counties, writes:

"Just prior to the opening of the trapping season last fall, I had a report from a small town in my territory about some early trapping. I was informed that the trapper was an old man about whom I had complaints in previous years. In the afternoon of the day before the season was to open, I got a search warrant and a local peace officer to accompany me. We went to the trapper's home, knocked on the door, and the old man himself came out. The local officer informed him who I was and I told him that I had come for the furs. He said that he didn't have any and that the season wasn't open yet. I told him that we were to search his premises and he turned around and yelled through the house, 'Ma, this is the game warden. He's got a search warrant and is going to search the place.' I looked over the outbuildings, all except one, a small square one where Ma had taken refuge when she was informed who I was, with no luck. It was a raw, cold day, so I sat on the back porch and waited for the old lady to come back in the house. After about 30 minutes the old man called, 'Ma, you might just as well come on into the house. That ?!/?!! game warden says he's gonna see what's in there if he has to stay until you freeze to death.' The old lady evidently was glad to get out and she came up on the back porch shivering like a T-Model Ford. When I stepped into that little building I found one of the nicest bunches of muskrats and mink that it has ever been my pleasure to grab."

A 90-pound catfish was caught recently in a Missouri River slough southwest of Rhineland, Missouri. When cleaned, the huge fish weighed 65 pounds.

In rich soil more than a million earthworms per acre may be found.



The tiny hummers' nests are of delicate construction and are woven of spider webs, down from cottonwood trees, and are usually covered with lichens. Allen Green Photo.

STATE PARK LODGE RENTALS

The following rates for park lodge rentals are given as per reservation. Summer rates are effective May 1 to September 30, inclusive. Winter rates are effective October 1 to April 30, inclusive. No charges are made for electricity or fuel. All reservations should be made with the park custodian.

State Park	Summer	Winter	Sundays & Holidays
Bellevue	\$ 3.00	Closed	Open to Public
A. A. Call	3.00	Closed	Open to Public
Clear Lake	7.50	\$10.00	By Reservation
Dolliver Memorial:			
South Lodge	5.00	Closed	By Reservation
North Lodge	2.00	Closed	By Reservation
Central Lodge	Open to Public at No Charge		
Fort Defiance	5.00	Closed	Open to Public
Gull Point	10.00	\$15.00	Open to Public
Heery Woods	3.00	Closed	By Reservation
Keomah	Leased—Contact Concessionaire		
Lacey-Keosauqua	Leased—Contact Concessionaire		
Lake Ahquabi	5.00	Closed	By Reservation
Lewis and Clark	5.00	Closed	By Reservation
Mill Creek	5.00	\$ 7.50	By Reservation
Palisades-Kepler	5.00	Closed	Open to Public
Pammel	3.00	Closed	Open to Public
Pine Lake	5.00	Closed	By Reservation
Stone Park	7.50	\$10.00	By Reservation
Walnut Woods	7.50	\$10.00	By Reservation
Mini-Wakan	3.00 when rented separate from group camp		
	2.50 when rented as part of group camp		



The shelter house at Lewis and Clark State Park is one of many that may be rented for nominal fees in Iowa State Parks.

CIRCULATION REACHES

THIRTY THOUSAND

The circulation of the "Iowa Conservationist" this month reaches thirty thousand, and during its five years of existence has built a reputation as a valuable medium for presenting basic conservation information to the citizens of this state. The Conservation Commission believes that no conservation program can advance faster than its public support and that an informed public is a supporting public. It is, therefore, interested in wider circulation of this bulletin.

If you enjoy this publication tell your friends about it and urge them to subscribe. The "Iowa Conservationist" is published at cost, a three-year subscription for one dollar. Your local conservation officer will be pleased to accept your subscription or you may mail your check, cash, or money order to the State Conservation Commission office, 914 Grand, Des Moines 8, Iowa. Tell your friends and help us boost the circulation to fifty thousand during the next twelve months.

NEW BULLETIN AVAILABLE

"Wild Ducks and Coots Make Good Eating" by Anna Margrethe Olsen is a new 14 page bulletin published by Iowa State College. Numerous tried and tested recipes for cooking wild ducks and coots are contained in the bulletin. This valuable aid in the kitchen may be secured in single copies by writing to Bulletin Editor, Iowa State College, Ames, Iowa.

THINGS YOU MAY NOT KNOW

Vultures, which are supposed to have an exceptionally keen sense of smell, are actually deficient in this regard.

The earliest record of a banded bird is that of a heron captured in Germany in 1710. The metal bands on its leg had been placed there in Turkey several years before.

THE FABULOUS EEL

THE eel is one of the most interesting of all of our fishes both in appearance and life history. Although formerly caught in considerable abundance in Iowa waters, they are much less common at the present time and their capture is certain to cause widespread comment locally.

The eel cannot be confused with any other fish and in this country there is only one species of eel, in fact there are in the entire world very few different members of this family.

For centuries no one knew where eels spawned or where the young eels, known as elvers, that concentrate in immense numbers at the mouth of coastal streams came from. European eels cross the Atlantic to spawn in the deep waters near Bermuda, and it is believed that American eels spawn south and west of this area.



The female eel may contain at spawning time several million eggs and after she leaves the American waters to go to the ocean spawning grounds she never returns again. The young eels seek out the mouths of streams and work upstream. The male eels never go up the stream very far from the mouth, consequently all the eels that are taken in Iowa are females.

Eels seek out some quiet stretch of stream and are active mostly in the nighttime. They feed principally on dead fish, and when taken on hook and line are generally caught on dead minnows.

After living on the "fat of the river bottom" for six or eight years the adult female eels again descend the streams to the sea.

Questions reaching the Conservation Commission relative to this fish are: Do eels have scales?

Eels do have minute almost buried scales that give the fish a sleek appearance.

Are eels good for food?

Many people consider the eel a delicacy. Its flesh is rich, tasty, a little like channel catfish.

Do eels leave the water and travel overland?

Eels can and do voluntarily leave the water and crawl on land for some distances. Numerous instances of eels leaving the water and traveling on land to get around dams have been reported.

Are eel skins a cure for rheumatism?

In some areas eel skins, along with rabbit feet, buckeyes, and copper bracelets, are believed to be of aid to rheumatism sufferers. The Conservation Commission, however, recommends the more widely accepted treatment of the medical profession.

CHIGGERS, BE JIGGERS

Long after the last of the fried chicken and potato salad have been disposed of, the presence of an almost invisible and uninvited guest at the picnic makes its presence known by numerous itchy red welts on the picnicker's legs, arms, and more tender parts of the human anatomy.

These are the bites of the chigger mites, present throughout the state. These little beasties are most common in grass and low open growth. It is small comfort to know that these pests would rather feast upon a bird or even a snake than a smooth-skinned human, for on man they are almost certain to be smashed before they have completed their dinner.

What manner of animal is this little red fellow that gives us so much discomfort?

In the first place, it has the appearance of a tiny bright red spider in its larval stage. They are so small that a column of 120 of them would measure only an inch. It is during the larval state that it feeds, causing the trouble.

Most people have the idea that the chigger burrows into the skin. This is not true. It remains on the surface. However, swelling around the bite may give the appearance of digging beneath the surface.

The chigger does not suck blood, but after having inserted its mouth part into the skin, it injects a digestive fluid that dissolves flesh tissue. The chigger then sucks the juices. It is believed that the fluid injected is what makes the bite itch. It is a few hours after the bite when the digestive juices have begun to work that the itching begins in earnest; and by that time the parasite has been mashed or brushed off.

For those who work in the vicinity of chiggers the most practical killing agent is dimethyl phthalate which kills the chiggers quickly and is found in some of the newer commercial brands of mosquito repellent. It will prevent bites but its effectiveness wears off after four or five hours.

DDT is not very effective in controlling chiggers. Sulphur dusting, however, does help a lot in discouraging the little —.

CARTOON SERIES

Beginning this issue, each month for 30 months we will carry one of J. N. Darling's cartoons on conservation and an article supplementing or paralleling the thought brought out in the cartoon. Dr. Hugh H. Bennett's essay, "There's Still Hope," begins the series at an opportune time, a time when floods and the loss of 15 million tons of our best topsoil are still vividly impressed on our minds.

The cartoons were selected by the Iowa Division of the Izaak Walton League of America and printed in a folder titled "Our Great Out-of-Doors". The 30-cartoon folder may be purchased for \$1.00 by writing to the Izaak Walton League of America, 732 Fenelon Place, Dubuque, Iowa.

APRIL COMMISSION ACTION

A MEETING of the Conservation Commission was held at the Commission offices, 914 Grand, Des Moines on April 21 and 22, 1947.

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

The Commission:

Approved printing of a second edition of 4,250 copies of the book, "Waterfowl in Iowa".

Authorized attendance of three staff members and three Commissioners at a meeting of the U. S. Fish and Wildlife Service at St. Paul, Minnesota, on June 2 to discuss migratory waterfowl problems, subject to Executive Council approval.

Authorized attendance of Commissioner Parker at meeting of

the Garden Club of America at St. Paul and Minneapolis on June 19, subject to Executive Council approval.

Approved the purchase of 500 reprints of separates on prairies and other matters from the Iowa Academy of Science.

Adopted Administrative Order No. 98 opening the fishing season in certain impounded waters.

Adopted Administrative Order No. 99 opening certain water areas to clamming.

Authorized purchase of ten prints of the film, "State Park Recreation", for distribution under the same plan as other department made films.

Authorized attendance of three members of law enforcement staff at a meeting of the Association of Midwest Fish and Game Law Enforcement Officers at Birchwood Lodge, Manitowish, Wisconsin, June 1-3, subject to Executive Council approval.

Accepted resignations of Louise

Snorf, Flo Signs, and Audrey Johnson, effective April 30, and Ree M. Berry, effective May 15.

Reaffirmed budget policy for conservation officers.

Meeting adjourned. Reconvened April 22.

Approved 10 per cent salary increase for all employees for the fiscal year beginning July 1, 1947, subject to approval of state comptroller.

Approved granting construction permit to the Grain Processing Corporation of Muscatine in accordance with specifications presented by the Rock Island U. S. Engineer's office, for minimum commercial fee of \$25.00 per year.

Approved certain changes to be made in the Memorandum of Understanding with the Wildlife Management Institute, as requested by Tom Scott, Leader of the Iowa Cooperative Research Unit.

Adopted Administrative Order No. 100 in regard to the bag and possession limits on bullfrogs.

outside the Oakland Mills Park area in Henry County to a river fishing access area.

Authorized electrification of the lodge at Heery Woods Recreational Reserve.

Accepted the gift from Schoolmasters' Club of Lee County of \$133.85 for the improvement of the Galland Wayside School.

Authorized construction of a road and parking area in the vicinity of the impounding dam at Lacey Keosauqua State Park.

Authorized purchase of a Disston saw for use in the State Forest areas.

Authorized certain channel work to be done on the Hottes Lake.

Meeting adjourned. Reconvened June 10.

Approved Pittman - Robertson program for the 1947-48 fiscal year.

Authorized changes in physical requirements for conservation officers as follows: minimum height from 5 feet 10 inches to 5 feet 9 inches, maximum age from 35 years to 38 years.

Approved corrected budget of Division of Administration.

Approved corrected budget of Fish and Game Division.

Approved continuance of the Farm Forestry Program.

Approved corrected budget of Lands and Waters Division.

Authorized taking bids on the dredging of Brown's Lake in Woodbury County.

JUNE COMMISSION ACTION

A meeting of the State Conservation Commission was held at the Chieftain Hotel in Council Bluffs on June 9 and 10, 1947.

Members present were J. C. Jensen, Mrs. Addison Parker, F. J. Poyneer, and E. G. Trost.

The Commission:

Authorized the extending of an invitation to Assistant Attorney General Robert Larson to attend the July Commission meeting to consult with the Commission on legal matters at that time.

Authorized attendance of Superintendent of Public Relations at the National Conference on Conservation Education and Publicity to be held at Fox Lake near Chicago, September 4-7, subject to approval of the Executive Council.

Authorized Supervisor of Predator Control to go to Missouri to make an inspection of the deer traps used by the Missouri Conservation Commission.

Authorized repair of the spillway at Mill Creek State Recreation Reserve.

Transferred H. W. Freed from Division of Lands and Waters to Division of Administration as Chief of the Design Office, effective July 1.

Adopted Administrative Order No. 101, opening Beeds Lake to all fishing June 15.

Authorized starting of condemnation proceedings on the five-acre Holland tract adjacent to the state holdings at the Siewer Springs rearing ponds in Winneshiek County.

Accepted and exercised Sutton option on approximately 45 acres along the Upper Iowa River in Winneshiek County for \$60 an acre from Fish and Game funds.

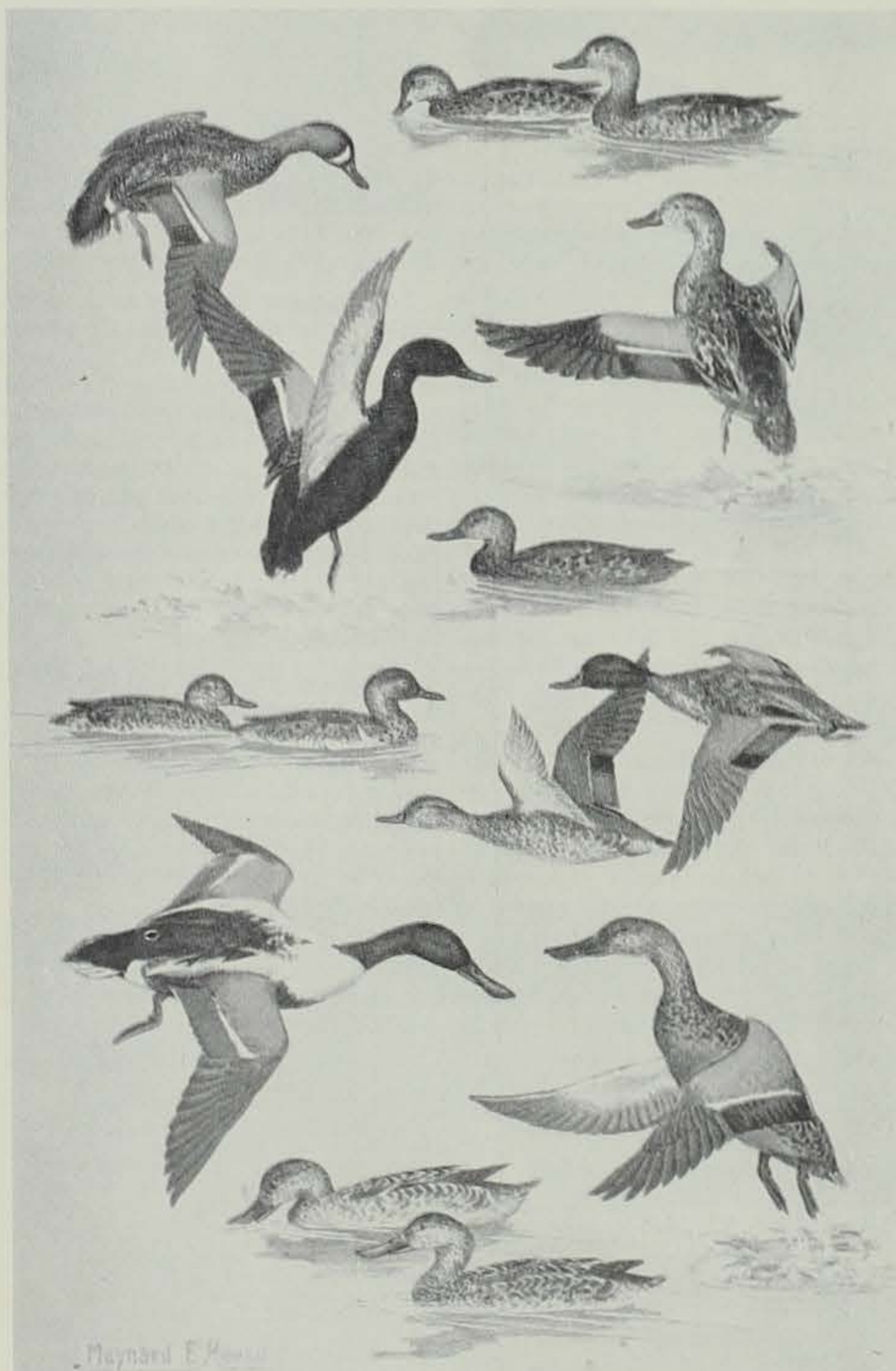
Changed the classification of the tract of land lying along the east side of the Skunk River below and

DOUGH BALL TOP CARP BAIT

Carp fishermen will be interested to know that the big fellows have started taking dough bait. Regardless of what we may think or say about carp, catching them is good sport. A five or six-pound carp will give you just as much trouble as a catfish of equal poundage. And it takes good tackle and a steady arm to bring a big carp to the stringer. Carp will take any kind of bait, but they much prefer some form of the dough baits. Most every carp fisherman has his favorite formula for preparing such baits, and he will scoff at the other fellow's recipe for making it. My father-in-law cooks yellow cornmeal until it is quite stiff, adds a little salt, and lets it go at that. His bait will stay on the hook good, and it really catches carp. But I make my carp bait differently—I boil yellow meal until it is of the consistency of heavy mush, I add enough sugar or syrup to sweeten it, enough salt to keep it from souring, and a teaspoon of vanilla for odor or flavoring. Then I mix into it enough wheat flour to give it the correct consistency. This bait will stay on the hook, and I know it will attract carp. But I've seen fellows make dough of dark bakery bread and catch just as many carp.

—Hopkinton Leader

A man's heart beats about 70 times a minute, a mouse's 700.



WATERFOWL IN IOWA

The Conservation Commission authorized reprinting of the popular duck book, "Waterfowl in Iowa." The illustration is a black and white reproduction of one of eight full-color plates in the 135-page book that will be on sale by the Commission for \$1.00 about September 1.



One of the new laws, HF 403, authorizes the State Conservation Commission to set size limits on fish. Prior to enactment of this new law, all size limits were set by the Legislature. Jim Sherman Photo.

NEW LAWS . . .

(Continued from page 145)

assembly. As some orderly method of discussing these laws should be followed, we have arbitrarily set upon taking them up numerically according to the Senate and House file numbers they received and discussing first Senate bills and then those of the House.

S.F. 66: This amends Section 16.11 of the Code of 1946. This law prohibited the discharge of firearms at any railroad train or engine. The new law now, also, prohibits the discharge of firearms at any cable or wire or other part of the signal equipment.

S.F. 67: This amends Section 109.54 of the Code of 1946. The old law prohibited the shooting of a rifle over any public waters or public highways of the state. The new law also prohibits the shooting of a rifle over any railroad right of way in the state.

S.F. 174: This relates to the increase of public employees retirement benefit tax.

S.F. 184: This law grants peace officers some additional authority in making arrests without warrant.

S.F. 196: This law relates to the payments of workmen's compensation to peace officers.

S.F. 231: This law makes it unlawful for any aircraft to make use of the inland lakes of the state except in the transportation of persons or property between points separated by a distance of 30 miles or more, but it does not prohibit the use of such waters to any aircraft in danger or distress

or to the operators of private aircraft not operated for hire.

S.F. 247: This law provides the legal mechanism for the restoration of Goose Lake in Greene County which had been drained unsuccessfully a number of years ago.

S.F. 252: This law provides for an increase in salary of \$200 a year for the State Conservation Director, and an increase in salary of \$400 a year for state conservation officers.

S.F. 279: This law amends the old workmen's compensation law.

S.F. 282: This law relates to the investment of public funds by the Treasurer of the State dealing principally with the authorization of the Treasurer to invest public funds not needed for current operating expenses in liquid or short term United States government bonds and certificates.

S.F. 289: This amends Section 109.48 of the Code of 1946. Under the old law the Commission was granted authority to open or close or extend hunting seasons in accordance with their findings as to the population of game species, but the legislature set the date of opening. Under this old law the open season could be for a longer or shorter period, but it arbitrarily had to open on the date set by the legislature. Under the new law the Conservation Commission is authorized to set the hunting season for whatever length of time is deemed advisable so long as that open season falls between the dates of September 1 and March 1 of the next year.

S.F. 294: This is an appropriation

bill providing the expense for repairs to the spillway of Upper Pine Lake.

S.F. 322: This law authorizes the Treasurer of the State of Iowa to disburse national forest funds now in his hands and belonging to certain counties in the State of Iowa.

S.F. 329: This law relates to workmen's compensation and specifically to definitions.

S.F. 389: This law appropriates from the general funds of the state \$2,713,100 for major improvements in the recreational facilities of the state. It is earmarked as follows:

1. State parks and reserves	\$ 451,600
2. State forests	35,000
3. State waters	71,500
4. Dredging	600,000
5. Artificial lake development	1,272,000
6. Erosion control	77,000
7. Stream and lake access	50,000
8. Land acquisition	67,000
9. Design and investigation	89,000

This money is to be invested in securities of the United States Government and released for the above named uses at the discretion of the joint legislative committee on retrenchment and reform of the state of Iowa.

S.F. 400: This law enables levee and drainage districts heretofore organized under the laws of this state, to cooperate with any agency of the United States Government engaged in flood control or reclamation projects which will benefit the lands in such districts and to cooperate toward the construction of improvements by such agencies.

S.F. 454: This law makes it illegal for any person to intentionally kill, wound, or attempt to kill or wound any animal, fowl, or

fish from or with an aircraft in flight.

S.F. 484: Previously the salaries of state officials other than those under the State Board of Education and elected state officials were subject to the approval of the Comptroller. The new law makes such salaries subject to the approval of the Comptroller and the Executive Council.

S.F. 493: This law authorizes the sale of certain lands along the shore of Carter Lake which lies on the Nebraska side of the river across from Council Bluffs, Iowa.

H.F. 110: This law relates to boards of levee and drainage districts.

H.F. 189: This law makes provision for the approval by the State Conservation Commission of the purchase of what was known as the Allerton Reservoir—a railroad reservoir in Wayne County which is to be improved for a fishing area.

H.F. 256: This amends Section 695.26 of the Code of 1946 which prohibits the sale of firearms to minors. This new law makes it clear that the sale of ammunition to minors who have been licensed to hunt or to minors who may legally hunt on their own premises shall not be prohibited.

H.F. 403: This law authorizes the State Conservation Commission to set size limits on fish. Previously, all size limits on fish were set by the legislature.

H.F. 480: This law permits counties to cooperate with the Federal government, the state, or its subdivisions in the construction and maintenance of flood and erosion control projects in the state and to levy a tax for maintenance.

H.F. 482: This law increased the state resident hunting license from
(Continued on page 152)



A bill introduced to provide an impost on furs failed to become a law. The bill, if enacted, would have produced considerable revenue to rehabilitate marshes. Marsh rehabilitation is considered one of the major keys to increased production of fur-bearing animals. Jim Sherman Photo.

FARM CROPS . . .

(Continued from page 147)

creased in proportion with "poor" crops at the expense of the "medium" crops, the situation might not have been so serious.

Note from the population curve shown on the graph that the reduction in pheasant numbers does not correspond directly to the increase of "poor" crops on the decrease of "good" crops. It is impossible to express the effect farming operations have had on bird population in numbers or per cent. However, isn't it very evident that we now have much less pheasant nesting habitat than we had back in 1939-40-41? What is left for the birds to use? Extremely narrow fence rows, road ditches, railroad beds, dredge ditch banks (also being rapidly reduced), some farm wood lot cover, and what tame and wild hay is left. Small grains furnish nesting cover for the late nesting hens but undisturbed areas that provide growth from the previous year are badly needed for good production.

Discussions such as this always lead right into the basic requirement for wildlife. Suitable cover or the improvement of environment for wildlife. Who is going to see that this cover is provided and where? Federal and state agencies want the cover provided; sportsmen want the environment improved and the production of birds increased; but in Iowa this must be done on high-priced farm land and it looks like the farmer is the one who is going to have to do it.

Farmers can't afford to manage their farms solely for the production of wildlife even if they wanted to. Neither can they farm without consideration for wildlife. This land is their livelihood so the problem must be approached from a practical and economic standpoint.

What, then, have we to look forward to in pheasant management so as to increase natural production or to provide more suitable environment for more wildlife? The future isn't as dark as it may seem at first glance. There is a method clearly outlined for us to follow. This bright spot is the strong movement toward wise land and water use by farm operators. Wise land and water use is that conception of land management that looks towards the building up and maintaining soil fertility instead of being concerned only with a one-year record production. Wildlife fits into these land use programs as snugly as does corn or hay production. Recommended practices for land use, such as gully plantings, marsh management, stream bank control, strip cropping, living fences, crop rotation, fertilizing, farm ponds, and many others, will all be of great value to pheasant production. In almost every case, any operation done to improve the conservation or fertility of the soil



The modern conservation officer's job requires a high degree of intelligence, careful in-service training, and hard work.

CONSERVATION OFFICER JOBS OPEN

UNDER the provisions of the statutes pertaining to the State Conservation Commission employees whose duties are enforcement of the laws are known as conservation officers. This includes those employees commonly known as park custodians and those known as game wardens, as well as lake custodians.

The law provides that a competitive examination shall be held and that appointments be made from a list compiled as a result of the examinations.

The law reads: "No person shall be appointed as a conservation officer until he has satisfactorily passed a competitive examination held under such rules as the Commission may adopt and all other qualifications being equal, only those of the highest rank in the examination shall be appointed."

Under rules adopted by the Commission, applicants are first required to take a preliminary examination. They then attend a training school of several days, at the close of which a final examination is given to determine the rank on the eligible list for each type of position.

Each applicant must be a resident citizen of Iowa for a period of not less than two years preceding the date of the examination. He must be between the ages of 25 and 38 years. He must be five feet and nine or more inches in height. He also must pass a rigid physical examination.

Salaries of conservation officers were increased by the last legislature to \$2,200 per year, with actual expenses being paid when absent from home on official business.

Applications must be made in writing and forms for this purpose will be furnished by the Conservation Commission office, 914 Grand Ave., Des Moines.

is also beneficial to wildlife. As the tempo of these programs increases so will the tempo of wildlife production be increased.

GINGERICH AND YOUNG NEW COMMISSION MEMBERS

Arthur C. Gingerich of Wellman, Iowa, has been appointed to the Conservation Commission to succeed Roscoe Stewart of Ottumwa. L. Guy Young of Bedford has been appointed to succeed James C. Jensen of Council Bluffs. The terms began July 1 and are for six years.

Roscoe Stewart was first appointed to the Commission in 1936 to fill a vacancy caused by the death of Dr. W. C. Boone. He was reappointed in 1941 for a six-year term. Commissioner Jensen was appointed in 1944 to fill the unexpired portion of the term of George F. Larsen who resigned.

The forthcoming Official Register carries the following information relative to the two new Commission members.

Gingerich, Arthur C., Washington County, Republican. Born December 6, 1889, on a farm in Johnson County. Owns farm where he was born which was homesteaded by his grandfather in 1846. Educated in the Johnson County Public Schools. Protestant, married, has one son and one daughter. Was a member of the Wellman School Board for 12 years. Director of the First National Bank, Iowa City. Trustee, School of Religion, University of Iowa. Board member of La Junta Nurses' Training School, La Junta, Colorado. President of Maplecrest Turkey Farms, Inc. Charter member of Chicaqua Izaak Walton League. Charter member and Past President Wellman Rotary Club. Member of Farm Bureau. Owns and operates several farms in Iowa and Colorado.

Young, L. Guy, Taylor County, Democrat. Born in Warren County, Iowa, January 2, 1904. Educated in public schools of Milo and Indianola, Iowa. Graduated Simpson College 1926. Married to Margaret Ash, Bedford, Iowa; two daughters, Margaret Ann and Katherine Louise. Air Force Officer in World War II; awarded Legion of Merit. Engaged in telephone business and farming, Bedford, Iowa. Member Lions Club, Gun Club, A.F.&A.M. Knight Templar.

NEW LAWS . . .

(Continued from page 151)

\$1.00 to \$1.50, the state resident fishing license from \$1.00 to \$1.50, and the combination license from \$1.50 to \$2.50. It also prohibits the issuance of nonresident licenses to any state that prohibits the issuance of such license to residents of the State of Iowa or that in so doing limits or restricts the privileges of our residents.

H.F. 521: This is the appropriation bill that appropriates the necessary money for the maintenance of our state parks.

H.F. 532: This law relates to hydro-electric generating plants or projects and makes it unlawful for any person or firms to engage in the business of constructing or operating hydro-electric plants within the state without first having obtained from the Executive Council a certificate of convenience and necessity.

This completes the list of new laws relating to wildlife conservation that were enacted by the Fifty-second General Assembly. A number of bills, however, were introduced, some of them passing at least one house and by that receiving considerable publicity, that did not finally become law. Some of these bills deserve mention.

A bill to allow the State Conservation Commission to provide an open season on beaver was introduced but failed to become law.

A bill to allow trolling by motor boat on several of our large lakes was introduced but did not become a law.

A bill prohibiting the operation of motor boats by persons under the influence of intoxicating liquor failed to become a law.

A bill to provide an impost on furs failed to become law. This bill, if enacted, would have produced a considerable revenue, the purpose of which was to rehabilitate marshes and improve conditions for fur-bearing animals, thereby expanding the industry in this state. It is regrettable that this did not become law.

A bill to strengthen our anti-pollution laws was proposed. This failed to become law.

A bill to prohibit fish spearing anywhere in the state failed to become law. Spearing of certain species of fish is now allowed in the overflow waters of the Mississippi River and in the Cedar and Iowa rivers in Muscatine and Louisa counties and in the Winnebago River in Worth and Cerro Gordo counties.

A bill clarifying the ownership of meandered streams and lakes failed to become law.

A bill providing for a continuous open season on the raccoon failed, as did also a bill providing additional bounties on wild animals and one dealing with the use of frogs for commercial purposes.

A bill to provide for a bow and arrow season on deer in Iowa failed to become law.