IOWA CONSERVATIONIST

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THOSE ELUSIVE COLONIES OF LIZARDS

THE SPIRITUAL SIDE OF CONSERVATION

By Earl L. Shaub

Volumes have been written from the scientific angle on the needs of conserving our natural resources. We should also see these needs from a spiritual viewpoint. The fact that we draw our very life from these resources carries with it some tremendous moral obligations.

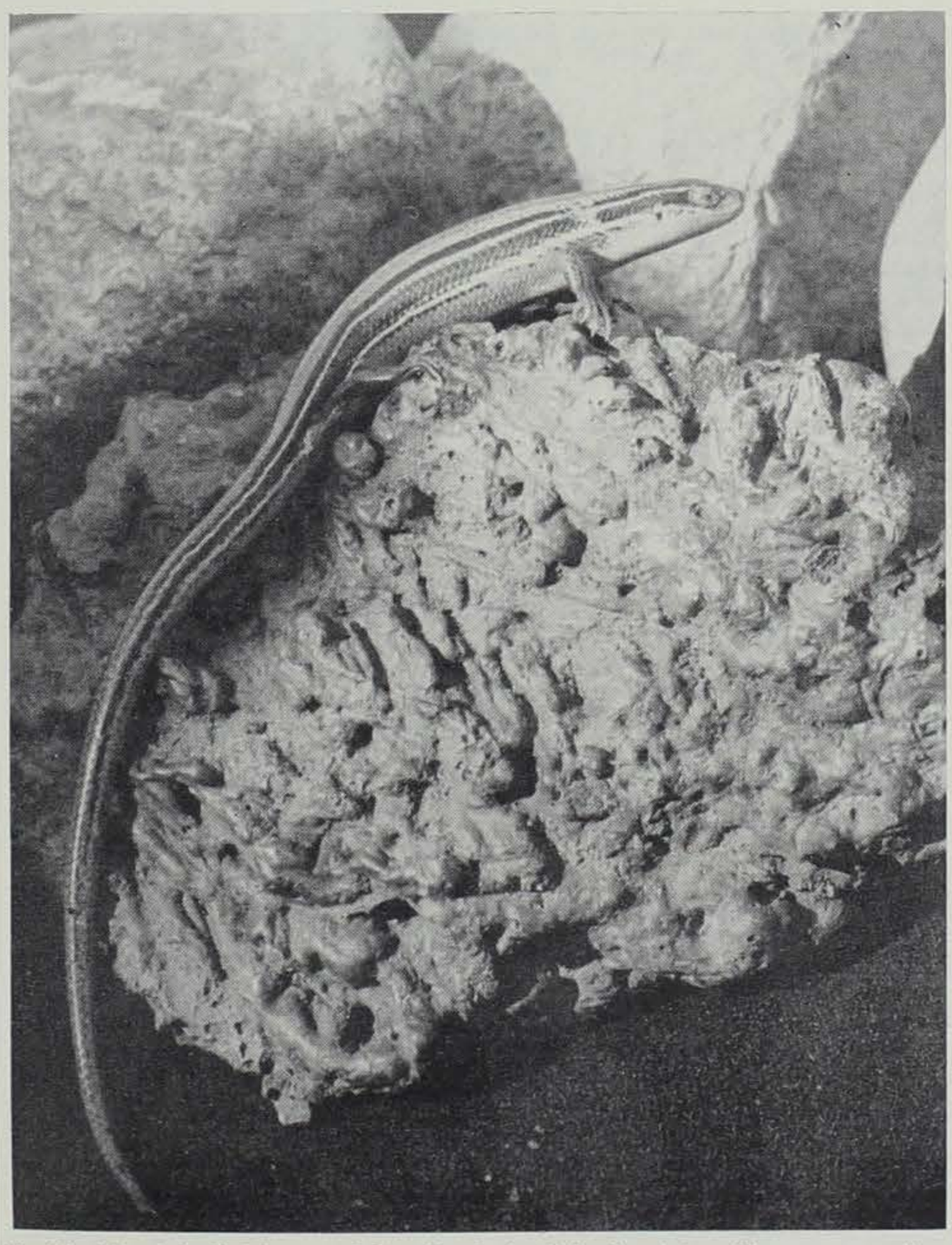
One of the greatest of these is our duty to wisely use, conserve and restore the natural resources from which we live, so that future generations may enjoy the same abundance that we have. This is a sacred obligation, stressed in the scriptures as well as in the experiences of the human race. Dominion over the earth with its plants and animals, fish and fowl, is a big responsibility that should be met wholeheartedly and with solemnity and dignity.

The first of these resources, of course, is the soil. The scriptures refer to man as a handful of clay into which the Creator has blown his warm breath. Though this may be taken as an allegory in scriptural language it is in reality a great truth. Most of the elements in our bodies came from the soil into which the processes of creation have blown the warm breath of sunshine, air and water.

Good health, then, and even life itself depends on good soil. In fact, everything we have or hope to have—our food, the wool and cotton in our clothes, the materials in our houses, all the commodities in our commerce—came from the soil. Our standard of living, therefore, and even civilization depends on the fertility of the earth.

Nations of the past flourished as long as their soil was good and decayed when their soil was depleted. Palestine, large stretches of China and Greece are glaring examples of what happens to once prosperous countries that fail to conserve and restore the ground

(Continued on page 64)



The black-banded skink is one of five lizards found in the state. They are secretive, seldom seen in the open, and most of the time live under rocks, logs or in burrows. Everett Speaker Photo.

PETE, THE SCIENTIFIC CATFISH

By A. George Morris

When one's word is doubted about a friendship of seventeen years' duration, then it's time to do something drastic—even though the friend is a channel catfish.

Such is what I decided when fellow members of the Missouri Conservation Commission showed disbelief that I had known Pete the Catfish for seventeen years. They lifted their eyebrows higher when I added an estimate that Pete had been swimming in Missouri waters for about five years before we became pals at the Chesapeake State Fish Hatchery, near Mt. Vernon. "How did I know all that?" they

(Continued on page 63)

By Kenneth D. Carlander and Robert B. Moorman
Iowa State College

Although few people see them, lizards are found in several parts of the state. They usually live in colonies, and several may be found at one place and none in neighboring localities.

We have five species of lizards in Iowa. Three of them are skinks, one of them is a racerunner, and the last is a legless lizard, the glass snake.

The skinks are smooth scaled lizards, with flat round scales, overlapping and more or less equal in size over the entire body. On the undersurface of the scales are bony plates which give the skinks a firm armor. Two of the Iowa species are striped. The five-lined or blue-tailed skink *(Eumeces fasciatus)* has a light line down the middle of the back and two light lines on each side. The line on the back extends forward and forks on the top of the head.

The black-banded or northern prairie skink *(Eumeces septentrionalis)* has three wide brownish-gray stripes on the back separated by two narrow black stripes. On each side, there are three black stripes separated by two narrow bluish-white stripes. Young skinks of both species have deep blue tails and are very different from the adults. The body of a young skink is black with narrow white stripes, five in the five-line and seven in the black-banded skink. The blue coloration of the tail is lost when the skinks are about two inches long (not counting the tail). Adult males, which are usually larger than the females, may be three inches long plus a four-inch tail. Older male five-lined skinks may lose the striped pattern.

In the southwest corner of the state is found a larger species, the Sonoran skink *(Eumeces obsoletus)*. The body of this skink may be almost five inches long and the tail seven inches. The Sonoran skink is not striped, but each scale on the back and sides is outlined in dark brown or black. The young

(Continued on page 62)

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WALLEYE REPRODUCTION

In 1950 the Spirit Lake hatchery had 84.5 per cent hatch on walleyes and produced 51,368,000 fry. The Clear Lake hatchery had a 77.2 per cent hatch on walleyes and produced 32,244,000 fry. The Spirit Lake hatchery produced 1,690,000 northern pike fry.

A study of the natural walleye spawn over a period of five years revealed a fertility of 2.5 per cent to 42 per cent. Parasitism of the eggs was noted during 1946, 1947 and 1948. Circumstantial evidence pointed to the organism *Hyalella* (scud, or freshwater shrimp). The parasitism probably is not important in the over-all fertility of the natural spawn.

Total natural production of fertile walleye eggs in Spirit Lake for the year 1947 was calculated at 2,389,660,000, representing about 50 times the total production of the hatchery. Stomach analysis of several species of fish from two lakes showed that walleye egg predation was most prominent in bullheads and perch, with carp and suckers taking a few eggs.—Briefs, *July Biology Seminar.*

Big, white, puffy clouds that look like balls of cotton mean fair weather if they stay scattered, but when they gather in a mass over one spot, camper look out! Jim Sherman Photo.

FAIR WEATHER OR NO, COME RAIN OR SNOW

No one, except these dry ice experts, can do much about the weather, but if a camper or picnicker has some idea of what it will be like on the morrow, he can prepare for the worst . . . or best.

Luis M. Henderson, noted artist and outdoorsman, has an interesting chapter on weather signs in his new book, "The Outdoor Guide." These signs are not infallible, but they are not based on superstition and warrant the attention of anyone who plans to take a camping trip this summer.

Regarding weather signs, Lu says: "If the smoke from your campfire rises in a long, spiral thread, there's good weather ahead, but if it rises sluggishly for a short distance, drifts off slowly and settles, then break out the rain gear.

"If all the trees (particularly the maples) are showing the undersides of their leaves, look for rain within 24 hours.

"Heavy dew on the grass presages fair weather, lack of it is likely to mean rain.

"Red at night, sailor's delight . . . red in the morning, sailors take warning! The same rule applies to rainbows in reverse. A rainbow in the morning bodes no good, but a rainbow in the evening portends a fair tomorrow.

"When the moon wears a halo, or has a ring around it, look for rain. The same goes for a red moon. But when the moon is a clear, bright 'white' you are pretty safe in planning a trip next day.

"When the sky is like black velvet and the stars seem especially brilliant and more numerous than usual, look for rain or snow the next day.

"Big, white, puffy clouds that look like balls of cotton mean fair weather, if they stay scattered, but when they gather in a mass over one spot, such as a mountain or wooded hill, look out!

"Cirrus clouds, or 'mare's tails,' those little wispy affairs high up, are a bad sign. If they are drifting rapidly across the sky, there is likely to be a storm within the next 24 hours.

"Clouds that move at different levels and in opposite directions are a warning of unpleasant weather ahead.

"If the clouds float high about sundown and are tinged with red, prepare for high wind to follow.

"When you see crows pitching and tumbling about in their flight, take up on the guy ropes . . . there's a gale in the making."—*Remington News Letter.*

The "odiferous spray" of the striped skunk is relatively accurate up to twelve feet from the animal. With a slight "tail wind" the accurate range is increased six to eight feet.

BLACKBIRDS

By Roberts Mann
Forest Preserve District of Cook County, Illinois

Typical of fall evenings are the flocks of blackbirds that gather in the marshes, in the fields, in groves of timber, or along tree-lined suburban streets. Occasionally in daytime one will see a flock of thousands—perhaps hundreds of thousands—flying in a narrow column that may extend as far as one can see and continue for an hour or more.

Sometimes such flocks are of one kind of blackbird; sometimes they are mixtures of two or more kinds. There are several species very different in appearance in spring. In the fall, when moulting, it is difficult to tell the males of some species from the females, or even one species from another, unless one knows them well.

Unmistakable in spring, and one of the first birds to arrive, is the male red-winged blackbird. He has a red patch, fringed with yellow below, on each shoulder. They nest near water, usually among cattails, rushes and willows around marshes and ponds. Another marsh dweller, rather rare here now, is the spectacular yellow-headed blackbird. It is larger than the red-winged blackbird and the male has a brilliant yellow head, throat nd chest, with a white wing-patch. Equally unmistakable, because the male has white patches on wings and rump, with a buff patch on the back of head and neck, is the bobolink, or "skunk blackbird," famous for his joyous bubbling medley of song. They are common here in meadows and prairies. In the South they are known as "rice birds" or "reed birds."

Another common blackbird is the brown-headed cowbird, which follows cattle, just as they originally followed the great herds of bison that roamed the prairies. Perhaps that is why the female builds no nest but lays her eggs in the nests of other birds. Somewhat similar is the rusty black-

(Continued on page 64)

Unmistakable in the spring and one of the first birds to arrive is the male red-winged blackbird. He sings "on-ka-lee" to the spring's warming sun. Jim Sherman Photo.

LONG-TIME CONSERVATION EMPLOYEE DIES

Robert B. Cooper, 44, Spirit Lake, Iowa, superintendent of fisheries of the State Conservation Commission, died at a hospital in LaCrosse, Wisconsin, July 3, after a five-day illness. He is survived by his widow, son Robert J., 21, and daughter Lois E., 18.

Cooper had been employed by the Conservation Commission and its predecessors for 26 years. He was born at Lansing, Iowa, December 13, 1905. He was first employed in 1924 as cook on the old Hawkeye No. 2 railway fish car. He had been fisheries foreman on the Mississippi River, superintendent of the Backbone trout hatchery at Strawberry Point, and fisheries supervisor at Spirit Lake. He was appointed superintendent of fisheries in 1948.

Jim Sherman Photo.
Robert B. Cooper.

Cooper was active in Masonic circles and was a sergeant in the Air Corps during World War II.

Shooting a wild duck in the autumn does not necessarily reduce the total spring population by one duck, for many a game bird falling before some hunter's gun would otherwise have died before another breeding season rolled around. Jim Sherman Photo.

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WILDLIFE POPULATION MECHANICS AND MANAGEMENT

By Frank C. Bellrose and Elizabeth Brown Chase

Up to about 15 years ago, few wildlife conservation agencies had a significant amount of factual information on game populations and kill. Consequently most hunting regulations governing the take of game were based largely on opinions and more often than not were applied in a hit-or-miss manner. Even though recent development of wildlife technology has given conservation agencies increasingly large amounts of factual information on which to base game regulations, most of the information obtained to the present time has been inadequate in that it has been concerned mainly with censuses of the population and inventories of the hunter take.

Officials engaged in drafting hunting regulations need to know more than trends in game populations and kill; they need to know the maximum proportion of a game population that can be harvested without adversely affecting the future of that population. It is evident that a large proportion of any game population will disappear each year from natural causes; it is a responsibility of management to see that the greatest possible use is made by man of the annual losses that normally occur. Shooting a wild duck in the autumn does not necessarily reduce the total spring population by one duck, for many a game bird falling before some hunter's gun would otherwise have died from natural causes before another breeding season rolled around. Paraphrased from Elton: A duck shot might have died in any case the next day or week in its ordained place in the life curve.

In order to formulate the proper hunting regulations for a game species, we must first measure the total annual loss that a population of that species undergoes, and we must measure the influence of varying kill intensities on that loss. What effect does a moderate hunter-kill have on the over-all annual mortality? How high can the kill rate go in a game species before it reaches a point beyond which the productivity potential cannot bring the population back to its former level?

The year-to-year game-regulation "tactics" should come, as they often do now, from up-to-the minute census and kill information. The population information necessary to lay out the general game-regulation "strategy" should develop from long-term band recovery data and from age ratio data. Band recoveries furnish facts on population losses; age ratios supply facts on productivity.—*From "Population Losses in the Mallard, Black Duck, and Blue-winged Teal," Illinois Natural History Survey.*

IS SILT RUINING YOUR LAKE?

Many of Iowa's little lakes are filling up. Too much dirt is washing downstream into the lake from unprotected slopes. The corn belt needs lots of these made lakes. They supply recreation in a big way. Fishing, boating, bathing are made available to many.

But most of the lakes were built without full consideration of the silting problem. Making a lake means more than just throwing a dam across a stream. It should mean a program of tree planting, grass planting and coutouring upstream.—*Wallaces' Farmer and Iowa Homestead.*

PET DEER ATTACKS CHILDREN

(Editor's Note: The tendency of well-meaning but ill-informed people to "rescue orphaned" wildlife babies presents a serious problem to game officials. With deer becoming more and more numerous in Iowa, "rescued" fawns have added to this headache. The release from the Oregon Game Commission is an "it can happen here" story.)

Three children were recently attacked by a pet deer near St. Helens, Oregon. Wayne Young, State Game Commission agent, was called upon to dispose of the unruly deer. The officer described the deer as an abandoned yearling doe. She wore a reflector-studded collar about her neck. The doe's ill temper prompted its desertion by the owners, according to Young.

The doe first trailed after a five-year-old boy who was following his mother and older brother through a wooded area along Morgan Road. Suddenly the deer reared up and struck the child down. The brother, attracted by the boy's screams, hurled a staff at the deer, driving it off. Fortunately, the child had dropped to the ground and doubled up. Severe bruises were the boy's only marks from the encounter.

Shortly afterward this same doe struck out at two other children who approached it.

Another recent deer encounter occurred when Willamette Valley game agents were called upon to pick up a captive buck. This deer was held under permit, but the owner, who had bottle-fed it as a tiny fawn, could no longer trust the animal. When approached in its enclosure, the enraged deer defied two game agents with slashing hooves and antlers before it could be hauled away for release in the Tillamook Burn. When freed, the buck stood its ground, ready to attack the first man who left the truck.

Actions such as this are typical of "civilized" deer and should serve as a warning to people with ideas of rearing fawns as gentle pets. According to Robert Mace, chief of big game for the Game Commission, these actions are attributable to deer's natural aggressiveness. Once a captive deer loses its fear of man, it can no longer be considered gentle.

State police and game agents throughout Oregon are now retreiving fawns picked up by sympathetic individuals suffering from an illusion that each tiny fawn lying in the woods has been abandoned. Doe deer leave their fawns in hiding during the first two or three weeks, returning at frequent intervals so that the fawns may suckle. It is against the law to hold these baby deer in captivity.

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The stage is all set for a tragedy—the pet fawn reaching maturity and inevitable meanness, the schoolyard where little children come and go. Jim Sherman Photo.

1949-50 RACCOON SEASON

Information reported by raccoon hunters revealed that the average hunting party caught .57 raccoon per hour of hunting, 50 per cent of the hunting was done during the first 10 days of the open season, 57 per cent of the raccoon were caught during the first 10 days of the open season, and 88 per cent of the catch was taken during the first half of the season. Hunting success per party per hour remained fairly constant throughout the season, although there was a slightly higher catch per trip early in the season.

More than 50 per cent of the hunters believe that Iowa's raccoon population is still increasing. The sex ratio of 1,741 raccoon, as reported by hunters and from pelts examined in fur houses, was 90.7 males per 100 females. There were 5 young raccoon for each adult female in the harvest. It is believed that Iowa's raccoon population is still on the increase or that it is at or near its peak.—Briefs, *July Biology Seminar.*

"I doubt if there is a millionaire's mansion anywhere with a front yard surpassing in beauty the panorama stretching out in front of many a Mississippi river fisherman's shack." Jim Sherman Photo.

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SCENIC BEAUTY OF UPPER MISSISSIPPI

Iowans don't have to drive thousands of miles to find scenery that beggars description. One of the most beautiful drives in the world is the river road skirting the high Iowa-Minnesota bluffs from Lansing to LaCrosse.

You don't have to be a poet to imagine you're in the mountains. Very little imagination is required to create the illusion that tawny-colored cattle grazing on the wooded slopes of those steep cliffs are wild deer. Indeed, it is not uncommon to get a glimpse of those wily, slender-legged creatures stalking in the deep shadows above the Mississippi.

Birds are less abundant now than they are during the migrating seasons, but there are other compensations for the traveler who takes the Lansing-LaCrosse road . . . cattails flaunting their slender spikes of light tan bloom, changing moods of the sky reflected in the Father of Waters, and the saw-teeth of Wisconsin hills cutting into the clouds as far as the eye can see northward and southward.

After numerous delightful drives through this Mississippi wonderland, I've been wishing I could transplant a section of the great river to my backyard. . . . I doubt if there's a millionaire's mansion anywhere with a front yard surpassing in beauty the panorama stretching out in front of many a Mississippi river fisherman's shack. —*Decorah Public Opinion.*

Wardens Tales

Shop Talk From the Field

Gene Newel, conservation officer in charge of Guthrie and Adair Counties, writes:

"I had a sandhill crane stay in my territory all last winter, and I think possibly it is a record of some kind. This is the dope:

"Early in November I stopped at the George Edwards farm, six miles west of Orient in Adair County, and George said, 'Come on down to the barn and see my pet bird, "Bill".'

"We went to the farm pond back of his barn, and there was an adult, healthy sandhill crane staying with a flock of six tame geese. I stayed back and Mr. Edwards walked up to within a few feet of the sandhill, who apparently was not the least frightened. I don't know whether the crane had a crush on one of the tame geese or not, but he fed on corn with them and waded around the upper edges of the pond when the geese were out in the center. When the geese came up to the barn, 'Bill' walked up with them. When the geese went into the shed in the hay lot to sleep, the crane would retire to a little knoll nearby and await

(Continued on page 61)

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With spring Bill got the urge, took off, and was soon out of sight. He never returned. Jim Sherman Photo.

1950 FISH CENSUS

Fishing success in the seven lakes studied has been about average this year, even though extremely adverse climatic conditions prevailed during the census period from May 15 to July 1.

Spirit, Storm and Lost Island Lakes showed significant increases in catch per hour, while East and West Okoboji, Clear and Black Hawk Lakes remained average or slightly below.—Briefs, *July Biology Seminar.*

STATE PARK SYSTEM PROVIDES MULTIPLE VALUES

As I look out the window beyond this desk in a cabin, beautiful Lake Ahquabi stretches before me with the opposite shoreline covered with trees and water lilies blooming along the edge of the lake. It is a privilege to be here. The view, the sunshine, clear sky, and the songs of the birds give a person a lift in life which equals much good food and a night's rest.

When we arrived late Sunday evening, we discovered that some 8,000 people had been at the lake during that day. This lake is located in a state park near Indianola, Iowa, just south of Des Moines. It is improved with a good beach, cabins, paths for long hikes, fishing, boating, dining halls, picnic tables, and places to camp out. Church, 4-H and other youth groups can obtain facilities at a minimum cost. Families can gather for reunions and private fellowships. Young people can come here to seek inspiration and friendships away from the hurried and commercial world.

Every so often we all complain about taxes and fees paid for our government which maintains places such as this. But one soon realizes the great values in family life, character building and nature study which are provided by the people, and for the people, through cooperation of our state park program. No church or small group of people could support or obtain such a place as this. It is proper that we should all be taxed to support these parks, and we should all use them for our own moral and physical good. They are so selected in our state of Iowa that no one has to drive far to find a place such as this.

Coming back to the Inter-State Corner for a moment, have you visited our own state park north of Hamburg? A drive into it, or a hike through it, will do you good. Take the family and try it. Do not go to excessive preparations. Just a simple lunch and an open mind is all you need to take along. Learn to relax and revive your strength in God's great out-of-doors.—*"From the Inter-State Corner," Shenandoah Sentinel.*

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"One soon realizes the great values in family life, character building, and nature study which are provided by the people and for the people through cooperation of our state park program." Jim Sherman Photo.

NEW DIRECTORY ISSUED LISTING ORGANIZATIONS AND OFFICIALS

A new directory of "Organizations and Officials Concerned with Wildlife Protection: 1950" has just been published by the U. S. Fish and Wildlife Service, the Department of the Interior has announced.

Designed to "meet the needs of officials charged with the administration and enforcement of fish and game laws, and . . . for the convenient use of persons desiring to communicate with officials and organizations concerning wildlife conditions . . ." the directory includes U. S. federal and state government agencies, Canadian dominion and provincial government bodies, Latin American government organizations, and various private groups.

The 35-page offset publication is the 44th edition of a directory listing the names and addresses of officials and organizations concerned with the protection or management of fish and wildlife. The directory was compiled by the Fish and Wildlife Service's Branch of Game Management.

Copies of Wildlife Leaflet 330, "Organizations and Officials Concerned with Wildlife Protection: 1950," may be obtained free by those interested in the conservation and management of fisheries and wildlife. Requests should be addressed to the Division of Information, U. S. Fish and Wildlife Service, Washington 25, D. C.

Echoes From The Past

(Editor's Note: This is the seventh of a series relative to life in early Iowa. It is taken from a *History of Jones County, Iowa, 1879.* Additional excerpts from pioneer books, newspapers, and diaries will be printed in future issues.)

FISH HATCHING ESTABLISHMENT

The 15th General Assembly in 1874 passed "an act to provide for the appointment of a Board of Fish Commissioners for the construction of fishways for the protection and propagation of fish," also "an act to provide for furnishing the rivers and lakes with fish and fish spawn." This act appropriated $3,000 for the purpose. In accordance with the provisions of the fish act above mentioned, on the 9th of April, 1874, S. B. Evans of Ottumwa, Wapello County, B. F. Shaw of Jones County, and Charles A. Haines of Black Hawk County were appointed to be fish commissioners by the Governor. These commissioners met at Des Moines May 10, 1874, and organized by the election of Mr. Evans president, Mr. Shaw secretary and superintendent and Mr. Haines treasurer.

The state was partitioned into three districts or divisions to enable the commissioners to better superintend the construction of fishways as required by the law. That part lying south of the Chicago, Rock Island and Pacific Railroads was placed under the special supervision of Mr. Evans, that part between the railroad and the Iowa division of the Illinois Central Railroad, Mr. Shaw, and all north of the Illinois Central Railroad, Mr. Haines. At this meeting the superintendent was authorized to build a state hatching house, to procure the spawn of valuable fish adapted to the waters of Iowa, hatch and prepare the young fish for distribution, and assist in putting them into the waters of the state.

In compliance with these instructions, Mr. Shaw at once commenced work and in the summer of 1874 erected a "state hatching house" near Anamosa, 20 by 40 feet, two stories, the second story being designed for a tenement, the first story being a "hatching room." The hatching troughs are supplied with water from a magnificent spring four feet deep and about ten feet in diameter, affording an abundant and unfailing supply of pure running water. During the first year, from May 10, 1874, to May 10, 1875, the commissioners distributed within the state 10,000 shad, 300,000 California salmon, 10,000 bass, 80,000 Penobscot salmon, 5,000 landlocked salmon, and 20,000 of other species.

By act approved March 10, 1876, the law was amended so that there should be but one instead of three fish commissioners, and B. F. Shaw was appointed, and the commissioner was authorized to purchase 20 acres of land on which the state hatching house was located near Anamosa. In the fall of 1876 Commissioner Shaw gathered from the sloughs of the Mississippi where they would have been destroyed over a million and a half small fish, which were distributed in the various rivers of the state and turned into the Mississippi.

In 1875-76, 533,000 California salmon and in 1877, 303,500 lake trout were distributed in various rivers and lakes in the state. The experiment of stocking the small streams with brook trout is being tried, and 81,000 of the speckled beauties were distributed in 1877. In 1876 100,000 young eels were distributed. These came from New York and they are increasing rapidly. At the close of 1877 there were at least a dozen private fish farms in successful operation in various parts of the state. Com-

(Continued on page 62)

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Since Iowa's first hatching house was erected in 1874, more than 150 hatcheries and rearing ponds have been constructed. Air view of Decorah hatchery ponds.

Tales . . .

(Continued from page 60)

their reappearance. This continued all winter.

"In March Jim Sherman came out to take some pictures. Apparently 'Bill' had not been getting along too well with his lady love, and with the return of spring was getting the urge for more compatible company. When Sherman unlimbered his camera, 'Bill' took off, spiraling around and around, and was soon out of sight in the sky. He never returned."

Conservation Officer Maurice Jensen, in charge of Jackson and Clinton Counties, writes:

"You can't always tell about the Mississippi River ice. In January Jack Musgrove, State Museum Director, asked me if I would pick up some of the lead poisoned ducks up on the pool behind Dam 13. I said I would and walked out on the ice about a mile from shore where the ducks were rafted. The ice looked and felt solid enough until, all of a sudden, I was in the water. I had quite a little trouble getting out because the ice kept breaking off under me as I put my weight on the broken edge. I kept 'cool,' however, and finally made the grade. I didn't try the ducks again, however, until the next cold spell."

Dwight Morse, U. S. game management agent and former conservation officer in Dickinson County, writes:

"A friend of mine called me late one night last fall and said there had been a bunch of Canada geese using a small lake for several days. He suggested we have a try at them the next morning.

"We went out before daylight, put out about twenty goose decoys, and hid ourselves in the willows and brush to await developments. Developments were not long coming. Before opening hour, the county road was lined with autos of hunters plotting how they could sneak on our goose decoys. We had left our car in the farmer's yard, and he knew that we were going to set out goose decoys. He told half a dozen different groups of hunters that the geese they saw were decoys; yet three different bunches crawled 500 yards through mud and water before they finally tumbled.

"Finally realizing our own really perilous position, we took our decoys in, pleased that some trigger-happy character with a rifle had not decided to try his luck. Our position would have made us the center of a bullseye from the county road."

HOW GOOD TO BE GOOD?

How good must fishing be to be good? The Ohio Wildlife Department offers a rule compiled by fish management experts—at least one fish per hour per angler.—Woods and Waters, *Davenport Times.*

FISHIN' AN' FACTS

We hear the carp are biting, and Bill Blanchard says he caught about 50 pounds of them the other night above the Delhi dam in about half an hour. They were all big ones weighing six to eight pounds.

Local fishermen around Hopkinton report the carp are biting. It's a funny thing, when carp are biting you can catch 'em any place where there are carp—but when they don't bite here they won't bite up at Delhi dam or any place else.

Much research has been done, but no one has come up with a satisfactory answer yet. We have noticed that when there are storms brewing fish don't often bite well, but when fair weather comes and stays they usually begin to bite.

We have noticed that catfish bite best in hot weather and in cool spells they don't seem hungry—in fact, we remember that bass and other fish seem to take hold better in hot weather. We expect the smallmouth bass to bite best in July and August in this river here and we have always found that evening was better than early mornings for bass fishing, and we have often caught nice bass right around noon in hot weather.

Now over in the Buffalo west of here we find that bass bite best most any time of the day, and we think the reason is that there are a lot more bass in the Buffalo than in the Maquoketa.

We think soft-shelled crawfish to be the best bait, and they must be alive as bass seldom take them dead. Next choice with us is "blue nose" minnows, usually found under rocks close to the shore at this time of the year. A little later in the year this minnow disappears, and where it goes is a mystery—you will find a few in deep holes in creeks but not many.

When the "blue nose" gets scarce we use the spotted sucker called "stone-rollers." They have a small white mouth and they are very good bait for bass and also walleyes and northern pike. Often catfish will take them alive or dead. They are one of the best bait minnows and we have caught more fish on them than on chubs, although we like large chubs best for big catfish.—*J. Curtis Grigg, Hopkinton Leader.*

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"It's a funny thing—when carp are biting you can catch them any place, but when they don't bite here they won't bite up at Delhi dam or any place else." Jim Sherman Photo.

The five-lined skink on its nest in a hollow log. The lizard will soon leave the eggs, which will hatch without parental attention. James A. Slater Photo.

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Lizards . . .

(Continued from page 57)

are jet black with bright blue tails, and the scales on the head have white or orange spots. As the skink grows older, the color becomes paler and olive tan.

Skinks are secretive lizards, seldom seen in the open. Most of the time they live under rocks or logs or in burrows. They hibernate in the burrows from October to April. Scott and Sheldahl (1937) report finding 52 hibernating black-banded skinks in a football-sized mass, four and one-half feet below the surface in a gravel pit refuse pile in Palo Alto County, Iowa. The black-banded skink seems to prefer grassy hillsides with sandy soil, while the five-lined skink is primarily a woods dweller.

The six-lined racerunner *(Cnemidophorus sexlineatus)* is less secretive than the skinks and depends upon its speed to avoid capture. Racerunners seem to prefer hot, dry, exposed habitats such as sand beaches, gravel ravines, or railroad right-of-ways.

The back, sides, and throat of the six-lined racerunner have tiny scales, and the skin feels soft compared to that of the skinks. The top of the head and the belly are covered with fairly large plates. The tail is extremely long and covered with rough scales. An adult racerunner may be up to three inches long plus a six-inch tail. The back is olive brown, and the sides are black with three narrow yellow or green stripes. Males during the spring mating season may be brightly colored.

The name "racerunner" is derived from their habit of sunning themselves on bare paths or roads and running ahead as a person approaches. Although their running speed has been clocked at 18 m.p.h., they appear to move even more rapidly. If a police dog were to run as fast, in comparison to its size, it would have to run nearly 300 m.p.h.

All lizards are able to break off their tails if caught by the tail. The broken tail then writhes, distracting attention as the lizard gets away. Within a few weeks a new tail is grown. The glass snake *(Ophisaurus ventralis)* gets its name from the fact that the tail breaks off readily and that it has no legs and therefore looks more like a snake than a lizard. It has eyelids and external ear openings near the back of the head which will distinguish it from any snake.

Glass snakes have smooth hard scales and an inward fold of skin the length of the body on each side to allow for expansion after a big meal. The back is usually light gray to brown and the sides usually have one or two dark brown stripes and vertical barring. The lower surfaces are white.

Glass snakes usually burrow and farmers frequently find them while plowing. They have been reported from several parts of southeastern Iowa and as far north and west as Polk County.

The Iowa lizards live on insects, spiders, earthworms, snails, and slugs. There was a report early this summer of many dead lizards found between the rows of melon plants after the latter had been dusted with insecticide. It is possible that extensive use of insecticides may eliminate these attractive creatures from some areas. The authors would appreciate learning of any similar observations of lizards being killed in large numbers.

Echoes . . .

(Continued from page 61)

missioner Shaw is enthusiastically devoted to the duties of his office and has performed an important service for the people of the state by his intelligent and successful operations.

The 16th General Assembly passed an act in 1878 prohibiting the catching of any kind of fish except brook trout from March until June of each year. Some varieties are fit for food only during this period.

Snakes can live for months without eating, but they cannot live long without water.

PETER RABBIT TOUGH COMPETITOR

If there's anything that brings delight to the newspaper editor, it is to receive either written or oral comment regarding stories and editorials which he has published. Even when the comments are critical they are welcomed as evidence that someone has read and thought over what we've had to say.

Frankly, the editorials are occasionally written for the express purpose of "getting a rise." When we feel that a subject is important enough to warrant wide discussion, we may do our blamedest to arouse discussion of it.

So what happens? We goad, we beg, we deride, we enthuse over matters dear to our heart in the hope of forcing some comment on them—and NOTHING happens. Then we print a little item in Main Street regarding a fawn's being seen south of town. Promptly one kind reader after another rings us up to report deer being seen in their fields and farmyards.

Now don't misunderstand us.

"We're left a bit puzzled as to just what deer possess as a topic of conversation that our pet issues so notably lack."

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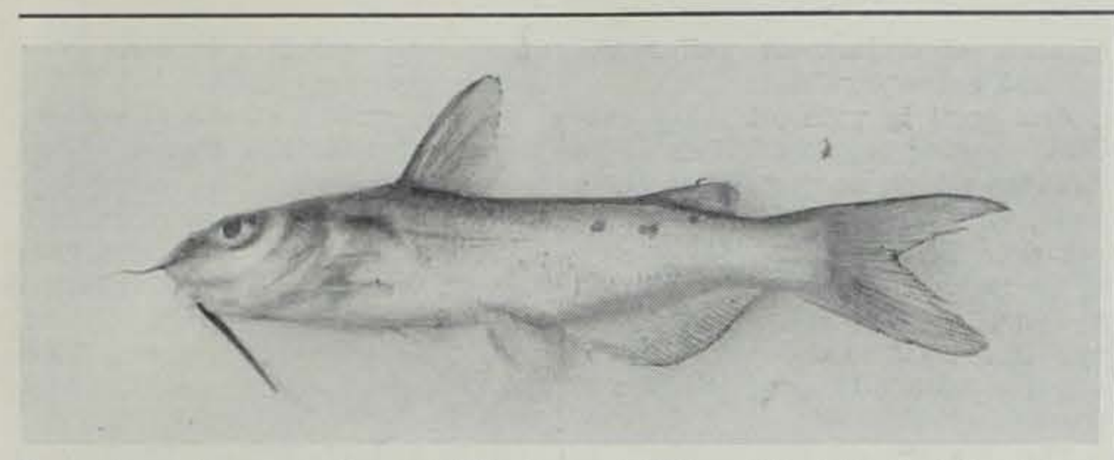
We're most grateful for the calls we've received regarding the surprising prevalence of deer in this vicinity. But we're left a bit puzzled as to just what deer possess as a topic of conversation that our pet issues so notably lack.—*Belmond Independent.*

The swimming ability of many animals is greatly increased by having the tail vertically flattened. Thus flat tails are very common in aquatic animals, occurring for example in muskrats, otters, many lizards, and even in the ridicuously small tail of the hippopotamus.

Your Conservation Officer and You.—Michigan Conservation.



No one knows how many thousand little bug-eyed fiddlers Pete fathered during his seventeen years in the hatchery ponds. Jim Sherman Photo.

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Pete . . .

(Continued from page 57)

asked politely, but firmly.

Well, in order to prove my big fish story, Pete has become a martyr to science. No longer will he swim about, with his whiskers preened for crawfish. Never again will he fan lake beds with his powerful tail to beat out a nest for his mate. Pete has become a laboratory specimen. His big carcass is offering a rare means for scientific study of age determination in catfish.

It all goes back to when Pete the Channel Catfish and I first met early in 1933, at which time he weighed one and one-half pounds and was one of 32 of his kind I obtained from a friend who lived on the Osage River. I wanted to use these fish in a try at raising channels.

Now the day that he arrived, I didn't give Pete any more attention than I gave the other 31 fish. Had I known that his life span was going to be doubted, it is very probable that I would have taken him off to one side and talked the matter over with him then and there. But about all I thought about him that day was that he was just about normal stream size, the good size to eat. He was long and rangy and covered with spots or small dots, which are usual on channel catfish of that size.

On that day he and the others were placed in a one and one-half acre rearing pond. I put nail kegs in the lake for the fish to lay their eggs in, and started construction immediately on troughs and other necessary paraphernalia to hatch the expected crop of eggs.

Of course I can't prove that Pete fathered any of the three spawns of eggs that were laid in the kegs that year. But I like to think he helped produce some of the 35,000 of his same kind which grew to six inches in length by the month of October. As a result of these 35,000 fish—some of which must have been Pete's sons and daughters—we were able to get one of the country's first channel catfish hatcheries built in the United States at Chesapeake.

Pete wasn't one to climb on a soap box and try to claim credit for all of that. In fact I think it all might have ended better, so far as Pete was concerned, if I, his friend, also had left his story untold.

Very soon after the first group of channels were obtained, Pete seemed to be in a class by himself. He liked hatchery life. He was the first to develop the characteristics of the normal male channel catfish. His head was much broader than any other part of his body, and he was even referred to as being that "chuckle-headed cat." As is customary after a few years, his body started losing the spots that are usual during the first years of life. He took on a blue cast all over, especially on his chin and the inside of his mouth. It was easy to pick him out each year as a male when we were sorting the brood stock in the lakes according to sex, so many females and so many males per acre of water.

The seasons passed. Each time the fish were handled Pete was noted as the largest in the group. I am sure that he did his best to hold the clan together during the war years, though production did go into a tailspin.

In going over the brood stock after the war, it was evident that the original 32 catfish had served their useful purpose at the hatchery and that they should be permitted to spend the rest of their days out in the streams, as nature had intended. But the emotions of friendship are strong, and when the day came to haul off the oversize and overage catfish, Pete used his magic power. At the last minute I took him and four of his sisters out of the truck tank and put them back in the hatchery lakes.

This year it again reached the point where something had to be done. Pete was on trial. Though we didn't know that he hadn't been helping all he could with the production, we did know that he had outgrown our facilities. He was too big to get in the usual kegs we provided for the catfish to spawn in, and he seemingly would not build a nest for his mate in anything else. We had many more fish of the right size and the food Pete needed to exist should be used for the others. He had to go.

I talked the matter over with Pete. It is our custom to preserve the life history of our great men. Certainly Pete was a great catfish and deserved full recognition. So it was decided that his life history should be exposed. A last meeting was arranged to record some facts and figures, statistics that I thought fishermen would be interested in.

Pete and I tried first to agree on his age. He didn't remember how old he was on the day we first met. We knew that he weighed one and a half pounds, and from what I had found out by watching his sons and daughters grow up, I made a guess that he would have been from three to five years old in 1933. Then we added on the seventeen years of our acquaintance and came up with an age of at least twenty years.

I put him down on the floor by the side of a yardstick and he lacked just two inches being as long as it was. With difficulty, he was placed in a tub and put on the scales. So he wouldn't clutter up the records with fractions, he obligingly made the scales go to exactly 21 pounds.

Pete always had long whiskers; I am sure he looked out at their great length with much pride. I

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When George first met Pete he was just about normal stream size, the good size to eat. Jim Sherman Photo.

Large male channel catfish are often called "blue cats" on the inland waters. During the breeding season they develop broad, flat heads, take on a blue cast all over, especially on the chin and the inside of the mouth. Jim Sherman Photo.

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decided they should be measured and found that from the tip of one whisker to the tip of the other was 19½ inches. Even his mouth was huge and, in thinking about how large a bait I could use in fishing for some of his brothers, I put the rule in it. That mouth measured 5 inches across.

Now in all beauty contests, and surely Pete was a beauty if there ever was one, there is a waist measurement. So, with a little argument about where Pete's waist was located, the tape was put around him and showed a stylish 20½ inches around.

Pete was modest and, as is customary, didn't like to have his picture taken. But, though he left one man with a bloody right hand and threw water on the other spectators, the pictures were taken.

When I began talking about my twenty-year-old catfish, I met with skepticism at first. Then my story got around to a scientist who is trying to determine the means of finding the age of channels by growth rings, similar to the growth rings in trees. The catfish rings are in the horns and vertebrae.

After that I began to hear that Pete had a chance to prove my fish story and also aid scientific research. He probably was the only catfish in Missouri with someone willing to vouch that he was over twenty years old. The only other way to get a twenty-year-old channel on which any sort of age record has been kept would be to rear one from babyhood. If the growth rings coincided with my statement of his age, then Pete could prove my story and the scientist's theory.

Moreover, Pete might bring about a standard means for determining the age of catfish caught in our streams. From that, we would have knowledge of how fast our fish were growing and of the type of water and food that aided their development.

Well, Pete was practically voting

(Continued on page 64)

More conservation should be taught in the schools; more ministers should base sermons on the subject; more bankers should deny loans to farmers who fail to practice conservation, and everyone should be alert to this vital cause, because their health and prosperity depend on it. Jim Sherman Photo.

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Spiritual Side . . .

(Continued from page 57)

from which they draw their sustenance.

So, if we are to have healthy bodies, a high standard of living and a thriving, prosperous civilization we must keep the soil in good condition. The conservationists and the soil chemists know how that can be done, but they are having a stubborn uphill fight against ignorance, greed and public indifference and it is every man's duty to assist them in every way we can, for we all have a stake in the good earth.

More of this should be taught in the schools; more ministers of the gospel should base sermons on this subject; more bankers should deny loans to farmers who fail to practice conservation and all business men and housewives should be alert to this vital cause because their health and prosperity depend on it.

Next in importance to the soil is the forest. We must protect and restore our trees as rapidly as we use them. Exploitation of the woods is a crime against nature and society. The importance of wood in our daily lives and in our economic world is seen in the fact that forest industries are second only to agriculture. A tremendous number of useful products, in addition to lumber, come from trees. Where the woods have been slashed we find desolation and poverty.

Forests also ameliorate climate and guarantee a perpetual and even flow of clear, pure water in the streams and rivers. When the forests are gone they will be replaced by deserts. Then at times the river beds will be dry and at other times they will be the paths of raging floods that will destroy property and lives. Fish and other forms of aquatic life for which we are responsible will vanish as well as the water we need in our homes and factories.

It is in the forest that we get a clear sense of unity. Anyone who meditates for five minutes in the grove will feel his kinship with all. Then he must realize that one source of life equally animates the tree, the bird, the deer and man.

Trees and other forms of vegetation also provide the habitat and food for the birds and animals of which we are the guardians. They are an active part of the plan of creation and we could not exist without them. It is a high privilege to be the custodians of those creatures and we must meet that responsibility by maintaining the balance of nature or suffer the natural consequences.

And so it is with all other natural resources, including the streams, which we must keep clean and free from eroding silt and the pollution of cities and industries. If we fail to protect and replenish the bounties we use we must suffer and die. That is the natural penalty for failure to keep the sacred trust.

The results of our neglect to keep faith with nature are appalling. Forests are disappearing before the ruthless axes; fertile land is washing down the rivers and into the sea at a costly rate; many species of birds and beasts are becoming extinct. Our neglect is all the more shameful because we know how to repair the damage. Conservationists have all the scientific remedies to the problem but they are helpless without public support.

Conservation is just sound common sense economics and good business from which everybody will profit, and any practice that will benefit the world is surely based on fundamental spiritual laws.

We must conceive of the earth as the Lord's, not the property of individuals who hold legal title to the land. The scriptures word it this way:

"The earth is the Lord's, and the fullness thereof."

We also read:

"The cattle on a thousand hills, all these are mine."

When we take that to heart we will realize that we are treading on holy ground and that we are the stewards who have the privilege of caring for the earth. Then we shall know that conservation is a vital part of spiritual life and an expression of practical love for those who will come after us.

We should meet our obligations with devotion and joy. Our task should be as pleasant as working in a garden where the rewards are many fold with full larders, good health and prosperity.

This work is a means of self-expression for we are a part of the living landscape. The man who participates in it is a partner with God in a creative act. The very subject is alive and the thing that binds us in fellowship is a quiet, deep feeling—a love of the land, the source of our sustenance, our inspiration, our enjoyment.

It is a high calling to preside at the mystery of the growth of the plants, the birds and the animals. It is in this work that we live closely with nature and read the story she is continually writing. Let's be acutely sensitive to perceive and feel and appreciate that story. Let's live and enjoy it.

It is in that story that we read that creation is all one piece. We must conserve all or we will lose all. Soil, water, forests, wildlife are but pieces in the pattern. All are bricks with which the Master Builder has created the pyramid of life—a pyramid on which man stands at the apex, presiding over all.

All this was aptly summed up by Charles N. Elliott in what he calls the eleventh commandment, which reads:

"Thou shalt inherit the holy earth as a faithful steward, conserving its resources and productivity from generation to generation. Thou shalt protect thy fields from soil erosion and thy hills from overgrazing by the herds, so that thy descendants may have abundance forever. If any shall fail in this stewardship of the land, his fertile field shall become sterile stones and gullies, and his descendants shall decrease and live in poverty or vanish from the face of the earth."—*The Tennessee Conservationist.*

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Our neglect of the soil is all the more shameful because we know how to repair the damage. Conservationists have the scientific remedies but are helpless without public support. Jim Sherman Photo.

Pete . . .

(Continued from page 63)

age, so I stepped aside. He went to the laboratory instead of to a delightful Missouri stream. This noble catfish gave his life for science, to bring about a better understanding of his brothers and sisters, children and grandchildren, whose lives thereby deserve to be lived in a stream rich in small frogs, crawfish, minnows and other answers to catfish dreams.—*Missouri Conservationist.*

Blackbirds . . .

(Continued from page 58)

bird, which nests in northern United States and Canada and migrates through here in huge flocks each fall.

Largest of all, except for the boat-tailed grackle of the Atlantic Coast, is the bronzed grackle or "crow blackbird"—conspicuous for its long wedge-shaped tail. The males have iridescent plumage, particularly on head and neck, that glints like polished bronze and blued steel.

Blackbirds walk instead of hop. In fact, they waddle.