IOWA CONSERVATIONIST

Volume 12 APRIL, 1953 Number 4

SPORT FISHING THE UPPER MISSISSIPPI

By John Madson

Education Assistant

Editor's Note: This is the first of three articles on Mississippi angling. The middle river and lower river will be reviewed in May and June.

From Allamakee to Lee County, few people call it the Mississippi. It is referred to as "The River," and anyone not knowing what river is under discussion is regarded with patient pity.

The natives have a great respect for their river. Most of this respect is due to something the river people themselves cannot explain, but much of it is due to the fishing that the river gives them.

The area around Harper's Ferry is typical of some of the best angling on the upper river. Channel Dam No. 9 lies just north of the little town, and is more or less a barrier to fish moving upstream. Fish congregate below the dam not only because passage is blocked, but because of an abundance of food and oxygenated water. Fishing below such dams is excellent, but the real paydirt is in the wilderness of quiet sloughs and backwaters below the dams where fish can escape the swift channel.

When the river is low, bass fishing in these sloughs comes into its own. As might be expected, some of the best fishing spots are the points of low islands where there is usually a jumble of logs, stumps, and old willow snags.

Using weedless lures, the natives cast happily into these messes. As often as not the lure hits wood before water. Jim Williams, who keeps Harper's Ferry in ammunition and fishing tackle, tells of hanging a lure on a willow snag about a foot out of water. Unable to shake it loose, he watched helplessly while a three-pound bass tried to climb the stump after the plug.

Local bass fishermen never pass up the mouths of small streams. Here, where clear water meets the coffee-colored bayous, there are often big largemouths just hanging around waiting for something to turn up. One or two casts are usually enough.

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Jim Sherman Photo.

Some of the finest largemouth bass fishing in the state is found in the sloughs and backwaters of the upper Mississippi River.

EROSION . . . AND FISHING

(Excerpts from a talk given by R. W. Eschmeyer at the annual meeting of the League of Ohio Sportsmen, Columbus, Ohio, February 27, 1953.)

As children we developed a very strong feeling about mud. The feeling didn't come of its own accord. It was promoted . . . vigorously. Mud was something which was *not* to be tracked into the kitchen or living room.

Our early attitude was so firmly ingrained that it never left us. It shouldn't. But it is of utmost importance that we develop another, and far stronger, attitude toward mud. It is something that must be kept on the land, and out of the streams.

Nationally, siltation has probably been the biggest single contributor to the gradual decline of our fish catches in inland waters.

In the early days our land was covered with forest or with prairie vegetation. The rain which fell soaked into the soil, to reappear gradually as flowing springs. Any run-off during heavy rains was clear water. The soil remained on the land.

Most of the siltation which has taken place can be attributed directly to human activity . . . our farming and ranching, our road building, our cutting and burning of the forest.

We know that siltation is a major destroyer of fish habitat. The rapid run-off of water, even without siltation, is injurious to fishing. Floods destroy fish food, fish spawn and fish habitat. Where the water runs from the land, instead of being absorbed by the soil, our springs cease to flow, causing a warming of the water, and the drying up of streams during periods of drought. In place of a reasonable even flow of cool water we have alternate periods of flood and low water levels with decided variations in temperature and streams once ideal for trout or smallmouth bass become unsuitable for these desirable species.

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IT WON'T BE LONG, NOW

As if Iowa trout fishermen weren't nervous enough waiting for opening day, Bill Tate, Area Fisheries manager, has added some fuel to the fire.

With Bob Cleary, fisheries biologist for the Conservation Commission, Bill has been conducting population checks on trout in northeastern Iowa streams. In four or five of the streams checked, the workers found an amazingly high carryover of trout, some of which ran over two pounds.

In spite of high survival in the better trout streams, some stocking will be done. Fishing pressure and carrying capacity of the streams, rather than numerical quotas, will be used as criteria for stocking.

Most Iowa trout streams are found in the extreme northeastern corner of the state, an area famous for its rugged beauty. The streams that will be stocked with trout this year are listed with their approximate locations.

IOWA TROUT STREAMS
Allamakee County

Clear Creek (small)—Rainbow trout, Brown trout.
At town of Lansing.

French Creek*—Rainbows, Brooks, browns.
4½ miles north of Waukon on No. 9, turn left, go 7 miles north, turn right for 1½ miles.

Hickory Creek—Rainbows, Browns.
Take County Road M south from Highway 13 to Smithfield. Creek flows into the Yellow River just west of Smithfield.

Livingood Springs — Rainbows, Browns.
6½ miles north of Postville on Highway 51.

Paint Creek*—Rainbows, Browns.
Flows through Waterville. Fishing is downstream from the town.

Village Creek*—Rainbows, Browns, Brooks.
West of town of Village Creek, which is 2½ miles south of Lansing on County Trunk Road L.

Wexford Creek (small)—Rainbows, Browns.
4½ miles north of Harper's Ferry on surfaced county road.

(Continued on page 125)

*Streams considered major trout waters because of carrying capacity or fishing pressure. These will be stocked about four times this year, including the pre-season stocking. Other streams will be stocked two or three times, including a pre-season stocking.

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National Committee Reports on Prairie Chicken

The National Committee on the prairie chicken, appointed by the National Wildlife Federation last fall to study the problems of this vanishing grouse, has made its first report.

According to R. A. Brown, a lawyer who formerly served as chairman of the State Conservation Commission, "there is no doubt that intensive land use—cultivation of crops and over-grazing of grasslands—has been the predominant cause of the bird's decline". Missouri, Indiana, Illinois and Iowa, where no hunting of the birds has been permitted for many years, have had a steady downhill trend, thus proving that gunning is not the cause of the drop in numbers.

A belt of states from Oklahoma northward through the Dakotas has the best chance for maintaining a shootable surplus of prairie chickens, Brown said. A survey by Reuel Janson in South Dakota showed that a ratio of 60 per cent cultivated land with 40 per cent grassland furnished the best habitat for the birds. The grassland surveyed was less than one-third good enough to furnish cover for prairie chickens.

The entire population of prairie chickens in the United States is not over 400,000 birds, the committee found. Hunters harvested more than that in the single state of Minnesota during an open season only 28 years ago.

The first report of the committee, of which Bruce Stiles, Director of the Iowa Conservation Commission, is a member, appeared in the March 13 Congressional Record.

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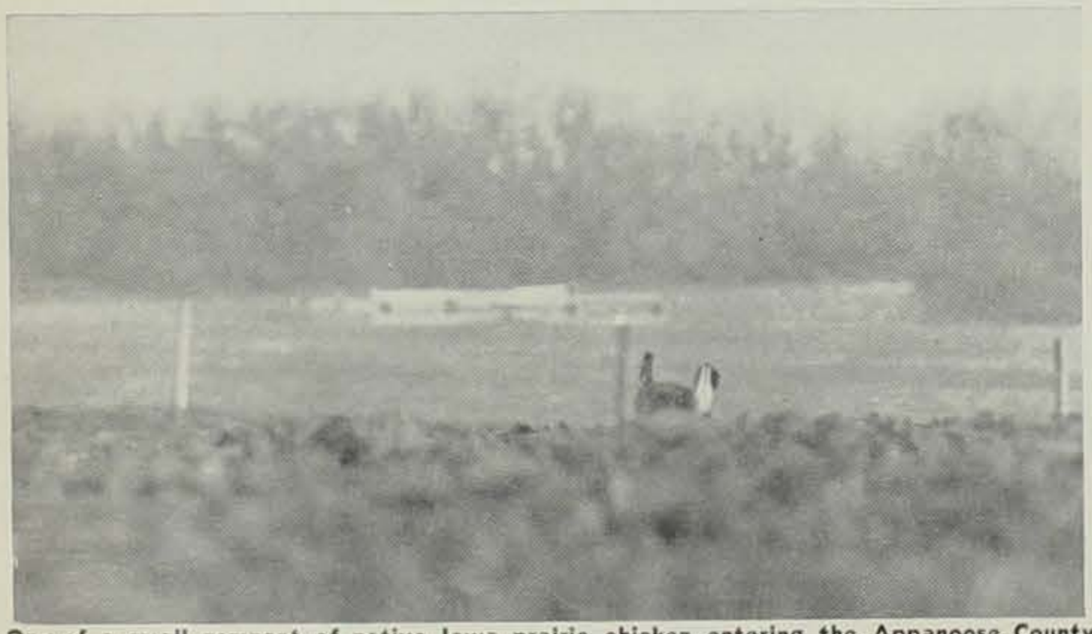

One of a small remnant of native Iowa prairie chicken entering the Appanoose County booming ground at dawn.

Jim Sherman Photo.

In the exciting, exacting, mechanized and industrial life of today, relaxation has become of primary importance in conserving man's powers of thought and energy.

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THE CONSERVATION OF MAN

The soil, the streams, the forests, the wildlife . . . Those natural resources generally are brought to mind when the word "conservation" is mentioned. But the Conservation of Man is important, too, and it ties in directly with the conservation of natural resources.

Conservation in practice means more than preservation—it means wise and judicious use of the resources. Conservation of Man means using his powers of thought and energy wisely and judiciously. In the exciting, exacting, mechanized and industrialized life of today, relaxation has become of paramount importance in conserving Man's powers of thought and energy. "Get away from it all," physicians advise people with nervous disorders. And where do they advise such patients to go? To the out-of-doors, as so many of the physicians themselves do!

There is no doubt but that the out-of-doors is becoming increasingly important each day as a recreational resource. People are coming to realize that in order to work efficiently, they must play. So, more state and federal parks are being established each year to meet the demand. The pressure upon the game and fish populations grows by leaps and bounds.

But, in order to have the relaxing out-of-doors as a recreational outlet for the conservation of Man, conservation of the soil, the lakes, the forests, and the wildlife is essential. Not only does Man's food, clothing and housing depend upon these things, but his mental well-being now is concerned as well. — *The Tennessee Press, Reprinted in Outdoor America.*

FOX HUNTS

March 1, 1953.

Dear Jim:

Reports of getting 3, 4, or 5 fox in a circle hunt or even 10 or 12 by airplane spotting leave us cold. Several farmers of Davis County have asked me to write you telling of their success.

In eight community hunts in Davis County the average take was 23⅝ fox. The biggest kill for one day was 33 at Drakesville. Others were 28 at Wesley Chapel, 28 at West Grove, 22 at Mark, 22 at Belknap; first Savanah hunt 17, second Savanah hunt 2 weeks later; 22 and 17 N. E. of Bloomfield.

These are well organized hunts with 100 to 200 men attending. Dinner is usually served by the local church women and a cigar box placed at the door for a voluntary payment. The servers also get the bounties. And such food! Like the old time thrashers used to get.

Usually two hunts or circles are held before dinner and two or three after. The most fox taken in one circle of which I have a report was 15 near Drakesville. Two hunts were held in the Savannah vicinity; and in one 1½ mile square five fox were taken—two weeks later in the same square with one section added, 11 fox were taken.

Hunters report a very good carry over of quail this winter, with these hunts giving a very accurate count of quail populations.

Sincerely yours,
Wayne Sanders.

RE-CREATION NOT WRECK-REATION

What are you doing about some outside interest for your life? I mean some absorbing hobby that will really take that nose of yours off the grindstone!

Yes, I heard you. You said that you were too busy. That's why you need that hobby. Listen, friend, have you noticed the great number of doctors and other men who know something about the need of the human beings, yes; have you noticed how for the most part they have absorbing hobbies? That's why you need a gun cabinet, or a battery of fishing poles and several cases of tackle. That's why you need a golf club and a will not to forget the Lord on the Sabbath. Maybe a garden would help you, or becoming friendly with a farmer where you can visit and take down your hair. I don't know what your tastes are, but I know that you need something.

You know there is a problem here, too, so many people misunderstand. Because they see a single hunter drinking, they reason that all hunters drink. Or because they don't play golf or square dance they say these things are wrong. It is a wise man who does something about mental outlook. Who will take time to recreate himself, to refresh himself by forgetting the serious and substituting even for a few hours, a lighter mood. That fellow will make better company for himself to live with!

There are a few mis-guided people who mistake recreation for dissipation. They are not synonymous. They are not bed-fellows. They are as far apart as light is from darkness. One builds, the other destroys. One causes happiness, the other brings dreariness. One causes smiles and laughter, the other brings tears and crying. It has been said by one much wiser than I, that it is not "wreck-reation", but "re-creation." It is a building again, a restoring of tempo and tenure that gives life its glow.—*Bellevue Leader.*

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Jim Sherman Photo.

What are you doing for some outside recreation interest in your life?

Jim Sherman Photo.
Winter fishing is here to stay until factual information shows that it is injurious to summer fishing success. Fish houses on Miiller's Bay, West Okoboji.

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SPIRIT LAKE SUPPORT FOR WINTER FISHING

Winter fishing is here to stay—until factual information is made available that it is hurting the overall fish picture in the Iowa Great Lakes.

In spite of a vain but boisterous effort on the part of the Better Fishing Association recently in Des Moines, the Conservation Commission still finds its methods are sound—that winter fishing is not ruining summer fishing.

It's disgusting to see the character of men whom this community has found many reasons to respect, taken to task unjustly. These local employees have taken many prominent positions in our community in other affairs, they have served us well and we have no reason to believe they would fail at the job they are skilled in doing.

No one wants good fishing any worse than the commission employees and they are working toward that end with the best known methods now available. Maybe in time the methods now in use will have to be changed—but pity the area if it comes about from the efforts of men who have no time to study the situation.

One thing has been stressed in the recent "noise." The need for an active sportsmen's group—the Dickinson County Isaac Walton League. From the heart of the Iowa Great Lakes region there is a voice which should always be heard on such matters. And what other group is here to do it?

When first rumblings and the false accusations of the Better Fishing group started to be heard, local sportsmen kept still, but with eyes open. Such talk is not good publicity and if ignored, sometimes it will die down of its own accord.

But it didn't die down—if got worse. And when the association meeting was scheduled with the commission in Des Moines, Dickinson county sportsmen took time out to make sure they were heard, too. These sportsmen were men who have taken time of their own to learn a little more of the "what" and "how" of fishing and fish propagation.

They're not experts—but they have an overall understanding of some kind—and with what they see and know, first hand, they are able to get some kind of a clear picture of the situation.

It makes sense that genuine fishermen and sportsmen should work with, not against, the men who have made a life study of fish. Any other way would make as much sense as telling a doctor, who has made extensive studies with a microscope, that there is no such thing as a microbe.

The scientist is in a position to tell much more about fishing than a thousand men, who have done nothing more than drop a line into waters they can't even see through.

Winter fishermen do have an opportunity to see into the lake, and they, for the most part, are well satisfied that the Iowa Great Lakes are not short of fish.

But there's no room for destructive criticism. The way to something better is to work WITH the expert.—*Spirit Lake Beacon.*

PERFECT RECORD

Ohio maintained its perfect record of no fatalities and no injuries during the deer season. The state has never had a fatality during any of the deer hunting seasons, which supports the belief that the use of rifled slugs in shotguns, which is required in Ohio, provides more hunting safety.—*Ohio Conservation Bulletin.*

It is difficult to approach most birds or animals undetected, even from the rear; the position of the eye and the bulging eyeball enable the creature to detect motion even from the rear.—M.S.

FIVE ISLAND WINTER KILL

There have never been, probably, more differing opinions on anything than what should be done about the dying game fish in Five Island Lake.

It's a funny thing, but when it comes to fish and game every man and boy, just about, is an authority. Every man is his own biologist and knows just what ought to be done.

Some insisted holes should be cut in the lake to "let in air," some that fresh water should be poured in the hole at the city dock, via fire hose and hydrant; others that air pumps should be used to blow bubbles under the ice.

One fellow told us the whole lake should be cleared of snow so sunlight could get through and provide more oxygen. How? Easy, he said. Farmers would be glad to respond with their tractors and scoops and clear the lake of snow in no time.

Well, maybe. Can anyone clear a five-mile-long lake in no time?

Many approved of taking fish out of the hole at the city dock by just about any method whatsover; many didn't. The fish moving into this area would die anyway, State Conservation workers said, and the fish might as well be eaten as lost.

A bill now (Feb. 17) before the legislature would make it possible to legalize such methods to prevent waste on order of the commission.

Even with the word of commission experts, whose business is to make a study of such things, that the Lower lake fish were doomed to death, some doubted it and felt they should be left alone on the chance some might survive.

Several local fishermen expressed bitterness to us over fish scooped out and left to die on the ice, making an unsightly mess. You wonder why anyone would take out dozens of bullheads just to leave them to die on the ice.

That wasn't the purpose of the state in allowing fish to be taken other than by hook and line. It was to provide food that would otherwise be wasted.

Carp, bullheads and other fish were strewn around the open water by the city dock at times last week. A week ago Sunday dozens of persons, some from a distance, were helping themselves to dying fish. Some of these people showed an unsavory greed that left others cold.

The bustle about the hole in the ice provided some laughs, too, to all except the victims—those who leaned over too far and plunged into the icy water and others who spilled in when they lost their footing on the slippery edge.

Experience and study by biologists with the commission have shown there is nothing that man can do to save fish in the predicament the fish in Lower lake were in, Garfield Harker, fisheries supervisor for Area One, said.

Probably all local fishermen had the impulse to do something, like cutting holes in the ice, thinking it would help, becuse all of us are grieved by the turn of events. Here the lake was booming with the best fishing in years in 1952 with even better prospects for '53, when this record-breaking winter-kill came along.

The water and weather conditions which produced the kill can be blamed on no one. We will do well to remember that. The only rueful satisfaction there is is to see so many hog-sized carp perish with the game fish. We wonder how many fishermen were aware of the great number of carp in the lake.

The damage has been done and maybe it won't be so bad as feared. As for anything the state, Walton League or any individual could do to reduce the damage, no matter how many opinions there may be on that, it is horse sense to leave this responsibility to the people whose business it is and are paid to do it.—*Emmetsburg Democrat.*

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Winter freeze-outs occur in the shallow lakes periodically. The kill is almost never complete and the remaining game fish, with reduced rough fish competition, grow with amazing rapidity.

Jim Sherman Photo.
The bedrock limestone at Union Grove State Park can be examined along the south end of the lake where it forms cliffs.

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UNION GROVE STATE PARK

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

Union Grove State Park, an area of about 250 acres in northwestern Tama County, is one of the state parks which is mostly lake. At the same time it has several features of interest to a geologist. Some of these are quite apparent to the visitor, others are not.

As for the lake itself, it is of course artificial. It was created by placing a dam across the valley of Deer Creek. The valley was made as most valleys are made by the stream which occupied it. It is wide and with gently sloping sides, so the lake is comparatively wide and shallow. Valleys in this part of Iowa are like this. Many of the streams are said to occupy broad sags. This is believed to be because the last glacier in this part of Iowa, called the Iowan, left only a thin deposit of drift. The drift is so thin that it only faintly masks the pre-Iowan landscape.

This country is covered with the wind-blown material called loess. It is composed mostly of silt, along with some clay, and is easily eroded by running water. This means that much of it is carried far into the lake, after heavy rains. The particles of silt and clay settle out in the lake instead of being dropped to form a deposit at the upper end.

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Jim Sherman Photo.
The fossils in the Mississippi limestone at Union Grove Park are principally brachiopods. These two-shelled animals were somewhat like present-day clams and oysters.

The loess is of course underlain with the thin Iowan glacial drift.

The relationship between the loess, drift, and solid rock of the earth's crust may be gained from a visit to a quarry which lies a short distance east of the lake. Here the loess is seen to extend about six feet down from the surface. It is brown in color. The top of the drift beneath is also brown. That is because it is weathered. It changes to gray at a depth of six or eight feet. The total thickness of the drift is about 20 feet. Below that lies the solid rock. This can as well be examined along the eastern shore at the south end of the lake, where it forms cliffs.

This rock is a limestone, occurring in beds up to a few feet thick. Limestone, so abundant in Iowa, is a rock composed of the mineral calcite. Calcite is calcium carbonate and so can be used to neutralize the acidity of soils. That is one of the principal uses of limestone. Great quantities of it are thus used in the form of "agstone". This is the familiar "lime" or agricultural lime which is spread on the fields. There were probably other outcrops of this limestone which were covered by the lake waters.

Limestone came into being as a deposit of limey material in a sea. The ancient seas have covered Iowa and large areas of what is now North America, many times in the course of earth history. The one in which the limey material for this limestone was laid down in called the Mississippian by geologists. That is because the record left by the invading sea of the time is so complete in the Mississippi valley.

The limey material was partly precipitated from solution, much as salt is precipitated from solution. Some of it came to the bottom in

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HOW MANY FISH IN THAT LAKE?

Earl T. Rose and Tom Moen
Conservation Commission
Fisheries Biologists

When we checked Lower Gar Lake in 1948, we found that it was a sick lake. We mean by this that the water was turbid, there was almost no vegetation, bottom samples showed few food organisms, and game fish were scarce.

It was known that there were carp in the lake, and it seemed logical to give them the blame. But were there enough carp to affect the lake so seriously? To find the answer, the carp population in Lower Gar Lake was estimated during June and July.

This estimate showed 220 pounds of carp per acre. While this sounds high, the figure is not considered especially large for northern Iowa lakes. The check indicated that the carp were not wholly to blame for the lakes condition, but that they had allies.

It was noticed that in most seine hauls where small mesh was used that bullheads outweighed the carp. Here was the answer to the poor game fishing. Overpopulations of either of these bottom-feeders would have been bad, but the combination of the two had ruined angling. When many carp and bullheads were removed, the lake improved rapidly and again game fish began to thrive without our resorting to that age old patent medicine of stocking fish from the hatchery.

If the average fisherman thinks about it very much, he probably becomes suspicious of any attempt to estimate the number of fish in a body of water. However, it can be done, and if properly made such an estimate can be quite accurate.

An estimate is begun by taking fish with net, trap, or seine, marking them and returning them to the water. (Marking fish was first attempted by Sir Francis Bacon in

Bullheads are one of the most popular Iowa fish, but even they become stunted, starve and fail to reach pan size when too numerous.

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1653, when he tied silk thread to the fins of parr to check their homing instinct, since then, almost as many marking methods have developed as there are fish. These include fin-clipping, buttons and tags attached to fish, tattooing, and even injection of compounds which show up in X-rays. Most of the marking in Iowa is by fin-clipping and internal and external tags.) In its simplest terms, a population estimate is based on comparing this *known* number of marked fish in a lake to the total *unknown* population of unmarked fish. For instance, if 100 marked fish were placed in a lake, 1000 fish were recaptured and 10 of these were marked fish, the total population would be estimated at 10,000 fish.

$$\frac{100 \times 1000}{10} = 10{,}000.$$

Using this basic method plus complex formulae, the estimates become quite accurate providing certain necessary precautions are taken. The two basic rules for accuracy are (1) the marked fish must be thoroughly mixed with the unmarked population, and (2) all

(Continued on page 125)

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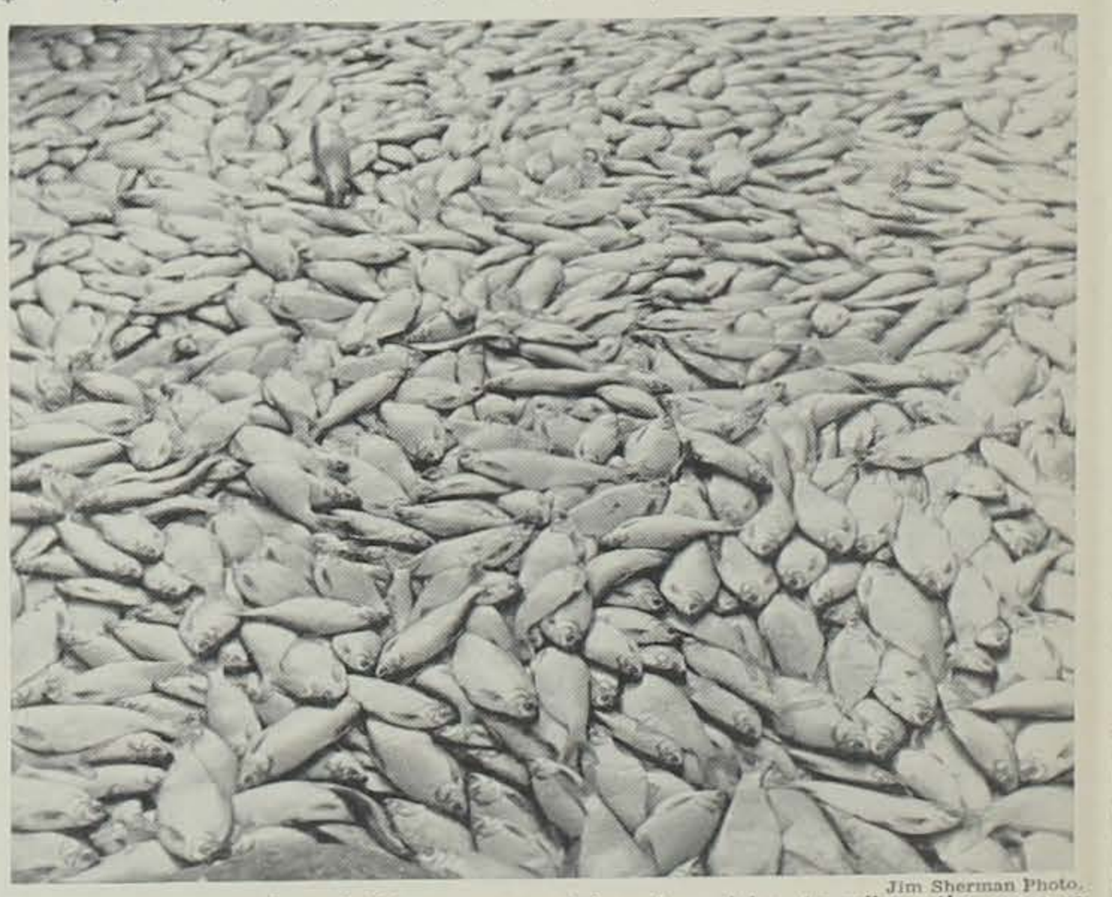
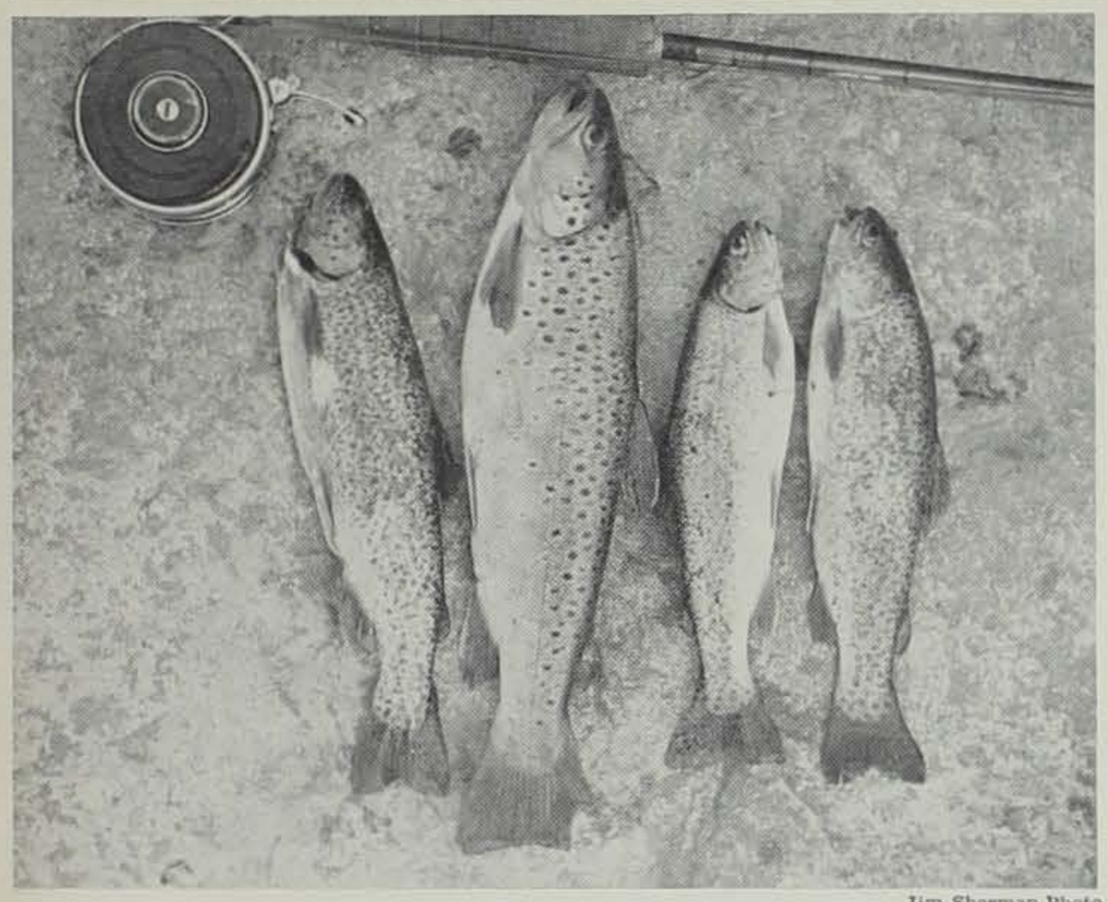


Jim Sherman Photo.
Fabulous quantities of rough fish are removed from Iowa lakes to relieve the pressure on food and space needed by game fish. Two tons of shad and a pop bottle taken from Storm Lake in 1952.



Jim Sherman Photo.

It won't be long now.

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It Won't Be Long . . .

(Continued from page 121)

Teeple Creek (small) — Rainbows, Browns.
Turn north on first gravel road east of Yellow River on Highway 51 at old stone house between Postville and Waukon.

Clayton County

Bloody Run Creek* — Rainbows, Browns.
Fishing in main creek just west of McGregor.

Buck Creek—Rainbows, Browns.
2 miles east of Garnavillo.

Ensign Hollow—Rainbows, Browns.
1 mile west of Strawberry Point on Highway 3, 4¾ miles north on surfaced county road. (1½ miles north of St. Sebald.)

Joy Springs—Rainbows, Browns.
1 mile south of Strawberry Point on Highway 13, 2½ miles west.

North Cedar Creek (Cedar Hollow)—Rainbows, Browns.
5½ miles north of Garnavillo on Highway 52 to National, 3 miles east of National.

South Cedar Creek (Cedar Creek)—Rainbows, Browns.
2 miles south of Garnavillo on Highway 52, turn west on surfaced county road for 2 miles.

Delaware County

Elk Creek*—Rainbows, Browns.
2 miles north of Greeley on Highway 38.

Maquoketa River — Rainbows, Browns.
Backbone State Park, Strawberry Point.

Richmond Springs — Rainbows, Brooks, Browns.
Backbone State Park, Strawberry Point.

Richmond Springs Branch — Rainbows, Browns.
Backbone State Park, Strawberry Point.

Turkey Creek—Rainbows, Browns.
2½ miles east of Colesburg on unsurfaced county road.

Manchester Spring Branch (also stocked by federal hatchery.)
2 miles east of Manchester on Highway 20, 1½ miles south on Highway 116.

Fayette County

Glover's Creek*—Rainbows, Browns.
North out of Echo Valley State Park.

Grannis Creek (small)—Rainbows, Browns.
4 miles east of Fayette on county road.

Mink Creek—Rainbows, Browns.
1¼ miles north of Wadena on Highway 296.

Otter Creek—Rainbows, Browns.
East out of Echo Valley State Park.

Howard County

Bigalk Creek* — Rainbows, Brooks, Browns.
5¾ miles north of Cresco on county road leaving northeast corner of town.

Chihak Creek*—Rainbows, Brooks.
1 mile out of southeast corner of Cresco, 1¼ miles south.

Mullins Creek*—Rainbows.
2 miles east of Cresco on Highway 139.

Jackson County

Big Mill Creek*—Rainbows, Browns.
1 mile west of Bellevue.

Brush Creek (small).
1 mile east of Andrew on county road.

Dalton Lake—Rainbows, Browns.
1 mile east, 1 mile south of Preston.

Little Mill Creek* — Rainbows, Browns.
1 mile west of Bellevue.

Twin Springs (very small) — Rainbows, Browns.
1½ miles east of Green Island, ½ mile south on county road.

Mitchell County

Spring Creek*—Rainbows, Browns.
Just north of Orchard.

Turtle Creek*—Rainbows, Browns.
¾ mile north of St. Ansgar.

Wapsipinicon River* — Rainbows, Browns.
½ miles north of McIntyre on county road T. 2 miles west on surfaced county road.

Winneshiek County

Bohemian Creek—Rainbows, Brooks, Browns.
4 miles north of Spillville on County Trunk Road DH.

Coldwater Creek—Rainbows, Brooks, Browns.
1½ miles east of Plymouth Rock (8¼ miles north of Ridgeway).

North Bear Creeek* — Rainbows, Brooks, Browns.
2 miles east, 1½ miles north of Highlandville.

South Bear Creek* — Rainbows, Brooks, Browns.
At edge of town of Highlandville.

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Trout River* — Rainbows, Brooks, Browns.
5 miles east of Decorah on County Trunk W.

West Canoe Creek — Rainbows, Brooks, Browns.
3¾ miles north of Decorah on Highway 52. Then straight north for 2½ miles on surfaced county road.

Trout Run* — Rainbows, Brooks, Browns.
¾ mile southeast of Decorah on Highway 9.

Twin Springs — Rainbows, Brooks, Browns.
Southwest corner of Decorah.

Although the general trout picture is excellent, there are parts of it that are not so good. Several trout streams have been lost recently because of the discourtesy and lack of consideration of a few fishermen. Most of the trout stream access areas are privately owned. When a farmer has his fence cut or his property littered with trash, a good trout stream may be doomed.

Like hunting, much of our future trout fishing depends on the conduct of the sportsman.

The 1953 trout season is from May 1 through November 30. Daily catch and possession limits are eight fish, with no minimum length or weight. Trout may be taken daily from 5 a.m. until 9 p.m.—J. M.

WHITETAIL HEADLINES

The Whitetail deer is making the headlines in Iowa these days. It's hard to believe there are over 10,000 of them in the state. Why that's probably a lot more than there are in Idaho, where we used to live, and which is considered the wild west in such matters. Strange thing is that 1,200 of the deer, or over 10 per cent for the state, are supposed to be loping around right over there in Pottawattamie County, a big county, to be sure, but that's a lot of deer. Try to tell a foreigner that there were 1,200 deer living happily almost within the shadow of the Omaha stockyards, and never once getting in the glue pots, and he'd think you were pulling his leg.—*Anita Tribune.*

Jim Sherman Photo.

Conservation Commission fish census crews using a harmless shocking device which temporarily stuns trout, found tremendous carry-over in many of the northeast Iowa trout streams.

How Many Fish . . .

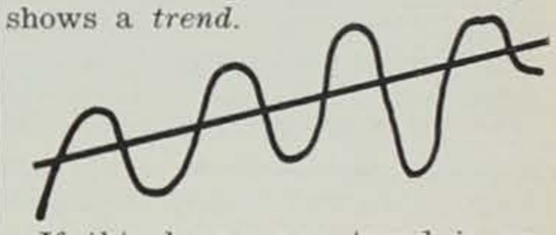
(Continued from page 124)

fish must have an equal chance of being caught.

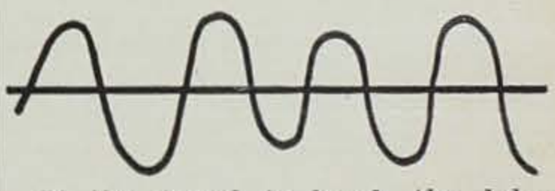
Fish populations are not determined by this trap-tag retake method alone, but in conjunction with summer and winter creel censuses and counts by state rough fish removal crews.

The most carefully made estimates indicate that fisherman's luck in itself does not give us high or low populations levels; rather, it only indicates highs and lows in angling success. (Which is another story).

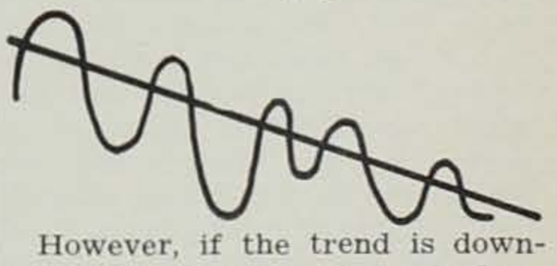
With lake censuses available, the job of fisheries manager is placed on a solid foundation. We know that fish and game populations fluctuate over the years. This has always been, and always will be. Annual estimates are now being made on many lakes and when plotted on a chart, peaks and troughs can be seen and the average populations computed. A line drawn through these averages shows a *trend.*



If this long-range trend is upward, the fish are increasing in the lake:



If the trend is level, the lake shows a stabilized population:



However, if the trend is downward, something is wrong and indicates the need for corrective measures.

The downward trend can be due to an increasing rough fish population, habitat loss, pollution, or many other reasons. It is rarely due to overfishing. But whatever the cause, we have been warned, and something may be done before it is too late.

The population estimate is one of fisheries management's most valuable tools. It has its drawbacks, and does not claim to give the exact number of fish in a given lake. But even so, such estimates are much more accurate than prejudiced or unfounded guesses and they form the backbone of modern game fish management.

The speculum or iridescent bluish-purple color patch on the wing of a mallard is bordered above and below with broad white bars. The black duck's speculum is much the same except it is not bordered above and below with broad white bars, but may have a narrow band of whitish behind.—J. S.

The Mississippi River, in high water, as seen from the bluffs above McGregor. During low water periods, the bottoms are a series of sloughs and connecting shoots that provide excellent pan and bass fishing.

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Sport Fishing . . .

(Continued from page 121)

There is also bass fishing in the flats . . . large pools or bays between the islands. These are presided over by bitterns and American egrets, and are rimmed with dead trees. They are often choked with river bulrush and water lily, and are quite shallow. Such flats may be worked with a variety of plugs and spinners, but live bait will often result in two dogfish for every bass taken and the dogfish are lots of fun.

Another hot spot for bass is along the edges of islands and "cuts" where there are rooted banks and half-submerged tangles of logs and brush. Drift and row slowly, working every cove and eddy you can get a plug into. The average river bass will run around fourteen inches, but there are largemouths lurking in these tangles that will scare the average fisherman to death. For the lunkers, the best fishing is at *dusk* and *early evening.*

While you're fishing these areas for bass, you may take northerns. They are an angling incidental in the upper Mississippi, usually taken while fishing for something else. But, while they're not very big, they do add spice to the game.

One of the favorite bass lures around the sloughs last summer was a sort of twin shannon spinner, weedless, with a large black bucktail. The bass ignored the lighter bucktails, and this dark lure became even better later in the day. Fourteen- or sixteen-pound lines are the best for such waters, since you will be snagged often, and a heavy line will be necessary to turn that seven-pound largemouth when he heads for his home stump.

The sloughs are filled with bluegills. One afternoon last summer we hailed a boat in Harper's Slough that contained two middle-aged ladies. In answer, they held up a string of bluegills that looked like pieplates. Some of the fish would have gone nine inches, a very respectable bluegill. The ladies were fishing in a quiet, sheltered hole about fifteen feet from the bank, and were using worms.

Twenty minutes and three bass later we met another fisherman who was working a bank where a sandbar shelved steeply down into the slough. He showed us several fine walleyes, one of which weighed five pounds. It had been taken with one of the most popular river baits, a live minnow.

The best walleye water in the upper Mississippi is extremely dangerous. This is the rough water just below the large channel dams. Fishermen get in as close as possible to a dam and use weighted minnows, or heavy spoons or spinners. In such waters five- and six-pound walleyes are common, and ten-pounders are not unusual. But when the dam rollers are open a sixteen-foot johnboat is tossed like a canoe, and these areas should be fished with great caution, if at all. In addition, it is against federal law to fish or boat within 300 feet of any channel dam.

Below each channel dam is a series of sunken wing dams which extend out into the main channel, causing a long, narrow riffle. During low water a few fishermen wade out on these rock structures and take some of the biggest walleyes and bass in the river. The same is true of the closing dams which are across sloughs lying across the main channel. However, these rocky dams are tough on tackle. You've probably heard stories about collecting bushels of sinkers, plugs, and spinners from such sunken dams when they are exposed by low water.

It's hard for an inland fisherman to understand the comparative lack of catfishing in the Mississippi. There are plenty of big catfish in the river. But aside from some angling for channel cat and flatheads from the dams at Harper's Ferry and Guttenberg, catfishing for the most part is left to the commercial fishermen.

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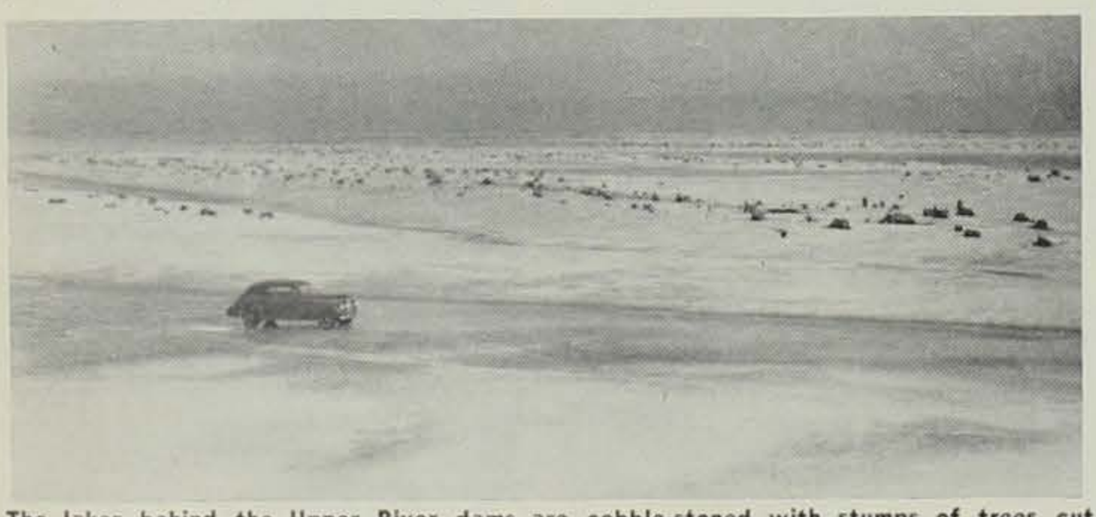

The lakes behind the Upper River dams are cobble-stoned with stumps of trees cut before the areas were flooded. The lake bottom above the Lynxville Dam, at low water during winter, reveals these stump hazards to boating.

One of the favorite bass lures around the upper Mississippi sloughs last summer was a twin shannon spinner weedless with a large black buck tail.

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Under the right conditions, the eddies at the sides of the big channel dams may be filled with black crappies, silver bass, and rock bass. The favorite baits are angleworms and minnows, but now and then a fly rod with a small spinner will wreak havoc.

Fishing above the dams doesn't amount to much, since siltation and raised water levels have covered much original fish habitat. Experienced river fishermen also regard these huge pools as dangerous to boaters not familiar with the area. Hundreds of stumps and logs are submerged just deep enough to be invisible, but are shallow enough to take the bottom out of a boat. And, like most large shallow water areas, the big pools "stand on their hind legs" in strong sudden winds. There are fish in the pools and fishermen that go after them, but the majority of anglers concentrate on the river below the channel dams.

Because of their dams, Harper's Ferry and Guttenberg offer the best fishing in the upper river. Both dam fishing and downstream slough fishing can be reached from these towns. Although not so readily accessible, there is good fishing in the bottoms near New Albin, and Lansing has been good in recent years.

That, in capsule form, is the upper river. It offers big water and big fishing, and local residents are content to stay at home.

After a day on Harper's Slough last fall we thanked Ben Quillan and Jim Williams for their hospitality. In passing, we asked Quillan if he had ever fished the Upper Iowa River. No. How about Lake Okoboji? No. Clear Lake? No.

"Benny," I asked, "have you ever fished anywhere else in the state? The answer came quick: "Why should I?"

And why, indeed?

One of the best containers for hooks and other small fishing items is an ordinary shoe polish can. The can can be easily cleaned by the use of hot water, then wipe dry. These cans close air tight and are easily opened by pressing side of can.

A sulphur-bottom whale may weigh around 15,000 pounds at birth and be almost half as long as its mother. By way of contrast, an adult black or brown bear may weigh from 200 to 500 pounds, but its offspring weigh only about eight ounces at birth.—G. S.

Small flocks of prairie chickens are found in some parts of southern Iowa. Farmers report that the most noticeable recent decrease in the numbers of these birds has been since 1946.—M.S.

Jim Sherman Photo.
Hundreds of teachers each year are now studying conservation. They, in turn, are teaching thousands of students what constitutes intelligent use of our natural resources.

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CONSERVATION, A RESPONSIBILITY OF OUR SCHOOLS

People living in cities and crowded communities have lost their attachment to the land and no longer have their roots in the soil that supports them. It is not good that a generation lose sight of the fact that the food they eat has to be grown and that from the land comes clothing, shelter, raw material for industry and our most wholesome kinds of recreation.

We cannot expect much of this understanding to come from parents because they too have become detached from the land and fundamental realities that make this country strong. If it is to become a part of the minds and consciousness of young people, it must come through the school.

Wise use of our resources cannot be left to other agencies, bureaus and departments. In a democracy people must know and understand what our natural resources are, what measures are necessary for their intelligent use and what programs are in effect to accomplish this end. This is not a reflection on the public agencies and private enterprises that are engaged in the management of resources — it is simply that we, the general public, must know more about these resources and their use if we are to support constructive programs.

Some progress is being made toward giving teachers an introduction to this thing we call "conservation". Hundreds of teachers each year are now studying conservation. Teaching devices and techniques are being developed and an impressive quantity of teaching aids are being made available. Most encouraging is the acceptance and approval by school boards and administrators of bringing conservation into the classroom and being made a part of the regular course of instruction. Teachers are finding that conservation makes their teaching more effective and as one put it, "Conservation in my classroom has stepped up student interest and participation and practically eliminated the problem child."

What is conservation? To a child it means my supper tonight, my dinner tomorrow, warm clothes when it is cold; a place and time to play where I can put my feet in clean, cool water, my hands in the earth, see flowers and hear birds; it means a home with my mother and father; a school where I can learn; a church where I can say my thanks for these good things. —*Michigan State College Bulletin.*

SHADES OF DANIEL BOONE

The proudest lad in Greene County is, without question, 10-year-old Jerry Kuebler.

Jerry lives just north and west of Jefferson and is the son of Mr. and Mrs. Virgil Kuebler.

Yesterday he shot a good-sized fox while out rabbit hunting in his father's timber. Today he brought the fox into town. The *Bee-Herald* took a picture of Jerry and his quarry to appear in next Tuesday's *Bee*. He also received his bounty from County Auditor Ralph Richmond and was to see about getting the critter's hide tanned.

His parents were beaming as if a new bouncing set of twins had joined the family instead of a dead fox.

Jerry generally hunts for sparrows. Yesterday he boldly announced that he and his dog, Blackie, a shepherd mongrel farm dog and co-hero of this story, were going rabbit hunting.

The dog barked at something in a hollow log, so Jerry shot into it. Out came the fox, who, in his confusion, circled back toward the young hunter. Jerry shot again and the fox staggered. Blackie finished the job.

Jerry's father does not hunt.

Jerry's weapon — a BB gun! — *Lake Mills Graphic.*

Jim Sherman Photo.
Most of the siltation which has taken place in our streams can be attributed directly to human activity; farming, ranching, road building, forest cutting and burning.

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Erosion . . .

(Continued from page 121)

Where silt has washed into the stream with the run-off, our waters become muddy, shutting out the light needed by the microscopic plant life so vital to food organisms. Too, the game fish, which feed by sight, are hampered in their feeding. Spawn is destroyed. Muddy water supports few fish, and is an unsuitable habitat for those species which we especially prize. The shifting mud bottom, too, destroys food and fills the pools needed by the fish.

The evils of siltation to fishing are many. The important question now is, can the conditions be restored? A lake or reservoir completely silted in cannot be improved at any practicable cost. But the streams can be revamped. If we stop the siltation, and allow the rain to be absorbed by the soil, Mother Nature will do a good job of restoring fish habitat.

There is a less direct but even more significant relationship between sport fishing and keeping the soil on the land.

Some years ago I talked with many representatives from countries such as China and India. They seemed to be unimpressed with our sport fishing and our rods and reels. They asked one question with almost monotonous regular-

(Continued on page 128)

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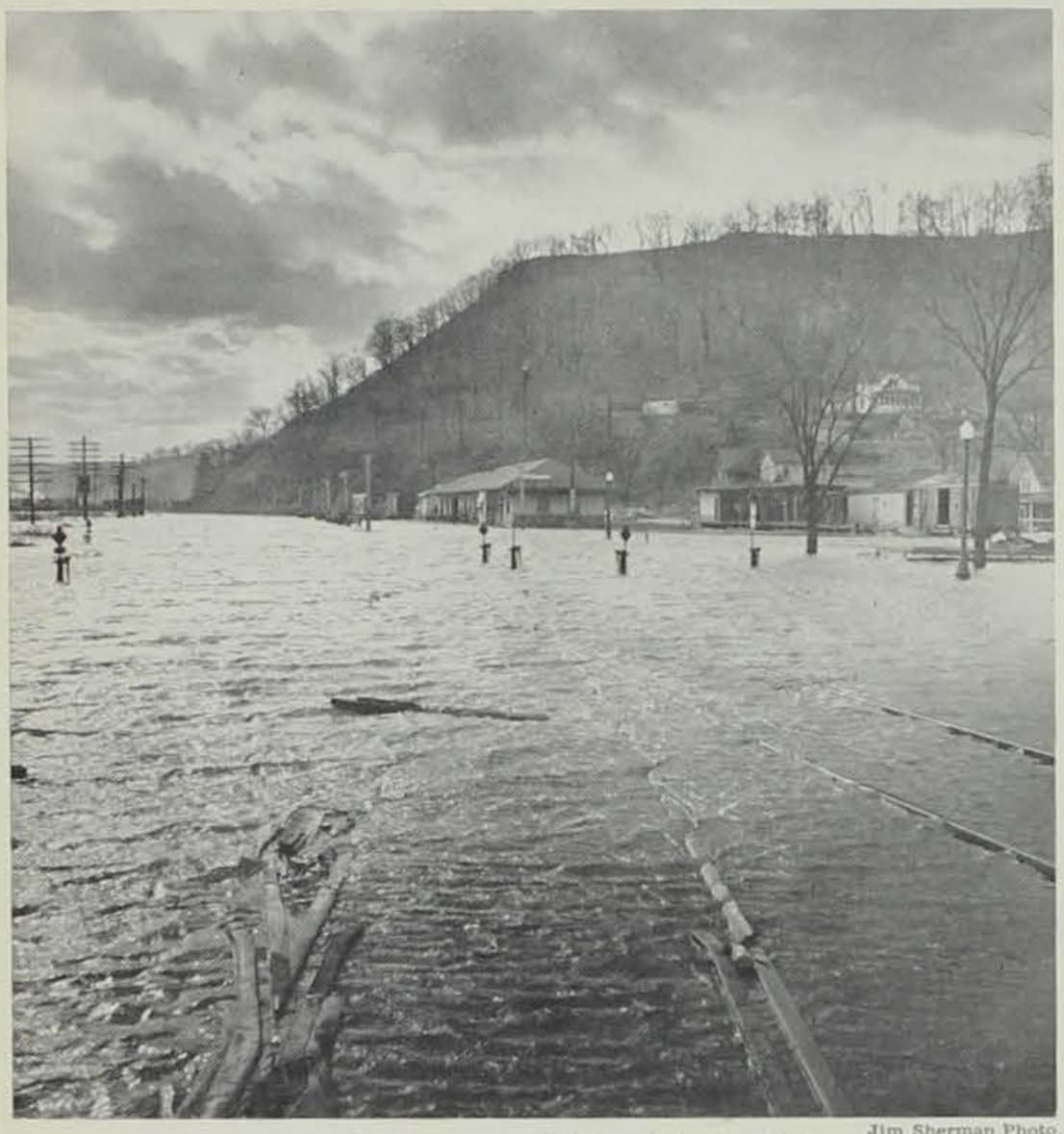
Jim Sherman Photo.
The work of the Soil Conservation Service and the Soil Districts is doing much toward keeping mud out of the streams.



Jim Sherman Photo.
Floods, in addition to destroying property and human life, also destroy fish food, spawn and habitat.

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Erosion . . .

(Continued from page 127)

ity: How can we produce more fish to feed hungry people?

Hungry people don't go sport fishing; they seek food, not relaxation. Without our high standard of living, which can be maintained only if we use our soil wisely, there would be no sport fishing.

Our major obstacle to progress is human indifference. We would still be much more concerned about losing a hundred dollar bill than about losing a hundred dollars worth of soil, but we are beginning to realize, finally, that soil has some value. An awareness could be created immediately if, just once, the soil which leaves a poorly managed farm after a heavy rain would somehow be deposited on the floor of the farmer's house . . . provided the house would contain all of it.

Siltation is still the major destroyer of fishing in our streams. But we have some reason for optimism. More and more attention is being given to the problem by a growing number of agencies and individuals.

The work of the Soil Conservation Service, and the Soil Conservation Districts with which it cooperates, is doing much toward keeping mud out of the stream. There are now nearly 2,500 soil conservation districts in the nation that include about four-fifths of all farms and ranches. In these districts nearly a third of the farmers and ranchers are installing complete conservation programs on their lands. The principal slogan of the Service is: "Use each acre of land within its capabilities and treat it according to its needs."

Treating land according to its needs means that all needed conservation practices are followed. Terracing, contouring, strip cropping, cover cropping, stubble mulching, and other practices that cause more of the rainfall to soak into the ground.

Then, grass waterways are established on each farm to drain off the surplus water during heavy rains. These waterways do not carry much mud. In fact, the water usually clears up while flowing down a grass-covered waterway, instead of picking up more mud as it would do if flowing down a gully.

On the public lands the watershed improvement work of the Forest Service has been outstanding. This agency has restored cover and stopped erosion on many watersheds. Our national forests now have 81,000 miles of fishing streams and 2,189,857 acres of lakes and reservoirs. The forest service program of watershed protection is vital to the fishing in these waters, as well as to the angling in the lower reaches of those streams which have their origin in the forests.

In some states, as in Wisconsin and Michigan, the conservation departments are active in improving fishing and hunting by restoring cover and preventing silting and excessive run-off.

In isolated instances sportsmen's groups have helped to control siltation as a means of improving habitat for fish and game.

The League of Ohio Sportsmen is to be congratulated for having initiated its Adopt-a-Stream program. It's a far cry from the old idea of building a bluegill-rearing pond as a sportsmen's club project.

The progress of this Adopt-a-Stream program will be watched with interest by those of us who are aware of the potential good which can come from such a program.

The important problem will be one of overcoming human lethargy. *But let's keep the soil on the land; the farmer needs it; the fish don't want it!*

While migrations are more common among birds than other animals, migration is not confied to birds alone. The Scandinavian lemmings are perhaps the most celebrated mammal migrants; however, caribou and several species of bats are some of the mammals that migrate regularly. There are seals that make an annual migratory circuit of nearly 6,000 miles. By definition, to migrate means "to pass periodically from one region or climate to another for feeding or breeding, as birds and animals."—G. S.

RARE PRAIRIE CHICKEN REPORT

Another marker has been put on the Iowa prairie chicken map with a recent report from Lee County. On March 16, Ecil Benson, conservation officer for Lee and Van Buren Counties, received a call from Frank Hopp, a farmer from Donnellson.

Hopp had found a dead prairie chicken hen three miles west of Denmark on Highway 16, a few miles north of Fort Madison. The bird had evidently flown into a wire and broken its neck only a short time before.

Although there have been several reports of prairie chickens or pinnated grouse from Lee County in the past, this is the first specimen that has been recovered and identified in many years. Old residents of Fort Madison told Benson that to their knowledge there have been no prairie chickens in Lee County for fifty years.

Most of Iowa's prairie chickens are now found in southern Appanoose County. Until recently, some migrants moved down into the northern tier of Iowa counties each winter, sometimes as far east as Howard County.

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Fort Madison Evening-Democrat Photo.
Conservation Officer Ecil Benson with prairie chicken found dead in Lee County.

Union Grove . . .

(Continued from page 124)

the form of shells of marine animals. These shells were gradually broken down to a powder. However, some were preserved, unbroken or only partly broken, and appear in the rock as fossil impressions. These can be found in the cliff at the south end of the lake and in the pieces of limestone used as riprap on the dam.

Most of the fossils are brachiopods. These are two-shelled animals, somewhat like clams and oysters. Others are flat-coiled snails several inches across. The impressions of both of these kinds of fossils are found on the surfaces of the layers of limestone.

There is also an unusual kind of limestone present here. This is oolitic limestone, so called from its resemblance in appearance to fish eggs. Ool is the Greek for egg. The rock is composed of small rounded grains, up to one-sixteenth of an inch or more in diameter. When examined with a microscope the grains are seen to have a concentric structure. This gives us a clue to the origin. Apparently the limey material was built up about some tiny nucleus as the sediment accumulated on the sea bottom. Possibly gentle circulation of the sea water may have helped.

The oolitic limestone also forms thick beds in the quarries north of Le Grand about ten miles to the south. Great quantities are crushed and used as agstone and for surfacing roads.

The dam at the south end of the lake catches the full force of waves stirred up by northwest winds. For this reason it is protected by blocks of limestone laid on the surface to keep it from being eroded away. This is called riprap. Many of the limestone blocks have the oolitic texture.

What wave erosion can do is shown at the west end of the dam. Apparently the dam was not at first completely protected here by riprap. In order to protect it large blocks of limestone were placed along the shore. These have failed to break the force of storm waves, which have cut away the earthen dam behind the limestone blocks.

Thus Union Grove State Park, which to many people would be "just a lake" has a thrilling story of past events in earth history back of it. It now gives perhaps most pleasure to fishermen. They may dream of the day when the area was part of a sea. There were fish in the sea, far different from the fish of today, but there were no fishermen about to try their luck.

During extremely cold weather, when there is sufficient snow on the ground, quail have been found nestling under the protection of the snow cover leaving little evidence of the fact that a large covey of the birds are sheltering in the neighborhood. Quail will in bad weather also seek shelter in the mouths of animal burrows.—E. S.