

IOWA CONSERVATIONIST

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THE ROUGH AND TUMBLE SMALLMOUTH BASS

CARP A SPORTS FISH FOR THOUSANDS

Sixty million Frenchmen can't be wrong, nor can one hundred thousand Iowans. That would probably be a conservative estimate of the number of anglers that fish for carp each year in Iowa. They have found out for themselves what some folks will probably never let themselves learn—that the carp is a sporty fighter, and when taken from good water, delicious to eat. Smoked carp, for instance, rivals the famous smoked salmon of the northwest!

Let's talk a little about the habits, background, personality of this fish, and point out the good and bad qualities of the carp so that we can know the truth rather than depend on the old wives tales that so often pass as fact.

Since earliest times the carp has been well thought of by man. It was raised some 3,000 years ago by the Chinese, brought to and cultured throughout continental Europe and England at an early date. Emigrants to America brought it to this country about 1870 and it was raised in ponds much as it had been for centuries in the old country.

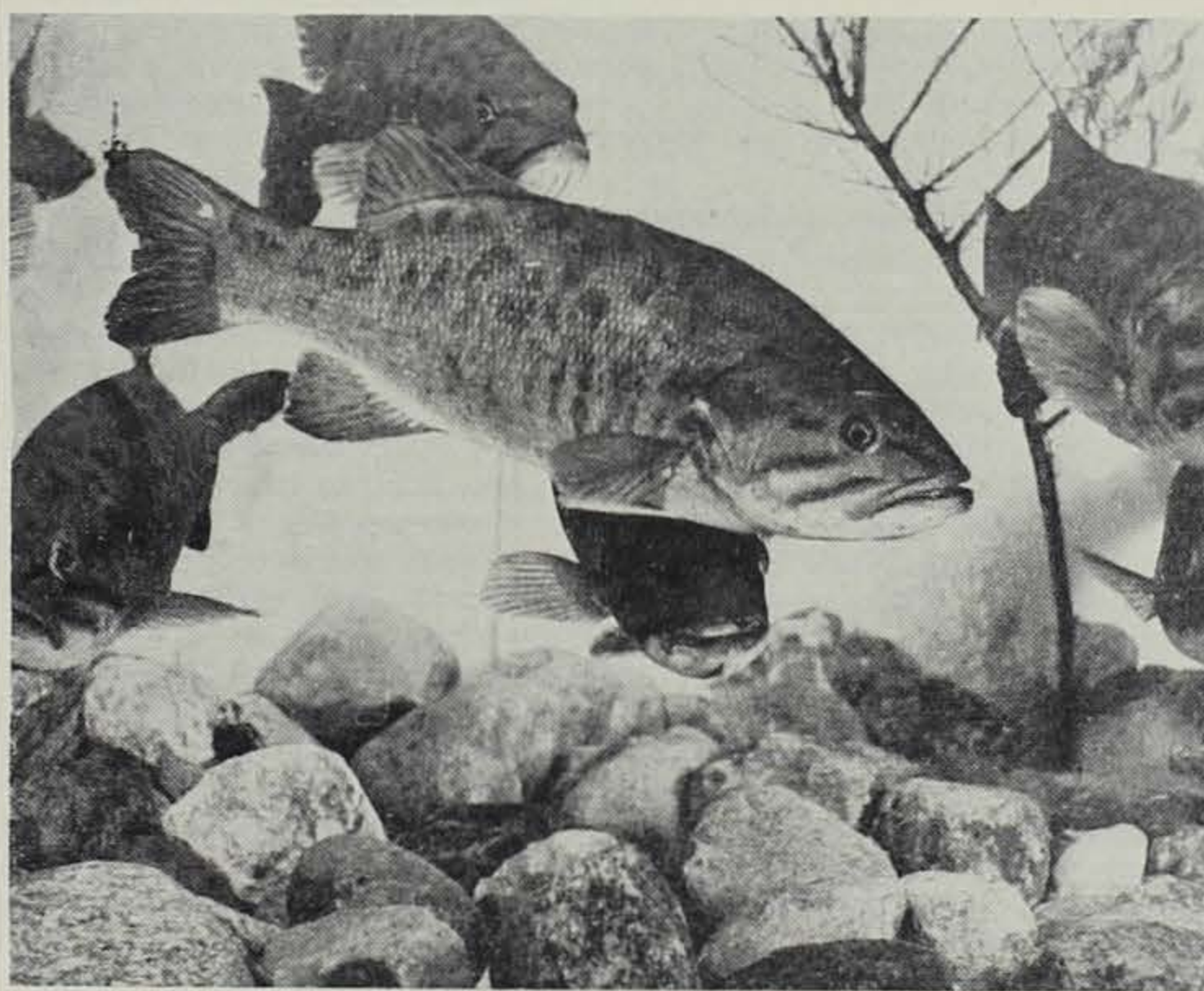
About 1880 the fisheries departments of many states, including Iowa, began to stock carp in the public waters, and in a few years it became firmly established in practically all of the suitable carp waters of the United States.

After a short period of popularity the carp became cursed and unpopular. Typical of many people's attitude toward this fish is the old recipe gag on how to bake planked carp.

"Catch a five-pound carp. Dress it, stuff with dressing, put it on a white pine plank or board, place in the oven, and bake for two hours. Remove from the oven. Throw the carp away and eat the plank."

This is nonsense.

(Continued on page 38)



The aristocratic smallmouth bass is an unscrupulous roughneck that requires clean, swift, cool water for his habitat. Jim Sherman Photo.

With all the traits of an aristocrat, and the usual shortcomings of an unscrupulous roughneck, the smallmouth bass stands head and tail above any strictly fresh water game fish of equal poundage.

The explosive energy in its powerful body and the dash of red in its predatory eye are bad medicine for any nearby food fish; by the same token, this savage instinct to kill its prey with a vicious surge accounts for the heavy impact of its strike.

It prefers only the cleaner, swifter, cooler waters and, in turn, is preferred by discriminating fishermen who like both edibility and capability. Here is a fish of the first water, that will fight to the last ditch.

Although sometimes confused with the largemouth bass, because of the similarity in general characteristics, the smallmouth is generally conceded a superiority in dash, stamina and acrobatics.

Those anglers who know it well respect it highly; those who have not learned to fool this gamester will find the smallmouth a difficult but worthwhile puzzle for solving.

A member of the sunfish family, the smallmouth in Iowa is called by many names—some of which are unprintable because they were coined just after this wily rascal had managed to leave a favorite lure tangled around a submerged root or snag.

Those names of complimentary or other origin are: bass, black bass, green bass, smallmouth, bronze back, and redeye.

Although the color of this fish will vary greatly, depending upon water conditions, the basic hue is usually close to a bronze or brassy green. The belly will vary from milky white to tattletale gray.

Darker bronze or dusky markings, appearing as vertical bands or patches, serve as excellent camouflage. Eyes are usually splashed with red, occasionally white ringed.

Since color cannot be taken as a guide in identifying the smallmouth

(Continued on page 38)

THE BAT KNEW IT FIRST

By Rachel L. Carson

Radar, with its power to safeguard night-flying planes against crashes into mountainsides or collisions with other aircraft, is an old story in the world of nature. Its advantages were discovered by that odd creature, the bat, at least sixty million years ago. Ever since the day when a small mouselike animal spread leathery wings and became the first mammal—and to date, the only one—to acquire the power of flight, the bat has been flying about the dark places of the earth and doing remarkably well about avoiding the trees, cliffs and buildings in his path. He escapes mishap by using a system that bears an uncanny resemblance to radar.

As everyone knows, radar detects approaching planes or other objects in the sky by filling the

air with a series of high-frequency radio waves, then receiving the echo that bounces back from anything in the path of the signals. The bat's method is very similar. Instead of radio waves, he sends out a staccato series of high-pitched cries.

These are not the squeaks you hear as he flies overhead on a summer evening; the bat's radar signals are pitched too high for human ears to hear—too high, perhaps, for the ears of any creature except himself. These supersonic cries fill the space into which he is flying. They strike some object in his path. No matter whether it is as large as the side of a hill or as small as a single strand of wire, the signals are reflected or echoed back to his keen ears. The echo warns him to change his course and avoid collision.

(Continued on page 39)

Iowa Conservationist

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order.

April Commission Action

A meeting of the Conservation
Commission was held at the Des
Moines office, April 5 and 6, 1948.

Members present were E. B.
Gaunitz, A. C. Gingerich, J. D.
Reynolds, E. G. Trost, F. J. Poy-
neer, and Mrs. Addison Parker.

The Commission:

Set the first Monday and Tues-
day of each month as regular meet-
ing dates for the Commission, un-
less otherwise designated.

Authorized attendance of three
Commissioners and three staff
members at joint meeting of Inter-
national Association of Game, Fish
and Conservation Commissioners
and American Fisheries Society at
Atlantic City, September 13-17,
subject to Executive Council ap-
proval.

Authorized attendance of two
Commissioners and two staff mem-
bers at waterfowl hearing in Min-
neapolis, April 23, subject to Exec-
utive Council approval.

Authorized attendance of As-
sistant Director and District Su-
pervisors of Officers at meeting of
Midwest Association of Fish and
Game Law Enforcement Officers
at Higgins Lake, Wisconsin, June
9-11, with approval of Executive
Council.

Authorized attendance of Direc-
tor and Commissioner Poyneer at
meeting to discuss Missouri River
Basin Studies at Lincoln, Ne-
braska, April 18, subject to Execu-
tive Council approval.

Adopted Administrative Order
No. 111 closing Upper Pine Lake in
Hardin County to fishing for the
1948 season.

Adopted Administrative Order
No. 112 opening ten north Iowa
lakes to minnow seining.

Authorized recommendation to

the Executive Council that 17½
acres in the bed of the Mississippi
adjacent to Bettendorf be sold to
the Aluminum Company of Amer-
ica.

Authorized title to 55-acre tract
in Heery Woods Park be allowed
to revert to grantors in return for
a quit claim deed to remainder of
park area.

Fixed May 11 as date for re-
gional waterfowl meeting to be
held in Iowa.

Discontinued use of cellophane
holders for hunting and fishing li-
censes.

Declined offer of gift of Pouska
Tract of 50 acres near Fort At-
kinson in Winneshiek County.

Granted request of Emmet Coun-
ty Board of Supervisors for an
easement of .09 acres on Birge
Lake in Emmet County to widen
highway.

Authorized completion of acqui-
sition of 60-acre Hurley Tract at
Waubonsie State Park.

Accepted resignation of Mary
Lewis, effective April 7.

Approved holding of conserva-
tion officer preliminary examina-
tion on April 26.

Ordered recording of Kalsow op-
tion on 160-acre prairie tract in
Pocahontas County.

Approved contacting Iowa rep-
resentatives in Congress, advising
that the Commission favors remov-
ing 20 per cent construction res-
triction on Pittman-Robertson
funds.

Refused request of Loren Harvey
of Knoxville to purchase a part of
the abandoned Des Moines River
bed between Harvey and Tracy.

Approved request of Tom Chris-
tensen to use a dragline to open
the lagoon at Triboji Beach on
Lake Okoboji.

Rescinded Administrative Orders
Nos. 15, 16, 35, 45, 3, 6, and 9
which conflict with Administrative
Order No. 110, setting the 1948
fishing regulations.

Approved statement to be pre-
sented by Director at a Public
Hearing to be held April 8 on Flood
Control Reservoir in the Des
Moines River proposed at the
Howell site.

Renewed permits of commercial
dock operators at Arnolds Park.

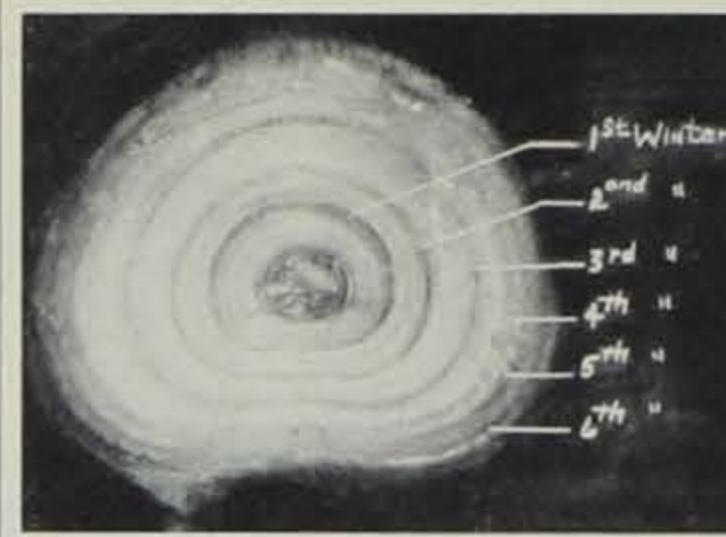
Appointed Paul Leaverton to po-
sition of Superintendent of Game,
effective April 1.

Completed formal action neces-
sary for transferring Lakeside
Laboratory on West Okoboji to the
State Board of Education.

Instituted condemnation pro-
ceedings on the Lanaghan Tract in
Goose Lake, Greene County.

Meeting adjourned.

In 2700 B.C. sage ancestors of Con-
fucius wrote on the forest influ-
ences, "To rule the mountain is to
rule the river" and "Mountains ex-
hausted of forests are washed bare
by torrents." It shows that they
knew of the menace of accelerated
erosion more than 4,000 years ago,
that they knew how to handle their
land. But they did not do so, for look
at that eroded, misused country to-
day.



End surface of vertebra from 10¼ inch
northern black bullhead. The fish is esti-
mated to be six years old. The annual rings
are labeled. State College Photo.

Bullheads Are Bullheaded

By William Lewis
Iowa State College

Biologists at Iowa State College
are finding the bullheads less co-
operative than other fishes. Most
fish record their age and life stories
on their scales, but the bullhead is
not so obliging. The age of a bull-
head is usually a secret. Can it be
that the bullhead claims a woman's
privilege?

The bullhead is one of the most
popular fish in Iowa, but less is
known about it than many less
important fishes. The little that
is known reveals that the bullhead
is a rugged individual. It will
grow and reproduce in ponds and
shallow lakes where no other food
or game fish can survive. As a re-
sult, bullhead fishing is to be had
throughout Iowa, often in places
where there is no other fishing. If
more were known about how this
fish lives and grows, bullhead fish-
ing could be improved in some
waters and could be provided in
others.

Much of what is known about
the life and growth of fishes has
been learned from marks on fish
scales.* Unfortunately, the bull-
head has no scales and hence can-
not be aged by scale reading. To
find some way for determining the
age of bullheads and to secure
information needed in the man-
agement of these fish, the Iowa
Cooperative Fishery Research
Unit† at Iowa State College has
been studying the vertebra of bull-
heads for the past year. The end
of each vertebra has a number of
light and dark rings. These rings
are somewhat like the rings on
tree stumps or on the scales of
other fishes. In the accompanying
photograph of a bullhead vertebra,
one can easily count the dark rings.

Each dark ring in a tree trunk
represents a winter, and the age of
a tree can be determined by count-
ing the dark rings. The dark rings
on the bullhead vertebra also indi-
cate the winter's growth. Bull-
heads grow more slowly during the
winter than during the summer
and therefore the part of the ver-
tebra which is formed during the
winter is different than the part
formed during the summer.

It would thus seem that the age
of the bullhead could be determined
by simply counting the rings on the
vertebra. However, in the studies

carried on at the college, some
bullheads of known age were found
to have more rings than one for
each winter. These additional
rings looked like the true winter
rings, except for minor differences
which could usually be detected.
Some of the bullheads will still
keep their age a secret until a fool
proof method of distinguishing the
true from the false winter rings
can be found.

Although it has been impossible
to learn the age of all bullheads
collected, interesting information
has been learned from the verte-
brae of some of them.

Lost Island Lake is famous for
its bullhead fishing. In fact, the
bullheads are so abundant that ap-
parently there is not food enough
for all of them. They are slow
growing, all about the same size
and most of them have empty
stomachs when they are caught.
Because of this condition, the Iowa
State Conservation Commission in
1946 removed all limits on the take
of bullheads in Lost Island Lake.
In the April, 1947, "Iowa Conserva-
tionist," Earl Rose, Fishery Biolo-
gist for the Commission, described
the reasons for and the results of
this lifting of the limits. Fishing
has continued to be good even with
the greatly increased fishing pres-
sure.

Rings on the vertebrae of bull-
heads collected at Lost Island Lake
in June, 1947, indicated that most
of the fish were four to six years
old. These bullheads were seven
and one-half to eight inches long
and weighed one-fourth to one-
third of a pound.

Some black bullheads were also
taken from a new farm pond near
Pella. In this pond the bullheads
were not crowded and apparently
had plenty of food. These fish
were only two years old, and yet
they were almost ten inches long
and weighed half a pound.

After aging several hundred
black bullheads, we have an esti-
mate of their average size at dif-
ferent ages. One-year-old bull-
heads are usually 2 to 3 inches
long; 2-year-olds, 3 to 4½ inches;
3-year-olds, 5 to 5½ inches; 4-year-
olds, 6 to 6½ inches; and 5-year-
olds, 6½ to 7 inches. This is a slow
rate of growth and may account
for the scarcity of large bullheads
in many of our lakes, ponds, and
streams. In some waters the
growth may be much faster than
here indicated.

*See "Fish Scales Tell Their Tales" in the
April 1948 "Iowa Conservationist."

†The State Conservation Commission, the
U. S. Fish and Wildlife Service, and the
Industrial Science Research Institute of
Iowa State College cooperate in this Re-
search Unit to provide information for the
management of Iowa fishes.

As a field border multiflora rose
will, in four to six years, produce a
fence that will hold all forms of live-
stock other than poultry. This living
fence saves the landowner time and
money because it maintains itself,
needs no pruning, and eliminates the
necessity of installing and maintain-
ing another type of fence.

Baby beaver are called kits.



With the return of spring the spiraling smoke of daytime campfires will be seen throughout the countryside. Jim Sherman Photo.

Spring and Young Dan'l Boone

Spring has come dancing back again, drawing the drab curtain of Winter behind her, her twinkling toes tossing crystal dewdrops from the greening grass. A million elfin subjects scatter wildflowers in her pathway and from every wooded hillside the chorus of birdsong sounds accompaniment for her dance.

And with the return of Spring, there comes a rebirth of the spirit of adventure in the hearts of young America. The summer months will find millions of youngsters tossing aside the cares of the school room and planning forays into the mysterious depths of the open spaces. Young make-believe Dan'l Boones, Kit Carsons, Buffalo Bills, and Izaak Waltons will gather along the creek banks and on the hillsides with home-made bows and arrows, sling shots, BB guns, cane poles, and worm cans for the great adventure dear to the heart of every boy.

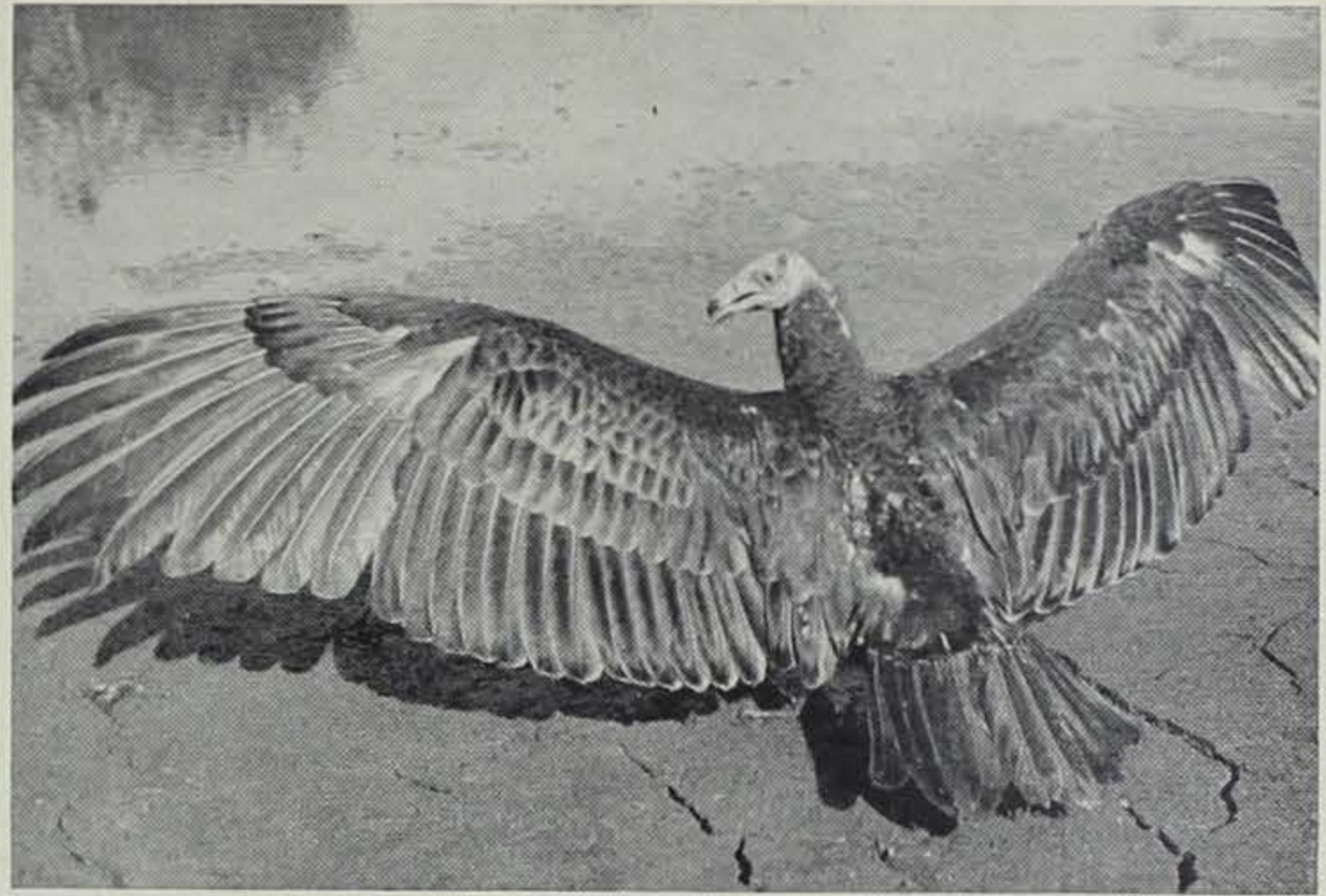
It won't be long before the spiraling smoke of daytime "campfires" and the crack of the .22 rifle will be

seen and heard throughout the countryside. "This is the time," says Henry P. Davis of Remington Arms Company, "for sport loving adults to step in and take a 'big brother' interest in the field activities of our youngsters. Not with the idea of spoiling the fun, of course, but to show young Dan'l Boone how to shoot his imaginary 'b'ar' with danger to himself, his companions or the public."

Boys naturally resent any adult intrusion into their world of make-believe, but playtime campfires can do untold damage when left untended and a .22 rifle is not a toy. Once you make it plain to the youngsters that yours is not the role of a butt-inski, but of one who wants to help them get the most enjoyment out of their outdoor adventures, you'll be welcomed with enthusiasm. In fact, you'd better be prepared to answer a lot of simple yet often difficult questions.

We, as sportsmen, can make no greater contribution to the enjoyment and well-being of our youth than by seeing that they are started off on the right road to a fuller enjoyment of the outdoors and its many fascinating advantages. It is the dream of almost every American boy to own a gun and go hunting like Dad or Uncle Jim or Mr. Brown. And it is our responsibility to educate him in the proper use of that gun, its safe handling and the fundamentals of shooting. Once his responsibility as a gun owner has impressed itself upon his absorbent brain, he becomes the best teacher his comrades can have. The instillation of such responsibility is a step toward making him a leader among boys of his own age and fine preparation for his future adult life.

An easy shortcut to young education in shooting and safe gun handling is the "Be a Ranger" program sponsored by the Sporting Arms and Ammunition Manufacturers' Institute, in cooperation with the National Rifle Association. Any boy or girl can partici-



All birds are not beautiful. Certainly even the mother of this turkey vulture would not make claim to beauty for her offspring. Jim Sherman Photo.

pate in this program. And if he or she can qualify by shooting three scores of at least 70 out of a possible 100 on a target, furnished free, from a distance of 50 feet, that youngster will become a N. R. A. Ranger and will receive a handsome Ranger emblem.

Full information concerning this program can be obtained by writing the Sportsmen's Service Bureau, Sporting Arms and Ammunition Manufacturers' Institute, 343 Lexington Avenue, New York. The inquirer will receive a pamphlet fully explaining the Ranger program and containing complete information on shooting fundamentals, care of equipment, safety practices on the range in the field and club organization before he can take part in the Ranger program. This plan is designed to help Young America to get off to the right start with firearms, to enjoy them to the fullest and to bring home the responsibility which goes with gun handling.

—Remington News Letter

ALDO LEOPOLD DIES

Dr. Aldo Leopold, 62, member of the Wisconsin Conservation Commission, and nationally known conservation authority, died recently while fighting a grass fire near his summer home at Barabou, Wisconsin. A native of Burlington, Iowa, Dr. Leopold was a past president of the American Wildlife Society and a Professor of Wildlife Management on the faculty of the University of Wisconsin for the last 15 years. He has written several books and many articles on forest and game management.

Dr. Leopold left an indelible imprint on game management practices in Iowa through his study and recommendations in the "Iowa Twenty-five Year Plan" published in 1933. His basic findings and recommendations resulted in Iowa's modern game management plan.

The Upper Iowa River falls over 700 feet during the course of its 135-mile journey to the Mississippi.

WHY THE CREATOR MADE MALE BIRDS BEAUTIFUL

Tuesday afternoon, two bright young ladies and an equally bright young man from the high school were viewing an exceptionally beautiful red bird with black wings and a female with dirty yellowish green back and dull colored wings, perched in a tree west of the band stand in Central Park.

The youths, trying to identify the male, finally decided that it was a scarlet tanager, but the two young ladies questioned the Creator's justice in making the male so beautiful while his "wife" is not nearly as beautiful.

One of the young ladies contended the Creator had to dress the "dude" up so beautifully or the lady of his choice would not fall in love with him nor follow him all over the face of the earth in his wanderings, spring and fall.

The other young lady was of the opinion that the "dude" was dressed up in such conspicuous apparel so the "wife" could easily shadow him at a distance to see if he were holding secret meetings with some "hussy" unbeknown to her.

But the young gentleman came up with an answer that we believe is more nearly correct. He opined that the Creator colored the female's feathers so that they blended with the surroundings and the materials from which the nest is made.

If an enemy hawk or a cat, out on a hunt for a delicious morsel of bird meat, came in close proximity to the nest, the brilliance of the male bird would attract that enemy away from the mother and her children. Then he added: "Just like you women, you call the men 'dudes' and suspect them of hidden motives, when they are performing the noble duty of risking their lives in defense of their homes and loved ones."

—Fairfield Ledger

Before the Magna Charta in 1215, wild animals and birds belonged to the English king as an individual.



"We, as sportsmen, can make no greater contribution to the enjoyment and well being of our youth than by seeing that they are started off on the right road to fuller enjoyment of the outdoors." Jim Sherman Photo.



Black suckers and trout live in the same water and the successful sucker fisherman uses the same tackle, bait, and technique as for trout. Jim Sherman Photo.

Fins, Furs and Feathers

If you will take carp or sucker meat, cut it into slices the right size for catfish bait, put the slices in a fruit jar, salt it slightly, then pour on a little milk and sprinkle on a generous quantity of cornmeal, sealing the jar loosely, set in a warm place and let ferment for a couple of days, you will have an excellent catfish bait. This recipe costs you nothing—it will work—give it a try.

Last opening day, I watched several trout fishermen as they endeavored to outsmart the trout. They had no success whatever. They made too much commotion, they openly exposed themselves to the pools, they used too heavy sinkers and too large hooks. You must use a gut or nylon leader to make the line invisible in the water—you must use a very small hook—preferably a No. 8—and a sinker no larger than a split BB shot. And for goodness sake, use caution in approaching any part of the stream you expect to angle in. Be as careful in your approach to the trout stream as you would be in approaching a covey of quail. And if you expect to catch your limit of trout, use patience. The trout are in those pools—if you are quiet, patient, and use the right bait and hook and sinker, you'll eventually get your share. But if you are a runner-up-and-down the stream, you will get few trout.

Black suckers are hitting good now. Most any hole in the Maquoketa has a good school of these very fine fish. For them, use exactly the same tackle, bait and technique as for trout. In the past ten days, I've caught about fifty nice black suckers. At this season

of year, they are superb for eating. No fish that swims is more delicately flavored and, except for a few small bones, no fish is more desirable for food. After the water gets warm, suckers become too soft in flesh to be good eating. So, go sucker fishing now—they are really taking the hook.

Women are not required to have a fishing license unless they go fishing in a state-owned lake. Then the girl friend must have a license. Nobody under sixteen years of age is required to have a license, and no license is required of a person who receives old age assistance.

According to the wording of the state law, you and I are acting illegally if we give our friends any minnows. The law says: It shall be unlawful for any person to take or attempt to take minnows for commercial purposes—and commercial purposes are construed to mean selling, giving, or furnishing to others. That's the way the law reads—so if I try to borrow a few minnows from you and you let me have them, you may get in "dutch" with the law. I must procure my own minnows and you must procure your own minnows—we can buy them from a licensed dealer, but I can't give you mine, nor can you give me yours.

There's a lot of fun in fishing for chubs, especially those big red-headed fellows. They strike with almost the viciousness of a trout, and they are gamey little fish. And in the frying pan they're tops. When taken from cold water, I don't know whether there is a better flavored fish. In this neck of the woods, I think Buck Creek is the best stream for the big chubs. But even in Buck Creek you must know the right pools.

Given a week of really warm weather and the carp will start hitting. And if this spring's high waters prove anything, there'll be tens of thousands of big carp in

the streams. One day in February when the river was out, this writer put on his boots and floundered over the bottomlands south of town. He saw great quantities of carp that would weigh up to ten and fifteen pounds. And he also saw large numbers of bass that would beat three pounds.

For carp, the dough baits are best. Carp do take worms, but they have a peculiar yen for dough baits. Ordinary graham bread worked into a stiff dough is favored by many carp fishermen, others demand the corn-meal mixture. Soybean meal cooked stiff and flavored with salt, vanilla and black molasses makes a good carp bait. My preference for a carp hook is the No. 22 Cincinnati bass. Most carp fishermen will tell you they catch more carp fishing upstream, instead of the conventional downstream.

The high-browed anglers sneer and scoff at the carp fishermen. But I have a notion there is quite as much real sport in catching carp as there is in catching catfish or bass. Of course, the catfish and the bass are more desirable as food, but for sheer sport, the carp rates along with the best of the game fish varieties. I use a fly rod for carp, with a ten-pound test leader. Now, if somebody tells you it isn't a battle to handle a big carp on such tackle, then tell that fellow he doesn't know his fishing. Personally, I think the carp, pound for pound, has more pulling power than a bass. The carp hasn't the sparkle and dash that has the bass, but bass never get to fifteen or twenty pounds either.

Last year, a fellow was fishing at Guttenberg for catfish, using dead minnows. He had a light tackle outfit and he was scolding the guys who were fishing for bluegills and sheephead.

I was trying for bluegills—this fellow of whom I write was within

five feet of me. I saw him get the strike—the fish made a good run, and the man struck and hooked the fish. I've never seen a more trying fight. The fish hooked was huge—the man had light tackle—and really was an expert. In about thirty minutes, the fish was vanquished and brought to the net. It was a carp—we weighed it and it went 22 pounds. Well, that chap said, "I'll be darned. I'd have sworn it was a catfish. I'll never say again that carp have no fight in them."

I've seen carp taken from below the Hopkinton dam that were real tackle busters. I saw one lost there last summer that I believe was four feet long. So, the carp fisherman does get thrills—and the thrill of landing a big carp is just as nerve-wrangling as is the thrill of getting any other big fish.

—Hopkinton Leader

NOW IS GUN REPAIR TIME

The best time to have your gun repaired, refinished or given a general going-over is right NOW, according to Remington Arms Company.

"A good many sportsmen put off small repairs and even overhaul jobs until the last minute and then hope for QUICK service. We could give much better service if they would not delay in sending these guns in and thus avoid the rush. If the repair is a minor one or one not requiring special work, it will be best to turn it over to a competent local gunsmith who is not so far behind in his work as the repair staff at the factory. They'll get quicker service that way."

All gun manufacturers maintain custom repair and service departments for firearms of their own make. When the gun is received at the factory, it is registered and given a file repair number, then stored awaiting correspondence from the owner. Factory service men then give the owner an estimate of the cost of the work desired and suggest whatever additional work seems necessary or advisable. Upon authority from the owner, the repairs are made and the gun returned as promptly as possible. Each is taken in its turn, except in cases of emergency.

In sending a gun to the factory, it should be taken down and carefully packed in a good stout box or heavy, double-thick cardboard carton. The trigger guard should be tagged with the sender's name and address and the model and serial number of the gun.

A separate letter should be written to the factory which will explain in detail the repairs desired, referring to the gun by model and serial number. This letter should be mailed before or at the same time the gun is shipped. Have that gun put in shape NOW, and it will be ready when next season rolls around.

—Remington News Letter



When fishing the northeast Iowa trout streams the angler must use caution in approaching the pools. Be as careful in your approach to the trout stream as you would be in approaching a covey of quail.



Big catches of small bullheads have been common in Five Island Lake, but most anglers would rather catch fewer but bigger fish. Thinning bullhead populations is the answer to larger individuals.

Five Island Bullheads

Big catches of small bullheads have been common since the first week of the month. These bullheads, averaging about half a foot in length, are here in abundance and easily caught.

As ANYONE who has fished Five Island for bullheads the last few years knows, the size of the fish has decreased as their number has increased. The bullhead population appears to be going through the same cycle the bullheads in Lost Island Lake passed through in the early 40's.

We would rather catch fewer but bigger bullheads and believe most other fishermen would go along with us on this. But we weren't so sure last Sunday after talking to a couple who had driven here from their farm between Plover and Rolfe to catch a mess of fish.

They were propped up on camp stools fishing from the west shoreline north of Dr. Marks' home.

When we passed by, they had caught three and the farmer's wife was hauling in a fourth. They did not concur when we said the bullheads were "too small."

"Why, these are the very best size for eating," the farmer's wife told us. "We think this is the best bullhead lake there is. There is no place we'd rather spend Sunday afternoon than right here catching bullheads."

So we backed right out of the argument. Maybe we don't appreciate what we have because we don't see it as others see it.

John Buffum and Stan Price caught a boatload of bullheads the other day in the lake here, hoping they would run across some of the larger ones. But they didn't. There is no bag limit, daily or possession, on bullheads this year and Buff had a good suggestion: Don't throw back the small bullheads you don't want, but dispose of them in some other way. This will help relieve, in a small way, at any rate, the congestion of bullheads in the lake. The sooner they are thinned down the sooner we should be catching bigger fish.

However thick they may be, apparently the bullheads aren't starving. In all cases those who have hooked them reported they are fat as butter. Add to this By Moad's claim Five Island Lake bullheads have the best flavor of them all and you have a fine eating fish, small though many of them may be.

—Emmetsburg Democrat

Sweden has practiced a forestry program, beginning in 1600. As a result of her conservation practices she has no ghost areas. She has set up a fine program because each citizen feels a personal responsibility for wise land use and as a result a fine public policy has been developed.

The poison from ivy is of an oily nature, so if you fear you have come in contact with it, wash the hands or other exposed parts with an alkali such as baking soda, weak ammonia, strong soap, or wood ashes.

Wardens Tales

Shop Talk From the Field

Conservation Officer Tom Berkeley, in charge of Madison and Dallas Counties, writes:

"When on winter fish patrol on the 'Coon between Adel and Van Meter, I arrested some spearkers and they had in their possession 30 catfish. Before taking them into court, I looked over their fishing site and found they were operating right in the middle of a huge concentration of catfish. I had never before seen anything like it, so I reported the concentration to Harry Harrison, fisheries biologist.

"It was decided to make a catfish count in this winter concentration so we sawed a channel in the ice a foot wide and 12 feet long across the channel. I drove the fish down past the open channel while Harrison made observations through the slot. He figured the number of fish under the hole at one time, then the time it took for the group to completely change, then the time it took for the whole school to pass under this spot. He arrived at an estimate of 25,000 channel catfish in this one hole. He explained that his estimate was ultra-conservative and the school could easily contain 50,000 fish because many passed on downstream outside the ends of the channel.

"The fish were in several distinct size groups, one inch, four inch, eight to ten inch, fourteen inches, and over eighteen inches, many in the last group that would weigh six to eight pounds.

"We visited with the farmer who owns the land adjacent to this spot and he said that he had lived there for over 40 years and that as long as he could remember a tremendous group of catfish congregated in the area each winter.

"I could scarcely believe my eyes when I first saw this concentration, and Biologist Harrison's eyes popped out like a couple of oranges when this mass of catfish began moving past his observation point."

Conservation Officer Wes Ashby, in charge of Washington, Iowa and Johnson Counties, writes:

"Fox and coyote hunters in this vicinity have long believed that the red fox and the coyote did not get along very well together. I had a chance to see why they think so during the past winter, and I agree with them.

"I was tracking a pair of coyotes with some of the boys when we found where they had entered a patch of downed timber, obviously hunting rabbits. They had come upon a red fox hunting in the same timber patch. They immediately put the hot foot to Br'er Reynard, but lost him in some heavy timber and brush a quarter of a mile away.

Further on where they had been feeding on dead chickens, which a farmer had hauled out with a load of manure, they got a sniff of a fox that had crossed upwind almost two blocks away and over a knoll. The coyotes again gave chase and from the appearance of the tracks, Br'er Reynard almost met his coyote Waterloo, but he finally got away by the hair on his brush in some timbered gullies fully a mile from where the chase began."

Charlie Adamson, conservation officer in charge of Scott County, writes:

"Last fall at the Five States Duck Enforcement Meeting at Davenport, about a hundred game wardens from Iowa, Illinois, Wisconsin, Missouri, and Minnesota, as well as United States Game Wardens, were seated in the dining room of the Blackhawk Hotel beginning their evening meal. In through the dining room door, with all the majesty and poise of full-rigged frigates came a group of unusually well-dressed ladies. They swept across the dining room to the far side and were seated. A hush fell on the assembly of officers and the ladies became the center of all eyes, for one of the matrons was wearing an unusually attractive hat, trimmed with the snowy white plumes of the American egret.

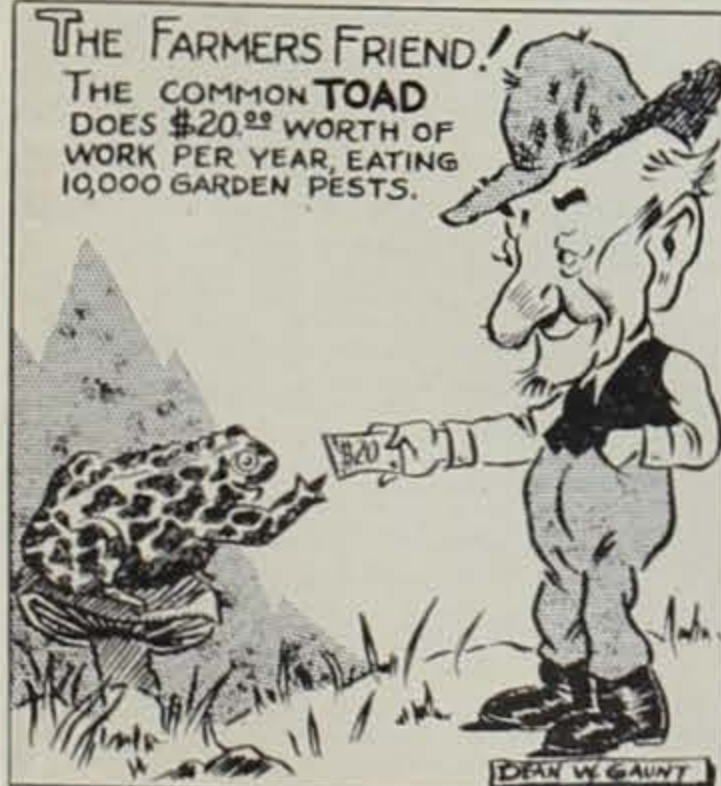
"Under federal law, it is illegal to use the plumes of the egret for trimming or even to have them in possession. The wardens finished their lunch and then clustered in the lobby. Among their numbers was Floyd H. (Flick) Davis, Acting Regional Supervisor of Law Enforcement for ten middle-western states for the U. S. Fish and Wildlife Service. When the 'hat' finished dining and came into the lobby, Davis stepped up and said, 'I beg your pardon. Would you mind telling me if those are egret plumes on your hat?' 'Why, yes, they are', promptly replied the matron, 'and I'll bet I'm in wrong for wearing them because my sister told me they were illegal.'

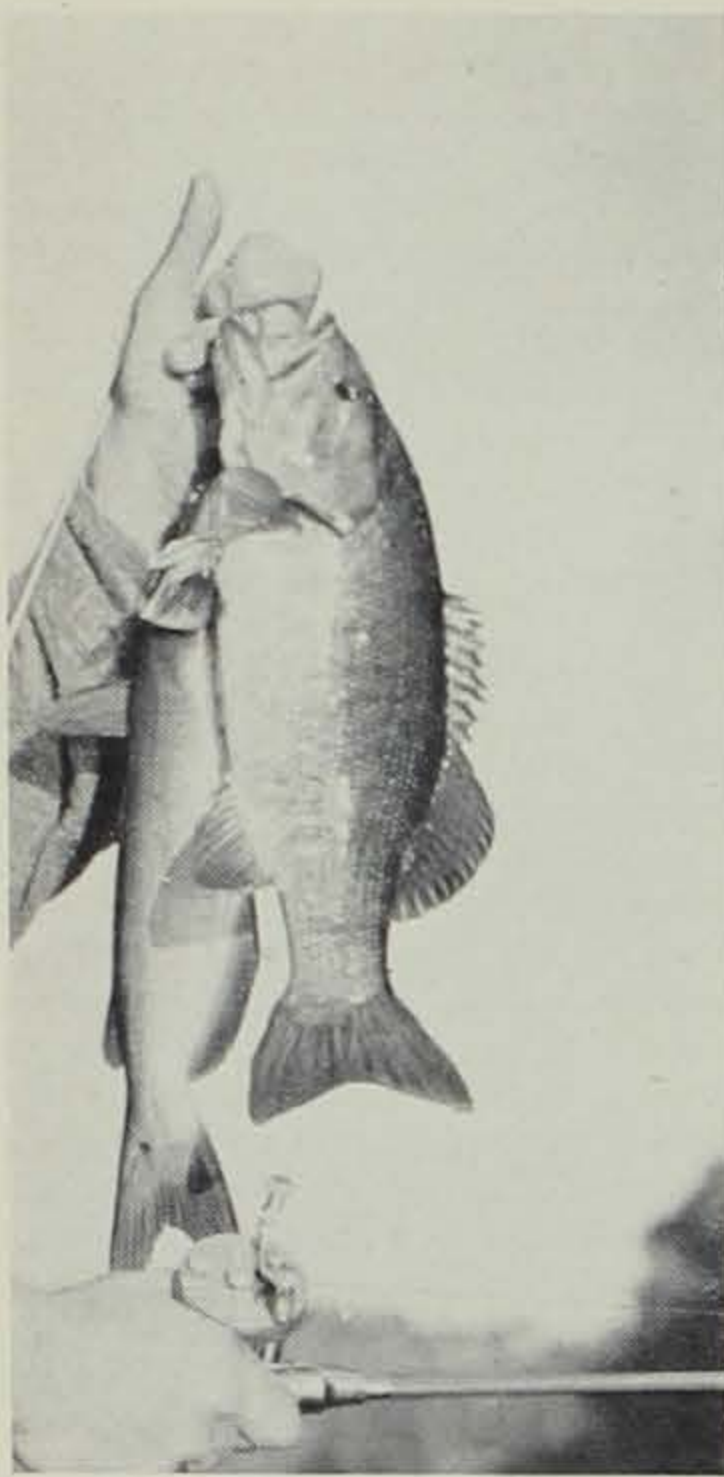
"Davis then presented the group and told the now startled lady who they all were. Further conversation developed the fact that the plumes had been obtained in India more than 20 years before when the lady had visited that country. They had been carefully preserved and were as beautiful as though they had just been plucked. The law was explained to the matron who now realized just what a furor her hat had caused, and she asked Officer Davis what he suggested. He replied, 'Under the law, the plumes must be confiscated, but they are much too lovely to destroy so suppose that after you return home, you send the plumes to the State Historical Department Museum where they will be under the watchful eye of The State Museum Director.'"

OUTDOOR ODDITIES

BY WALT HARVEY

THE FARMERS FRIEND!
THE COMMON TOAD
DOES \$20.00 WORTH OF
WORK PER YEAR, EATING
10,000 GARDEN PESTS.





Smallmouths up to nine pounds may be taken, but the average throughout the country varies from one to two pounds. Jim Sherman Photo.

Smallmouth Bass...

(Continued from page 33)

from the largemouth, here are positive differences: with mouth closed, the jaw hinge, or maxillary bone, at its rearmost extremity will be directly below the eye of the smallmouth. On the largemouth, the maxillary extends beyond the eye.

Also, on the cheek of the largemouth, there are 10 oblique rows of scales, where the smallmouth has 17 rows. The largemouth has no scales at the base of the dorsal and anal fins while the smallmouth does have these.

In addition, the dorsal fins are different, since the soft and spinous dorsals of the largemouth are separated by a deep notch, while on the smallmouth the separation is very slight.

When seeking a scrap with a smallmouth, pass up the sluggish, unattractive waters and try your luck in the faster moving streams where the clear waters rush over rocky or sandy bottoms and swirl around such cover as undercut banks, boulders or logs. Deep, clear pools and the foot of riffles are excellent feeding places.

While smallmouths up to nine pounds are taken every year, these are certainly exceptions, for the average throughout the country will vary from one to two pounds, and in the south slightly higher.

The smallmouth resembles the largemouth in the choice of foods since it will eat nearly every type of digestible offering. Heading its menu are: minnows, frogs, crawfish, worms, insects, small water snakes, field mice, small birds, baby

muskrats, helgrammites, grasshoppers and larvae in general.

Casters will find best results with smaller, more active spoons, underwater plugs, spinners with bucktail or pork rind combinations and noisy surface lures. Fly-fishermen get results with wet and dry flies, fly and spinner combinations, bulky hair lures and plastic or wood imitations of minnows, frogs, etc.

Bait fishermen prefer chubs, minnows, soft-shelled crawfish, grasshoppers, and helgrammites.

One final word of caution; the smallmouth is extremely sensitive to vibration, so, when nearing a prospective spot, use the utmost care in effecting a quiet approach. If wading, scoot the feet along as carefully as if stalking a deer; if fishing from a boat, approach the chosen spot from upwind and use both anchor and oars with discretion.

—Heddon Fish Flashes

Carp...

(Continued from page 33)

How did this fish gain such ill repute as a food fish? There are three important reasons and we will discuss them briefly.

First, the carp is charged with having a muddy taste. Let us see about this.

Like the largemouth bass and some other popular game fish, at certain seasons of the year and in certain waters the carp does acquire an unpleasant taste from its surroundings. This generally occurs in shallow water during the latter part of July and August when shallow waters become very warm. Many people have experienced the eating quality of carp from this type of water and have declared them bad.

Carp taken from running streams and from moderately deep lakes during the cool season of the year have a delicate flavor, superior to that of some of the popular native game fish. This is the collective opinion of the hundred thousand anglers who know.

The second charge against the carp is that it is boney. This is true. It has the same major bones as, for instance, the catfish; but in addition has numerous bunch bones above the lateral line from head to tail. These little bundles of bones are the cause of the difficulty but they are not of enough importance to condemn the carp as a food fish.

Small carp up to two pounds may be scored and these very fine bunch bones may be cooked and eaten without removing them. For larger fish, it is easy to determine the pattern of the bunch bones and pick them out by hand. The result is a bone pattern much the same as any other fish.

The third major charge against the carp from a food standpoint is that it is soft. This is true to some degree, especially in shallow lakes during the warm summer

months. Carp found in deep cold water lakes and in streams remain rather firm fleshed even in July and August and do not become as soft as, for instance, crappie from the same body of water.

Carp is a good food fish. An excellent booklet titled "Eat Iowa Fish," prepared by the Cooperative Research Unit, may be secured cost free by writing to the State Conservation Commission. The booklet contains dozens of recipes on fish cooking, as well as tips on dressing, handling the fresh catch, smoking fish, and other valuable information.

Carp are a sporty fish and even the game fish purist will have to admit that a five- or ten-pound carp when taken on light tackle gives the angler plenty to think about before the fish is safely landed.

Carp generally feed in schools. They are located in streams much in the same types of water that catfish are found. Most fishermen believe, however, that if the school of carp moves into a hole the catfish move out. Although catfish are often taken in very shallow water even in the daytime, carp prefer deeper water during the daylight hours. Carp, for the most part, do not prefer to feed in the center of the channel, but like the quieter deep water holes, especially those that contain drifts where they feed with a loud sucking noise on the underside of logs.

Carp baits are very numerous. The fish may be taken readily on fresh sweet corn, worms, and the white meat of crawfish tails. By far the most popular carp bait, however, is dough ball. Basic doughball may be made by stirring a cup of white corn-meal into a cup of boiling water and cooking about two minutes. The corn-meal

then may be worked into a sticky ball.

Some carp fishermen use a treble hook; however, the experts use a No. 2 or 4 single hook, upon which a small round ball of dough ball is formed.

Cook up a batch of dough ball and take it along the next time you go on a fishing expedition. If your favorite fish is sulking and will not take your bait, slip on a chunk of dough and see for yourself what a hundred thousand other Iowans already have learned.

J. D. REYNOLDS APPOINTED TO IOWA CONSERVATION COMMISSION

J. D. (Deg) Reynolds, Creston attorney and long interested in sports and conservation, has been appointed by Governor Robert D. Blue as a member of the Iowa Conservation Commission.

Reynolds will succeed Guy Young of Bedford, who resigned last August.

The appointment will be submitted to the 1949 state senate for confirmation. The term runs until 1951. Reynolds is a Democrat.

CENTENNIAL "SNAKE HUNT"

We see by the Winterset Madisonian that a rattlesnake hunt held one hundred years ago in Madison County is to be given centennial recognition. In the hunt in 1848, 3,750 of the venomous reptiles were slain. Apparently the hunters missed a few and now, 100 years later, the sportsmen's club in that county is going after those the pioneers missed.

—Chariton Leader



One hundred thousand Iowans have learned that the carp provides fast fishing action and when taken from good waters in the spring or fall is an excellent food fish. Jim Sherman Photo.



The bat's radar signal is a series of high pitched cries. These cries are reflected or echoed back to his keen ears.

The Bat . . .

(Continued from page 33)

This amazing system, antedating modern electronics by millions of years, has been revealed by two scientists working in the laboratories of Harvard University, Doctors Robert Galambos, now of the University of Rochester Medical School, and Donald Griffin. Ever since 1794, when Spallanzani performed the first experiments on the flight of bats, researchers have been trying to explain the bat's ability to fly in complete darkness without accident.

After proving that bats do not depend on sight to dodge obstacles—blindfolded bats flew just as well as those that could see—Galambos and Griffin made an important discovery: The bats blundered about helplessly if their ears were plugged or if their mouths were taped shut. To detect objects in their path, apparently they had to hear something. But what? Since they also required freedom to open their mouths, evidently they heard sound they uttered themselves.

To discover whether the bats might be producing sound inaudible to human ears, Galambos and Griffin borrowed elaborate sound-detection apparatus from Harvard's Professor G. W. Pierce, a specialist in supersonics. When the instrument, capable of translating supersonic sound waves into audible sound, was set up in the laboratory, the bats were again released. Instantly the apparatus gave out a tremendous, chattering clamor. The din continued as long as there was a bat in the air, ceased as soon as the last bat had tired of fluttering about the room.

When their tests were finished, the Harvard scientists had a complete picture of the bat's method of blind flying. This is what happens when a bat is about to take off—from his perch on the wall of a cave, in a hollow tree, or on the inside of your window shutters—he begins to send out his signals, a series of supersonic cries. At

first, the cries are uttered at a comparatively slow rate, less than ten per second. Then, as the bat launches out into the air, they come faster, at a steady rate of thirty per second.

Now something happens. The bat hears a faint echo of his cries coming back to him—trouble ahead! Instantly he speeds up his cries, uttering up to fifty a second. The increased burst of sound apparently gives a stronger echo, telling his alert brain just where the obstacle is. He changes his course until the echo becomes fainter, dies away. Then, as he speeds safely past the tree or post or church steeple, his cries drop back to the cruising level of thirty per second.

Why don't we hear the clamor of the bat's incessant cries as he flits about overhead? It's a matter of the frequency of the sound wave. The bat's signaling voice lies in the wave band of about 50,000 cycles or vibrations per second. Human ears detect sound anywhere in the band from 20 to 20,000 cycles. The limit of hearing for dogs and cats is about 35,000 cycles, and for rats about 40,000. These figures are higher than those for any other mammals tested, except bats, which appear to hear sounds up to at least 98,000 cycles, perhaps higher.

Not only are they equipped to hear their own signals; bats have extraordinarily well-developed vocal apparatus for uttering these high-frequency sounds. For years, anatomists have marveled at the great development of the bat larynx. In one species, the African hammerheaded bat, this organ is so enormous that it is one third as large as the entire body cavity. In all bats, the vocal cords are short and tough. Large muscles are attached to the voice box in such a way as to put great tension on the cords.

How bats developed their sonic detection apparatus is not known, but of all animals they are most in

need of some such device. Practically all bats are night feeders and most live on insects which they capture on the wing, dodging, twisting and turning in intricate aerial maneuvers. Some live in dense forests, where they hunt among the trees. Others use deep limestone caverns as sleeping quarters. Entering and leaving the caverns, the bats must fly long distances through the pitch-black corridors.

Mother Bat Knows Best

The bat's radar system sometimes means more than individual safety. Mother bats carry their newborn young with them during the first days of life. The youngster clings to its mother's fur with claws and teeth, and rides with her far into the night skies as she searches for food. After a few days, however—perhaps when the young bat becomes too heavy to maintain his perilous hold—Mother leaves him at home, hanging him up in good bat fashion by his hind claws on the wall of their cave while she goes a hunting.

Fossil records, which often tell much about the beginnings of ani-

mals, are incomplete in the case of the bat. The earliest known fossil is quite a good replica of present-day models and helps not at all in revealing what the first bats were like or who were their ancestors. This first known bat lived in Eocene days, that curious period some sixty million years ago when tropical plants grew in Alaska.

But long before the first fossil record, the ancestor of the bat, scientists believe, was a shrewlike creature, tree-climbing, flightless. When these forerunners of bats were learning, first to leap from tree to tree, then to make long glides from the treetops to the ground, and finally to launch out into aerial space, they must have developed, along with leathery wings, the special faculties that probe the darkness and make night flying safe. There must have been failures and fatal crashes in those early trials. We know only that those pioneering bats finally succeeded, that they perfected and used the counterpart of radar millions of years before man laboriously developed it.

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If We Treated Our Homes As We Do Our Woods



What A Lucky Thing Folks Never Took To Holding Picnics In Other Folk's Houses



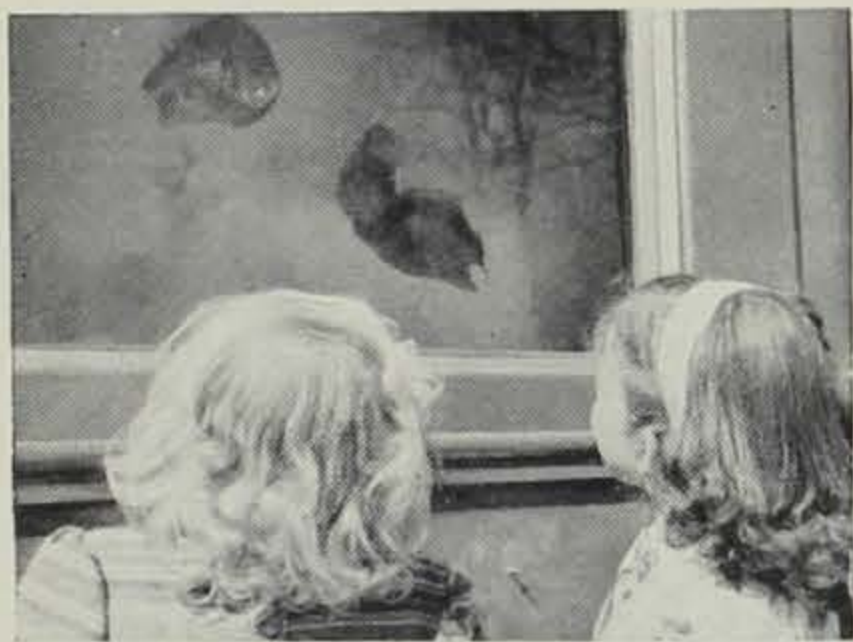
Moral: Take Your Indoor Manners With You When You Go Outdoors

Reprinted from "Our Great Out-of-Doors," published by Iowa Division Izaak Walton League.

TRAVELING EXHIBIT GOES TO SCHOOL



State Center school children view the new State Conservation Commission Exhibit during its first week on the road. Commission employees and teachers explain the various live fish and animal displays to the primary children while the upper grades are attending a 30-minute conservation talk in the assembly room. The exhibit is on a 5-week shakedown school tour, during which more than 30,000 school children will view the show. Photos at State Center School by Jim Sherman.



School children from near-by rural schools are brought by car and bus to the city school ground to see the wildlife show.



Conservation Officer Walter L. Harvey operates a slide projector while State Center youngsters absorb a recorded conservation talk.



Lady, the exhibit's coyote, undisturbed by the student visitors, poses with dignity for the photographer.



The antics of Penny, the orphan raccoon, is the reason for the intense attention of these youngsters, who in a few years will be responsible for the conservation of our natural resources.



The entire purpose of the mobile traveling unit is to bring forcefully before as many school children of Iowa as possible a few of the basic conservation principles.