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State Conservation Commission  
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# IOWA CONSERVATIONIST

Volume 6

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NUMBER 4

## LOST ISLAND FISH CENSUS

By E. T. Rose  
Fisheries Biologist

THE sound administration of fisheries resources requires a thorough understanding of pertinent biological principles plus a continuous study of all fishing waters.

Since 1940 the Iowa Conservation Commission has conducted annual investigations on all major fishing lakes to determine inventories of existing supplies of fish, extent of natural reproduction, population ratios, growth rates and other factors essential to the formulation of management plans.

These surveys very largely determine the stocking, rough fish removal programs, the adjustments of seasons, and the numbers of fish that can be legally taken by the fisherman.

Occasionally, even in our heavily fished Iowa lakes, the surveys have found fish populations exceeding desirable limits. Accordingly, the Commission has either opened the fishing season for the species requiring control (under the biological balance law) prior to the one set by law, or increased the number that could be legally taken each day by the fisherman.

In order to obtain accurate information on the number of fish removed in these cases, a system of fish censusing has been established. The fish census has proved to be a valuable aid not only in determining the number of fish taken, but also in following population trends, ratios and balances. Without the voluntary cooperation of boat-livery operators who counted the fish, recorded the species taken, the number of fishermen, hours spent in fishing, it would have been almost impossible to have obtained these records.

Lost Island Lake, a 1,260 acre body of water located in Palo Alto and Clay counties, near the town

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During 1946 the average catch of bullheads per day per fisherman on Lost Island was 29 plus. Catch limits were taken off bullheads on this lake by the Commission to aid in rebalancing the fish populations.

## MUD-HIGH-SWAN AREA DEVELOPMENT IN EMMET COUNTY

By G. L. Ziemer  
State Conservation Director

The State Conservation Commission has designated for development of the maximum recreational potential, the area known as the Mud-High West Swan Area in Emmet County, which centers approximately nine miles southeast of Estherville.

The developments contemplated are enclosed in a rectangle, six miles north and south and eight miles east and west, with an ultimate holding of approximately 4,500 acres in the name of the state of Iowa, to consist of 1,800 acres of lake, 900 acres of marsh, and 1,800 acres of upland game bird and animal refuge and public shooting grounds.

The recreational potential to be developed includes fishing in the lakes, hunting of migratory waterfowl on the marshes, trapping of

fur-bearing animals on the marshes, hunting and refuging of upland game birds and animals on marginal upland areas and drained state lakes. This will also provide some refuging for waterfowl and will undoubtedly have some value for boating.

The existing holding of lakes includes High, Mud and West Swan, these three meandered lakes having a total water surface area of approximately 1,800 acres; and the holding of marsh which we have title to includes Cunningham Slough, Mud Lake outlet slough, and the several sloughs on the Olin Anderson farm, and the slough at the southwest corner of West Swan Lake, all totaling approximately 532 acres of water and marsh area.

The upland game areas include East Swan Lake drained lake bed, the Ryan Lake drained lake bed, and the upland area surrounding

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## CONSERVATION CAN'T WAIT

By J. N. (Ding) Darling  
Honorary President, National  
Wildlife Federation

(Editor's Note: This article is reprinted by special permission of the Associated Press.)

THERE was a story a few years ago about a man living out on Long Island who sent his new barometer back to the factory for repairs because the needle kept pointing to "hurricane".

A few hours later a hurricane swept his house away and went on to wreck the Atlantic seaboard as far north as Maine.

He wasn't much different from all the rest of us who disregard the signs of rapidly diminishing natural resources upon which our rich American life depends.

Diminishing wildlife is only the premonitory breeze of a rapidly approaching hurricane of depleted natural resources all along the line.

The need for intelligent conservation of our national resources is stark and real.

It is imminent upon us.

It is inescapable if we are to prevent the ultimate economic decline of the United States.

### Leads Parade

Wildlife merely leads the parade. Even if you are not interested in birds and fish and little Johnnie Skunk, you'd better stick around and watch the rest of the procession. A lot of your more intimate friends are just around the corner.

Two world wars, in which we oiled, munitioned and fed half the world, have taken a heavy toll of our iron, oils, forests and soils, already badly wasted in a reckless era by a nation of economic spend-thrifts.

We have seen the bottom of the barrel too often recently for it to be soon forgotten.

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## Iowa Conservationist

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ROBERT D. BLUE, Governor of Iowa  
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## FEBRUARY COMMISSION ACTION

**T**HE February meeting of the State Conservation Commission was held at the Commission offices, Des Moines, on February 24 and 25, 1947.

Members present were E. B. Gaunitz, J. C. Jenson, Mrs. Addison Parker, F. J. Poyneer, R. E. Stewart, and E. G. Trost.

The Commission:

Authorized condemnation proceedings on the one-acre Parker tract on the north shore of Clear Lake in Cerro Gordo County adjacent to the McIntosh Woods recreation area.

Authorized expenditure of approximately \$2,000 for completion of core borings and investigation of Rock Creek Lake site in Jasper County.

Authorized renewal of permits for operation of commercial docks at Arnolds Park, Lake Okoboji, if and when application is made.

Accepted resignation of E. O. Richman as conservation officer at Wild Cat Den State Park, effective April 1.

Established cabin and lodge rental rates for the various state parks and recreation areas.

Accepted gift of Clarence G. and Thysa Karn of ten acres adjacent to the Saylor Woods tract in Polk County, subject to Executive Council approval.

Disapproved construction of a foot bridge or suspension bridge across the Iowa River in Pine Lake State Park.

Authorized action be taken to quiet title on the Green Bay Bottoms tract in Lee County.

Authorized continuance of a subsidized program for cooperation with conservation and other organizations in conservation activities, necessary funds to be appropriated from Fish and Game fund.

Authorized expenditure of \$2,-

075.50 from Fish and Game funds for construction of 90 additional laying pens at the Game Farm.

Increased allocation for construction of outlet control dam structure for Rush Lake in Osceola County from \$1,679.60 to \$2,300.

Rejected offer of Abbie Smith to sell 80 acres in Jemmerston Slough area in Dickinson County for \$7,000.

Approved purchase of a 66-foot roadway and a parking and access area of 150 by 200 feet on Elm Lake in Wright County, a total of two and two-thirds acres, at \$140 an acre from Fish and Game funds.

Approved exercising of Miller Christiansen option of 15-acre tract in the Mt. Ayr upland game area at \$50.00 an acre from Pittman-Robertson funds.

Meeting adjourned.

Reconvened February 25.

Relinquished priority on the purchase of Des Moines Ordnance Plant property.

Accepted resignation of Conservation Officer James Rector, effective April 14.

Entered into an agreement of understanding with the Colonial Dames of America in Iowa, authorizing them to select the proper furnishings for the Lucas House, and make decisions on proposed gifts for the House.

Confirmed former action opposing Mississippi River drawdowns and of having all drawdowns cease after October 1, if any are made.

Meeting adjourned.

### ST. MARY'S TROOP 29 BIRD HOUSE PROJECT

By W. H. White

Four boys from Troop 29 and their scoutmaster and Dr. Stempel built bird houses last year. The houses were built in Dr. Stempel's basement. There were 34 houses built (bluebird). St Mary's Troop has 45 bluebird houses out. There are 34 between Ft. Madison and Burlington, Iowa; 30 of them were occupied last year. We also have ten at Getsemane Cemetery in Ft. Madison and eight of the ten were occupied. In checking them we found from three to six bluebirds in each one.

We figured that they would lay and hatch two sets of eggs and in checking the boxes we found this to be true. Our plan is to build at least 30 or 40 more houses this year. Our bird houses were built out of scrap box lumber and also the work was done by hand. The dimensions of these houses are only three and one-quarter inches square and nine and one-half inches high, with one and three-quarters inch hole. They are painted green and are about one-half mile apart.

The world's largest and smallest animals live in water. These range from one-celled microscopic amoeba to multi-tonned whales. Many terrestrial animals such as frogs, salamanders, and certain insects spend part of their life cycle under water.

## Wardens' Tales

Shop Talk From the Field

**H**ARRY RECTOR, conservation officer in charge of Benton and Tama counties, tells this one. "On January 1, 1947, I checked two men from Tama County for their hunting licenses. One man didn't have his license with him; however, he assured me that he had purchased one the day before at a drug store in a nearby town.

"After leaving the men and getting out of sight, I headed for this town and drug store. As I drove up to the curb another car pulled in from the opposite direction, and as the occupants of this car and I saw each other, I am sure the expressions on both our faces told that we had met before.

"We also had a third meeting, this time in a justice of the peace court. There is nothing like starting the New Year off right."

Last fall, during the duck hunting season, Conservation Officer Stub Severson of Ruthven was checking licenses and duck stamps. One of the hunters remarked that he would never again forget his license. In response to Stub's question "Why?" he replied "Well, I forgot my license once in '42 and, of course, you asked for it. When I said I had forgotten it you inquired, 'You didn't forget your gun did you?' I think of that every time I pick up my gun to go hunting."

Conservation Officer L. F. Tellier of Epworth writes: "Last summer, while checking on a catfish stream, I found evidence of the use of illegal lines commonly called 'Diddy poles'.

"One of my fellow officers, Lee Berkley of Earlham, was assisting me at the time so we set up a board of strategy and planned our attack.

"When we arrived at the stream in the late afternoon, we found that our suspects were already on the ground, sitting around a campfire. As there was nothing illegal in evidence we drove on by, parked the car in the timber some distance away, and walked back to where we could watch the stream.

"It soon grew so dark that we could no longer see from where we were so we took the car and drove back past the bridge. As Lee slowed down for the bridge, I crawled out of the car and hid in a patch of weeds while he continued on up the road.

"About two hours and two million mosquitoes later two men approached the stream and I discovered that I was sitting not more than fifteen feet away from an illegal line that they were using.

"The two men pulled in the line, rebaited it, and returned it to the water. Then I became aware of a third person, sneaking through the weed patch in which I was concealed. He passed so close to me that I was afraid he would stumble over me.

"Suddenly he stood up, flashed a light on the two men and ordered, 'Put up your hands, you ———, I'm the game warden.'

"They readily recognized him as their fishing pal and were enjoying a good laugh when I stepped up with my light and took all the enjoyment out of their little prank.

"After securing their licenses, I read off their names under my flashlight and said, 'Now, just which one of us is the game warden?'

"No reply for some time, and then one of them said, 'Guess the laugh is on us. Let's go up to the smudge and get away from these mosquitoes.'"

Garfield Harker, conservation officer at Maquoketa, gives us the following information on one of his local catfishermen: "He is Ed Podlak of Maquoketa, and he and his wife caught 340 cat last year. The largest weighed 16 pounds. He gave fish to 55 different families. All but about 40 of these fish were caught right here in the vicinity of Maquoketa, the balance (40), in three trips to the Wapsie. He is a 'blood' fisherman and has 50 quarts in the locker at present.

"Also sold him a subscription to the 'Conservationist'."

### THE BUDDING NATURALISTS

They wake us up on Sunday morn when we would fain be sleeping, These lads of ours who tramp downstairs with ne'er a thought of creeping.

No time to stop for food or drink! The weekend urge is on!

Off to the woods with book in hand And eyes alert they've gone.

Each time they go they're sure to see a Pheasant or a Grouse,

Sometimes a Hawk descending on an unsuspecting Mouse.

The Flicker and the Blue Jay, the Chickadee and Rook,

All take their places, one by one, within the Record Book;

And if by chance there should appear a bird they do not know

They jot down a description with a question mark below.

They do not shine as naturalists, But they're learning, day by day,

Of the wonders all about them As in the woods they stray.

—G. F. Field  
Canadian Nature.

Compared to other members of the family the channel catfish is streamlined, but it becomes more thick-set with an increase in age and weight.

The nesting site of the channel cat is usually in a burrow in the stream bank, under a rock, or in a submerged hollow log.

The female channel cat, after laying her eggs, is chased from the nest, the male guarding the eggs and the young until the fry leave.



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

### Attracting Birds to the School Grounds

THE old saw, "Everybody talks about the weather but no one does anything about it," might be changed to say, "Everyone enjoys birds but too few people do anything to increase their numbers, thereby increasing the measure of their own enjoyment." The ease with which birds may be attracted to a location should remedy this lack of action.

When we think of attracting birds, immediately we think of building and putting up bird houses. This is one of the important steps, in fact so important that we will go into it more or less in detail.

More than 50 different kinds of birds are known to use bird boxes or other man-made devices in which to build their nests. Most of these birds ordinarily build in tree cavities which they either dig out themselves (woodpeckers) or in natural cavities. A few, like the robin, barn swallow, and phoebe, will use shelves or platforms on which to build their nests when the platforms are in the proper location.

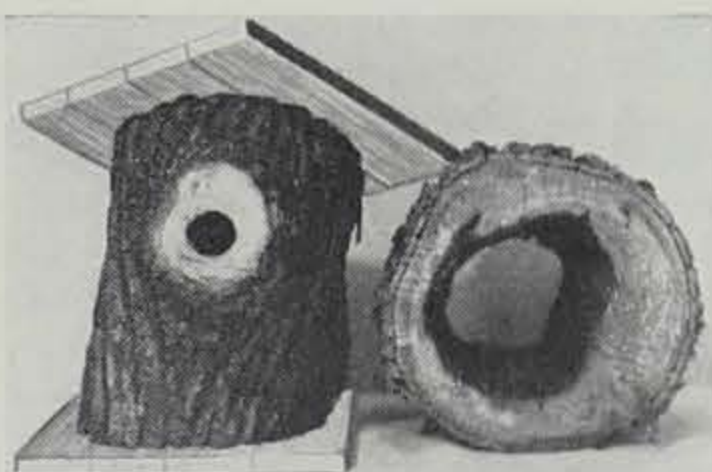
In making bird boxes the National Audubon Society says, "Do not make a box 'for birds', but build it for a specific kind of bird, a wren, a bluebird, or robin, keeping in mind the requirements of the prospective tenants."

All of the conventional bird houses may be easily built from scrap lumber; however, one of the quickest and most effective is part of a hollow log, 12 to 30 inches long, with a board nailed on the

top and bottom, and a hole, the proper size, made in one side of the log, a third of the way down from the top.

Bird houses are generally placed in a comparatively sheltered situation with the opening facing the south or southeast. The boxes may be placed from six feet to 30 or more feet from the ground. Any standard bird book will give the nesting height for the bird you are designing the new home for.

The door in the bird house should be designed to accommodate the occupant and should be round. The diameter of the opening for some common birds that you may expect to use your boxes are as follows: wood duck, six inches; screech owl, three and one-quarter inches; flicker, three inches; redheaded woodpecker, two and one-half inches; hairy woodpecker and crested flycatcher, two inches; bluebird, one and one-half inches; downy woodpecker, tufted titmouse, and white-breasted nuthatch, one and one-fourth inches; chickadee, one and one-eighth inches; house wren, one inch.



A simple but effective bird house.

The nesting platform is particularly effective when placed under the eaves on the south or east side of buildings. It should be placed several inches down from the under side of the eaves, which will form a "roof" over the platform. Platforms are especially appreciated by the robin, phoebe, cliff swallow, and barn swallow. Often a series of a dozen cliff swallows will build nests on platforms under an eave if that many platforms are available.



Possibly no single attraction will pay greater dividends to the bird watcher than a bird bath. Here a flock of cedar waxwings are tidying up. Jack Kennedy Photo.

Previously we have talked about attracting birds with food, both in winter and summer. Our bird houses and nesting brackets or platforms take care of nesting requirements of certain kinds of birds. There is yet another important need for birds and that is water.

Possibly no single man-made attraction will pay greater dividends to the bird watchers than a bird bath where the singers may come to drink and enjoy bathing. This is particularly true during the hot summer time. Birds will bathe even in winter where open water is provided.

A shallow pan filled with water is the simplest way to furnish water for drinking or bathing. The pan may be placed on the ground or on a low stump. It should not be placed close to bushes or tall grass where stray cats can hide.

Anyone can make a bird bath out of concrete by digging a shallow depression in the ground two or three feet in diameter and several inches deep. The shape and size of the depression is not important, but the depth is, for most birds prefer water less than two inches deep. This "hole" should then be lined with cement and shaped with a trowel or big spoon. The water should be no more than three inches deep in the center with a gradual slope toward the edges.

Providing water, like providing food in the winter time, once undertaken, should be continued.

One more phase of our bird attraction program should be the addition of a dust bath. Dust bathing is not an absolute necessity to bird welfare but it adds to the attractiveness of the locality. A dust bath may be made by simply nailing a frame of one-by-two's on edge to a board or piece of tin two by three feet, and placing fine dry road dust in the tray so formed.

Try these suggestions and see what happens on your school grounds.

### IF FISH ACT FUNNY

The fish in the Missouri River were whooping it up. A catfish called a gar a sucker and a pickerel referred to a bullhead as a poor fish, according to the Sioux City Journal. The trouble began when Detectives Frank Edwards and A. E. Dik tossed 28 coffee jars filled with processed marijuana into the water from the Combination Bridge. The marijuana was seized in a police raid and was destroyed on court order after it no longer was needed as evidence.

During high water stages in spring and early summer large catfish in considerable numbers may be found in the small tributary streams.

In the Des Moines River insects were the most common items found in the stomachs of catfish of all sizes during 1946.

Channel catfish feed at any water altitude from the stream bottom to the surface.

Counting the rings on fish scales to determine age was a practice used by the ancient Greeks.

## LACEYISMS

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

TREES have their poetic as well as their practical side. While sensible to their beauty, we are now deeply concerned in their utility. All they have asked heretofore has been standing room. Give them but place, and they will patiently do their work. Their long arms have reached out for ages, and gathered from the air the elements of growth which they have added to the soil.

I remember the hills and streams of the eastern states in my boyhood. The old swimming holes, described by Whitcomb Riley, were there, a source of delight to the boys of forty years ago. After long absence I revisited some of these old streams. The trees had been felled and the springs had gone dry. The streams were gravelly beds, as dry as Sahara, except for a few hours after a big rain had converted them into muddy torrents.

A man or a woman who preserves a tree in a practical way will preserve the things that that tree shelters and produces and that are useful to man.

The love of birds is something that ought to be taught in every school. Their protection is something that ought to be inculcated in the mind of every boy and girl. I have always been a lover of the birds; and I have always been a hunter as well; for today there is no friend that the birds have like the true sportsman—the man who enjoys legitimate sport. He protects them out of season; he kills them in moderation in season. The "game hog" is an animal on two legs that is disappearing. May he soon become extinct! The "game hog" formerly had himself photographed surrounded by the fruits of a day's "sport" and regarded the photograph as imperfect unless he had a hundred dead ducks, grouse, or geese around him. Today a true sportsman would be ashamed to be pictured in connection with a larger number of fowls than a decent share of an American gunner, having due regard to the preservation of the game for the future.

Arbor Day may seem to be an anniversary of sentiment but the trees planted on that day will remain and grow from year to year as useful evidence of the work of the lovers of the trees.

Now that anyone can put his dogs and gun into a baggage car, reach his hunting grounds five hundred miles away in a few hours, his power of slaughter has become so great that moderation becomes the test of a true sportsman.



Silt-laden flood waters are more than muddy water, "they are beefsteak and potatoes, roast duck, ham and eggs, and bread and butter with jam on it." Bill Rooker Photo.

## Can't Wait . . .

(Continued from page 121)

According to our best informed geologists, our mineral honeymoon will be over in from 15 to 25 years, which is about the time the prophets of evil look for the next world war.

### Tough Times Ahead

It will be tough even without a war.

Those silt-laden rivers we see running down to the sea may look like nothing but muddy water to you, but they are beefsteak and potatoes, roast duck, ham and eggs and bread and butter with jam on it.

For there, with the aid of improvident agricultural methods, goes the rich top soil from American farms at the rate of 25 million acres a year. Some groceries!

We have been whittling up our forests faster than we have grown them for a hundred years without counting the extra drain of wars.

This year the demand was for 60 billion board feet of lumber. Only 34 billion board feet were available.

Wasteful methods of harvesting timber could be remedied where they exist, but aren't.

The Atlantic salmon are practically gone from our eastern seaboard. The Pacific salmon, once one of our richest gifts of nature, now come mostly from Alaska—if you can afford to buy them.

The old Pacific salmon runs from California to the Canadian border are gone or on their way out.

The cod, haddock and tuna of our off-coast waters and Great Lakes fisheries are swept so clean of food fish resources that our fishing fleets are invading our neighbors' waters against their violent protests.

### Water Resources

Water resources for industrial purposes, water for agriculture, water for municipalities and water for fish and wildlife have been so polluted, drained, dammed and mismanaged that the sub-soil water table has fallen drastically over most of the continent and we are authorizing billions for control of man-made floods.

All these things and more, including dust bowls and over-grazed cattle ranges are closely associated with and following close behind the vanishing wildlife of our continent.

Those who are placing special emphasis on wildlife do so with full recognition that any attempt to restore fish to our waters and wildlife to our uplands without more intelligent management of our soils and waters and without wise application of sound practices to forest and vegetation would be impossible.

They are as interdependent as the wheels in a watch. No one of them can operate without the co-ordination of the others.

About the only difference between wildlife and the rest of our national resources is the fact that the ducks and geese and fish and fur bearers have been counted and found wanting. Thus far this nation has never taken an inventory of its stock of supplies.

How much iron, zinc, nickel, lead and aluminum have we and how long will they last?

### What About Oil?

What will we do for oils when the present flood dries up?

How many people can be fed on the products of the remaining tillable soil?

How much lumber for houses and ships?

Bernard Baruch, that wisest of elder statesmen, put down the inventory of our natural resources as a number one essential to our postwar program of reconstruction and future prosperity.

It might be a shock, but no merchant would think of doing less without inviting bankruptcy. Should an intelligent nation do less?

Any nation can be rich only as long as its supply of resources is greater than the needs of its people. After that no nation is self supporting.

It is high time we snapped out of our delusion that the people of this country can go on forever using up soils, forests, waters, minerals and wildlife without eventually coming to the bottom of the barrel.

## The Sportsman Speaks

### "Remarks" from The Sportsmen's Questionnaire

**Cresco:** "The Commission should have more money to give us the things we want and need. It cannot be done on the present license fees. Very few of the boys will object to an increase provided the money is spent wisely. I favor a state sales tax only as a last resort. Fees raised will be permanent, inflation or not. It takes money to make the mare go."

**Fairfield:** "I have purchased licenses every year since the law or license fee was established in the state and feel that I have had very cheap sport. The restocking of lakes and ponds with fish is well worth the license fee."

**Amana:** "I think if you can't make ends meet I would look for a different job."

**Leon:** "Anything for the betterment of our wildlife. I have always thought that women sports should have to buy a license, for my wife will catch more fish than I."

**Panora:** "I'm a farmer, hunt maybe once or twice a year and fish about the same. I think this is sufficient. I raise 50 or 60 little pheasants every year and people from cities drive through in the fall and shoot them from their cars. We have no protection on foxes. Airplanes in the fall shoot them on anybody's land, protected or not. I think farmers should and are doing their share now for sportsmen."

**Boone:** "I would support any move the Commission deems necessary to get funds for developments for wildlife so they would not become extinct in many parts of the state."

**Winthrop:** "I do not feel that enough attention is being paid to stocking the small streams with bass. Much fine fishing is found in such waters; it likewise provides many more fishing spots, especially to the fellow who likes to get away from the crowded fishing holes."

**Farragut:** "If a woman can hunt she can pay for it like any man."

**Bayard:** "We certainly have enough tax and identification receipts to carry on our person now, why add one to guns and fish rods?"

**Oxford:** "I believe if more sportsmen would make it a point to leave their cars in the farmer's yard while hunting on his land, it

would make it easier to get permission to hunt or fish next time. And I believe a Farmer-Sportsman dinner and meeting once a year would be fine."

**Burlington:** "I personally am proud of our small state lakes but would like to see them better stocked, and pledge myself to pay my share of whatever it costs. I am sure I reflect the attitude of most game fishermen and hunters."

**New Sharon:** "In regard to fishing we should not have to buy a license for we earn all the fish we get. As for hunting and trapping you either beat the other feller to it or get nothing. We had more game years ago when there was no law on anything."

**Mystic:** "Suggest that all licenses have the dates of the season and the bag limit printed on back of each because it is very confusing at times to remember the dates and bag limit."

**Burlington:** "Raise hunting and fishing license so your conservation officer can get more money and the sportsmen can get more hunting and fishing."

**Spirit Lake:** "Give us something for our money, then we will talk turkey."

**Tabor:** "I favor a federal law prohibiting shooting of migratory waterfowl every other year."

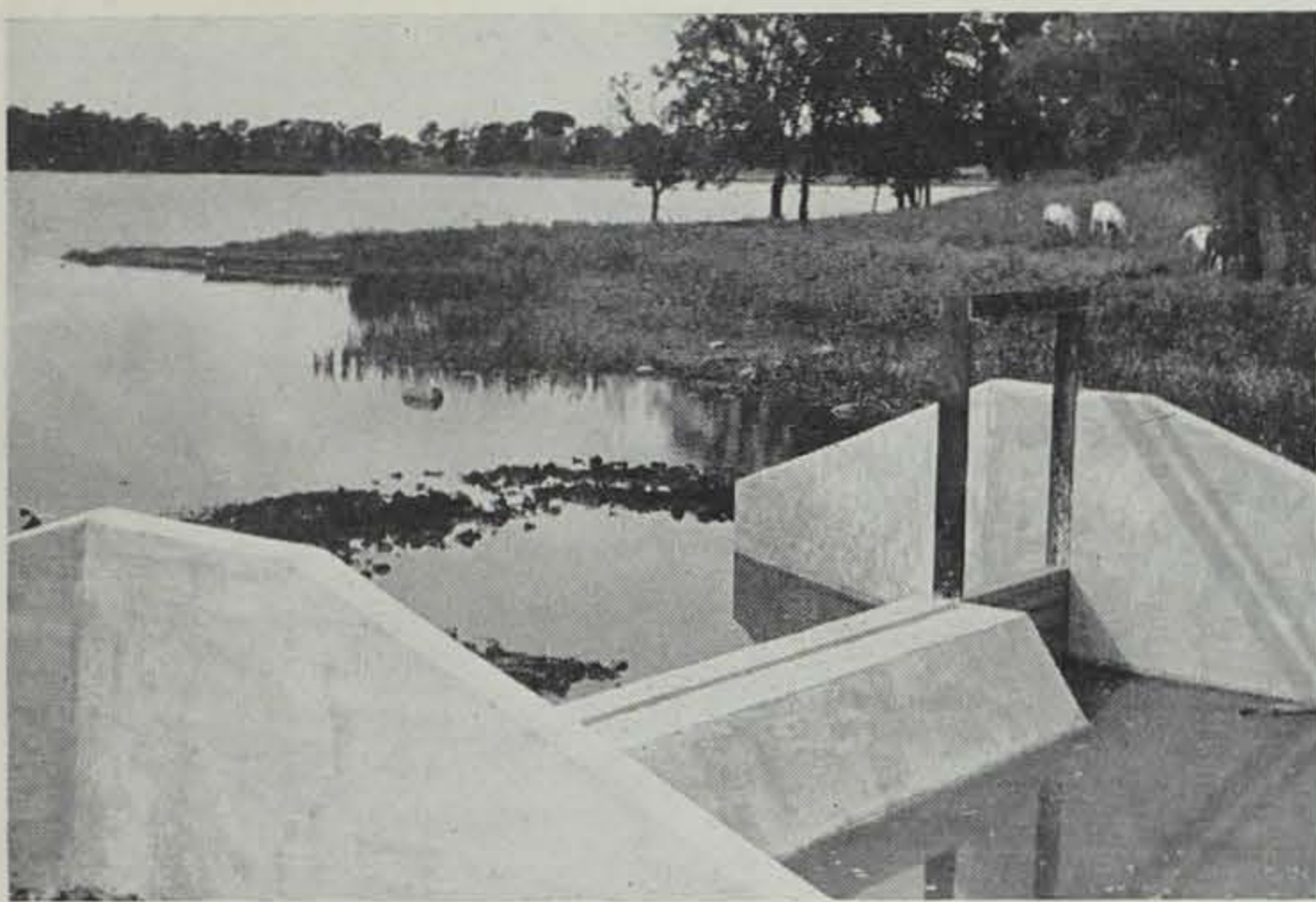
**Nashua:** "It's not a question of 'inflation,' it's a question of illegal fishing and illegal shooting of game such as shooting along the public highways, especially little traveled roads, during season and out of season by such as pheasant hunters."

**Lake Park:** "No more methods of taxation such as tax on equipment. I'm paying 15 different taxes with forms and blanks to fill out now. No more please."

**Waverly:** "License fees are reasonable which encourages our people to have them, regardless of whether they actually fish and hunt or not. Many of us like to fish and hunt but due to the nature of our work we are unable to do it. Yet year after year we purchase a combination license feeling that this year we surely will fish and hunt again. Cannot state funds already collected be re-allocated so that the various branches of our state agencies receive sufficient funds?"

**Bartlett:** "I definitely do not favor a tax on equipment. This is not a dictatorship yet."

**Mt. Ayr:** "I do not believe in extra or special taxes of any kind where they can be avoided by an increase in the already existing tax."



The new control structure on Mud Lake, one of several in the Mud-High-Swan lakes area development in Emmet County. Jim Sherman Photo.

## Mud-High-Swan . . .

(Continued from page 121)

Cunningham Slough, Olin Anderson farm, and areas surrounding the Mud Lake outlet slough. These upland areas at the present time total 1,375 acres.

The ultimate land and water ownership in the development project will include the same amount of lake area we now have plus a total of 900 acres, approximately, of marsh area, and a total of 1,800 acres of upland game bird and animal area, mostly in the form of additional margins around subsequent acquisitions. This totals an ultimate project area of 4,500 acres of which 3,690 acres is now owned by the state, leaving an acquisition to complete the unit of 810 acres. All of these are approximate figures.

The development to date includes public access and shore line control on approximately one-half of the total shore line of Mud Lake, and a completed outlet structure for Mud Lake this past year; also a completed outlet structure for the Mud Lake outlet slough and some fencing. Riprapping of the High

Lake shore line will start soon. Management of the East Swan area for maximum pheasant production was undertaken last year and will continue.

Development contemplated in the near future includes a management program to be outlined by our biological section, which will take into account a running inventory of the habitat conditions and game bird and animal populations, and a manipulation of the factors to such an extent and in such a manner that the maximum production and harvest may be accomplished.

Immediate developments of a physical nature are a continued program of shore line acquisition, public access acquisition, public parking area construction, shore line riprap, and upland game and migratory waterfowl habitat development and improvement.

Contemplated development on our ultimate program consists of a biological management program as mentioned above, shore line control, public access, parking area, shore line protection from wash and pollution, additional marsh land acquisition including marginal areas which will have value in control of

the area and provide concurrently some habitat for birds and animals, water control structures in order that the surface level of the marshes may be deliberately manipulated in line with recommendations made by the biological section to develop the maximum potential environment and habitat for birds and animals for which the area is intended.

It includes also a habitat development and improvement program for upland game, and this series of High, Mud and West Swan Lake is included on the program of lake dredging to bring out and enhance the fullest possible fishing use.

## GUN REPAIRS NOW

Hunters with guns needing repair should send them to the factory now during this off-season, if they want them back in time for the hunting season this fall.

"Advising a shooter just what repairs his gun needs, and exactly what the repair job will cost and getting the go-ahead, often means involved correspondence, which extends the time of the repair period," said W. S. Allen, sales manager of the Winchester Repeating Arms Company division of Olin Industries, Inc.

"Early last fall the repair department was swamped with ten times the pre-war number of guns awaiting repair, and many shooters failed to get their guns until the hunting season was well advanced.

"There will be thousands of disappointed shooters again this year if they wait until just before the hunting season opens to send in guns for repair. With the supply of new guns still behind demand, and distribution continuing on an allocation basis, it is expected that the factory will be overloaded beyond capacity with repair jobs again this fall unless gun owners act promptly now," Allen said.

To speed handling, when shipping a gun to the factory for repair, it should be removed from its case and packed tightly in a stout box or cardboard carton. The name and address of the owner should be tagged to the trigger guard. Repair instructions, together with the model and serial numbers of the gun should be inclosed in a sealed and stamped letter attached to the outside of the package.

Southern channel catfish is the correct common name of the variety of channel catfish living in Iowa's streams.

The southern channel catfish is known by a number of different names, such as white channel catfish, Fulton cat, blue Fulton, barbed trout, spotted channel catfish, fiddler, channel catfish, white cat, silver cat, Potomac channel cat, and cat.

Channel catfish rarely exceed fifteen pounds in weight. In the Des Moines River channel catfish seldom weigh over ten pounds.

Old groundhog holes make the best shelters for rabbits during the wintertime for they show relatively little variation in temperature.

## IT'S TIME TO TAKE STOCK

By Frank Dufresne

EVER since the pale-faced man from Europe set foot on the shores of this country some 450 years ago, the forces of progress set in motion by his arrival have been working against the so-called balance of nature. The steady rise in population of this aggressive immigrant, his rapid spread from eastern to western seaboard, his creation and expansion of industries, his building of sprawling cities, his railroads and highways probing into every wilderness area—all of these factors have, until recent years, robbed and destroyed natural fish and wildlife resources at a rate never matched anywhere, any time, by any people.

We have been careless and wasteful.

After four long centuries of gunfire, traps, nets, seines—cropping the fish and game without reseeding—it's a wonder we have any wildlife resources left. But we have, and its capitalized value is estimated at the staggering sum of 14 billion dollars.

Fishing and hunting is big business, really big business. The sportsman in this year of 1947 is going to spend close to 3 billion dollars for hooks, bullets, gadgets, and vehicles to go places on; for the pleasure of wading the cool riffles of a trout stream; for tramping the open fields with a gun under his arm; for camping and sleeping under the stars.

It is fitting and proper at this time when sales of fishing and hunting licenses are pyramiding into the stratosphere to post a few warning signs along the trail to better fishing and hunting, because if we don't it's soon going to mean poorer fishing—poorer hunting.

The signs can be simple little things that all of us will understand:

No game department can hope to keep pace with present accelerating demands.

Try to understand, to tolerate, to support shorter periods of open season, smaller bag limits, when your game department prescribes them.

Help to conserve this resource from which you get so much pleasure.

It's your game. Give it a break.

From here on there is no room for free riders; every one of us must help put back as much as we take out.

The grebe is a bird contortionist. It lifts its legs out of the water, shakes the moisture from them, then folds them over the back, under its wings.

If Little Red Riding Hood lived today The modern girl would scorn her; She only had to meet one wolf, Not one on every corner.

The eggs of the channel catfish are about the size of a No. 4 shot.



Several of the sloughs in the new area that are now dry part of the year will be permanently flooded and will provide excellent habitat for waterfowl and furbearing animals. Jim Sherman Photo.



Test netting on Lost Island Lake revealed an extremely high population of small, under-nourished bullheads and tremendous numbers of half starved carp.

## Fish Census . . .

(Continued from page 121)

of Ruthven, Iowa, has long been famous for its bullhead fishing. However, surveys and observation of the fisherman's catch since 1942 indicated a tremendous population of under-developed bullheads and a very small proportion of large bullheads. Food studies in 1945 showed an almost complete lack of the favorite food of this species (larvae of the midge fly, commonly called blood-worms and snails). A large population of undernourished carp in the lake also indicated an undesirable competition for the available food remaining on the lake bottom. Consequently, it was recommended that the carp population be reduced insofar as possible, and that the limit on bullheads be removed.

Subsequently, in the spring of 1946, state rough fish removal crews took 130,000 pounds of carp from a new type trap at the inlet of the lake. The limit on bullheads was taken off, permitting fishermen to take by hook and line as many as they could or cared to catch each day.

A fish census program was established, and the catch recorded from June 26 to September 3. All species of fish and the number caught were recorded, together with the number of fishermen contacted daily, by a census taken by the boat-livery operators. The average number of fish taken per fisherman and the average catch per hour were calculated for comparative purposes. Every effort was made to obtain a complete record of the fish taken.

Conservatively, at least 90 per cent of the fish caught from Lost Island were recorded. The small record for the walleye pike would either indicate a low population or a poor season for taking them. Neither of these is deemed correct since many reports of good catches at night by shore fishermen were received.

The following data shows the pertinent facts obtained in the daily census: 1. There were a total of 153,878 fish caught during the 10-week period. 2. A total of 153,372 of the above were black bullheads (called "yellow-bellies" by

most fishermen). 3. The average catch per person was 29.23 fish per day. 4. The average fisherman spent 5.56 hours fishing per day. 5. A total of 5,264 fishermen was recorded. 6. A total of 29,249 hours was spent in fishing by the above number of men. 7. The average catch per hour was 5.22 fish. 8. There was an average of 75.2 fishermen on Lost Island Lake every day during the census period.

Fishing was considerably better in the first two weeks of the census than in the succeeding periods. This is, of course, the usual occurrence, since spring bullhead fishing is invariably better than summer and fall. Had our census started earlier a greater variance would doubtless have been noted between early spring, summer, and fall periods.

In order to obtain a season average of 5.22 fish per hour, there were some remarkable catches made. One census taker, Mr. Robert Finley, observed one man catch 70 bullheads in two hours' time—35 fish per hour! Many fishermen went away from the lake with gunny sacks or tubs full of bullheads. Of course, there were also days when very few fish were taken, and individual fishermen who caught few fish even on good days. It is doubtful that any record exists of any lake which had a higher number of fish caught per hour than this 1946 record on Lost Island Lake. Several census records have been taken of individual lakes for a few days or perhaps the opening week in which the catch-per-hour record is higher. Most of the census records on lakes which are normally considered good fishing areas have an average catch-per-hour of about 1 to 1.5.

At the start of the season the bullheads were quite small, but it mattered little to the disciples of Ike Walton. The average length of the bullheads on July 25, 1946, was about seven inches, with the majority in the six inch category. They averaged three ounces in weight. On October 23, a survey seine haul was made, and the bullheads obtained averaged seven and five-eighths inches in length and had increased in weight to 4.4 ounces. Only very rarely was a large bullhead caught by hook and

DATE	SPECIES			Total	Number	Hours	Hours	Fish	Fish
	Northern	Pike	Walleye	All Fish	Men	Fished	Per Man	Per Man	Per Hour
June 26									
July 2	1	12	43	16,236	678	2,117	3.1	24.12	7.69
July 3									
July 9	2	19	45	16,783	723	2,572	3.5	23.30	7.55
July 10									
July 16	12	15	23	14,394	532	2,921	5.5	27.15	4.94
July 17									
July 23	5	6	1	15,547	400	2,714	6.8	38.89	5.73
July 24									
July 30	2		10	17,857	439	2,990	6.6	40.70	5.97
July 31									
August 6	1	4	8	19,294	606	4,184	6.9	31.86	4.61
August 7									
August 13	10	5	10	15,239	545	3,269	6.0	28.00	4.67
August 14									
August 20	7	26	11	11,760	460	2,610	5.7	25.66	4.52
August 21									
August 27	6	57	35	12,247	449	2,752	6.1	27.59	4.48
August 28									
September 3	21	37	72	14,015	432	3,100	7.2	32.74	4.56
TOTALS	67	181	258	153,372	5,264	29,249			

AVERAGES: Season Average Catch Per Man . . . . . 29.23  
Season Average Fish Caught Per Hour . . . . . 5.22  
Average Number Fishermen on Lake Daily . . . . . 75.20

line, although some were taken in survey seine hauls that weighed a pound and more.

The increase in size and weight can only be attributed to the reduction in demand on the meager food supplies, by reducing the carp and bullhead population.

Most of the bullheads taken in 1946 by fishermen were five years old. In 1941, these were the predominating young-of-the-year in the lake. At that time, July 29, they measured from one to two inches in length and weighed .104 ounces. In 1942 they had grown to two to three and one-quarter inches and weighed .24 ounces (July 30). Survey data is not available for 1943, but in 1944 the bullheads averaged around six inches in length and weighed 2.5 ounces. In 1945, no appreciable increase in length or weight was apparent over the preceding year. Signs of starvation were not apparent at any time during this period from 1944 to 1946. The carp taken from the trap during the spring of 1946, however, showed definite signs of starvation.

This program of carp control and no limit on the number of bullheads that can be taken by pole and line in Lost Island will be continued during the 1947 season and longer,

if necessary to obtain more suitable balances of food organisms and fish populations. This, it would seem, is the sensible approach to the management of fish in an "unbalanced lake." The harvesting of surpluses in all species is necessary to prevent overcrowding, stunting, or death from old age.

There is a growing tendency among some of the leaders in fisheries research and administration to discount the value of creel limits and closed seasons. However, until such time that adequate data refutes these values for all species of game fish in Iowa, it is good reasoning to retain creel and seasonal limitations, except where alterations are necessary to balance populations.

The popular belief in the value of closed seasons and creel limits is, of course, almost legendary. The legendary virtues should be evaluated without bias, and, if proved unsound, removed from the statute books.

A dull hook will lose fish. Keep a small honing stone in your tackle box and check the tip of the hook barb from time to time. When fly casting on shale or sand, the back cast will allow the hook to touch the beach and dull itself. Clean, sharp hooks mean more hooked fish and less danger of infection to yourself if you hook the wrong creature.



More than 130,000 pounds of carp were removed from Lost Island during '46 to relieve the pressure on available food supplies.



"—with stretched neck and head feathers fluffed." Allen Green Photo.

## THE MOUSE TRAP CAME TO MY DOOR

By Allen Green

YOU surely remember the old adage, "When man invents a better mouse trap the world will make a beaten path to his door." Well, this story is just the opposite, for the mouse trap beat a path to my door.

One morning two boys stopped at the wildlife refuge carrying something with extreme caution. As soon as they approached, one boy excitedly exclaimed that they had found a bird caught in one of their muskrat traps and I had better look out for it would pick out my eyes (it had tried to pick his). It *did* have a savage look and a sharp bill.

"What kind of a bird is it?" asked the boy who held it firmly.

Well, to tell the truth, I was stumped at first, never having seen one of these birds at close range—didn't even make a guess. I was sure it was one of the herons and on looking it up found it to be an American bittern.

This seemed to satisfy them and they left the bird for us to care for—one of its toes had to be amputated on account of an injury received from the jaws of the trap. So we put it in a covered pen and in a couple of days it was well again.

We then turned it loose in our pheasant pen (which was open at the top and surrounded by a high, wire-mesh fence) where we had been rearing young pheasants. On account of the pheasant feed the place was infested with mice who were growing tame and fat.

Instead of immediately flying away, as one would expect such a bird to do, the bittern actually seemed tame and did not attempt to make use of its wings, al-

though these were not injured in the least. It walked about contentedly, perched on one of the bushes as if investigating the area; then it suddenly spied a mouse run. Waiting near one of these tunnel entrances (and being hungry) it quickly made a strike with its long, sharp bill and landed a mouse in beautiful style. To our surprise it swallowed it whole. Apparently pleased with its new surroundings, it at once began to search for more mice, going from one tunnel to another till it finally got its fill. The bird stayed in the open pen for two days but when we entered the enclosure on the third morning the bittern had departed—still our pheasant pen was well rid of mice.

I don't think I ever saw a more interesting bird, and if man ever produces a better mouse trap he will have to take a hint from nature and make it BETTER'N A BITTERN.



"It perched on a bush and seemed perfectly content with its bill-of-fare and captivity." Allen Green Photo.

## GUNSMITHING WILL BE TAUGHT IN COLLEGE

Gunsmithing soon will be taught in college, it has been learned by the Wildlife Management Institute. The new 2-year course in gunsmith training, thought to be the first of its kind in the country, being started at Trinidad State Junior College, Trinidad, Colorado, is arousing widespread interest according to President Dwight C. Baird. Prospective students from no less than 22 states have inquired about the course. Many of the inquiries and applications are from veterans who, having developed an interest in firearms, now wish to make a career of gunsmithing.

The college credits P. O. Ackley, nationally-known gunsmith and operator of a Trinidad gunshop, with the idea for the new course. Mr. Ackley, beset with requests of men who wanted to learn his trade and not wishing to train apprentices himself, referred the applicants to the school.

The skins of rats are used to make pocketbooks and tobacco pouches.

## LETTERS FROM THE BIRD FEEDERS

Burr Oak, Iowa

Miss Ivah Green  
Rural Supervisor  
Dept. of Public Instruction  
Des Moines, Iowa  
Dear Miss Green:

We are sorry to say many birds in this vicinity perished in the February storms. We do not see as many as we did but we are hoping one reason may be that some moved a little farther south to escape the cold weather and storm.

One day we coaxed a chickadee into the school room. We put a little suet on the window sill back of the feeder and he came in to get it. He took it in his beak and flew up on the light fixture and ate it. Then he started creeping up the light fixture chain. There must have been some flies spending the winter there because he found some. He ate the live ones and threw the dead ones down on the desks. Then he flew around again. We opened the window at the top, and he found his way out. That afternoon he came back in again, flew around a little, looked at the light fixtures again, and then flew out. He even sang a little song while he visited us.

Some of us are still keeping our bird calendars and have over a hundred birds listed.

Sincerely yours,  
Pupils of the Upper Room  
Burr Oak, Iowa.

## OUR FEATHERED FRIENDS

I like to hear the chick-a-dee,  
That sings in the barren tree;  
I like to hear the old blue jay  
That makes a noise all the day,  
And hear the cawing of the crow  
As he sits in the cornfield row;  
They all will help the farmer out  
By catching insects that fly about.

Dwayne Houdek  
Decorah.



Well directed interest in wildlife and conservation in today's youngsters is believed to be the answer to the conservation problems of tomorrow. Dick Trump Photo.

## A WINTER SONG

I like the chick-a-dee because it isn't afraid,  
He likes the feeder that we made.  
He sings his merry song to me,  
"Chick-a-dee, chick-a-dee, dee,  
dee, dee."

Earl Ward  
Decorah.

Williamsburg, Iowa

Mr. L. D. Sanders,  
Chairman Wild Life Contest Committee

Marengo Fish and Game Club  
Marengo, Iowa

Dear Mr. Sanders:

I thought perhaps you would like to know how we have been feeding the birds at our school. For the past several winters we have been feeding the birds but never have they eaten so much feed as they have since the recent snow storm.

We have four feeding stations for the pheasant and quail. At two of these stations we leave feed every night and morning and in the other two we place feed during our noon recess.

After the storm on January 29 the feed which we put out would always be gone, and we would see pheasant and quail tracks. We would see the birds going to and coming from school, but we could never catch them eating. However, on the evening of February 6 we saw 23 quail at one feeding station and 17 pheasants in at another one. We noticed them at our feeders twice on February 7. Judging from the number of pheasants we have seen around the feeders, we think we are feeding between 40 and 50 of them.

You can't imagine how good it makes us feel to think that maybe it is our feed that is keeping the birds alive. If you or some of the members of your club happen to be near our school some day, stop in and I will show you our feeding stations. Perhaps you would be lucky enough to see the birds eating at our stations.

I go to the York No. 6 school. There are five other pupils besides me. My teacher is Mary Welsh.

Your friend,  
Robert G. Wallace.

## ANOTHER STEP FORWARD FOR MAQUOKETA INDUSTRY

The news that the Fishing Tackle Company of America is planning to erect a permanent home here this year is another step of progress for Maquoketa.

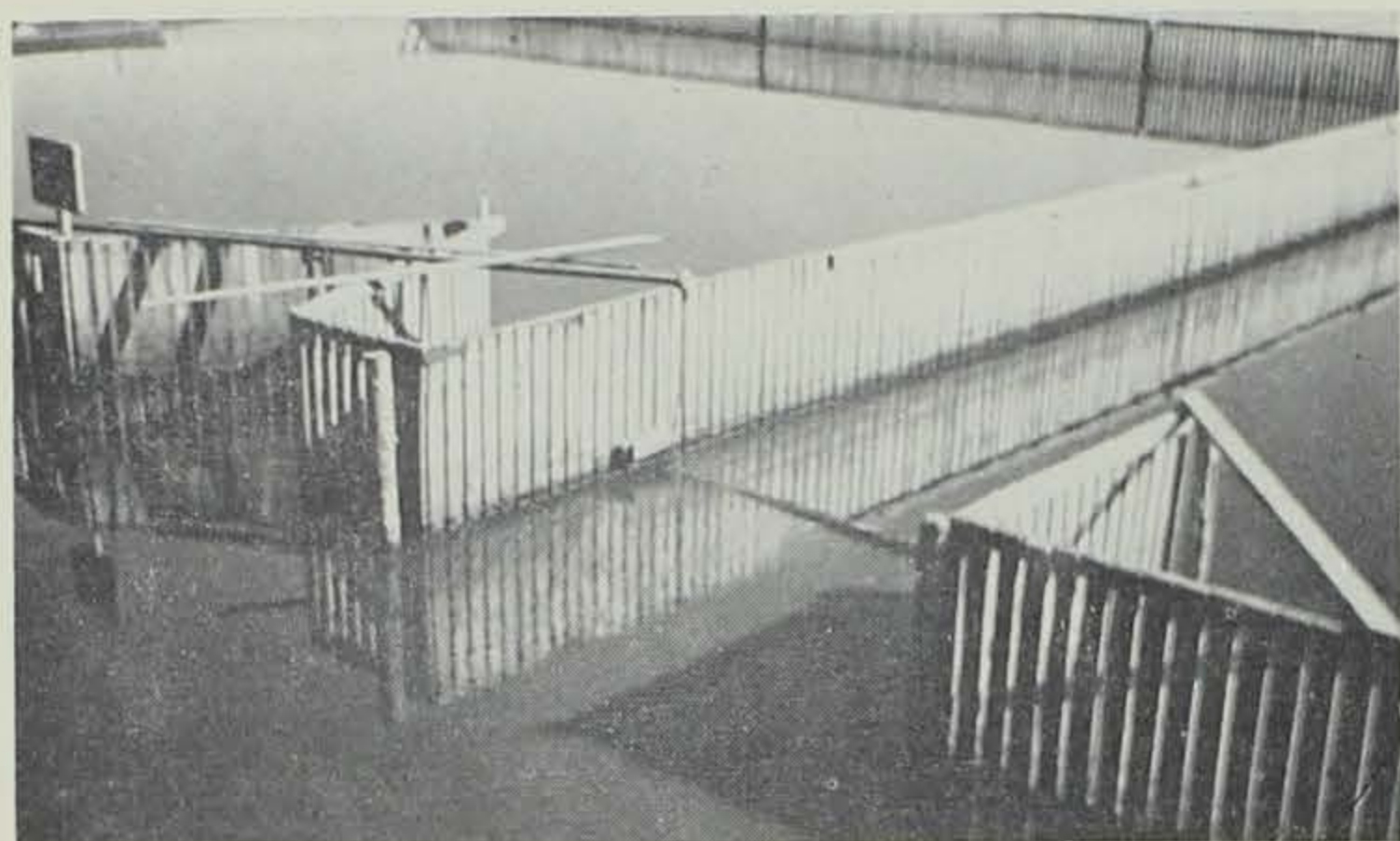
Already this company is employing 80 persons, and when the new structure is completed, this number will be upped sharply. Their production will bring that much more money into Maquoketa in terms of supplies purchased locally for the company and pay checks for the employees.

Maquoketa may have "missed the boat" on getting many of the needed improvements in past years, but it is on the band wagon in getting its share of decentralized industry.

—Maquoketa Community Press.



"—a savage look and a sharp bill." Allen Green Photo.



The Wisconsin weir, a modification of which will be used in many of Iowa's lakes this season to remove rough fish and protect spawning beds for desirable game species. E. B. Speaker Photo.

## A NEW WEAPON FOR ROUGH FISH REMOVAL

By E. B. Speaker, Superintendent of Fisheries and O. J. Koch, Supervisor of Rough Fish Removal

THE war is over in Europe and the Pacific, but the battle of the carp rages on through the middle-west. Up in Wisconsin the boys are using the Wisconsin wier, an effective trap, with splendid results. A modification of this trap will be used in several Iowa lakes this year.

This fish trap is somewhat similar to the famous herring wiers and pound nets used along the Atlantic Coast and in the Great Lakes fisheries. In Iowa they will serve the two-fold purpose of removing rough fish when they attempt to enter the bays, and by so doing provide suitable spawning areas that are not messed up by carp and buffalo for the game fish. The wier is made of slat fencing placed across the mouth of shallow bays, and the trap is constructed in the center to capture migrating fish. When fish attempt to enter the bay in their spring movements to the spawning grounds, they strike the fence barrier. As they attempt to swim around it they are led into the throat of the trap. Once inside, few escape, because the throat is small and the fish have a tendency to move in curves rather than by angular turns.

The bays where the traps are constructed range in size from a few to several hundred acres and afford excellent spawning areas for both game and non-game fish. Reproduction of the game species, however, is impaired in most Iowa lakes by the rooting tendencies of carp. Heavy growths of aquatic vegetation, rocks, snags, and other obstacles desirable in spawning areas usually prevent the effective use of seines in rough fish removal. Since the stationary fish traps are known to be highly effective in such areas, it is expected that large numbers of

rough fish will be removed this spring as they attempt to enter the bays.

Close check will be kept on the traps and when fish are captured the rough fish will be removed and the game fish placed over the trap into the bays where they can reproduce without the interference of tons of rooting carp. Later in the season a section of the fence will be removed to permit the game fish and their progeny to return to the main lake. Angling will be prohibited in these production areas until after the spawning season to insure maximum reproduction success.

The traps vary in size from 60 to 100 feet square and the wings leading to them are in some instances as long as a thousand feet. The fish will be removed frequently to minimize reproduction of the rough fish and to guarantee against damage to trapped game fish.

The slats in the fence and trap are spaced from one to one and one-half inches apart to permit free passage of water and at the same time preventing certain of the game fish from becoming gilled. Rough fish of spawning size will not be able to get into the spawning area through the slats.

While these traps are extremely effective in lakes and slow moving water, it is doubtful if they would be practical for streams without further refinement.

Traps of similar design made of web or netting have been used in Iowa lakes for many years. Carp, one of the worst offenders, however, are not taken in the web traps in large numbers. In a single season nearly 200,000 pounds of rough fish were taken from the web traps in East Okoboji, but only about five per cent were carp, the balance being buffalo and sheepshead. Traps constructed of rigid material such as wood, however, will take carp readily.

It is estimated that over 30,000,000 pounds of rough fish, prin-

cipally carp, buffalo, and sheepshead, are removed annually from the waters of central United States. While there is no accurate data on the standing crop in Iowa, it is felt the total poundage exceeds that of the game fish by several times. From one to two million pounds are removed from the inland waters of the state each year, and nearly twice that many from the Mississippi River.

In the two year period of 1942-43, a total of 810,000 pounds of rough fish were removed from Storm Lake (3,000 acres) in Buena Vista County. This is an average of 270 pounds per surface acre. A like number were taken from Beed's Lake in Franklin County in 1946. Rough fish populations of from 100 to 200 pounds per acre are common in Iowa lakes and in some instances the figure is even greater.

Over a period of eight years, 1937-44, a total of more than 4,800,000 pounds of rough fish were taken from the Okoboji chain of lakes alone. Since the combined area of this chain is approximately 6,000 acres, and the average catch was 600,000 pounds each year, the sustained yield for this period was 100 pounds per acre. Of this number 17½ per cent were taken with gill-nets and 82½ per cent with seines and traps.

The new wooden traps are not expected to take the place of other methods of rough fish control, but rather to add to the efficiency of the program. Expansion of their use in Iowa will be dependent upon their success. While it is expected these traps will be most effective from early spring to mid-summer, they will be closely observed throughout the season.

## ALBINO CROW SHOT BY JOHN BOEVER

No longer does the old saying, "black as a crow," hold any significance for John Boever, for he added a white one recently to his trophies of the hunt.

John was not out in quest of game, but grabbed his shot-gun and hastened to the edge of his corn field when he spied the albino alighting. The otherwise wary bird obligingly remained atop a fence post, awaiting its fate as if tired of evading the many other members of the sportsmen's club who had been after it all winter.

The white crow, one of the rarest of the feathered world, had been sighted by many hunters and farmers since early last fall—now here, now there—but the sportsmen are agreed it was the one and only in these parts. Mr. Boever, a member of the club, has taken the specimen to a taxidermist and in a week or two it will be "perched upon a bust of Pallas" in the hunter's home.

—Remsen Bell Enterprise.

## THE CHORUS

Now when frogs awaken and sing in the warming days of April, one of the greatest choruses of the year swells from pond and marsh. The frogs are at their singing.

Each kind sings in its own way and they are all loud. One frog has voice enough to dominate a pond, and when dozens sing at once the crescendo surges until all other sounds are lost. Then, if someone comes near the pond, the chorus stops abruptly, or, more gradually, one by one the singers cease until perhaps only one lone cricket frog, preoccupied with the sound of his own voice and with ecstasy of spring, sings on.

The greatest chorus comes in the warm and perfumed April dusk. Now the singers sit in shallow water and on the muddy shore, the last dim light of the west picking out their flexible throats that in song have swelled like balloons.

The tiny swamp cricket frogs start the medley with a clicking and a musical jingling. Among the shore grasses and lily pads others



Here an American toad sits along a muddy shore with throat swelled like a balloon, adding its music to the spring chorus.

begin—the high-pitched bird whistles of the Hyla or spring peeper, hidden in the wet grass; the laughing and cackling of the big green and brown leopard frogs with gold-rimmed eyes; the trilling of the toads that sit submerged to their elbows; the somber, explosive, pond-shaking coughs of a bullfrog somewhere among the cattails; the chirrup of a tree frog that, with sticky toes, clings to a nearby willow trunk.

Only the male frogs sing. Their throats are pale, while those of the female are dark. In the water near the singers the voiceless females lay their strings and masses of gelatine-encased black eggs which are the climax to and the real meaning of the springtime chorus in the pond.

—The Living Museum

Mark the butt of your rod with a thin strip of adhesive tape six inches from the end with another strip ten inches from the end. This will give you a handy ruler for measuring fish without marring the rod surface. And, if you remember the rod, you remember the ruler.