

IOWA CONSERVATIONIST

Volume 11

APRIL, 1952

Number 4

CHANNEL CATFISHING IN HIGH WATER

CATFISH BAIT AND SUCH STUFF

Marquette, Iowa
April 1, 1952

Editor, IOWA CONSERVATIONIST,

Dear Jim:

I was glad to get your letter of March 22 and I am sending you the catfish bait recipes for use in the CONSERVATIONIST.

In any of the following recipes that call for cheese, cheese rinds or trimmings may be used, running them through a food chopper. Then pour boiling water over the cheese until it is soggy, then add flour and ground rolled oats (the quick kind). Knead it until it is mixed and tough and rubbery. Of the cheese rinds, Swiss makes the best bait. For variations of the standard cheese, catfish bait, fish liver paste, ground up rough fish or sour clam meats may be added.

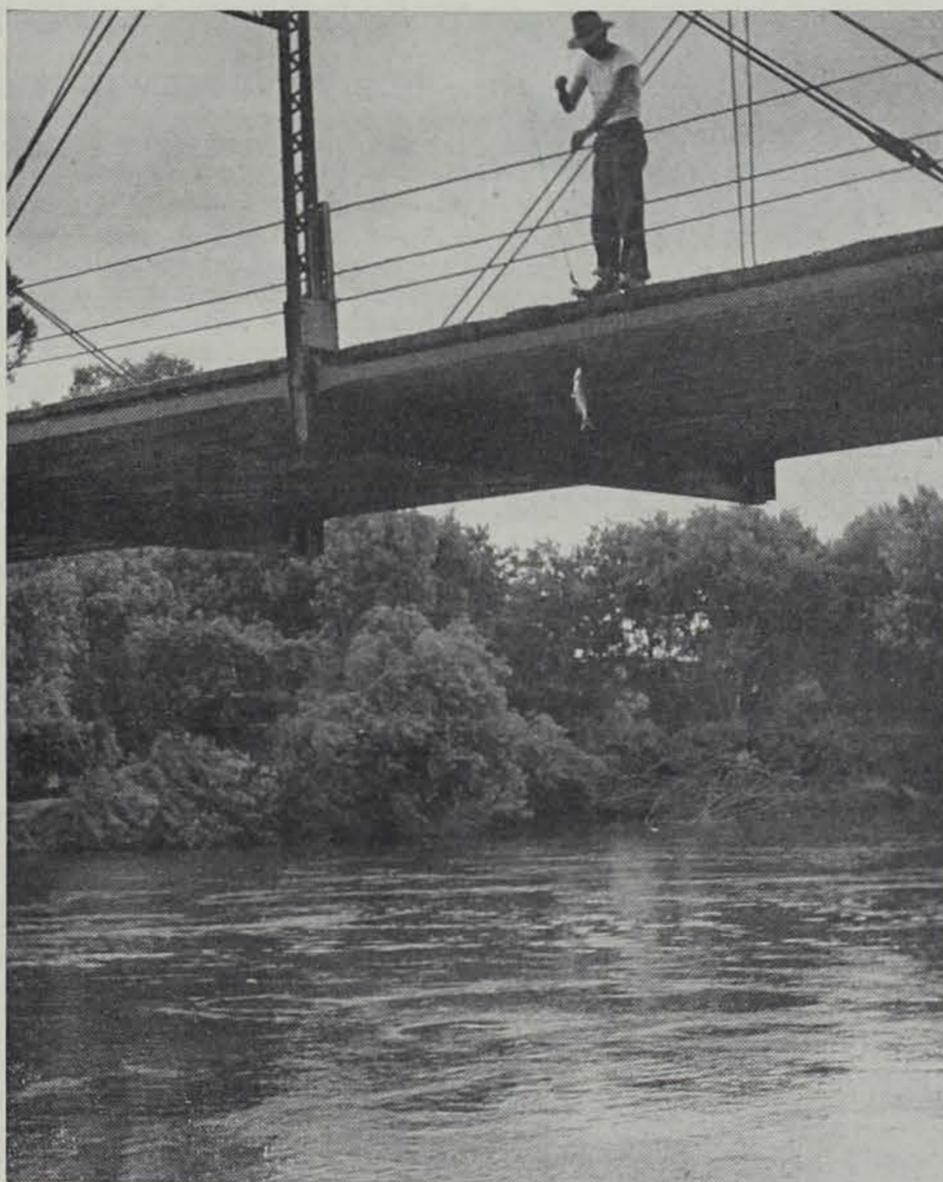
In any of the recipes calling for rolled oats, better results will be obtained if these are run through a food chopper and ground fine. They help make your bait tough and rubbery.

If any of your readers want to get addresses where they can secure cheese trimmings or other bait ingredients, if they will drop me a line and enclose a stamped return envelope I will reply promptly.

Channel cats are the fastest, gamest, sportiest, and cussedest of the catfish tribe. Ask any catfish crank—he knows. Here are a few pointers: In daytime look for spots where there is plenty of cover for cats. Fish around submerged logs, drift piles, tree roots, cut banks or over-hangs, or the deepest part of deep holes.

I use the clincher type sinker to keep the bait well down toward the bottom, but not so much lead but what you can keep off snags if you are drifting it down current. When fishing at night for channel cat, use little or no sinker, floating or casting your bait downstream. Best

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Jim Sherman Photo.

Catfishing can be very good during high, muddy water periods. The problem for the angler is to find the location in the stream where catfish are feeding.

SPRINGBROOK GEOLOGIC STORY

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

As far as its geological story goes, Springbrook State Park is unique in at least two respects. It lies in an area underlain by sandy deposits of the last sea to invade Iowa. Also, it is on the edge of the deposits made by the last glacier.

The park includes an area of about a square mile on the Middle Raccoon River in northern Guthrie

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By Harry M. Harrison
Fisheries Biologist

The one thing that chills the average catfisherman's enthusiasm for spring fishing is high, muddy water. This condition can be doubly annoying after a long winter of fishing anticipation if it occurs on weekends—the only time that many of us have the opportunity to be at our favorite catfish hole.

We say that if high and muddy waters are causing you to give up that long planned fishing trip, "don't let it do it." We know from our fisheries studies over the past six years that catfish feed during high water and that in the spring they often take food in larger quantities than at other times of the year.

We have caught lots of catfish on pole and line with the river bank full and with so much silt that it could almost be plowed. The techniques used to get 'em is only a little different than those commonly used during lower and clearer water stages. If you will try to catch your catfish according to the methods that follow, we feel that your efforts will be rewarded, and you may find that catfish can be taken easier during high water than at any other time.

The first and one of the most important things to think about when going after catfish in the spring and during high water is that of the correct bait to use. The natural foods of the catfish at this time of year are primarily those that are washed into the stream or get there from bank cave-ins, and the like. These include a wide variety of worms, grubs, bugs, carion and so forth. Such food items possess odors that the catfish are able to detect, and since the water is darkened with its silt load, our bewhiskered friend, to find sustenance, will have to rely upon his sense of smell rather than sight. From this you will gather that the bait you choose should give off some odor. Now it doesn't have to stink so bad that you have to fish up wind from your bait can. It only has to smell a wee little bit on the other side of un-

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Iowa Conservationist

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IOWA'S OFFICIAL BIRD

By George W. Worley
Superintendent of Public Relations

The rollicking good nature of our state bird makes it a favorite of barefoot boy, casual observer, and trained ornithologist. William Cox writes: "If I could be a bird during a month of summer, I should want to be a goldfinch. It seems to me that they have learned the art of having a good time."

Postponement of nesting until late summer leaves time to play, and not a single daylight hour is wasted. Roberts, in his "Birds of Minnesota," says: "If the actions and expressions of birds are any indication of their dispositions and feelings, the handsome little goldfinch is one of the most joyous and light-hearted of all our feathered throng. Sociable and genial among its kind, cheery and musical of voice, and gay and happy in demeanor, it goes frolicking through the summertime in little troops or couplets with an abandon

and happy-go-lucky air that suggests that it had never a care nor duty in the whole year 'round."

The eastern goldfinch was declared the official state bird of Iowa on March 22, 1933, by the Forty-fifth General Assembly. Legislators acted on a suggestion of the Iowa Ornithologists' Union. In all fairness it should be mentioned that the goldfinch was not a unanimous choice of the ornithologists. The dickcissel, bright songster of roadside and meadows, was a strong contender for the honor.

In spring and summer the male goldfinch is a study in gorgeous contrast, with bright yellow body, black wings, black head crown, and black tail. His mate is less gaudy, olive-yellow where he is yellow, dusky where he is black, and lacks the black head crown.

In Iowa All Year

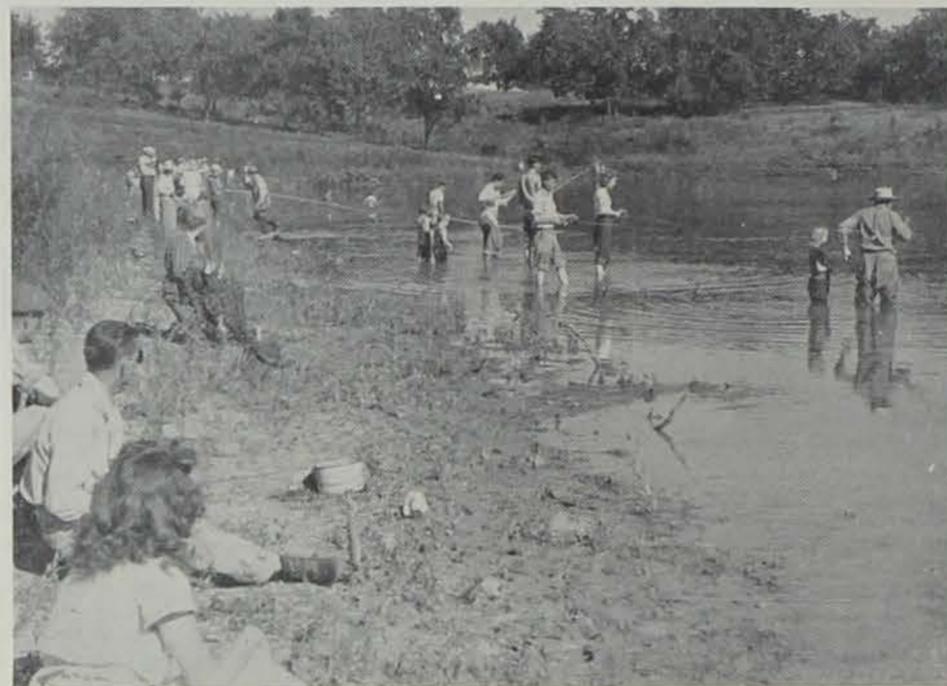
Goldfinches live in Iowa all year, although winter thins their numbers and their dull winter plumage makes recognition more difficult. Winter males lose their bright coat and assume the more somber female plumage.

The bouncing, roller-coaster flight of the goldfinch is nearly as useful in identification as the plumage. The males offer rhythmic accompaniment to each downward swing with a twittering "ker-chee-chee-chee." During the mating and nesting season they rise to sing and swing in circles above their brooding mates.

At rest, the male offers a clear, whistling warble. Taverner describes the song as "sweet-sweet-cheewitcheewit-cheewit." The yellow and black color and canary-like song have earned for the goldfinch the common name of wild canary. Yellow bird, thistle bird, and lettuce bird are less common names.

Nests and Food Habits

"The more the merrier" is apparently a credo of the goldfinch clan, for they are commonly found



Jim Sherman Photo.

More than 16,000,000 fishermen were licensed in the United States in 1951. Iowa's share was more than 400,000.

THIRTY-FIVE MILLION DOLLARS IN FISHING LICENSES

From the United States Department of Interior comes some very interesting information from time to time . . . refreshing in the sense that it is not of dry statistical nature, but does make sense to a lot of people. For instance, this past week we received such a bulletin giving the figures on the sale of fishing licenses in the United States ending the fiscal year of June 30, 1951, wherein we are informed that 16,026,699 fishing licenses were sold in the 48 states. These licenses brought in a gross revenue of \$35,554,285, which in these days of inflation still "ain't hay." This was an all-time record according to the department.

Getting a bit closer to home, in this same period Iowa sold 440,667 resident licenses and 10,312 non-resident licenses, bringing in to the state coffers some \$673,127. Now the take on hunting licenses in the

state for this same period was \$664,883 which, on our adding machine, brings the total license revenue up to \$1,338,010. Great day in the morning! You had better join the Izaak Walton League or the Marshall County Wildlife Club or, if you live outside of Marshall county, the nearest club to your home to help swing weight in seeing that this money is not diverted to other than the support of conservation in our state.

While we are whipping around a few figures of astronomic proportions you might be interested in knowing that Michigan topped all of the states in fishing licenses sold, 1,089,864, with Wisconsin a close second with 1,029,355. Minnesota was in fourth spot with 954,768. Minnesota, however, had top billing on the sales of non-resident licenses, 280,711, with Michigan in second place with 268,902. Tennessee and Florida took third and fourth places respectively.

Delving back into the Iowa story with its total of 440,667 resident licenses issued, means that just about one-fifth of the total population was kicking around our Iowa lakes and streams in that year. Now you add to that number the youngsters, old age pensioners and others who were not required to hold licenses, you could probably safely say that nearly 25 per cent of the total population had fishing on its mind. We are indeed glad to have these figures for, from the remarks of some of our associates, we had arrived at the conclusion that we were practically alone in liking to fish.—*Sighting Upstream*, by John Garwood, *Marshalltown Times Republican*.

The bat's wing is equipped with a hook in the form of a claw. This enables it to cling to walls, rocks, etc. From this clinging position the bat takes flight. Without the hook on its wings, it would be one of the most helpless of animals.

A wild goose has been photographed at an estimated height of 9,000 feet—almost 5½ miles high.

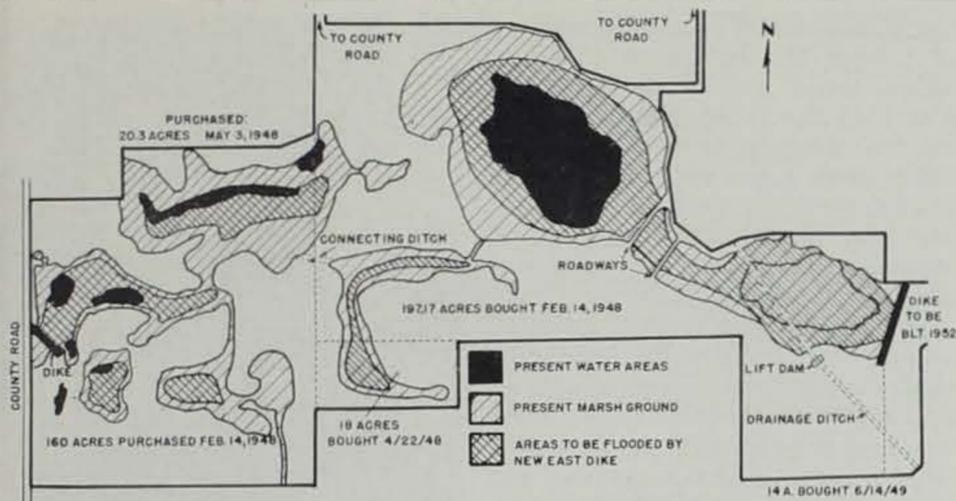


Maynard Reeco water color from the Iowa Official Register. The eastern goldfinch was named the state bird of Iowa by the General Assembly in 1933. It is commonly called the wild canary.

in small flocks throughout the year except during the nesting season. In July, August, and September the female builds tiny nests of grass, fine rootlets, moss, and other fine fibrous material. The lining is almost invariably of thistledown. Nests are ordinarily near the ground in thistles, bushes, or low shaded trees. Eggs are three to six in number, pale bluish-white, and unmarked.

As befits a bird chosen for honorable distinction, the food habits of the goldfinch are almost entirely beneficial. Weed seeds, such as those of thistle, sunflower, ragweed, and wild lettuce are favored items. Grain and wild fruit are taken in season. Insects and insect eggs are eaten occasionally.

Truly the choice was well made when the eastern goldfinch, winged envoy of beauty, gay blade of summer air and thistle patch, sweet songster, and self-appointed ambassador of good will, became Iowa's state bird. — *Midland Schools*.



Harmon Lake development.

TO ADD 80 ACRES OF WATER AREA AT LAKE HARMON

Current improvements in the Lake Harmon area planned by the State Conservation Commission will give Winnebago County an outstanding public duck hunting ground, according to Floyd E. Morley, conservation officer for Winnebago and Worth counties.

Early this month bids were taken for the construction of a dike at the extreme east edge of the commission-owned property surrounding Lake Harmon. This dike will raise the water level of the area, including Lake Harmon, from 12 to 18 inches and will add more than 80 acres of open water surface in the hunting grounds. This will nearly double the amount of open water area in the hunting grounds.

The new dike, to be constructed early this summer, will restore the "twin lake" situation which existed in the Lake Harmon area when the white man first settled Winnebago County with a new, smaller lake forming behind the dike to the southeast of Lake Harmon proper.

"Historical Atlas of the State of Iowa," dated 1875 and owned by Officer Morley, shows the twin lakes located in what was then called "Norway Township," comprising most of the northern tier of present townships.

The State Conservation Commission at first owned only the water area of Lake Harmon itself and it was accessible only by permission of the R. A. Campbell family whose farm entirely surrounded the lake. The smaller lake and marsh ground

to the east were drained by a county drainage ditch which shows on the map accompanying this story.

Since World War II the Conservation Commission has been gradually building up the area as a waterfowl refuge to tie in with the other two natural refuges in the county, Rice Lake and Myre Slough.

Under terms of the Pittman-Robertson Act, a tax was levied by Congress on all guns and ammunition used for sports. The funds accumulated under this act are used to assist State Conservation Commissions in establishing and improving the wildlife hunting grounds and refuges. The states must supply 25 per cent of the money needed with the federal tax money making up the balance.

First purchase by the state was an access road from the lake east and north to the county road going west from Vinje. The purchase totaled 3.98 acres and was bought from the R. A. Campbell estate. A year later a second outlet road was purchased along the west edge of the Campbell property.

In 1948 the primary effort in enlarging the area was made. One hundred and sixty acres were purchased from Palmer Hove to the west of the lake. An additional 194.17 acres were acquired from the Campbell estate on February 14 of that year, followed by the purchase of a 20.08 tract from A. C. Engebretson March 3. April 14 of that year, 18.36 acres were ac-



Jim Sherman Photo.

All wildlife is unpredictable. Especially unpredictable are animals that have been raised in captivity and then are released to the wild.

UNPREDICTABLE WILDLIFE

By Lola Cherry

Seymour Herald County Seat Correspondent

A raccoon with ideas of his own as to the solving of the housing shortage wrecked a good portion of the roof on the Elsa Holder property in Millerton recently. Mr. and Mrs. Holder had been spending the winter in Humboldt, so there was no one at home stop the furry intruder.

Gaining access to the roof, he proceeded to tear a good-sized hole in the roofing and through the shingles underneath. On coming to the

sheeting he worked along the crack between the boards, making the shingles and roofing fly for several feet. Not finding access to the attic there, he repeated the process about five times, wrecking the east portion of the roof. In some manner he managed to gain entry to the attic where he proceeded to take up headquarters.

Neighbors noticed the actions of the vandal and notified the game warden, who came and trapped the animal alive. Plans were to take him to a timber away from Millerton and release him where he would be forced to live in a hollow tree as other 'coons do.—Seymour Herald.

quired from Lyle Hanson to the south of the Campbell property. These purchases gave the Conservation Commission nearly all of the marsh ground in the area. However, the next spring the Commission added 14.71 acres from David Twito on the east edge which is the site of the dike to be built this year.

In the Lake Harmon area a high ridge of ground extends north and south along the west side of the lake and divides the watershed of the area. To the east of the ridge the water flows southeast in the general path of the drainage ditch. To the west it flows southwest.

To further the development of the hunting grounds, two years ago the Commission built a dike at the west edge of the Lake Harmon property which raised the water level in the area by two feet and effectively changed the flow from southwest to east through a cut made in the high ridge which separated the two watersheds.

For a number of years the Com-

mission has controlled the amount of water being drained away by the drainage ditch by the operation of a control structure across the ditch. When the water gets too high in the hunting grounds, it can be allowed to drain off through the ditch by removing stop logs.

However, as the dike to the west backed the water and caused it to flow east, it overflowed to the area to the east. The Commission is constructing the dike to the east this year in order to add to the water area of the hunting grounds and yet control the water flow so that it does not damage any of the farming ground in the adjoining area.

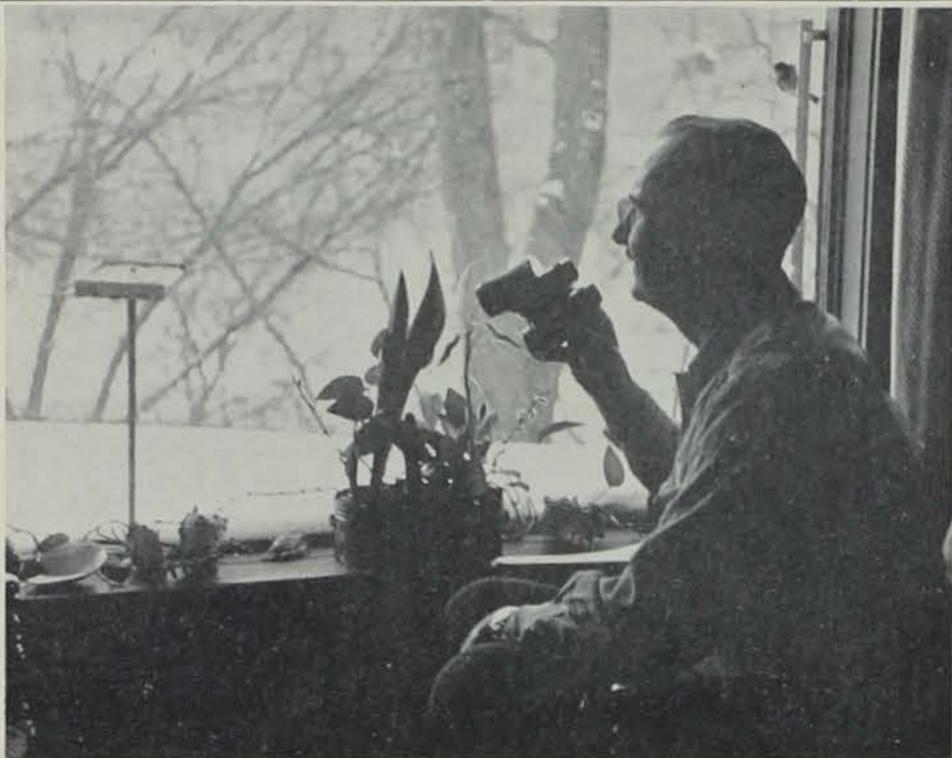
When the dike is completed and the additional 80 acres are flooded, nearly a third of the total of 483.3 acres in the Lake Harmon project will be in open water with an expanded area of marsh and cover ground surrounding the water. This spring the Commission also plans

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Jim Sherman Photo.

Development of natural lakes such as Lake Harmon not only provides additional hunting area, but also encourages production of local ducks.



Jim Sherman Photo.

More and more Iowans spend uncounted hours watching the activities of birds at a winter feeding station.

GLEANINGS FROM WINTER FEEDING STATION

It won't be very long until the winter birds will be deserting the feeders put out for them because some will be taking off for their summer homes in the north and others, the year-round residents, prefer to forage on their own once the snow and ice are out of the way.

We have kept a record of the birds that have visited the feeding station outside our kitchen window this winter and the total number is 54, as far as we can tell. Of these a few, like the starling, are characters you wish would invite themselves elsewhere.

Our tally shows we have had the following guests at our feeding station:

- Chickadees (black-capped) 6
- Juncos (snowbirds) 10
- Nuthatches (red-breasted) .. 4
- Nuthatches (white-breasted) 4
- Cardinals 2
- Woodpeckers (downy) 2
- Woodpeckers (hairy) 2
- Kinglets (golden-crowned) . 2
- Bluejays 6
- Brown Creepers 2
- Cedar Waxwings 2
- Sparrows (English) 8
- Sparrows (Tree) 1
- Sparrows (unidentified) 1
- Starlings 2

The chickadees, juncos, brown creepers, nuthatches, woodpeckers and English sparrows have been regular customers at our lunch counter all winter but some, like the juncos, didn't show up until December.

The pair of cardinals have been daily visitors since early January. The kinglets were with us two weeks in January, the jays moved in about that time and have been on hand since. We saw the tree sparrow only two days, after Joe Hopkins identified it. The waxwings were brief guests. We saw

them just twenty minutes during the noon hour the last Sunday in January.

The unidentified sparrow was around a week in January, a dainty, friendly little bird we hope comes back again so we can pin a label on him. The starlings were two of a flock in the neighborhood that were brave enough to approach our bay window for food.

The "personality kids" of all our birds are the four red-breasted nuthatches, who are spending their first winter in our back yard. They will eat from our hand or the brim of our hat.

Of all the birds they are the tamest. They are the size of a wren and have the wren's sassy manner. They have a scolding voice that sounds like a little tin horn and are crazy about suet, the only food we have seen them eat.

One of the four, a rooster with a

rusty breast and blue back, is boss of the outfit. He shoos the hens away when he perches, up-side down, on the meshed bag containing suet hanging from a cedar tree. Sometimes when we leave by the kitchen door for work in the mornings, he leaves the feeders and swoops at us, fluttering about our hat, demanding a snack.

He likes to take it from our hand because we break it up in chunks just the right size for him. So we go back in the house and get some suet and go out again and feed him. He flies away with a bit of suet and buries it under the bark of a cedar, or even in the ground, then darts back to us for more.

One day we were picking up fallen sticks in the snow. He was on us right away and we had a handful of suet in our pocket. He came to our hand 22 times that day as he followed us about the place but only once have two nuthatches perched on our hand at the same time. They scrap too much for that.

These tiny nuthatches summer as far north as the limit of the Canadian spruce belt. They will be going soon, no doubt, and next winter we will be watching with interest to see if they return to us again.

The waxwings, one of the most beautiful visitors we've had, hovered like humming birds outside our window and plucked the blueberries that grow on female cedar trees. They are built like the cardinal and the coloring is unusual, a blend of dusky brown and yellow, with a yellow band across the tail and dabs of bright waxy-looking red on the wings.

One winter Ed Sweeney had 25 of the restless birds in his yard nearly a week.

As we have said, the red-breasted nuthatches feed only on suet, the white-breasted take both suet and sunflower seeds as do the chickadees. The cardinals like sunflower seeds best of all but will also try



Jim Sherman Photo.

One of the most interesting and most welcome birds at the window feeding station is the tufted titmouse.

buckwheat and they would much rather pick up seeds scattered on the ground than in a feeder hanging from a cedar bough.

The jays will eat anything, the woodpeckers suet alone, the sparrows and juncos bits of seeds and grain. Sunflower seeds are a great attraction and will even draw squirrels. Which we don't appreciate. The squirrels chase the birds away so we shoo the squirrels away. You needn't feel sorry for them because they are doing all right. Nearly everybody has corn out for them and they're as fat as butter.—*Outdoors, by Gib Knudson, Emmetsburg Democrat.*

KURLY KINKS TIP

If you can't separate the joints of your favorite rod due to tightly stuck ferrules, do it this easy way: Hold a lighted match under the female ferrule and revolve it. Then quickly while the outside ferrule is expanded, unjoint the rod. If you will occasionally wipe the male ferrule with a rag lightly saturated with light reel oil and also wipe out the female ferrule with same rag tightly twisted, you'll avoid much trouble.

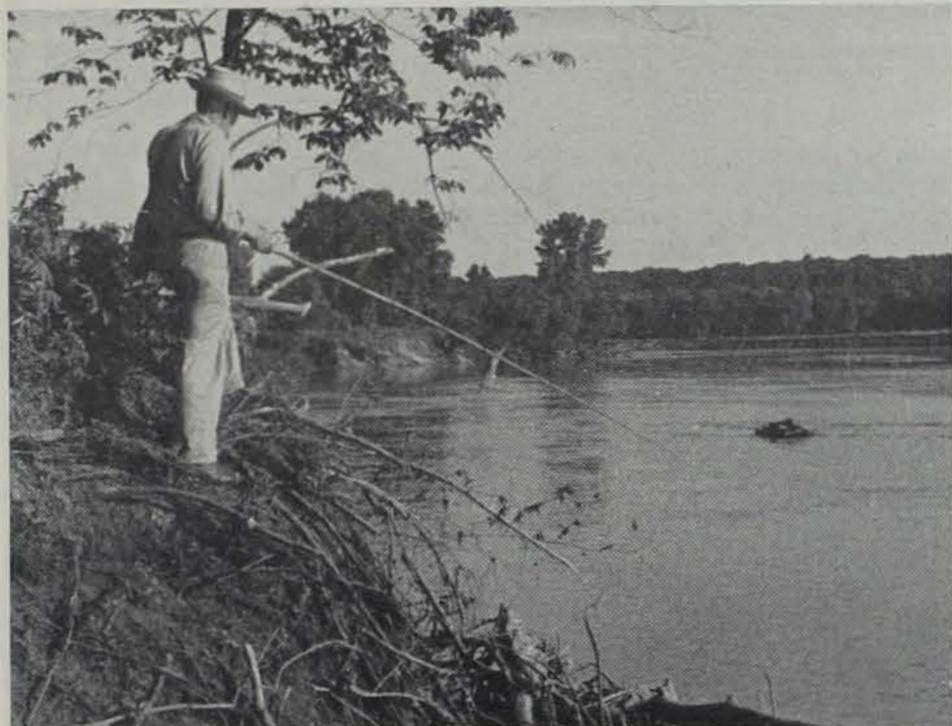
NEXT MONTH

In the May issue of the IOWA CONSERVATIONIST we will carry a revised check list of birds found in Iowa throughout the year. The check list, compiled by Jack Musgrove, State Museum Director, in 1949 and used as a supplement in the IOWA CONSERVATIONIST, has proved so popular that a reprint is deemed advisable. Extra copies of the check list will be printed. Teachers and others wishing bulk copies of the check list as a teaching aid may write to the State Conservation Commission advising how many copies they will need. The check lists will be sent cost free upon request.



Jim Sherman Photo.

The house sparrow (left), considered an undesirable at the feeding tray, disputes possession with a slate colored junco.



Jim Sherman Photo.

During periods of high water, catfish are not feeding in the center thread of the stream channel, but rather in eddies where the speed of the current is slowed down.

Channel Catfishing . . .

(Continued from page 25)

pleasant. As indicated above, the catfish is equipped with a very powerful sense for detecting odors in the water and if your bait smells only a little, the channel cat won't have any trouble in finding it, especially so if you fish where he feeds during high water, and we will talk about that a little later on. Your bait then may consist of night crawlers or worms, grubs, chunks of soured fish, dead minnows, chicken guts, and cheese. The intestines from any fish are particularly good.

Proper Tackle

With the bait problem in hand the next thing to do is to make an appearance at the river and rig up your line for high water fishing. The proper rigging of your line is as important as any other aspect of catfishing.

As far as hooks are concerned, any conventional sharp hook of medium to medium large size will suffice. The hook should be tied to the bitter end of your line. For a sinker, you should use what is known as a slip sinker, and it should not be of large size. A piece of lead one-half inch long by one-quarter inch in diameter with a hole through it lengthwise is about the right size. This should be affixed to your line by simply slipping the line through the lengthwise hole. *It should not be tied.* In other words, your line should be free to slide through the sinker. A knot to act as a stopper should be placed about twelve to eighteen inches above the hook. This is to keep the sinker from coming down to the baited hook. Since you will be fishing in still water, you will want to present the bait to the fish in as natural a manner as possible. Having to pick up a chunk of lead along with his food just isn't natural to a catfish. The idea then behind the use of the slip sinker is that when you get a bite you can let the fish take out line through the sinker without his having to lift a lot of

extra weight off the bottom of the river. The slip sinker has an additional advantage in that it will keep you from snagging so often.

Right Location

Equipped with the right bait and correctly rigged up we are now faced with the problem of choosing a place to fish. Picking the right place is simply a matter of common sense. Before throwing your hook out, you might well imagine yourself in the catfish's dilemma during flooding. For certain you would not find yourself swimming around in the center of the river where the current is traveling pell-mell, with large quantities of sand, gravel and other debris sailing by. On top of it, taking all your energy to maintain your equilibrium in such a place, it would be dangerous—so it is with the catfish.

During high water, catfish congregate in still water areas or at least where the current is much reduced. The place then to fish during high water is along the bank

THE CAMPFIRE

By Theo Lorenzen
Davenport Democrat

Editor, *The Campfire*:

The interesting correspondence which has appeared in your column concerning a proposed waterfowl refuge in Dam Pool 16 prompts me to write this letter. So far the letters and editorial opinion have been "anti-refuge." I would like to take issue with those who feel that since the refuge isn't wanted, it isn't needed. The nearest effective refuge to the north is the Spring Lake area near Savanna.

This is about 50 miles above the proposed Pool 16 refuge. Another 40 miles separates the proposed area from Lake Odessa to the south. The posted areas above Princeton may eliminate perma-

on the inside of river bends. If you can locate spots where the high waters have invaded willow mats, it is a good idea to fish just a little to the river side of the mat. An equally good spot is where an overhanging tree or bank vines are partly submerged by the high water. Both spots cause the current to be slowed down which results in causing any floating food items to sink to the bottom or become lodged in the entanglement. Catfish find these areas and at such places they are very easily caught.

A third excellent place to fish during floods is at spots where the river makes an abrupt turn. In doing so a back water area is formed just below the inside corner of the curve. In these places the current is reduced to the point that virtually all floating materials fall to the bottom and the food items that collect here offer a veritable pantry to catfish. A good bait in such a spot just can't go without being sampled by a hungry catfish.

Again we say, try for catfish during high water. Your efforts may surprise and reward you.



Jim Sherman Photo.

In the spring when the ice is going out, the channels of streams are dangerous to fish life with churning ice cakes and debris often scouring the bottom with pushing forces.

nent blinds but they are certainly not effective refuges.

Is one refuge every forty miles too many? I don't know. I wish I knew the answer to that and to about half the other little problems which plague the U. S. Fish and Wildlife Service in their handling of what is basically one big problem: too many hunters and too few ducks.

We have been learning slowly that game management is pretty complicated. We have found that it takes more than stocking and closed seasons to produce a shootable surplus of pheasants in Iowa. We have found that in years when all conditions seemed most favorable the bottom might drop out of our pheasant crop for no apparent reason at all.

The same holds for quail and even for rabbits. It seems that successful management of upland game demands just as much intelligence, planning, experience, and luck as the management of a successful business. And if upland game management seems complex just look at waterfowl. A pheasant stays put; a duck doesn't.

A pheasant is just one species with a single, fairly predictable set of habits. Ducks are thirty species with just as many different habits. No three-months-a-year duck hunter has the time, experience, and training to figure out the answers to waterfowl management even in his own area.

That's where the "long-haired bureaucrat" comes into the picture. Almost all those bureaucrats are men who love duck hunting — Gabrielson and F. C. Lincoln, just to mention two. But in addition they are men who work with waterfowl twelve months a year.

Just the single difficulty of estimating waterfowl numbers is so overwhelming that I am surprised not so much that one census was off by some million but that most censuses are so accurate . . .

I trust the U. S. Fish and Wildlife Service people, and if they say that a refuge is needed in Pool 16 then, frankly, I'm inclined to go along with them.

How about letting the hunters determine management policy in this area? Apparently that was the purpose of the 1,448 to 6 straw vote reported in your column. Should pheasant hunters and quail hunters determine upland game management policies? Should commercial fishermen determine fisheries policy? The answer is obvious.

If a refuge is established it won't ruin hunting in Pool 16. It may even improve it as it has for most hunters around Spring Lake. It is impossible to have waterfowl remain any length of time in an area where hunting is as extensive as it is in the region between Savanna and Burlington unless the ducks are given places to rest and feed in safety.

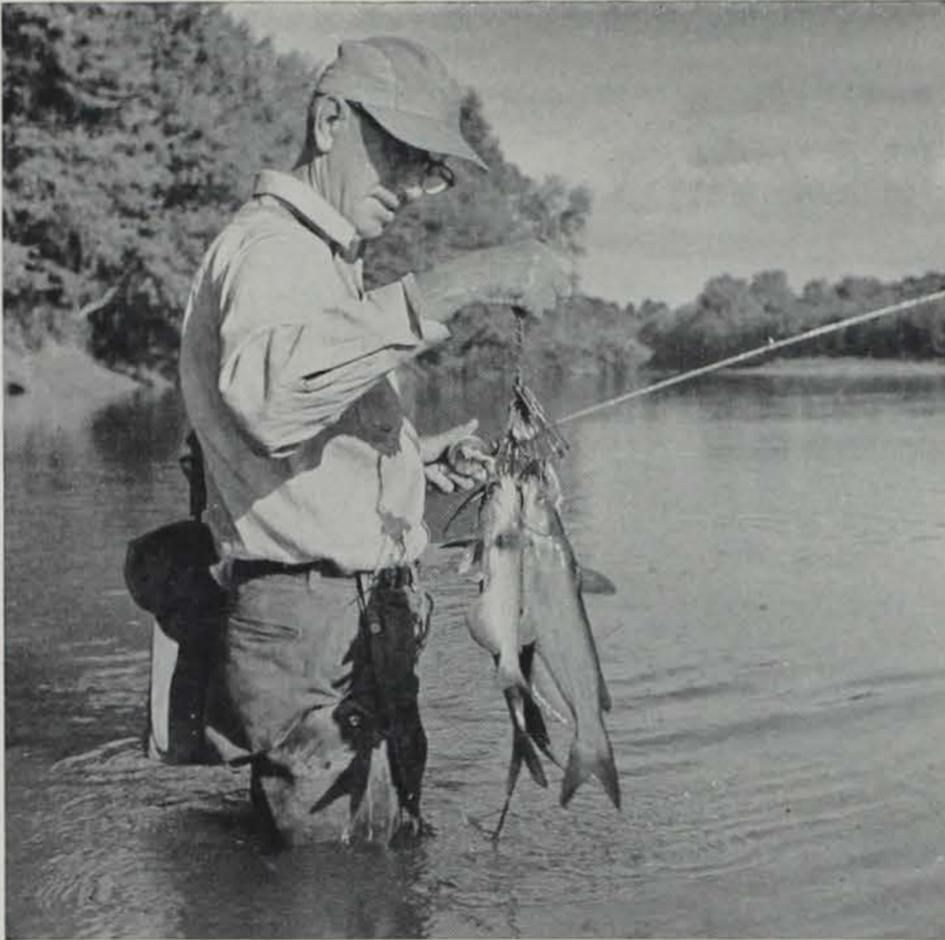
Good hunting along the Illinois

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IOWA

Historical Building

DES MOINES, IOWA 50319



Jim Sherman Photo.

Channel catfish are the fastest, gamest, sportiest, and cussedest of all the catfish tribe, according to enthusiasts.

Catfish Bait . . .

(Continued from page 25)

night spots are riffles above deep pools or holes.

The number one bait for flat-heads or mudcat is live minnows or other small fish. Minnows three to five inches long are preferable.

Carp, scaled and filleted, cut in bait size and soured, is an excellent bait for channel catfish. Don't pass up carp entrails. They are an excellent catfish catcher and some good fishermen prefer them to any other bait.

One other good point to make is that bulk cider vinegar will remove practically all the odor of stink baits from your hands.

1952 STATE PARK FOLDER—FREE

The revised park folder "Where to Go and What to Do in Iowa's State-Owned Recreation Areas" is now available in the State Conservation Commission office.

The new folder lists all 92 state recreation areas and outlines facilities available in each park.

All special state park facilities including tent and trailer camping, organized group camping, overnight cabins, state lodge rentals and concessions are listed.

Write the State Conservation Commission, East Seventh and Court, for a free copy of "Where to Go and What to Do in Iowa's State-Owned Recreation Areas."

I still have several hundred copies of the booklet "Original Mississippi River Catfishing Guide." I used to sell these for a dollar, but any of your readers who would like to get a copy may do so for 25 cents apiece, if they will write to me at Marquette.

In the following catfish bait recipes we start out rather gently. Non-catfishermen with squeamish stomachs should stop reading after the second or third recipe.

Take one pint of milk, bring to a boil and add eight ounces of limburger cheese spread, mix well and add four tablespoonfuls of molasses. Add dry oatmeal, stirring until thick. Remove from fire and mix in more oatmeal until you have a thick, tough bait that will stay on the hook.

Take one pint jar of soft limburger cheese spread, add four tablespoonfuls of sour clam juice, mix together well, add dry uncooked oatmeal which has first been run through the food chopper. Mix all together until you have a thick, stiff, tough dough. A little oil meal added when mixing will help make the dough water-proof and stay on the hook better. Fish oil may also be added to this recipe.

Secure two pints of limburger cheese spread and one loaf of whole wheat bread. Use only soft center pieces, mixing cheese and bread together to make a tough, rubbery dough. Seal in glass jar. Mold bait pear shaped, covering entire hook. (One-half dozen ground or mashed

sour clam meats may be added to this recipe.)

Use one gallon whole milk, one pound strong cheese, cut fine, one tablespoon powdered asafedita, one-half pound linseed meal. Place in crock, cover with cloth and set outside in shade to sour. Let turn to a thick clabber on top, strain this off after a week's time and thicken with one-half flour, one-half cottonseed meal, add more fine cheese of the strongest kind. If not quite stiff enough mix in more flour and knead into a stiff paste, with a wooden paddle. Keep in tight jar. Mold a chunk of this around hook. Use of treble hooks recommended.

Take one-half gallon fresh water clams, one-half cup salt, one cup cornmeal or one cup cottonseed meal, one cup molasses, one ripe banana, one teaspoon powdered asafedita, 15 drops tincture or oil valerian, 15 drops of oil spearmint. Mix well and let stand four or five days or until ripe, keeping covered to keep flies out. Cut up in size for hook and keep in cool place. The refrigerator is an excellent place if the wife does not object too strongly.

Take one pound liver, one cup cornmeal, one teaspoon powdered asafedita, one ripe banana. Cut liver in narrow strips, hook size. Add asafedita and banana cut in small pieces. Add cornmeal. Mix above ingredients well, then put in quart jar. Put on lid and bury in ground several days until sour. Smells bad but "cats" love it.

Ozark special. One quart of minnows or rough fish flesh (these can be ground up), one box of oatmeal (quick kind), two teaspoons salt, three teaspoons brown sugar, one

pound of dry linseed meal. Put fish in gallon jar (do not put in metal container). Cover with cloth to keep flies out. Let rot down to a very rotten juice. After flesh of fish turns to a juice, add enough oatmeal to make a very soft mush, add salt and sugar and let this rot a few more days, then add balance of oatmeal to this mixture until it makes a soft dough-ball. Then knead in enough oilmeal to make mixture water-proof. Seal in glass jars after final mixing. When going fishing, if bait is too soft, add more oatmeal; if too dry, add a little water. Use on treble or stay-on hooks for best results.

Take two quarts clam meats, one cup brown sugar, one cup cornmeal and tablespoon canning salt. Mix all together well and let stand until ripe, keeping covered to keep flies out. When ripe, cut in bait size as used. Use on single or treble hooks. One of the best of catfish baits.

Chicken or other kinds of blood is tops for channel catfish bait.

Take one pint of fresh chicken blood, mix into it fine downy feathers, then add one-fourth cup of sugar, dash of salt and a few drops of rhodium, two teaspoons of powdered Casco glue. Stir a few minutes, then let set. Keep in cool place until ready for use.

Chicken entrails can be used fresh or prepared the following way: Cut entrails in bait size, mix enough sour milk to cover with a few drops of rhodium, one clove, finely chopped garlic. Put in glass jar and bury underground at least 24 hours.

The entrails may also be covered with fresh blood to which has been added one teaspoon of asafedita,

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In the major catfishing streams, long stretches of productive catfishing waters can be reached by boat that are almost inaccessible without water transportation.



The number one bait for flatheads or mudcat is live minnows or other small fish, preferably from three to five inches long.

Catfish Bait . . .

(Continued from page 30)

one clove, and chopped garlic. Bury in ground to sour—at least 24 hours.

One pint of fresh chicken blood, add 15 drops of tincture valerian, 15 drops of oil of spearmint. Stir well. Take sponge and cut in bait size, soak in above mixture and keep in cool place until ready to use.

Cure a pound of wieners in the sun until withered, cut in bait size. Take a half pint of fish oil, one teaspoon of powdered asafetida, 10 drops tincture valerian, 10 drops of oil of anise. Mix all together well and let age a week to 10 days.

(Brother Harlan, this one is a real stinkeroo and a real catfish catcher.) Two dozen large night-crawlers, one pound strong cheese, cheese rinds ground fine, brick or limburger. Four ounces catfish liver paste will improve recipe but if not available you may omit. Pour enough boiling water over cheese stirring until it is a medium paste. Chop up worms and add. Mix in equal parts of flour and ground rolled oats (Quaker Quick kind). Knead until tough and rubbery. Pack in small large mouth jars for easy removal. Let age a few days before using.

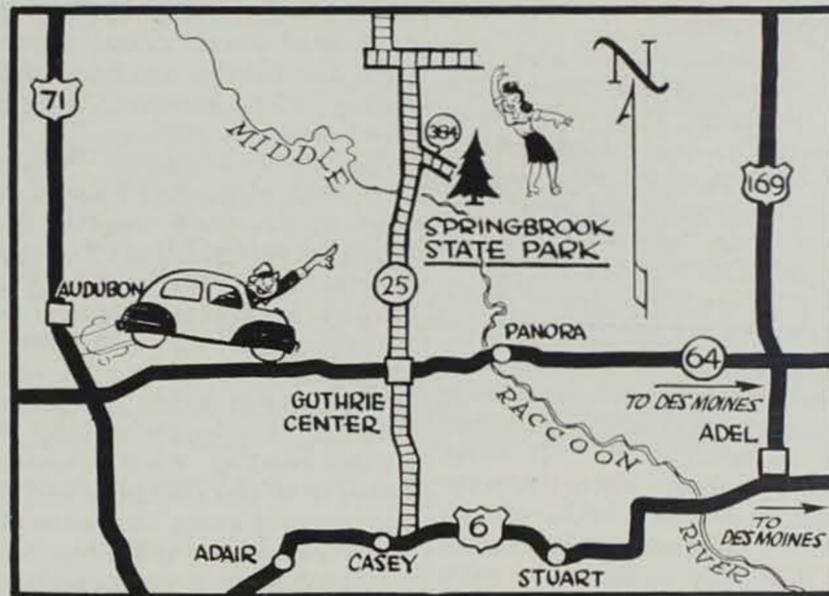
Yours for good catfishing,
Curly Sharp

GAME LAW ENFORCEMENT A NECESSITY

My fondness of conservation officers, or game wardens—whichever they may be called in the locality where we happen to live—seems to grow with each successive contact I have with them. Because I have learned that were it not for the game and fish officer most of us would do much less fishing and hunting today than we now enjoy.

Laws don't protect our game and fish, but enforcement does. I don't mean to say that we would all violate the game laws if there weren't officers around, because I believe most sportsmen worthy of the name would abide by the laws even if they weren't enforced. But the occasional scamp—the lawless one who for better or for worse possesses a gun and fishing gear will take whatever he can get his hands on at your expense and mine. He is the one who makes conservation officers get up in the wee hours of the morning and he is the one who forces these officers to go out in the foulest kind of weather.

I don't think conservation officers like to make arrests. At least I have never talked to one who did. But they do have a sincere desire to preserve our wildlife and natural resources. Often this desire thrusts them into strange places at unusual times, but they don't complain about the nature of their work. They have a mission to perform, and it's for you and for me.—*Mid-County Comment, Sioux Center News.*



Springbrook State Park in Guthrie County will again be the home of the Teachers Conservation Camp beginning June 8.

THIRD TEACHERS TRAINING CAMP—JUNE 8

By George W. Worley
Superintendent of Public Relations

The first of three three-week sessions of the third Iowa Teachers Conservation Camp at Springbrook State Park will begin June 8. The last session will end August 16. For the first time, a full course is offered for high school teachers. Also offered for the first time is an advanced course for teachers who have attended the camp in past years, as well as for new campers.

Five quarter hours of college credit will be given for each session. Cost to teachers attending is \$17.50 for tuition and \$52.00 for board for each session. Some scholarships are available.

Full information on the camp and application forms may be secured by writing to Dr. Emery Will, Camp Director, Iowa State Teachers College, Cedar Falls, Iowa.

The first session, June 8 to June 28, will be an improved version of the popular course offered to elementary teachers in 1950 and 1951. Soils, water, and forest conservation will be emphasized.

High school teachers will attend the second session, June 29 to July 19. This new course will feature

field work in soil, water, plant, and wildlife conservation under the leadership of resource specialists. There will be opportunities for individual investigation. Five quarter hours of graduate or undergraduate credit will be given.

The final session beginning July 27 and ending August 16 is for elementary teachers. It will emphasize wildlife resources, soil nutrients, and balance in nature. This new session is offered at the request of teachers who have attended camp in 1950 or 1951 and wish to return for additional training, credit, and experience, and is also open to new campers. By attending both first and third sessions, ten quarter hours of credit may be earned during the summer.

The rapid growth of the Iowa Teachers Conservation Camp since its beginning in 1950 is gratifying to those concerned with conservation education in Iowa. Sponsors of the camp, Iowa State Teachers College, the State Conservation Commission, and the State Department of Public Instruction, have stressed practical, usable training. Teachers learn about resources by actual experience. They spend several

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Teachers at the conservation camp spend several hours each day in the field under the leadership of visiting conservation specialists.

Springbrook . . .

(Continued from page 25)

brought to this part of the country by the glaciers. They came from regions far to the north and are quite different from the bedrock which lies beneath the park. As we walk along the trail we see an occasional glacial erratic on the surface. There are many in some of the ravines we cross.

The sandy beach is another attraction. But this, like the lake, is an improvement of man. The sand had to be brought in from some neighboring place, where it probably had been deposited by glacial meltwater. Of course, storm waves on the lake tend to wash the sand away.

The trail winds along the lake-side, up and down hill and across ravines which once led into the valley of Springbrook. If the ravine is a large one there may be a small V-shaped bay in the shore of the lake. This is because the ravine widened as it opened into the valley of Springbrook.

The upper end of the lake is marked by a delta, formed since the lake was made. Sediment brought down by the brook is dropped as it reaches the quiet waters of the lake. As the deposit builds up to lake level and is extended outward vegetation takes hold. This helps to catch more sediment every time the brook is in flood. One can easily understand that if this were allowed to continue the lake would presently fill up. Soil erosion control measures to prevent this are being taken upstream. Small dams are being built which will help to hold back the sediment.

There is little evidence of bedrock along the trail. However, here and there a brown sandy substance juts out on the side of the path. The places are mostly along the east side of the lake and on the tops of ridges. This is some of the weathered Dakota sandstone, the deposit of the last sea to invade the midwest. In places there are pebbles in with the sand.

Some of this mixture is in the form of a hard brown crust. Here the sand and pebbles are cemented together with limonite, a mineral quite like iron rust.

The bedrock of the vicinity is best seen along the highway just west of the park, on the side of the river valley. Here, the Dakota sandstone is well exposed. It is found to be in beds or layers, as one would expect for a deposit laid down near the shore of a shallow sea. Some of it has a layering at an angle to the main bedding. This is cross-bedding. Such structure resulted from the changing and shifting currents along the shore of the sea. The sand has been loosely cemented since it was deposited. It is very porous and many wells in western Iowa secure water from it. It is easily weathered and worn by rainwash. Thus, the surface of the roadside cut is very irregular.

The hilly country of the park is related to its location along the Middle Raccoon River. The river is flowing along the edge of the deposit made by the last glacier and has cut a deep valley. Tributaries to the river have thus acquired a steep course. They have then been able to cut deep valleys and extend their tributaries.

There is a great contrast between the country west and east of the river. Westward, in the rest of Guthrie County and beyond, hills and valleys are everywhere. The country is well drained. Also, much of the subsoil is loess, the wind-blown silt. East of the park it is a different story. For a mile or so there is a belt of upland hills. These have gentle slopes and more than the usual number of large and small stones. This belt trends northwest-southeast rather parallel to the river. It is the end deposit, the terminal moraine, of the last glacier.

Eastward from the terminal moraine the country is very gently rolling, except where streams are flowing in shallow valleys. Here we are on the main deposit of the glacier. The natural drainage is poor. Erosion by running water



Jim Sherman Photo.

There is no question but what waterfowl refuges are an absolute necessity to prevent destruction of the continental population of ducks and geese.

Campfire . . .

(Continued from page 29)

River is largely due to refuges even more closely spaced than the ones proposed for this area. But that's beside the point. The point is that people who ought to know, people who I'm sure have no ulterior motives, say we ought to have a refuge. And there is no one in this area with enough training, experience, and with a sufficiently comprehensive view of waterfowl management to say that the refuge is not needed.

It looks like we will have to accept the U. S. Fish and Wildlife Service's recommendation on faith.

Unfortunately that's not much comfort for the 150 or so hunters who will be dispossessed of their blinds by the new refuge. If local hunters have a legitimate matter for protest it is this: No one from the U. S. Fish and Wildlife Service has seen fit to meet with local groups to explain the necessity for the proposed refuge. No one in authority has taken the trouble to show where the refuge fits into any plan for the flyway as a whole or how it will affect local hunting conditions and hunters.

I hope such an explanation will be forthcoming and I am sure that it could do much to settle the present controversy.

Sincerely yours,
Tom Morrissey
325 McClellan Blvd.
Davenport, Iowa.

Lake Harmon . . .

(Continued from page 27)

to plant the hill area to the south of the lake to wild game cover shrubbery and to multiflora rose.

Officer Morley said the presence of three good refuges in the county should attract large numbers of waterfowl to the area on their annual migrations and provide good hunting each season for the local hunters.—*Forest City Summit.*

has not yet had time to produce drainage systems like those of the country west of the river. Glaciers once covered that area, too, but so long ago that running water has had plenty of time to cut up the country into hills and valleys. Also, the windblown silt, loess, has been deposited on top of the drift. There is no loess in the park or east of the river.

These are only a few of the things that attract our attention as we become acquainted with the geology of this park and its surroundings. A visit to the park, a drive along its roads, an examination of its natural features, are well worth the time of any lover of the outdoors.

Training Camp . . .

(Continued from page 31)

hours each day in the field under the leadership of visiting specialists. They learn to know soils, water resources, plants, minerals, and wildlife through actual contact and experience. They see examples of poor resource management — they observe and practice conservation of these same resources. They plan and practice ways to teach conservation to their pupils.

Practical training comes first at the camp, but it is not the only attraction. Comfortable outdoor living, excellent food, cookouts, picnic lunches, square dancing, swimming, fishing, boating, handicrafts, campfires—all add to the fun.

Teachers seeking practical training, college credit, and pleasant living will not be disappointed at Springbrook State Park in 1952.

Korean hunting licenses carry the following: "Hunting in public streets, shrines and temples is not permitted. Firing at buildings, people, cattle and street cars is not permitted."

The spring song-fest of frogs and toads is a wondrous chorus, if one takes a few moments to listen. Only the males take part in the chorus which advertises the breeding period.



Jim Sherman Photo.

The hills of Springbrook State Park were formed of glacial debris left by the last glacier to invade the state. The sandstone underlying the park was deposited by the last sea to cover Iowa.