

IOWA CONSERVATIONIST

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THERE'S MORE THAN FISH TO FISHING

MUD-PUPPIES AND FIRE ANIMALS

By Kenneth D. Carlander and
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Queer creatures are often brought to the college to be identified, and the animals which seem to most completely puzzle the novice are the salamanders. "Is it a fish?" asks the angler who catches one on a hook baited for bullheads. "Is it poisonous?" asks the frightened housewife who finds one in her laundry room. The answer is no.

Salamanders are lizard-like in general appearance but have a moist slimy skin and are most closely related to frogs. The name salamander comes from the Greek for fire animal. According to superstition, salamanders are supposed to be able to live in fires due to their "natural coolness," but salamanders actually can stand very little heat or dryness. The fable probably started because salamanders were often seen around hearths or fireplaces. Having been brought in with the firewood, they were driven from their hiding places as the heat dried out the wood. A salamander's skin must be kept moist and therefore salamanders live only in moist places, such as under decaying logs.

Salamanders are amphibians like frogs and toads, and most of them have a tadpole stage which is passed in the water where the eggs were laid. Salamander tadpoles differ from those of frogs and toads in several ways. Salamander tadpoles are rather long and slender compared to frog and toad tadpoles, which look like balls with tails. The fernlike gills of salamander tadpoles are readily visible, whereas those of a frog tadpole are covered by a flap of skin soon after the egg hatches. Salamander tadpoles have broad mouths and feed on worms, snails, insects, small fish and on other tadpoles. Frog tadpoles, on the

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There is more than fish to fishing. Jim Sherman Photo.

By Ivan Merrill

During the week a question was fired point-blank which gave birth to this column. It was, "Why do you fish?"

The answer that can be given to that one would fill a book, not a small skimpy thing but a voluminous edition with an ancestry of editions numbering into infinity. But to boil it down into column form we can best do so by giving the three principal causes.

Perhaps Edgar Guest did the situation justice when he penned the words "When a fellow goes fishing he's done with his care. Life's small irritations can't follow him there."

Truer words never were spoken. It is an escape from the bondage of being forever at the task of trying to make just a little better living than our neighbors. An escape from false pretense and sham, a reprieve from the monotony of staid society and the set tasks whereby we are permitted to eke out a living.

It is an opportunity to run wild, to let the soul soak up some of the spiritual as well as the more concrete gifts that are presented to those that would take advantage of a day astream. It is a chance to brush away the cobwebs of wearisome punctuality, a chance to come into the full realization that life is more than fancy dreams, idle talk and monied schemes. More than work and sweat and toil, accumulating worldly spoils. It is an opportunity to reverently partake of the freedom with which we in this country are blessed.

That in itself is enough to send a man fishing, but there is more. One cannot spend a day fishing without literally drinking in a million pictures, none of which even the old masters of the brush ever found it possible to duplicate, nor will those of a generation yet to come, for these are some of the secret treasures which man can view, not copy.

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GAME FARMING THE MODERN WAY

By Lester F. Faber
Supt. of Federal Aid Section

A new game management plan designed to develop maximum wildlife habitat on state-owned game areas in Iowa has come into being, and three new game management units are now staffed, equipped and in operation.

The Ingham-High management unit embraces all state-owned game land in Emmet and Kossuth Counties, with headquarters on the Ingham-High Lake area near Wallingford. It has 11 separate areas in two counties totaling 4,690 acres. When all land acquisition planned for this district has been completed, final acreage will total some 5,200 acres.

The Ruthven management unit includes 10 areas in Clay and Palo Alto Counties with headquarters at

Dewey's Pasture near Ruthven, and now contains 4,000 acres. Anticipated total acreage is 5,200.

The Rice Lake management unit is made up of eight areas totaling 5,000 acres in Worth, Winnebago, Cerro Gordo and Hancock Counties with headquarters at Rice Lake near Lake Mills. An additional 500 acres will be added to this unit in the near future.

These lands have been purchased over a period of time and are submarginal, made up for the most part of marshes and sloughs and drained lake beds. Prior to the present time the Conservation Commission's energies have been concentrated on acquirement. Development for maximum wildlife production was of secondary consideration. Now development of

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Wardens Tales

Shop Talk From the Field

At the recent conservation officers' training school at Springbrook Park, Area Game Manager Tom Berkley conducted a demonstration on fox trapping, making three fox sets on land adjacent to the park. The class was to meet next morning at the set to complete the instructions.

During an intense study of higher mathematics that evening, two of the more curious mathematicians whose tuition fees were exhausted because of their curiosity, decided to visit the fox sets. They found a trapped fox.

Next morning the class assembled to admire Berkley's trapping prowess. A hush fell, broken only by a string of censored phrases from the lips of the trapper, as the fox rose to his feet to display a large shipping tag bearing the legend, "Return promptly to State Game Farm, Boone, Iowa."

Bill Boswell, Centerville, conservation officer for Appanoose and Monroe Counties, writes:

"On opening day of the trout season I was in the northeastern part of the state patrolling the streams with Officer Wes Ashby. About 6:00 in the morning as we were checking licenses along Glovers Creek, I noticed an elderly gentleman who was quite intent on his fishing, muttering to himself about the 'dad-blasted trout' and wishing them a one-way ticket to a place much warmer than Glovers was that morning. As I approached him he landed a rainbow which weighed about a pound, unceremoniously dumped it on the rocks alongside four other nice ones, and started to bait up again.

"I introduced myself, checked his license and inquired, 'How's fishing?'

"'Why, heck!' he said, 'I can't

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Goldfish often become naturalized when released in favorable environment and grow to large size. Generally they lose their bright color and take on a pale milky appearance. LeMars Globe-Post Photo.

"GHOST FISH" FALLS FOR WOOD PLUG

The mysterious "ghost fish" which has puzzled scores of anglers at the south lake of the New Deal park has now been caught and identified. It was caught by Dale Kolker, and the "ghost" was a goldfish, grown to giant proportions. It weighed four pounds.

The large scales possessed by the fish, as seen in this picture, suggest that it is a carp, and so it is. That is, goldfish are really a special kind of carp. When they are dumped into a large body of water, they revert to their natural mode of life and may grow into very large fish.

Conservationists frown on the idea of putting goldfish into lakes and streams because they are carp, classified as "rough fish." Conservationists don't like to see them put where "good fish" live. The idea is that they'll grow up into big bad carp and drive the good fish out.

Ten years or more ago somebody put a few goldfish into the New Deal park lakes. What has happened to the others nobody knows. It is evident that they did not multiply and drive the other fish out. The lone survivor may have been the "ghost fish," which was more silvery than gold.

This fish could often be seen, warily nosing around a baited hook, looking at it again and again, and then disappearing into the depths. When it was eventually hooked it fell victim to a wooden plug. Thus ends the haunting of the South lake.

The "ghost" will not be forgotten, however. It was skinned out Tuesday; the skin is being tanned now, and eventually the "ghost" will be mounted by taxidermist Les Hartter.—LeMars Globe-Post.

The little brown bat, common to Iowa, sometimes spends as much as a half hour on its bath.

WHY FIREARMS SAFETY SHOULD BE TAUGHT IN SCHOOL

A recent survey of 7,000 Iowa ninth and twelfth graders by the Department of Vocational Education at Iowa State College told much about the interests of Iowa youth. Each student was asked to name his or her favorite recreation.

Over one-half of the twelfth grade boys stated that hunting was their favorite hobby. "Sports" ranked as second choice.

Nearly one-third of the ninth grade boys gave hunting as their preferred leisure time activity. "Collecting" enjoyed top popularity with this group.

Fishing was third choice for both ninth and twelfth grade boys, being outranked only by hunting and "sports."

WOMEN'S FISHING LICENSES

"Women need licenses to fish in state-owned lakes," says a release from the Iowa Conservation Commission. And then they name the 94 lakes in the state that are state-owned.

"'Twould avoid a lot of confusion and save a lot of printer's ink if the powers-that-be would just decree "Women must have licenses to fish, period."

It seems discriminatory and a bit on the foolish order to have rules and regulations for the females any different than for the male nimrods. If a femme over 16 years of age wishes to fish, she should shell out the mazuma the same as those of the opposite sex. If a woman WANTS to fish, no dollar and four bits is going to stop her!

So let's stop the confusion and the question-asking and the wasting of ink—treat the women in the same manner as us men.—Lake Park News.



The striped ground squirrel is nervous and timid. When startled, he scurries away, then suddenly halts and freezes bolt upright.

GROUND SQUIRRELS AND GOPHERS

By Roberts Mann

Forest Preserve District of Cook County, Illinois

On sunny summer days, a dusty-colored animal with yellowish and brown stripes, about the size of a small rat, often may be noticed creeping through the grass of prairies, pastures, golf courses or lawns. Watch him. He pauses every few feet to sit up, look and listen for a moment. Nervous and timid, he crouches low at every distant sound or passing shadow. Startle him and he scurries away, and then may suddenly halt and freeze, bolt upright, as stiff and straight as a stake driven in the ground. If approached, he gives a loud shrill trilling whistle and, with a flip of his tail, pops out of sight. Watch that spot closely and in less than a minute a snaky head appears. Be quiet. He has many enemies above ground and he also

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"If a femme over sixteen years wishes to fish, no dollar and four bits is going to stop her." Jim Sherman Photo.



American Railway Express agent at Sheldon and helpers with racing pigeon crates shipped from Milwaukee after start of 700-mile return race. Sheldon Sun Photo.

PIGEONS HURRY BACK TO MILWAUKEE

The flock of more than 700 homing pigeons which were liberated here early Saturday made the flight to their home base in Milwaukee in about seven hours, it was reported to Fred Wilson, local American Railway Express agent.

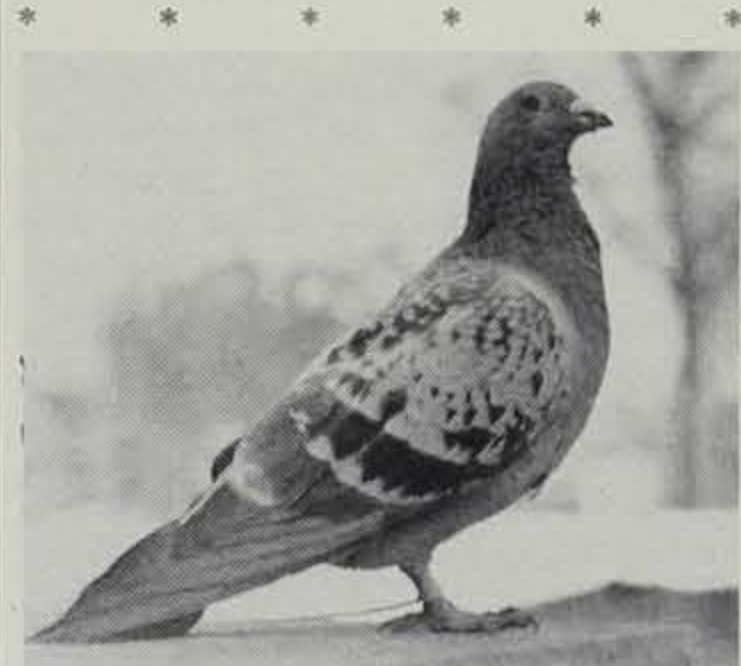
The birds were turned loose by Wilson and several assistants at exactly 5 a.m. According to Elmer Belter, race secretary of the All City Flying Club in Milwaukee, they reached home before noon that day, covering nearly 400 miles in less than seven hours.

Belter was well satisfied with the results, he said in a letter to Wilson, who has had charge of releasing racing birds from Sheldon for the Milwaukee group for a number of years.

It was exactly on the "zero hour" of 5 a.m. that releases were un-snapped and the pigeons took off with a flurry of wings. The sky was overcast here, but Wilson had checked with Milwaukee shortly before the deadline and received a

report of clear skies and the signal to go ahead on schedule.

The pigeons circled over the city in two large groups for about 15 minutes apparently attempting to get their bearings before finally disappearing into the murky skies. —Sheldon Sun.



Racing pigeons may be told by their slender appearance and the fleshy protuberance at the base of the upper bill. Racing pigeons are banded with aluminum or rubber leg bands bearing the initial of the pigeon club and identification number of the bird.

65 NEW BIRDS ON U. S. PROTECTED LIST

Sixty-five additional birds — including the pink-footed shearwater, the parakee goatsucker and the forktailed flycatcher — appear on the newly-revised list of 522 migratory birds protected by federal law, the U. S. Department of the Interior has announced.

The list appears in a Fish and Wildlife Service leaflet, "Birds Protected by Federal Law," written by Frederick C. Lincoln, ornithologist.

The new list includes many revisions in the common names of birds and drops a few—including the Labrador duck, the great auk and the passenger pigeon—which are extinct. The important changes, however, are the additions of birds which recent investigations have proved to be migratory under the terms of the convention with Great Britain, or which have been declared migratory according to the terminology of the Mexican convention.

Conventions with Great Britain and Mexico protect numerous species of birds of certain families. The terminology of the conventions

clearly indicates that all birds which are members of the families listed—and occur in the United States and either Mexico or Canada—are under the protection of federal law.

Thus the Fish and Wildlife Service now lists the roadrunner of the southwest as a protected bird—since the roadrunner is found in both the United States and Mexico, and its scientific family name, *Cuculidae*, is listed in the convention signed with Mexico in 1936. A similar example is the clapper rail, of the family *Rallidae*, which a federal court recently held to be a protected bird. In the light of these findings, a complete re-analysis of the protected list was necessary.

Another well-known bird appearing on the list for the first time is the cardinal. While this attractive bird has been protected in many states, other states have permitted its caging as a house pet. Large numbers of cardinals are now kept as pets, but the capture or sale of cardinals is forbidden by federal

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GEODE LAKE BEING BUILT

By Don Mahnken

Work on an earth-filled dam which will impound the waters of Cedar Creek to form a 205-acre lake at Geode State Park is about one-third complete, according to a member of the contracting firm.

Geode Park, located about seven or eight miles by road northwest of Denmark, is named after a stone frequently found in that area. The geode stone is hollow with crystal formations on the inside.

Warren Duesenberg of E. M. Duesenberg, Inc., who made the estimate about work on the dam, said his company should complete its contract on the 425,000-cubic yard project by the first of October.

Already the base of the dam is assuming its completed proportions, and an area has been provided on a hill overlooking the project for sightseers who wish to watch the work.

Work was expected to be completed this week on the core of the base. Duesenberg explained that the core is formed by digging a 12-foot-wide trench the length of the dam and refilling it with dry yellow clay to make a wall which will prevent seepage.

The trench is dug about 14 feet deep (down to blue clay) before it is drained and filled with the dry clay.

When the core is completed, Duesenberg said, excavation will start for concrete work on the spillway, which will be located on the west end of the dam.

Then the base, now ranging from six to eight feet in height, will be built up to its completed height of 55 feet with six-inch layers of clay. Each layer, after being spread over the entire dam, will be rolled, packed and leveled before another layer is spread.

When it is completed, the dam

will measure 400 feet in width at the base and will be 1,300 feet long. A 30-foot gravel roadbed will be constructed across the dam.

While work goes on at the dam, the water of Cedar Creek is being carried through the base of the project by a concrete sluiceway measuring four feet by six feet. Duesenberg admitted that heavy thundershowers had him worried about the flow of the creek, but said that so far the sluiceway has handled the creek.

A gate in the sluiceway will be closed when the dam is completed, stopping the flow of water until the water level in the lake reaches the height of the concrete spillway near the top of the dam.

The dam will form a lake about two and one-half miles long starting about a half-mile above the Skunk River.

To develop Geode State Park and lake, the Iowa state legislature in 1947 appropriated \$203,000. At the last session of the General Assembly, the legislature added \$295,000, sufficient to complete the project.

The park is approximately equidistant from Fort Madison, Burlington and Mt. Pleasant. It is located on the north bank of Skunk River, partly in Des Moines County and partly in Henry County.

Two routes can be followed in driving from Fort Madison to the park. One is on Highway 103 to West Point, then north on a county road to Lowell, Henry County, and through the west entrance into Geode. This is an all-weather route.

The second route, which takes the motorist into the east entrance of the park, would be on 88 to Denmark, thence to Bridgeport. Three miles of this route, in Des Moines County, remain to be graded and rocked.

Geode has 1,573 acres of land and affords 160,000 residents in a nearby area the benefits of a state park.—Fort Madison Democrat.



Bulldozer at work on earth fill of the new 205-acre Geode Lake. The lake proper will fill the background to the trees and wind to the left for more than two miles. Jim Sherman Photo.



Generally orphaned raccoon have a gluttonous appetite like this one. Occasionally they will refuse to eat, preferring starvation to warm cow's milk from a bottle.

ASK FARMERS TO HELP SAVE LAKE

The Iowa Conservation Commission is going into the watershed area of Lake Ahquabi with the object of constructing diversion terraces at the upper reaches of all creeks and gullies.

The work is being done under the direction of the construction engineering section of the commission. Glen Powers of Indianola is chief engineer of this section. Bill Frank of Chariton is foreman in charge of work in the field.

At the time a reporter from *The Record-Herald* and *Indianola Tribune* talked with Mr. Powers, work on three farms had been completed, agreements had been made with five other farmers and there were still 12 farmers in the watershed area to be contacted.

The Fifty-first and Fifty-second General Assemblies voted funds for this type of work in connection with state-owned lakes in Iowa, according to Mr. Powers. However, there are not enough funds to do the work alone, and the state is asking farmers to go along on a cooperative basis.

Most of the farms in the watershed area lie east and north of Lake Ahquabi. The state-owned Hooper game area, which lies south of the lake, is a study in soil conserving practices in itself.

Besides the diversion terraces on the farms, the Conservation Commission is planning to build a number of retention dams and two or three drop inlets in the watershed area. It is also planning to do some soil conservation work within the park area itself.

"We believe the public as a whole will benefit from the work we are doing in the Lake Ahquabi watershed," Mr. Powers said, "We feel that by going into the watershed and cooperating with the farmers we can do them a lot of good as well as stop the silt from washing into the lake."

A total of 4,600 feet of terraces have been completed on the Dave

BABY COON FINDS NEW MOTHER

Now we've heard everything!

A short time ago a friend of Morris Strausser gave him an orphan baby coon for a pet. Morris attempted to bottle feed the little fellow but without success. The baby coon lost weight and interest in life, we guess.

Anyway, about ten days ago a Chester White sow at the Strausser farm gave birth to a litter of five pigs.

One evening last weekend Morris took a look at the mother and pigs. And there with the five little Chester White pigs was the blackest little "pig" you ever saw—the baby coon. He's an especially forward little "pig" at mealtime.

"Coonie" gets along fine now with his adopted mother, brothers and sisters, but Morris is rather dubious about the future.—*North English Record*.

KEEP 'EM SHINING

Here is a little tip for your favorite baits. Place spoons, spinners, etc., for three or four hours in water that has been used to boil potatoes. Then rub briskly with a soft wet cloth and wipe dry. If the metal hasn't been too badly scratched or worn they will come out bright and shiny as new. To preserve this appearance, coat with aeroplane dope.—*Hampton Chronicle*.

Middleswart farm; 2,400 feet on the A. J. Simmerman farm, and 1,300 feet on the Izaak Walton League area.

Agreements have been made for work on the Nellie W. Lester, George Pace, Cecil Heavilin, C. W. Middleswart and F. E. Middleswart farms.

The U. S. Soil Conservation Service is cooperating in the work.—*Indianola Record-Herald*.

Most bats spend five-sixths of their lives hanging upside down in the dark.

Echoes From The Past

(Editor's Note: This is the sixth of a series relative to life in early Iowa. Additional excerpts from pioneer books, newspapers, and diaries will be printed in future issues.)

Below are excerpts reprinted from the *Annals of Iowa* of October, 1928, of the diary of John J. Audubon, kept while on his famous trip on the Missouri River in 1843. The selected items are from entries made by the diarist while on the river adjacent to Iowa on both the outward and homeward trips. Footnotes are by Elliott Coues, famous early naturalist.

May 8, Monday. * * * We saw Parrakeets and many small birds, but nothing new or very rare.

May 11, Thursday. * * * We have seen one Wolf on a sand-bar, seeking for food, perhaps dead fish. The actions were precisely those of a cur dog with a long tail, and the bellowing sound of the engine did not seem to disturb him. He trotted on parallel to the boat for about one mile, when we landed to cut drift-wood. Bell, Harris, and I went on shore to try to have a shot at him. He was what is called a brindle-colored Wolf,¹ of the common size.

May 12, Friday. The morning was foggy, thick, and calm. We passed the river called the *Sioux Pictout*,² a small stream formerly abounding with Beavers, Otters, Muskrats, etc., but now quite des-

¹This wolf is to be distinguished from the Prairie Wolf, *canis latrans*, which Audubon has already mentioned. It is the common large Wolf of North America, of which Audubon has much to say in the sequel; and wherever he speaks of "Wolves" without specification, we are to understand that this is the animal meant. It occurs in several different color-variations, from quite blackish through different reddish and brindled grayish shades to nearly white. The variety above mentioned is that named by Dr. Richardson *griseo-albus*, commonly known in the West as the Buffalo Wolf and the Timber Wolf. * * * —E. C.

titute of any of these creatures. On going along the banks bordering a long and wide prairie, thick with willows and other small brushwood, we saw four Black-tailed Deer³ immediately on the bank; they trotted away without appearing to be much alarmed; after a few hundred yards, the two largest, probably males, raised themselves on their hind feet and pawed at each other, after the manner of stallions. They trotted off again, stopping often, but after awhile disappeared; we saw them again some hundreds of yards farther on when, becoming suddenly alarmed, they bounded off until out of sight. They did not trot or run irregularly as our Virginia Deer does, and their color was of a brownish cast, whilst our common Deer at this season is red. Could we have gone ashore, we might in all probability have killed one or two of them. We stopped to cut wood on the opposite side of the river, where we went on shore, and there saw many tracks of Deer, Elk, Wolves, and Turkeys.

Audubon's Return Journey

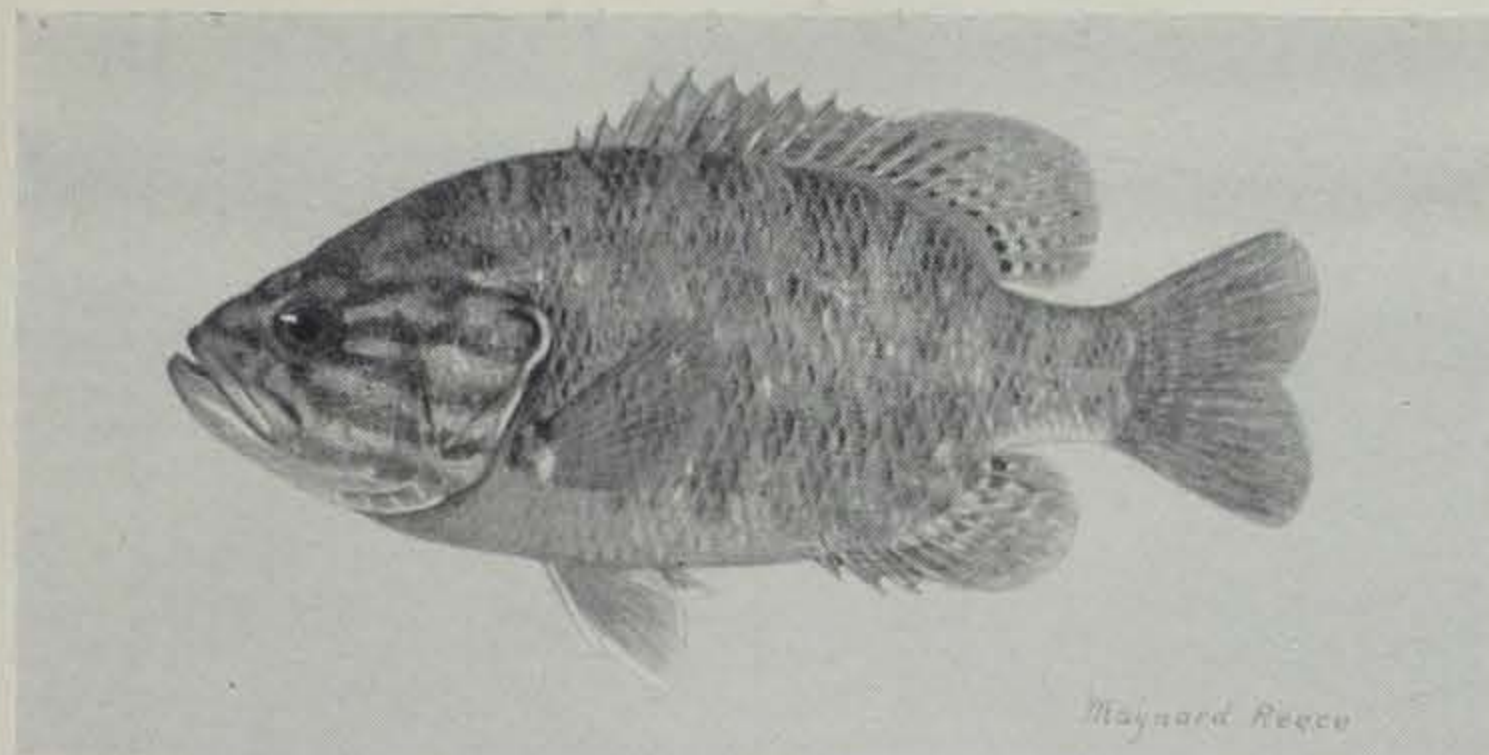
Sunday, October 1. * * * Passed the (Big) Sioux River at twenty minutes past eleven. Heard a Pileated Woodpecker, and saw Fish Crows. Geese very abundant. Landed below the Sioux River to shoot Turkeys, having seen a large male on the bluffs. Bell killed a hen, and Harris two young birds;

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²Little Sioux River of present geography, in Harrison Co., Iowa.—E. C.
³Otherwise known as the Mule Deer, from the great size of the ears, and the peculiar shape of the tail, which is white with a black tuft at the tip, and suggests that of a Mule. * * * —E. C.



Audubon makes mention in his diary of ducks and geese "abundant beyond description" along the Missouri River in 1843. The same description fits the modern blue and snow goose flight in that region a hundred years later. Jim Sherman Photo.



The warmouth bass is a chubby little bundle of piscatorial dynamite. They are little known to most anglers because of their habit of hiding in dense weed beds. (From water color by Maynard Reece.)

THE WARMOUTH

By Tom English

Iowa Coop. Fisheries Research Unit
Iowa State College

The chubby little bundle of piscatorial dynamite known as the warmouth is making a bid for more widespread popularity in Iowa. Studies at Iowa State College suggest that the warmouth may be able to fill an important need in many Iowa farm ponds, acting as junior assistant to the largemouth bass. Like the bass, the warmouth is a predatory fish, eating many times his weight in minnows and small fish. Since bluegills and bullheads are often far too numerous in lakes and ponds, the potential value of the warmouth is apparent.

He is a heavy-bodied, red-eyed sunfish with a huge mouth. He never gets larger than a man's hand, but may weigh one-half pound or more. His overall appearance ranges from a deep purple to a rich, golden brown. His sides and back are mottled olive to gray, flecked with gold, copper and emerald. The underside of the fish is a light greenish-yellow and the gill cover is purplish with a dark "bluegill" spot at the tip.

Many anglers confuse the warmouth with the rock bass and other members of the sunfish family. However, once you know the tricks, spotting the warmouth is easy. His large mouth and unusual coloring quickly distinguish him from all but the rock bass. Then run your finger over his tongue. The warmouth has several small teeth on his tongue that you can feel, while the rock bass has none. Further, the rock bass has six hard, sharp spines in the anal fin (the fin behind the vent), but the warmouth has only three.

Warmouth are most often found in lakes and ponds, but may be occasionally taken in flowing water. They are exceptionally fond of mud bottoms and spend the summer in very shallow water, often hidden in dense weed beds. Many fishermen pass up the haunts of the warmouth because of the difficulty of fishing in weeds, which explains why you may fish in a lake for years and never catch one of the warmouth living in it.

Studies by the Iowa Cooperative Fisheries Research Unit indicate that warmouth are fairly common in Red Haw Hill Lake near Chariton, although anglers seldom catch them. In this lake three-year-old warmouths are about 6.5 inches long and weigh a little under four ounces. The oldest one found was seven years old and weighed 9.3 ounces.

The warmouth is a meat-eater and a glutton. He often gorges himself with small fish and crayfish for a main course and eats insects and snails as appetizers and desert. He will bite readily on worms and minnows worked along the edge of weed beds near shore. An instantaneous strike is often produced by dangling a gob of worms over a small hole in a clump of weeds. You can take advantage of his habit of living in small tribes by locating warmouth holes and fishing them intensively. The sight of a half dozen fish rushing for your lure will convince you this is a valuable trick.

Warmouth have been taken on both wet and dry flies and will sometimes hit a plug viciously, even though swallowing it would be impossible. Bass fishermen often tangle with him when they fish with bugs and large flies over weed beds. The unusual combination of the rugged rock 'em and sock 'em tactics of the bass and the long, gamy battle of the bluegill makes the warmouth a welcome addition to the daily bag.

More must be known about the warmouth before he can be definitely recommended as a fish for Iowa farm ponds. His size and feeding habits appear ideally suited for use in controlling populations in ponds, but experts want to be certain he has no undesirable traits before endorsing him to the public. You can look forward to the possibility of warmouth in farm ponds at a later date, but get out and meet the spunky little fighter today. He'll give you a tussle worthy of your skill.

Contrary to popular belief, the raccoon and the bear are not true hibernators. They may "sleep" for several days at a stretch, but their body temperature is maintained at, or near, its normal level and they are ready for "action" at any time.

McGREGOR FAMILY PLAYS NURSEMAID TO DUCKLINGS

June has come to be the time for the Charles Tipps, who live beside the Mississippi at McGregor, to play nursemaid to broods of wood ducks.

Each spring of late years one to several pairs of wood ducks have nested in hollows in trees on the hill high above the Tipps' home. The setting meets what wildlife experts say are "musts" for a wood duck nest—woods, water, a hollow tree and acorns.

But to reach the Mississippi from such nests means getting the young down from the bluffs, across the highway and the railroad tracks—a perilous adventure. It is a journey that has come to mean real drama for Mr. and Mrs. Tipp, as the favored path of the wood ducks from hill to river is down over the sand walls at the rear of their home.

Most of the baby wood ducks, guided by their mothers' directive calls, get to the river unaided, but nearly always there are strays. The shrill, frightened peeping of the lost ones brings the Tipps.

They carry them down and drop them in the river, where they swim away expertly and are soon taken over by the mother, who leads her babies across the river to island waters.

But this June there has been tragedy. A mother wood duck was killed by a car while heading her brood off the hill to the river. The Tipps found four of the brood—three in their yard and one on the railroad, and carried them down to the river. But with no mother to look after them and lead them over the river, the orphan ducklings have been just swimming around in the reedy waters at the river front here for ten days.

Tipp, who is keeping a watchful eye out to see that no harm comes to them, says they are finding plenty of food and are growing. They stay in the willows at night.

Monday another wood duckling stray was found and brought to the river and, though dropped in a couple of hundred yards from the orphan brood, made a straight swim for them. Now there are

ENGINEERS REPORT ON CLEAR LAKE

This is the second article by the *Clear Lake Reporter* containing quotations from the report "Water Pollution and Sanitary Problems of Clear Lake, Iowa," by the Brown Engineering Company, Des Moines.

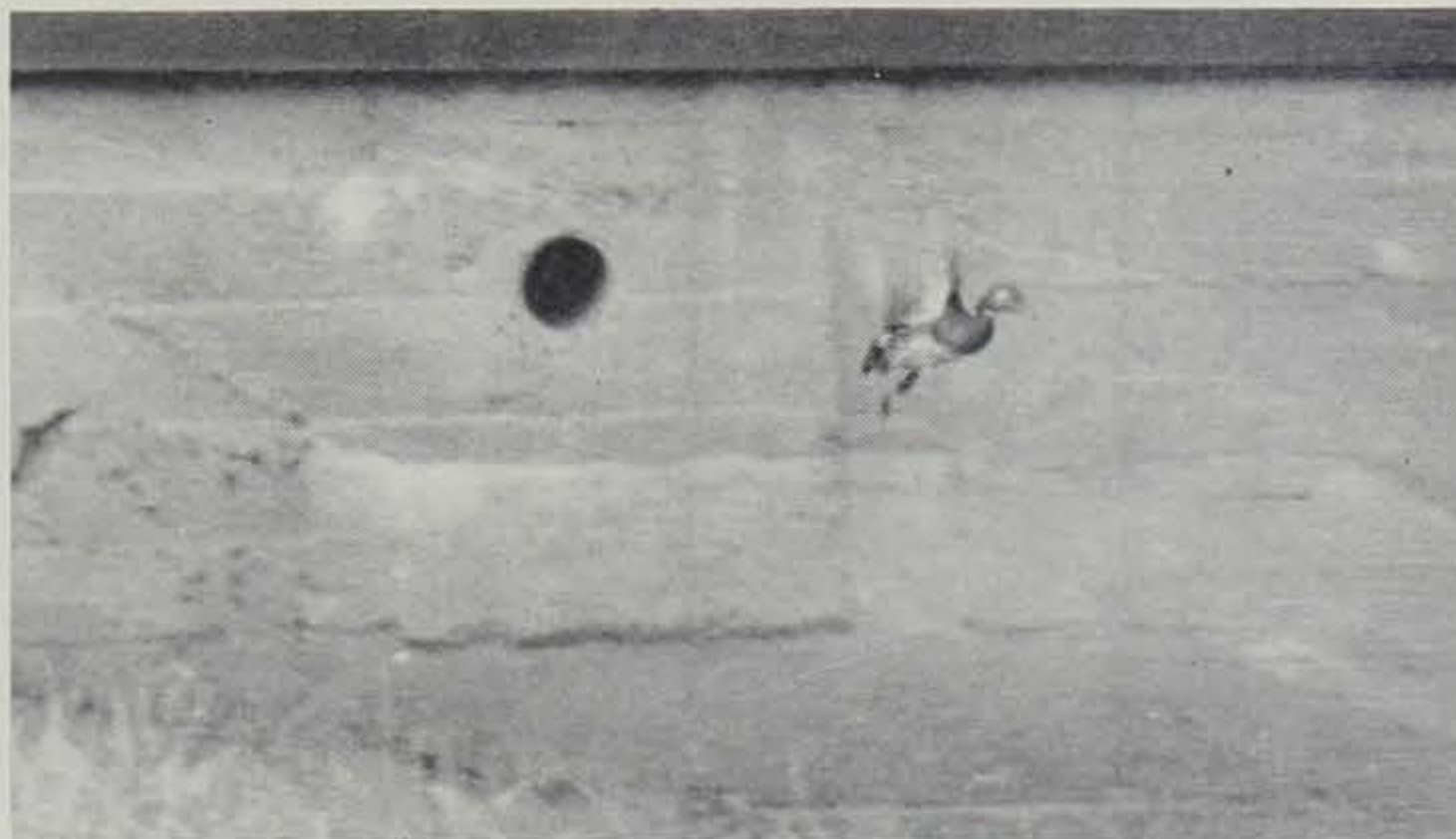
"Periodic blooms of blue-green algae occur in practically all impounded waters. In most Iowa lakes 'blooms' of blue-green algae are natural manifestations of fertility and limited principally to the degree of available plant nutrients in the water. As Dr. Shimek, Iowa naturalist and scientist stated: 'It is Nature's way of cleaning up its own premises.'

"Where excessive blooms of algae occur during the spring and summer months, direct evidence is indicated of an abundance of fertility in the water above the normal requirements of the desirable biota of the lake. Excessive blooms of algae occur at times on Clear Lake, hence it is reasonable to assume high fertility. Elimination of any possible source of over-fertility is, therefore, a desirable step toward eventual reduction of abundant algae growths."

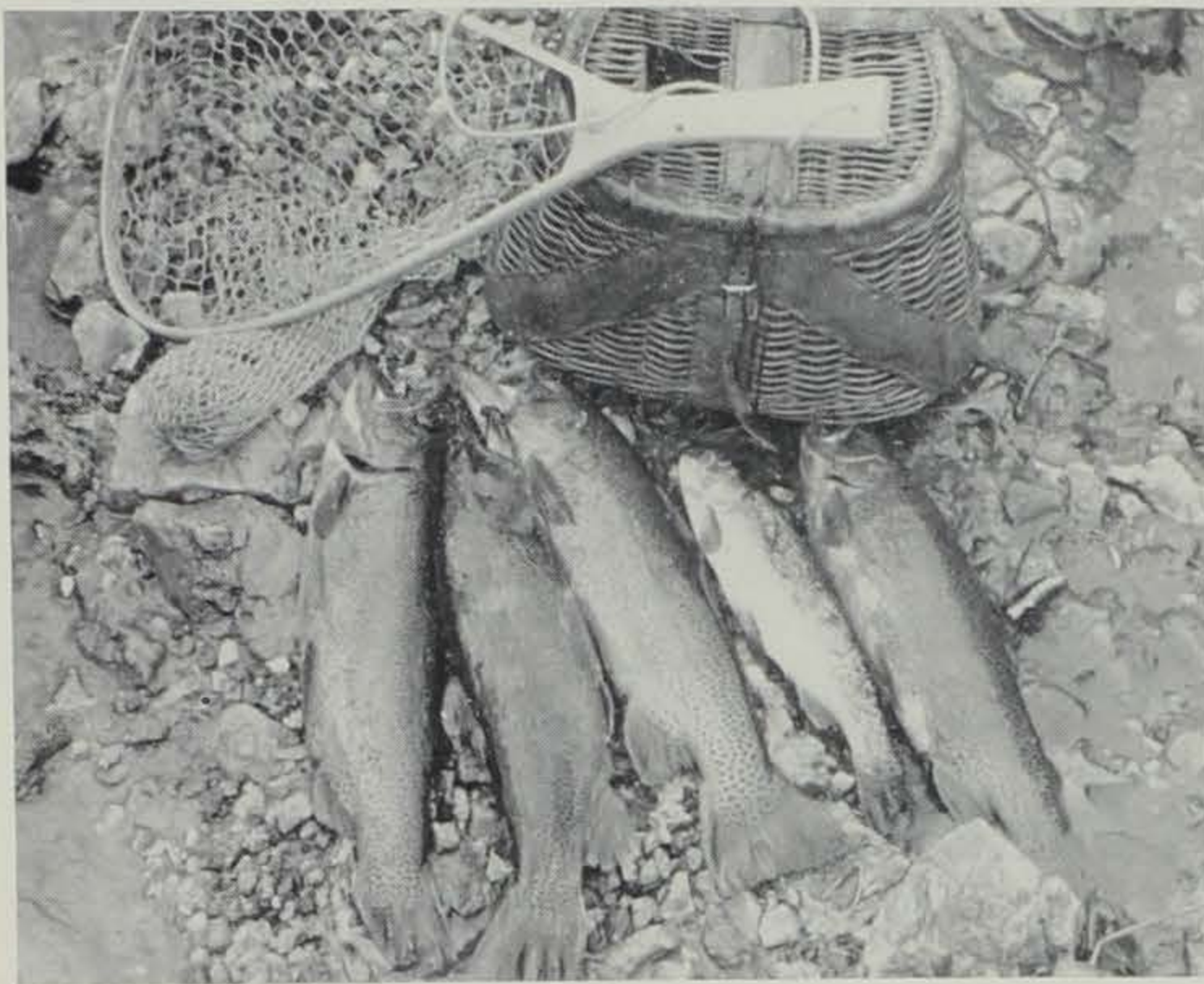
The report states that of the hundreds of cottages and homes built on the lakeshore, many are connected to the existing sewage system and that scores have installed septic tanks near the lake. However, the number outletting directly into the lake is not known.

But the report continues: "Since the drainage slopes toward the lake, it may be assumed that some sanitary wastes reach the lake by leaching processes. If these pollutants are excessive, it would be desirable to eliminate them."—*Clear Lake Reporter*.

five in a snug little bunch that folks on the river bank are having fun watching. The ducklings cheep! cheep! and dart about after bugs while Tipp warns, "Stand back. Keep quiet. Don't scare them."—*Dubuque Telegraph-Herald*.



Along the Mississippi River wood ducks often get into trouble with their selection of nesting sites. Here a "woody" leaves a cabin basement where she has laid 13 eggs on top of an abandoned icebox. Don Edlen Photo.



This creelfull of trout is reason enough for a fishing trip, but more important are the less concrete rewards of angling. Jim Sherman Photo.

Fishing . . .

(Continued from page 49)

To optical satisfaction we will add the soothing contentment of the songs of hundreds of birds. None exactly alike, but harmonizing so smoothly that one is forced into the realization that the Maestro, the conductor of nature's symphony, is a master of all things.

To these two we can add the actual act of fishing wherein every fiber of one's body is set tingling when a customer takes upon himself the task of outwitting the fisherman. Said customer goes dashing away under the pressure of screaming reel and arching rod to bore mightily into the brush and rocks, or he goes skyrocketing in his fight for freedom. It is good to feel the twisting, gyrating vibrations of a wary bluegill as it frantically tries to keep out of the frying pan.

It is only human for man to pit his skill against that of the creatures of nature; man has been doing that since the beginning of time and as long as there be fish in our waters it will continue to be so. We are submitting to an instinctive trait, which at one time was part and parcel of living but now is a fulfillment of inherited desire.

A man doesn't actually fish just to catch them. He fishes for the thrill of battle, for what he may see and hear and to get away from the monotonous task of proper living. But if one can see no beauty in a flower bending to the breeze or hear music through the rustling leaves, or cannot feel that sunset is the benediction hour, then he best keep to his work, to his books, his cups or whatever it be that such men do in their leisure hours, for it is a sacrilege to take from nature and not at least return a full measure of devotion in her behalf.—East St. Louis Journal.

Ground Squirrels . . .

(Continued from page 50)

has a lot of curiosity. Presently he sits up upon his haunches again.

You have been watching what is commonly called the striped gopher, more correctly named the thirteen-striped ground squirrel because of its six yellowish-white stripes alternating with seven brown ones, each of the latter being broken by a row of light spots. It is one of three burrowing rodents common in the prairie regions of the central states. It digs tunnels, several feet long, that reach below the frost line in winter, but the small opening of the burrow is hidden in the grass and is not betrayed by any pile of earth because that is carried away in their cheek pouches and scattered.

Here in early autumn, when they are very fat, they retire for the winter and hibernate until early April. During this winter sleep their body temperature falls to 40 or 45 degrees Fahrenheit, their breathing almost stops, and their heart beat drops to about five per minute—as compared with their summer normal rate of 200 to 350.

In addition to plant foods, a large part of their diet is grasshoppers, crickets, cutworms, beetles and other insects. One litter of five to thirteen naked, helpless, blind young is born about June 1st.

The Franklin ground squirrel or gray gopher has almost the same habits as its 13-striped cousin. Its burrow openings are larger and the dirt is piled at the mouth, often in the middle of farmers' fields. In size and appearance it is considerably different, weighing about twice as much and being colored iron-gray or brownish all over. Its hair is coarse and grizzled and the tail is rather bushy, so that sometimes one is mistaken for the tree-dwelling gray squirrel. In addition to plants and insects, they also

COMPLETE DREDGING OF FIVE ISLAND LAKE

By Glen Powers
Chief Engineer

Dredging in Five Island, the seventh of the 37 lakes recommended for dredging in the Iowa Twenty-five Year Conservation Plan, has been completed, and the dredge is being moved to Ingham-High Lakes for a sojourn of some 18 months.

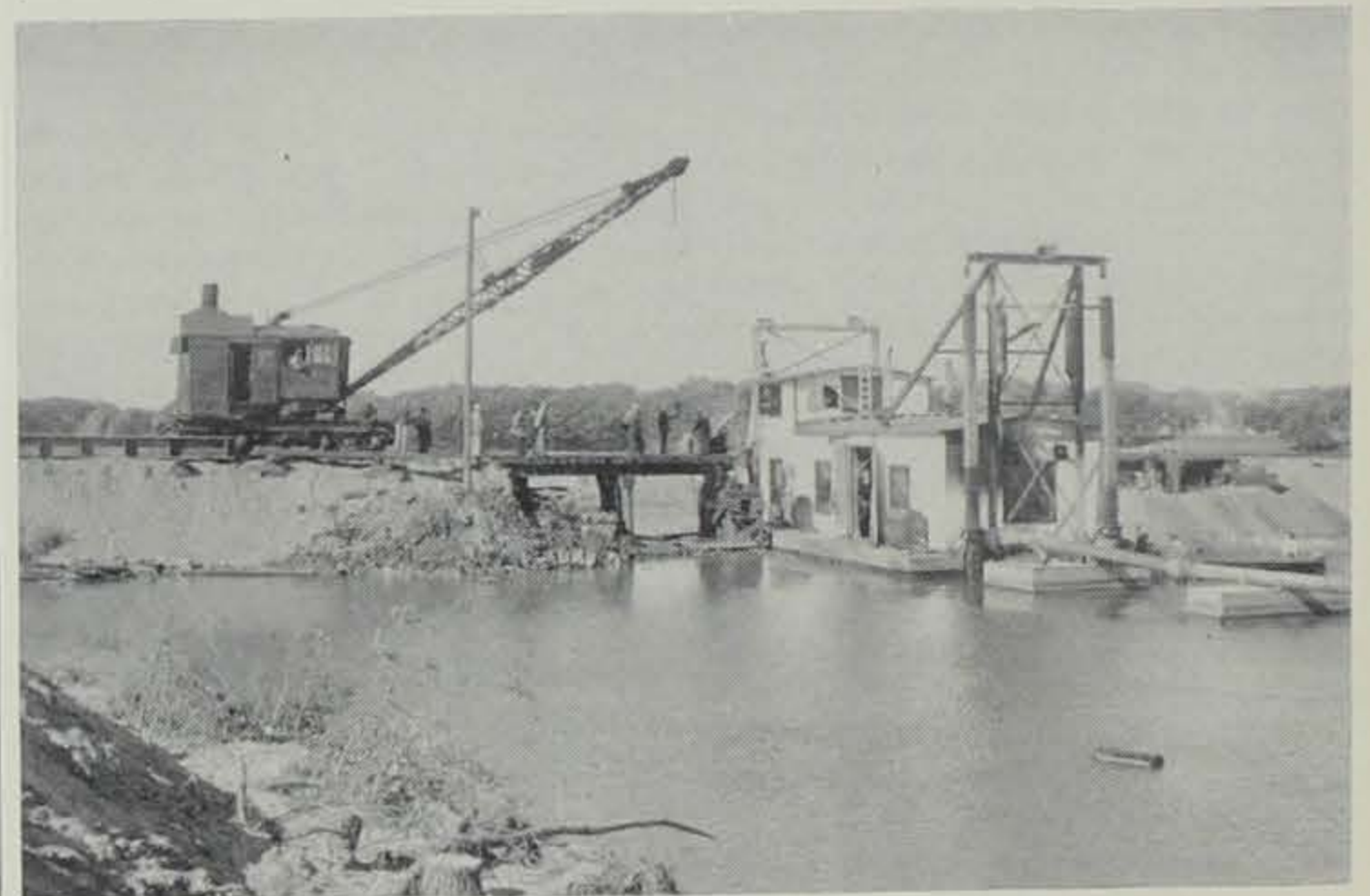
Five Island Lake, formerly Medium Lake, receives its name from five small islands, the largest from six to eight acres in size. It is a typical glacial lake approximately six miles long and a half mile wide at the widest. The city of Emmetsburg is situated on the south end of the lake, which is bisected by the Rock Island Railroad. Approximately 90 acres of the lake is south of the railroad track adjacent to the town of Emmetsburg.

The lake was dredged to eight-

to ten-foot depths from crest. Between 140 and 150 acres of the 991-acre water body were dredged out. The cuts were made to "stabilized bottom" of either blue clay or solid bottom.

The dredge material was pumped as much as 4,000 feet through 14-inch pipe to private lowlands adjacent to the lake with no fill material being placed in the lake proper.

The dredge used, one of two owned by the state, is a standard 14-inch hydraulic dredge powered by a diesel motor. It has a crew of six men operating in shifts of 10 to 12 hours. Part of the dredging in Five Island was done on double shift with the dredge working 16 hours per day. Total cost for the Five Island project, including dredging, riprap and other improvements, was approximately \$135,000.



Rock Island Railroad crew lifting the bridge bisecting Five Island Lake to allow state-owned dredge to pass through to the south end. Gib Knudson Photo.

eat a few small birds and mice. They, too, have only one litter of young each year, usually four to eight, about June 1st.

In contrast, the pocket gopher—so called because it has a large fur-lined pouch on the outside of each cheek in which it carries food—seldom shows itself above ground and is active below ground, both day and night, throughout the year. About the size of a rat, it is dark brown above and lighter beneath, with strong forelegs and heavy claws for digging. The tail is short, hairless, and used as a guide when running backwards in the burrow. Its eyes and ears are very small, and its voice is a mere squeak.

The pocket gopher feeds on roots and bulbs which it gathers by tunneling through the soil, and upon green food about the holes. Large amounts are stored for future use. The actively used burrow of one gopher may be several hundred feet long, the earth being brought to the surface in many large loose piles, but the holes are carefully plugged to prevent the entrance

of enemies such as mink, weasels and snakes. They usually have several litters, of four or five young, per year.

The bat, which has the reputation of being unclean and of harboring all sorts of bugs and crawling things, is actually one of the cleanest of all animals.

Singing house mice are nothing new, for the Chinese are said to have kept these rodent songsters in cages, just as we keep our canaries.



"Of all that is good, Iowa affords the best" (and biggest). Three-quarter pound sponge mushrooms gathered by John Williams, Boone, Iowa. Boone News-Republican Photo.



Mud-puppies are often caught by fishermen. They are perfectly safe to handle and cannot bite hard enough to "hurt your little finger." Jim Sherman Photo.

Mud Puppies...

(Continued from page 49)

other hand, have small beak-shaped mouths and are strictly vegetarian.

The two salamanders most commonly seen in Iowa are the mud-puppy, *Necturus maculosus*, and the tiger salamander, *Ambystoma tigrinum*.

The mud-puppy is aquatic throughout its life and never leaves the water as do most other salamanders. It is therefore found only in permanent ponds, lakes and streams. They are often 12 to 15 inches long, and there is one record of 17 inches. Three pairs of bushy red gills are retained throughout life. These animals are dark gray to brownish with some black and some light spots. We doubt if anyone would call them pretty. The mouth is broad, the head flattened, and the eyes are small.

The ugly mud-puppy is most often brought to light by surprised fishermen using a bait of minnows or worms. Many fishermen would rather cut their lines than touch the curious creature. This is foolish. All salamanders are perfectly safe to handle. They cannot bite hard enough to hurt your little finger. They are not poisonous, nor is their slime at all irritating to the skin.

Tiger salamanders, our most common member of this group, usually live in the water only a



The tiger salamander is found commonly in abandoned cisterns, meter cut-off boxes, and wet basements. Like its larger cousin, the mud-puppy, it is absolutely harmless. Kenneth D. Carlander Photo.

few months and spend the rest of their lives burrowing in moist ground. These little animals are often found in meter cut-off boxes, abandoned cisterns, wet earth-floored basements, or most any other dark damp situation. They are also found in the spring by minnow seiners in ponds to which they have returned to lay their gelatinous masses of eggs. The numbers which may come to a pond are almost unbelievable, when one has tried to locate salamanders during the summer and failed to find a single one in the vicinity. The feather-gilled tadpoles may be found by thousands in their shallow nursery ponds, often outnumbering the hosts of crayfish found in the same situations.

Tiger salamanders are dark brown or black with yellow spots and yellow underparts. They are smaller and much more slender than mud-puppies.

In Iowa's two southernmost tiers of counties, the smallmouthed salamander, *Ambystoma texanum*, is found migrating to ponds in the spring or burrowing under logs or in crayfish holes at other seasons. It is quite similar to the tiger salamander, but has a much more slender head and the markings are usually irregular and grey rather than yellow.

The blue-spotted salamander, *Ambystoma jeffersonianum*, a fairly small black or dark brown species with blue flecks on the side and tail, may once have been found in much of eastern Iowa, but it is now rare. This salamander lives only in undisturbed heavily wooded areas where there are many decaying logs and small permanent shaded pools.

The newt, *Triturus viridescens louisianensis*, an aquatic species found only in the southeastern corner of the state, is probably the most interesting of our salamanders. In some parts of the country the tadpole transforms into a small red salamander with rough

pebbly skin. This red salamander, which is known as an eft, lives for a few months to a couple of years on land. When it reaches maturity, it returns to the water and takes up aquatic life again. The red color is lost and the tail grows a finlike margin to aid in swimming. In parts of the Midwest and probably in Iowa, the eft stage is eliminated, with the tadpole transforming directly into an aquatic adult.

There are two very unusual records of salamanders reported from Iowa. The long-toed salamander, *Ambystoma macrodactylum*, which can be distinguished from other Iowa salamanders by a light band down the middle of the back, has been reported from Davis County. Its normal range is from British Columbia to California and east to Idaho. The hellbender, *Cryptobranchus alleganiensis*, has been reported from Polk County, about 250 miles north of where other specimens have been collected. The hellbender is the largest known salamander, sometimes

reaching a length of 27 inches. It lives in the water throughout its life, breathing through the flabby folds of skin along its side.

Many Iowans may never see a salamander. Those who will look for them can usually find a few. The best places to look are in old wells or under logs and rocks in damp locations or, in the spring, in and around ponds where they lay their eggs. On rare occasions large numbers may be found migrating to ponds—usually at night after the first warm spring rains.

Salamanders occasionally are unwelcome guests at fish hatcheries where hatchery men think they may eat large numbers of small fish. Studies now being carried on in Minnesota indicate that salamanders usually feed on insects and small crustaceans and may live in hatchery ponds without any apparent injury to the fish. Even if salamanders do eat some small fish, they should be considered interesting forms of wildlife and not monsters to be feared and destroyed.



Multiflora rose fence planted on contour on Wiley Alexander farm near Keosauqua. W. H. Lathrop Photo.

FREE MULTIFLORA ROSE SEED FOR FALL PLANTING

Thirty thousand packets of multiflora rose seed will be distributed free to Iowa farmers by the Conservation Commission for planting this fall. This rose proved successful as a stock-proof living fence in the south part of the state and, with large numbers of experimental plantings successful to date in the north part, is heralded as a great boon to Iowa's wildlife. The thorny shrub, which grows to a maximum height and width of eight feet and is nonspreading, provides excellent refuge and nesting places for game and songbirds, as well as small game animals.

In addition to its use as a living fence and for wildlife cover, multiflora rose hedge is excellent for wind erosion control.

Free seeds in packages of 1,000 along with complete planting instructions will be mailed about the 15th of September for late fall

planting to farmers making requests before September 1. The seeds may be grown in a vegetable garden plot and demand about the same care during their first year as seedling carrots and onions. When the new plants are a year old, they may be transplanted to their permanent location.

After transplanting the seedlings must be cultivated the first year, two or three times, depending on weed competition. A single cultivation the second year is generally necessary with no further cultivation or pruning.

Free seed packets were first announced in the June 4 *Iowa Farm and Home Register* in a story by B. G. Thrailkill. More than 2,000 requests for more than 4,000,000 seeds were received as a result during the first two weeks, showing the tremendous interest in this

(Continued on page 56)



Development of state-owned game lands for maximum production of pheasants and rabbits is the purpose of game area units. This crew is planting 2,000 multiflora rose seedlings per hour on one of the areas. L. F. Faber Photo.

Game Farming . . .

(Continued from page 49)

these areas for production of pheasants, ducks, rabbits and fur-bearing animals assumes primary importance.

A game manager has been appointed for each of the three units and will be responsible for maintenance and development of all state game lands in his area. Three- and five-year development plans have been prepared for each section of the unit and will include construction and maintenance of fence, manipulation of water control structures, noxious weed control, cover planting, wildlife inventories and many other tasks designed to make each acre produce the maximum amount of game and other wildlife.

The managers, in addition to being trained wildlife workers, have all had farming experience. Their job will be to actually "farm" the areas for wildlife production. Unit managers are not foremen, but will work the areas themselves, hiring additional help only during peak periods.

The new game management plan is game farming in the modern manner, which is, in short, maximum game production by proper manipulation of habitat.

Wardens' Tales . . .

(Continued from page 50)

catch a thing but these pesky trout!"

"Surprised, I remarked, 'I take it you don't care much for trout.'

"'Nope,' he replied, 'Never cared much for 'em. I'm fishin' for bass myself. They're more fun to catch.'

"'Well, I'm glad to see you haven't caught any bass,' I said, trying to keep a straight face, 'You see, the season isn't open yet.'

"I thought the old fellow was going to fold up at that. He apologized profusely and declared that in sixty years of hunting and fish-

ing he had never knowingly violated any of the laws, and had actually thought the bass season was open.

"'I've brought up my boys to appreciate hunting and fishing and to respect the laws,' he said, 'Sure hope they don't find out about this mistake.'

"'It's a strange world.'

Gene Hlavka, Grinnell, conservation officer in charge of Jasper and Poweshiek Counties, writes:

"One day while on routine patrol I noticed a farmer with whom I was acquainted walking up a long hill, carrying a gunny sack. I drew alongside him and called, 'Hop in, Mr. Smith, I'll give you a ride to the house.'

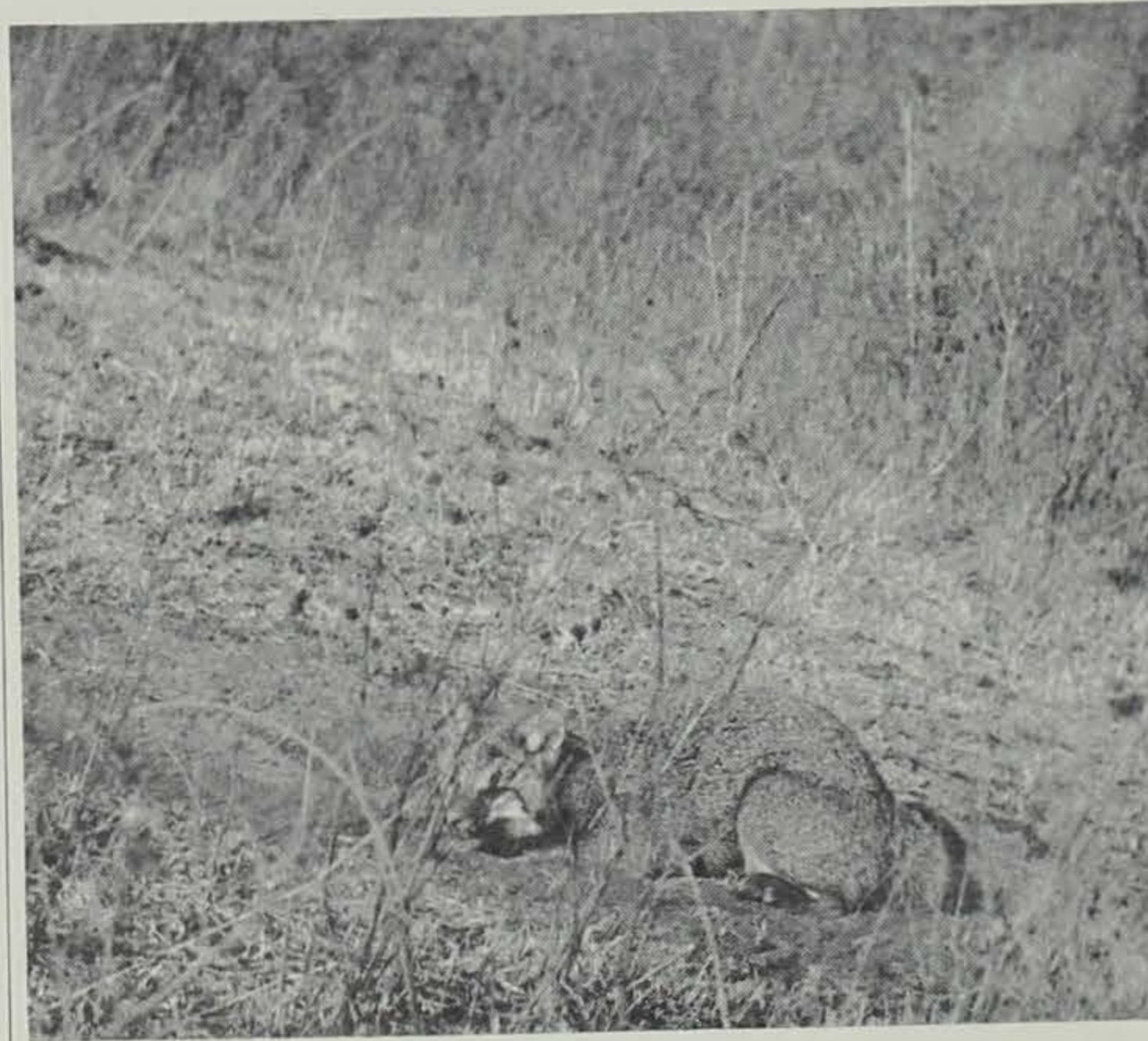
"At the farmhouse we sat and

WATER DOWNHILL

Water runs downhill, says a headline in a recent issue of Outdoor America. Everybody knows that water runs downhill, but a lot of them forget it when they are planning their growing operations. Hillsides are successfully covered only with grass sod (little or not grazed at all) or heavy timber. Slight grades may be tilled successfully if terraced or contoured properly, under proper circumstances. Water runs downhill and unless the hills are protected with vegetation, they're going to wash away. Every time we look at some of the denuded hills around Estherville and think of the only slightly valuable wood cut from the hills to render them bare and useless, left to eventually erode and lose topsoil completely, we blush and wish it never had happened. Nature knows how to protect the hills and the waterways, but man regards himself as smarter than the good Lord—and how he can mess things up until he learns better!—*Estherville News*.

talked a few minutes before I continued on my way. When I arrived home. I noticed that Mr. Smith had left his gunny sack in my car. I thought the bag moved strangely and decided I'd better have a look. Untying the string, I peeked inside to discover—of all things—a little pig!

"I've had all manner of articles left in my car—shells, guns, coats and boots—but never a little porker. I drove back at once to Mr. Smith's to return his mislaid livestock. He was laughing as he opened the door for me, and I could still hear him laughing as I drove away."



Two curious mathematicians whose tuition fees were exhausted because of their curiosity decided to visit trapper Tom Berkley's fox sets. They found a trapped fox, and what they did to poor Tom was murder.

New Birds . . .

(Continued from page 51)

law as a result of the new listing. The service asserted, however, that no action would be taken against individuals who obtained their pets prior to issuance of the revised list.

Practically every songbird, shore bird and species of waterfowl is included in the new listing. Migratory game birds, such as woodcock, waterfowl and doves, may be hunted in accordance with regulations administered by the Fish and Wildlife Service. The service also issues permits for the taking of scientific specimens of protected birds.

Some of the commonly known birds not appearing on the list of federally protected birds are the nonmigratory upland game birds (such as quail, pheasant, grouse, etc., protected by state laws), the bluejay, crow, starling, common sparrow and the hawks and owls. The service emphasized, however, that most hawks and owls are beneficial to mankind because of their rodent-killing activities and pointed out that states have laws protecting some owls and hawks.

Other birds on the list are certain Alaskan birds protected by the Alaska Game Law, and the bald eagle—which is protected in the United States by the Bald Eagle Act of 1940.

All birds native to Iowa are protected by state law except the European starling, English or house sparrow, blackbird, crow, sharp-shinned hawk, Cooper's hawk and great horned owl.

Echoes . . .

(Continued from page 52)

these will keep us going some days.

Tuesday, 3d. * * * Saw three Deer on the bank. A Prairie Wolf travelled on the shore beside us for a long time before he found a place to get up on the prairie. Plenty of Sandhill Cranes were seen as we passed the Little Sioux River. Saw three more Deer, another Wolf, two Swans, several Pelicans, and an abundance of Geese and Ducks. * * * Killed two Mallards; the Geese and Ducks are abundant beyond description.

Multiflora Rose . . .

(Continued from page 55)

plant on the part of landowners. According to Paul Leaverton, Superintendent of Game for the State Conservation Commission, "Multiflora rose is here to stay and in some sections may even change the appearance of the landscape." To which game managers, knowing its possibilities, reply, "Joy, joy!"

The otter is probably the best swimmer of all our land mammals. It can swim under water for over 400 yards without coming up for air.

Many species of ants keep "cows" (aphids) from which they get a sweet exudation called honeydew.