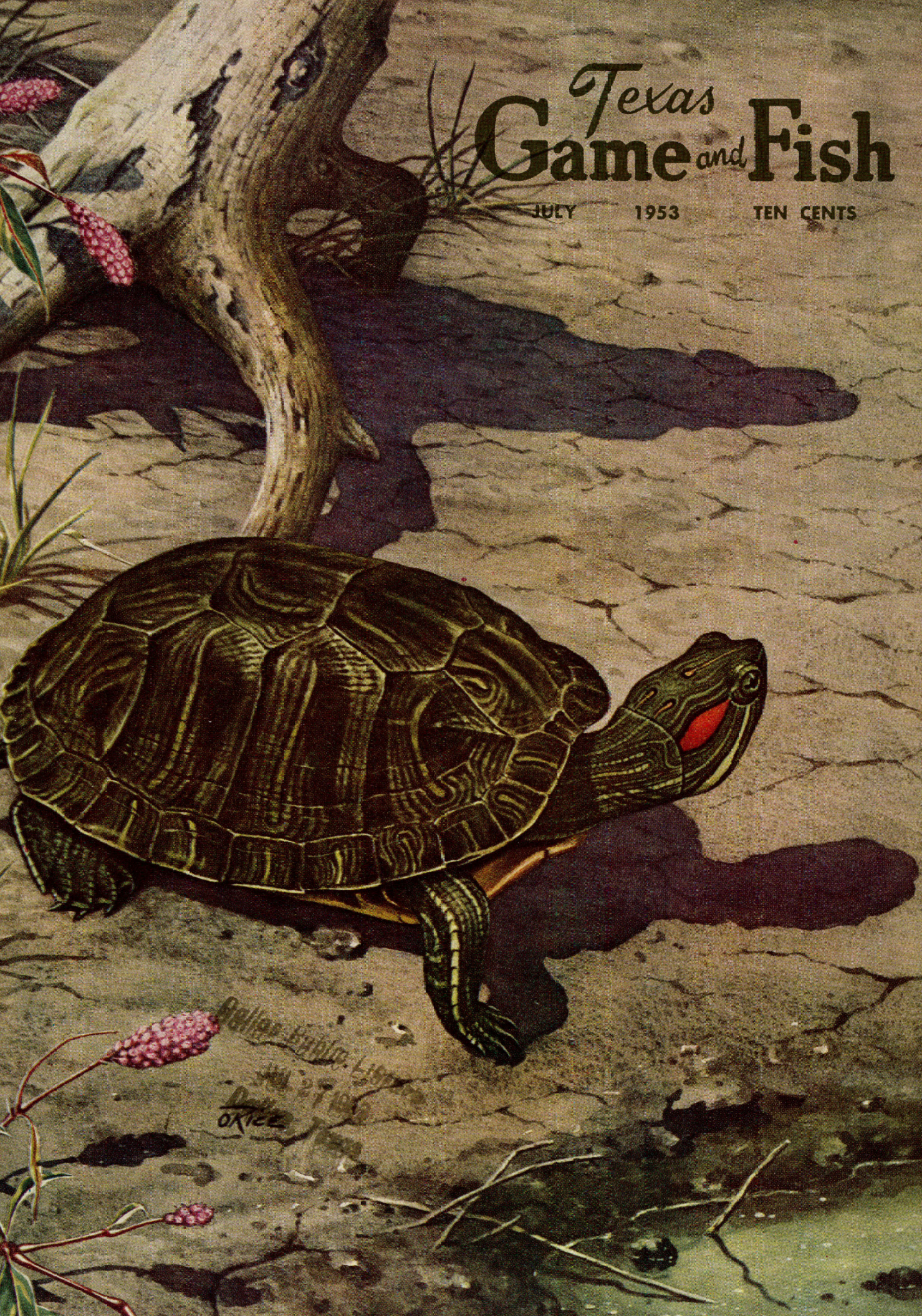


Texas Game and Fish

JULY

1953

TEN CENTS



Bulletin of the
Texas Game and Fish
Department
ORICE



Staff photo by Clyde Graham

A BLACK WHITE-TAILED DEER?—or is it? Game Warden Grover Simpson believes it might be. This female fawn, along with another fawn, a black buck, and five black does, have been seen on Johnny Reimer's ranch at Hamilton Pool near

Austin. These deer are reported to have markings to indicate that they might be black-colored white-tails. However, Commission wildlife biologists, with nothing more than this picture to go on, think they might possibly be an imported breed of black deer.

Texas Game and Fish

A MONTHLY MAGAZINE DEVOTED TO THE PROTECTION AND CONSERVATION OF OUR NATIVE GAME AND FISH; AND TO THE IMPROVEMENT OF HUNTING AND FISHING IN TEXAS.

July, 1953

Vol. XI, No. 8

★
 EDITOR Townsend Miller
Chief Photographer Lon Fitzgerald
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★ In This Issue ★

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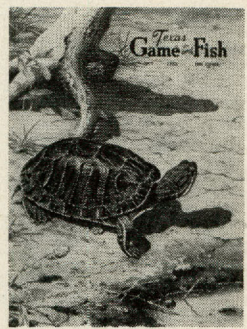
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The Cover

The Cumberland terrapin or slider, a familiar sight to most Texas fishermen, was painted for this month's cover by Orville O. Rice. It can be most easily identified by the bright red or yellow patch on each side of the head. The "chinese writing" on the lower shells of the light green young are well known to many children who have had them for pets.

Lookin' In on the Outdoors

With Townsend Miller, Editor

To every editor, at some time or another, comes the problem "Shall I reprint articles from other publications?"

A lot of editors shy away from reprints like they would a rattlesnake. Maybe they just don't like giving a rival publication credit for digging up something interesting. Maybe they feel it is below their dignity to "borrow."

We disagree. We somehow feel it is the first duty of an editor to find interesting material for his readers, regardless of the source. So, we use reprints in TEXAS GAME AND FISH and always are on the look out for more.

A good story is always worth retelling. No one has ever shied away from reprinting Izaak Walton's "Compleat Angler" or the Bible or "The Night Before Christmas" or Dickens' "Christmas Carol."

We aren't apologizing for the reprints in TEXAS GAME AND FISH. We're just getting around to pointing out a good example.

George Fichter, editor of THE

FISHERMAN Magazine, the relatively-new national which is growing at such a whiz-bang rate, hit the jackpot with a reprint in the July issue. It's called "How Fast Is a Fish?" and was reprinted from the ANGLERS DIGEST AND SHOOTERS MONTHLY, a Sydney, Australia, publication.

The author, David Gunston, has gathered together figures from various scientists and has made a comparison of game fish speeds.

Which Fish Fastest?

For instance, how does the speed of a bass compare to that of a trout? The trout, it turns out, is really a demon among the smaller species. Its maximum is listed as 23 miles per hour, compared to 12 for a bass.

Feelings hurt? Not ours. It's that acrobatic ability that keeps the black bass No. One in our books!

Of course the big saltwater species are the really fast babies. The acrobatic tarpon reaches 35 miles per hour, even while making those

frantic leaps. A bluefin tuna clocks in at 44 miles per hour and a blue marlin at 50.

The championship, though, is a photo finish between the broadbill swordfish, most sought-after of all big game fish, and its cousin, the popular sailfish. They both are equipped to strip line off your reel at upwards of 70 miles per hour!

Gunston points out that these speeds are all the more remarkable when it is remembered that the resistance of water is something like 700 times that of air.

Another interesting sidelight he reveals is that—and we'll quote him here—"It was formerly thought that the fins, particularly the caudal (tail) fin, and the tail were the sole and primary means of locomotion, but experiments have shown that a fish without tail or fins is far from helpless. The chief method of progression is through the rippling undulations of the fish's body, aided by the streams of water from the gills."

Mystery Explained

Not long ago, an unknown fisherman ran his trotline on the east shore of Lake Travis.

Strong, irregular movements of the line told him he had a big 'un somewhere along the line. Sure enough, there he was—a fine 12-pound blue catfish.

But, wait . . . something wrong here. The fish wasn't hooked. He was TIED to the line with a piece of galvanized wire.

That lucky fisherman probably still is trying to figure that one out. And he really has no idea how lucky he actually was.

The answer? Two game wardens, John R. Wood and Gene Ashby, beat him to the fish. While checking for illegal equipment, they found the (legal) trotline and big blue catfish. The cat was barely hanging onto a hook by a tiny thread of skin. So they wired the fish more securely, so the fisherman wouldn't lose him.

Your Gun Ready?

By the way, is that gun of yours ready for shooting come fall? If not, now is the time to have it repaired.

Pet peeve of any gunsmith is the

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hectic rush the last few weeks, days, and hours before the season opens. Too many hunters forget about that needed repair job until they get out their guns just before shooting time.

Then they're disappointed when the gunsmith can't get around to repairing it on half a day's notice.

Better check those guns over now. It's for your own good. And you'd hate to miss those first days of the season.

Fish Catches Angler

From Missouri comes the story of the illegally-taken fish that helped catch the violator who took it.

This particular angler had slipped onto Big Tavern creek for a little walleye fishing before the season opened. He caught one—a nice two-pounder—and spiked it onto his cord stringer.

A little later a game warden interrupted the fishing, and the angler made a run for it. The walleye refused to cooperate. Every step or so, the fish, dangling from the stringer attached to the fisherman's belt, bounced into the leg of the violator—fins first.

Handicapped by the fish and the pain, the offender finally gave up the race.

The warden rendered first aid for the fin punctures and hauled him off to court. He figures, however, that the revenge of the fish hurt even more than the fine.

South of the Border

Each year, more and more outdoor sportsmen are going down Mexico way to take advantage of the hunting and fishing. Its tropical waters teem with fish, and the wild country, much of it still unspoiled by farming and ranching, supports an abundance of game. Texans, indeed, are lucky to be so close to this outdoor paradise.

And one Texan, Squire Haskins of Dallas, is doing a lot to help his fellows take advantage of the situation.

Squire likes to hunt and fish. Naturally, he was drawn to Mexico, and during his frequent visits became quite familiar with the game and fish in various parts of the country. Friends, then acquaintances, then strangers began seeking his advice. The volume

of queries finally got so big, Squire did the only logical thing—he went into business.

He is now open to help you plan your trip, and his service normally doesn't cost the hunter or fisherman a cent. He'll tell you where any particular species of fish is hitting best at a particular time of year, make your hotel and boat reservations, arrange for your transportation if you wish, and in short lay out the whole trip for you. He has established good contacts all up and down both coasts, particularly on the Gulf side, and knows the country well.

For you folks who've put off going to Mexico simply because you "didn't know," Squire seems to be the answer. His address is 2014½ Commerce, Dallas.

Another real bargain we've discovered lately is one of those amazing "breathing" minnow buckets which, believe it or not, sells for just \$1. It's called the Cellulite. The new breathing buckets which have hit the market in all sizes and shapes lately are a great boon to the live bait fisherman, and they'll actually keep your minnows alive for weeks without changing water. The Cellulite is the first we've seen at under \$2.

Skunk Medicine

W. C. Glazener, head of the Wildlife Restoration Division, handed us a typewritten excerpt from the TEXAS RANGER AND LONE STAR. It first appeared June 2, 1853, just over 100 years ago.

Here is what it said:

"Of course anyone at all conversant with Texas affairs must have heard of Deaf Smith, the celebrated spy. Smith, though not a doctor, has a remedy for consumption which he believed almost infallible.

"This remedy was to live upon the skunk or pole cat. He learnt its use from the Indians, and strongly recommended it to those afflicted with pulmonary complaints.

"The liquor ejected by the skunk for defense is known to possess highly medicinal qualities; its offensiveness has prevented its having a fair trial. The meat, when properly prepared, is delicious.

"It is necessary, immediately after killing the animal, to remove the

glands secreting the pungent fluid. Roast the meat upon a stick, before the fire; divest yourself of prejudice; taste a bit, and you will never refuse an opportunity to feast upon what, if placed unawares upon the plate of an epicure, would be pronounced exceedingly savory.

"Of the merits of this eatable as a remediate for consumption, nothing positive is known. In the case of Deaf Smith, a wild life among the Indians, fresh air, and exercise, may have affected what he so earnestly attributed to the meat of the pole cat."

Up in the corner of the typewritten sheet, Glazener had scrawled in pencil, "What do you think?"

Well, what DO you think?

Wayward Finger

One H. M. McGehee of Greenville wrote recently to tell us about a most unusual and exciting "fish story." McGehee points out that many fish stories have centered around peculiar catches made with out-of-the-ordinary baits. And we'll have to admit that the catch of Otto Gross, also of Greenville, was made on a MOST unusual lure.

It seems that Gross was standing in hip-deep water, fishing with pole and line for catfish. Suddenly, the serene, dreamy scene erupted.

As McGehee tells it, "Otto had a bite. Feeling a tug on the middle finger of his hand, he thought it was a crayfish. Then came another tug. This time he yanked his hand out of the water . . . a snake had swallowed his entire finger!"

"With all his strength, he flung the snake as far as it would go."

Quite a story!

But immediately one question popped up. What was he doing with his finger in the water? McGehee hadn't explained that. We wrote a letter.

The answer came from Gross, himself. He said, "We had been having some success with our fishing, but things had quieted down. I let my pole rest on a stump just in front of me, with my hands under the water.

"I have taken quite a bit of ribbing over the incident," he continued, "especially about whether or not I stayed to do any more fishing. Believe it or not, I did."



Cuero's young G-men have a mourning dove nest spotted and are preparing to band the fledgling birds. Their reward is the knowledge that their contribution to research will help the species survive and multiply.

Youngsters Up and Down

The youngsters of Cuero weren't really bad. But shooting up the town with BB guns wasn't the most wholesome occupation. Now, thanks to some understanding and willing adults, they find high adventure in banding young doves for research.

Staff photos by Lon Fitzgerald

By **THERON D. CARROLL**

Supervisor, Conservation Education

TWO, TOO young to band."

"Check."

"One young and one egg."

"O. K., come on down."

So it went, all one Saturday morning—young "G" (for "Game") men of Cuero doing a bang-up job of dove banding within the city limits of this South-central Texas town usually known for its annual Turkey Trot.

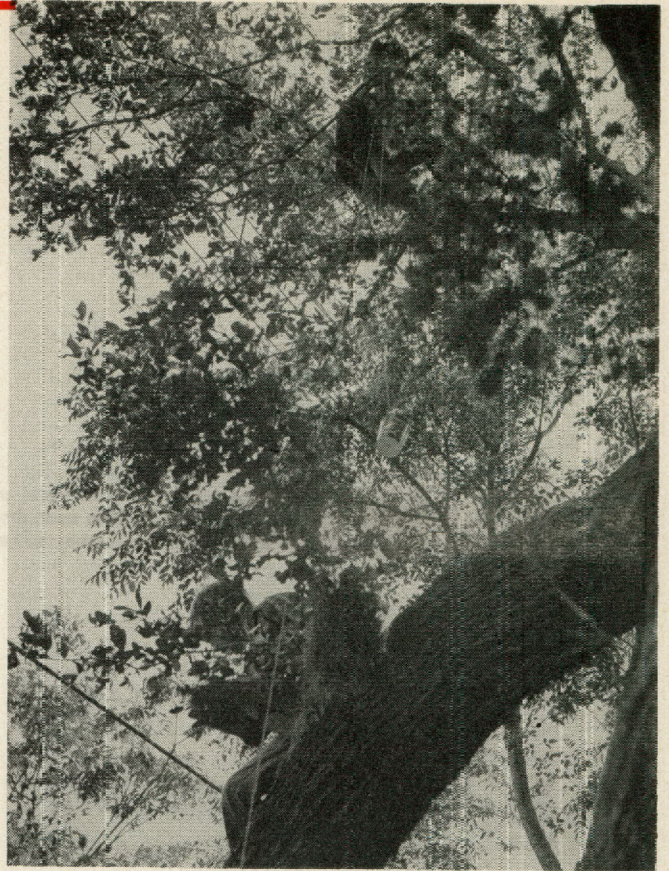
Maybe you wonder why these youngsters would be spending their free Saturdays doing this kind of work (and believe me, this up and down trees is no cinch) when they could be out at the swimming hole, playing marbles, BB gunning, fishing, or just loafing. It's simply a matter of proper guidance. Their energies and interests have been directed to something constructive and educational.

You see, a couple of years ago these same youngsters were creating quite a problem in Cuero. Just about all of them had air rifles, and nesting doves, mockingbirds, cardinals, cats and dogs, window panes, and insulators were taking quite a beating from these perfectly normal boys.

The citizenry began to complain long and loud to the local newspaper, civic groups, police officers, and business men. An ordinance was passed banning the BB gun. But you can't put a ban on energy, so what were these little fellows going to do next?

Mr. Harry C. Putman, associate publisher of the Cuero *Daily Record* and father of two of these bundles of "perpetual motion," reasoned that this energy could be expended for conservation rather than for destruction. He enlisted local city officials and Game Warden Charlie Edmundson to help in the formation of a Junior Game Wardens organization, which came into being in 1951. These same boys who had been giving Mr. Citizen and wildlife such a headache were brought into this organization.

Each member was given an identification card signed by Mr. Putman as sponsor. They received this card only after they had signed a pledge to respect property rights, cooperate with proper authorities, and report law violations. Members in good standing received certificates signed individually by the Mayor, the Chief of Police, the State Game Warden, and the Sponsor. Since the start of this organization some 150 members have been enrolled.



A bucket is raised to workers aloft by the ground crew. Doves taken from the nest will descend in the "elevator," and will be returned to the nest the same way after being banded.

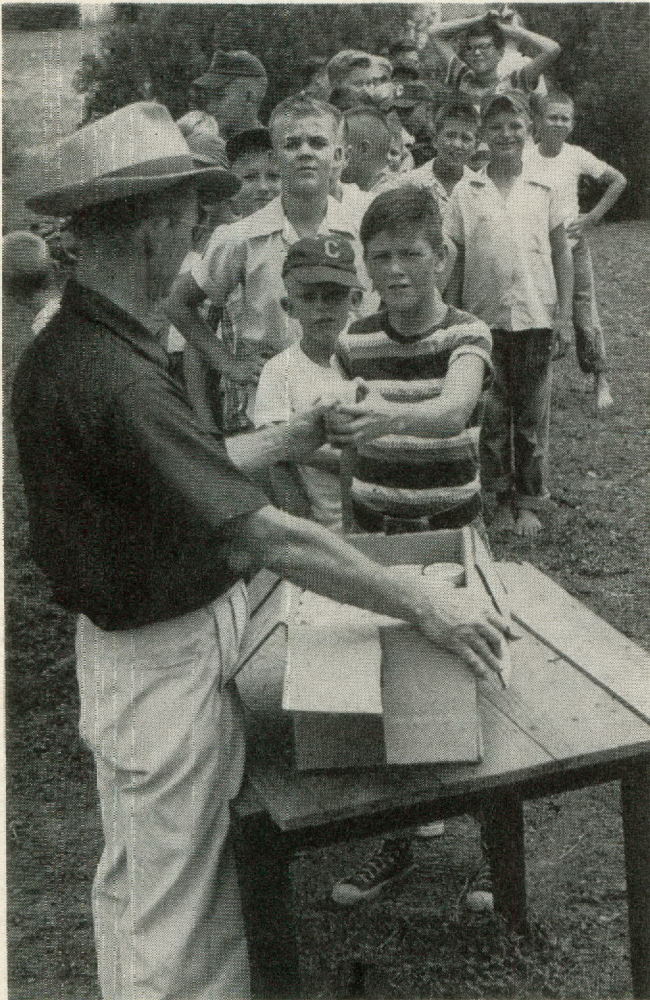
Jerry Putman, center, bands a fledgling, while Donny Putman, seated left, jots down location, date, and band number. Other members of the ground crew looking on are left to right, standing, Tommy Kennedy, Bill Blackwell, and Larry Coppedge.





"Two eggs—no young," Jerry Putman reports. The crew will return to the nest at a later date after the young doves have hatched.

Harry Putman, one of the sponsors, passes out refreshments to the young workers after a banding session. An occasional free movie, donated by interested Cuero citizens, is the only other compensation the boys receive.



At first the age limit was set at 12 years, but now youngsters, in good standing, are allowed to remain active Junior "G's" after their twelfth birthday if they so desire.

So much for the organization; now for the activities:

The air rifles which were formerly banned are now taken out periodically and, under proper leadership, the boys are given an opportunity to improve their marksmanship. Their targets are now starlings, blue jays, English sparrows, and blackbirds. Confidentially, they kill very few, but this desire to "hunt like Dad" is satisfied and the youngsters receive some good instructions on gun safety and field etiquette that will serve them well when they graduate to more powerful weapons.

These boys know that one of these days they will want to hunt doves and other game birds. They realize that the Game and Fish Commission needs all of the information it can get on the migration of doves if it is to help the sportsmen plan for the wise harvesting of these prized game birds. These little fellows said that they would like to help, and believe me they are.

In 1951 they banded more than 200 doves; in 1952, they made it 250, and in 1953, in spite of a devastating hail storm that did much damage to the nesting population, they hope to make it 300. Can you think of any other local sportsman's club or wildlife organization that can match this record?

Banding operations are carried on from 9 until 12 o'clock on Saturday mornings. The *Daily Record* notifies the town folks as to when and where the operations will be and solicits their support. Young "G" men are notified where to meet and given instructions to leave dogs and BB guns at home. They gather at 8:30 for last-minute instructions, such as: Do not pick the plums, peaches, and so forth in the yards where you work—private property, remember! Do not enter a yard if the home-owner asks you to stay out. Follow the instructions of your leaders—each group has an older boy as captain and co-captain.

The workers are assigned work areas and reminded that they are going out to work and that no "horse play" will be allowed. As an immediate reward for their efforts, the local merchants, who have been very cooperative, take turns in treating the boys to an afternoon movie, and sometimes a pre-movie ice cream reward is given.

Some of the banders find it impossible to attend the movies with the group. Many of them have other jobs to do. Quite a few of them are earning money to pay their expenses to summer camps. But they work at banding doves because they enjoy it. You hear no complaints.

Frankly, when I went down to Cuero to meet with the Junior "G" Men for the "kick-off" of their dove banding program, I hardly expected to see what I saw. The older boys who served as captains had their groups under control without acting like bosses. The division of labor and responsibilities found the tree climbing, the nest locating, the banding, and record keeping handled in a very fair and business-like manner. There was a

● Concluded on Page 32

HOW

to catch a

CARP

A roundup of carp fishing methods and baits

featuring comments of

E. A. Marth, Texas

Art Williams, Iowa

Clayton Green, Texas

Southern Outdoors Magazine

John Majer, Pennsylvania

**Joe Stearns, Georgia Game
and Fish Magazine**

At the request of a number of readers, *TEXAS GAME AND FISH* herewith presents a roundup of carp fishing methods.

There seems to be no better way to start than with this story by John Madson from the *Iowa Conservationist*—the story of Art Williams, whose two-hour battle with a carp created a traffic problem of interested spectators who stopped to watch:

AT SIX o'clock in the evening on Labor Day, traffic was heavy on the Court Avenue bridge in Des Moines.

Fishing from the bridge, Art Williams felt something working on his bait, and he waited until the fish ran with the doughball and set the hook. That's when traffic began stopping.

Within half an hour there were five hundred people watching the battle. The fish fought back and forth across the river, and Art could only follow it from the bridge and hope the fish didn't lean too hard on the 15-pound test line.

By seven o'clock there were a thousand people on the bridge and riverbanks. Cars had completely blocked the street. Patrol cars sent to clear the traffic jam were stalled too, but finally managed to open lanes for traffic.

After an hour and twenty minutes the fish swam to the west bank and sulked. The next twenty minutes were spent trying to move him, but there was little action until a friend plucked Art's taut line. The fish surfaced for the first time in an hour and forty minutes, slapped the water with his tail, and brought a roar from the multitude.

The fish made a few more runs after that, but it was

played out and soon came to the net. It was a carp that measured an even three feet in length, and weighed twenty-two pounds.

This show added to Williams' growing reputation as a carp fisherman. In fact, the stories of his catches became so spectacular that a friend hinted at elements of untruth. The next morning the doubting Thomas had a string of thirty carp on his front porch.

Art believes that, like all fishing, the success of carp- ing lies in correct bait, tackle, and know-how. His favorite carp bait was copyrighted and sold for several years under the trade name "Tackle Smasher," but because carp fishing is so much fun he is passing it on free:

1½ cups Quaker yellow corn meal
2 heaping tablespoons of Quick Quaker Oats
1 level tablespoon of sugar
1 cup of cold water

Water, sugar, and oatmeal are stirred together. Two-thirds of the cornmeal is then added and stirred in. Place on a medium to hot fire, stirring constantly for 5-7 minutes, until the dough works up into a stiff ball. Remove the pan from the fire. Sift the rest of the cornmeal into the cooked dough and work it well into the mixture. The resulting dry dough is placed on a paper and thoroughly kneaded. Before wrapping the dough in paper for a fishing trip, allow to cool; if not, the dough will sweat and soften. If too much sugar is added the dough will be sticky. If not enough sugar, the dough will not be rubbery.

This is not the conventional carp doughball. Unlike most dough baits (and this is the secret of its success), it is tough and durable and almost impossible for a fish to remove from the hook. In a fit of despair a carp will finally take the whole thing and run with it. When he does, hit him!

Art's favorite carp tackle is a fly rod with a light line and a number 4 Carlisle hook. A treble hook is not recommended. A half-ounce slip sinker, running freely along the line is stopped about twelve inches above

the hook by a small piece of matchstick tied in the line. According to Art it is an absolute must that the carp not be allowed to feel the weight and drag of a solidly attached sinker.

There are carp almost everywhere. Like many fishermen, Williams prefers areas around brush piles in rivers at just about the place where the bottom drops off. He also fishes around rocks and just below riffles, but generally avoids water much over four feet deep. Another good spot for carp is the rather deep, quiet eddies in coves in the riverbank. Like bananas, big carp often run in bunches, and these coves are favorite hangouts. Still another favorite location is just below river dams, where big carp often congregate in large numbers.

Most Texas lakes and streams contain carp. If you are after lunkers, don't overlook most Texas lakes, where carp usually reach the greatest size. There are records of lake carp that weigh nearly fifty pounds.

Art's best day was on the Grand Avenue Bridge in Des Moines, when he and a friend took seventy-two carp. The total weight of this string was almost exactly three hundred pounds, an average of four pounds per fish.

None of the carp's bad name is due to a lack of fighting spirit, and it is untrue that they are not good to eat. If taken from fresh, cool water their flesh is firm and delicious. While carp do have many small "faggot" bones along the back, these may be eaten in small fish and removed by hand from big ones. For best eating the dark streak along the side of the carp should be removed. (Keep it . . . it is fine catfish bait.) Carp have long been a prized food fish, and have been cultivated by man for thousands of years.

TEXAS also has a real carp-fishing enthusiast in Game Warden Ed Marth of Victoria. And, since he probably has caught as many carp and buffalo as any other person in the state, he might well be classified an expert.

Marth is firmly convinced that carp fishing can make many fishermen forget about all other kinds of angling—and he'll tell you so at the drop of a sinker.

He firmly believes that time spent in preparing the fishing grounds is well worthwhile. He has some advice to offer on that score:

"First, select a spot that is somewhat calm and secluded, not necessarily very deep. This is to be baited with a special bait, which is placed in a wire screen sack and weighted to keep it on the bottom. The screen mesh should be small to prevent turtles and fish from stealing the bait. You can start fishing the baited spot anytime after two or three days. Here is my recipe for the "lure" to be placed in the screen sack to attract and hold fish:

One part cotton-seed meal
Two parts soaked corn (soak two or three days)
One part old stale white corn meal
Mix these together and add one cup of sugar and one small box of anise seed (whole seed preferred)

If fresh corn is available, use this in place of the soaked corn, using whole ears after running a sharp knife through each row.

When the fishing time rolls around, Marth recommends tackle "on the rugged side."

"You can use a bobber or fish tightline. A nylon leader is good but not essential. A sinker should be attached about 8 to 10 inches above the hook.

"The hook is the most important thing. If large fish are expected, a Sobey-type hook should be used, for it is strong for its size. It should be no larger than # 1/0 (the smaller the better) and should be kept very sharp. A Sobey hook of # 2 size will hold a carp upward to 50 pounds.

"To bait the hook, roll out a small portion of the dough—enough to cover the barb and full length of the curve of the hook to the lower part of the shank. I find that the most successful size is a small bit that the fish can take without a long period of sucking.

"Where fish are numerous, they will take the bait and start a run like a game fish."

Of course, Marth has his favorite bait, too. Here is the recipe and directions for making:

Two cups of flour
Three cups white corn meal
One cup sugar
Two egg whites
One cup of cold water
One small box anise seed
One kettle boiling water
One small sugar or flour sack
"Thoroughly sift the flour, corn meal, and sugar together into a large mixing bowl. Beat the eggs and cold water in another bowl until you obtain a smooth mixture, add the anise seed, and stir. Next, add the dry and the damp mixtures together and stir to an even consistency. Add a

bit of flour and corn meal or a little water as needed to obtain a "dough" that is stiff.

"Flatten this mass somewhat to about 1½ inches thick, place it in the cloth sack, and tie it with string. Drop this into the hard boiling water.

"Cook about three minutes on one side, turn the sack, and cook three more minutes. Lower the fire and let simmer for 15 more minutes.

"Remove the sack from the water and the dough from the sack. Let the dough cool on a piece of paper. With the hands, work the dough thoroughly, roll into a ball, and place it back in the sack. You're ready to fish!

"The bait keeps indefinitely in the refrigerator—the older the better. If it becomes dry, a little moisture on the fingers will work it back to the right consistency."

So much for Warden Marth.

CLAYTON GREEN of Crowell, Texas, is another avid carp fisherman. He likes to use spinning tackle, and has taken carp up to 19 pounds, using the following favored recipe:

One cup yellow corn meal
One cup flour
One teaspoon sugar
One quart water
One cup Karo syrup

Mix the corn meal, flour, and sugar with enough water to form a heavy dough and roll into balls about the size of a nickel. Mix the water and Karo and bring to a boil. Drop in some of the balls of dough and let boil for two or three minutes, being careful not to put in so many balls at a time that they stick together. Take out the first batch of balls and replace, continuing until all are cooked. These can be stored in part of the cooled leftover water and kept for some time.

JOHAN MAJER of Portage, Pennsylvania, had this to say about carp fishing in a letter to *Pennsylvania Angler Magazine*:

"Here is my best recipe for carp bait:

"Two cups yellow corn meal, put in 2-quart pot, add Karo or other brand of light syrup until it starts to run off spoon. When thoroughly mixed set to boil for 10 minutes or until it seems smooth, stirring continually. Take off stove, start to add white flour, stirring until it starts to form dough. Dump it on kneading board, work it into soft but firm dough as the syrup tends to harden doughballs when it hits cold water.

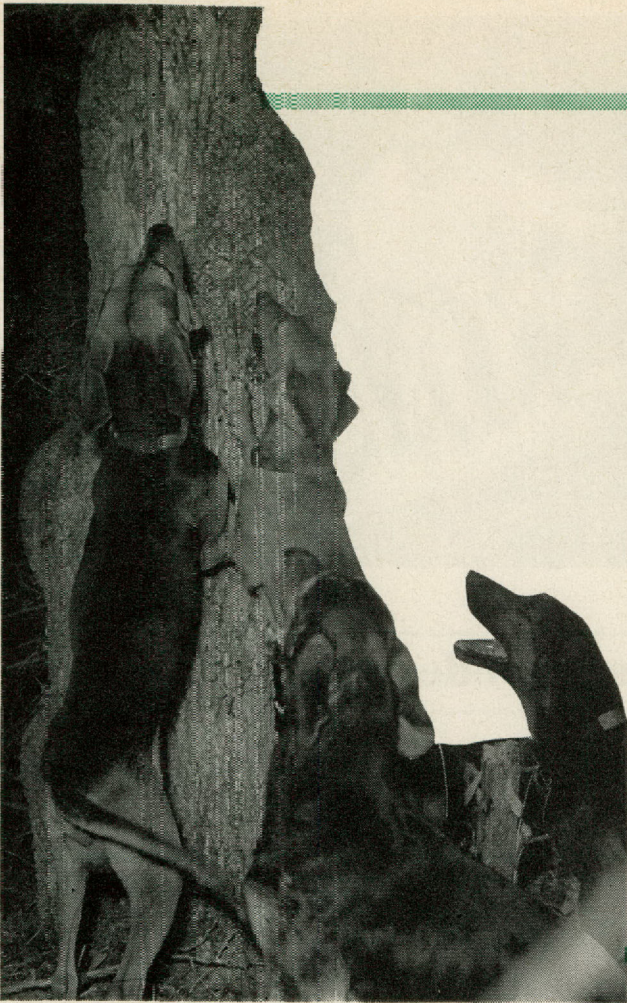
"Size of hook? No. 1 to 2—and do not bait too heavy . . . just enough to cover hook. This dough will not sour, and if there are no turtles around you may add a drop or two of Anise seed oil.

"Sweet corn is also good for carp bait, and some fellows snag some real whoppers on it. I do find dough more consistent."

AND here is a carp bait recipe from *Southern Outdoors Magazine*:

There are many recipes for dough-

• Concluded on Page 22



Internal Parasites

Can Slow Down Your Sporting Dog

Second in a series of articles concerning the care of your dog by Martin P. Hines, Doctor of Veterinary Medicine.

Staff photo by Clyde Graham

Last month some brief comments were made concerning the nutrition and diet of the hunting dog. Internal parasites have a direct relation to the nutritional status.

For one thing, a heavily parasitized animal is usually unable to utilize many of the essential nutrients supplied through a good diet. Reasons for this are many, but a few are listed as follows: The parasite may utilize food necessary for the host (tapeworms); parasites may cause mechanical obstruction when found in large numbers, thus blocking the intestinal tract (roundworms) or obstructing the bile ducts (roundworms and tapeworms).

In some cases they may irritate the intestinal tract, causing a diarrhea which makes it impossible for the body to absorb valuable digestible nutrients (whipworms). Some suck blood from the host, causing anemia and rapid death (hookworms). Many

parasites migrate through the body, which lowers the resistance of the animal, thus setting the stage for pneumonia and many other infectious diseases.

The problem of internal parasites is a complicated one. Parasites, as a rule, are organisms which live temporarily or permanently on or within other living organisms for the purpose of obtaining food. In this manner the parasite benefits by this close association at the expense of the host.

Treatment should never be considered the final measure in the control of parasitism. Prevention of parasites should be the primary objective. Therefore, to prevent parasitism requires an intimate working knowledge of the life cycles, habits, habitats, and ecology because this information is the groundwork on which to base intelligent measures of prevention and eradication.

There are many ways in which par-

asites are spread. Infective stages of parasites are passed to the outside by feces, urine, and in many cases are taken in through food and water. Some life cycles of parasites require an intermediate host to inoculate the host, as is the case of the mosquito in transmitting heartworms. Hookworm larvae may enter by way of the skin after infected feces have been deposited in the soil. Roundworms may be transmitted to the young by the mother before birth.

Warm temperatures and a certain amount of moisture are required for rapid reproduction of parasites. This is the reason parasites are more prevalent in the warm, humid southern states.

Since there are many groups of parasites that affect dogs in the South, only the most common ones, such as roundworms, hookworms, tapeworms,

● *Concluded on page 28*

BIG LAKES

For Your Enjoyment



Dallas News photo by Tom Dillard

Texas has a generous share of Federal reservoirs

By LES DUCK*

WATER, to the people of the Southwest, is something more than a wet substance used to wash socks in. Indeed, it is even something more than the life's blood of agricultural, industrial and municipal existence. Water, in addition to all this, is the center of outdoor recreation.

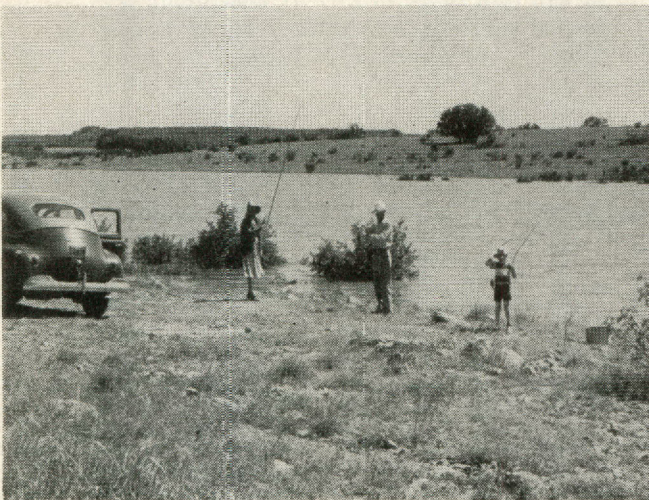
This fact is demonstrated in a spectacular manner by figures which show that some eleven and one-half million people visited 23 Corps of Engineer reservoirs throughout the Southwest in 1952. Of this total, almost three million man-days of fishing, and 122,000 man-days of hunting are reported.

Furthermore, these 1952 figures show us that each of these projects, scattered through Texas, Oklahoma, Arkansas, Kansas, New Mexico and Colorado, has enjoyed a steady upward climb in public recreation use since the day it was completed and placed in operation. Where it will end and when the completion of a new reservoir will cause a drop in recreational use on an existing one is anyone's guess.

However, I will hazard a prediction that if the population of the country continues its present rate of increase and if the industrial and municipal growth of Texas continues, as there seems to be good reason to expect, then these public waters in Texas are going to come to occupy a mighty important place in the efforts of Texans to find free places to fish, hunt, and find outdoor recreation.

In addition to long completed Lake Texoma, Hords

* Biologist — Southwestern Division Office, Corps of Engineers, Dallas, Texas.



A family enjoys a day of fishing at Hords Creek Lake, West Texas recreation spot near Coleman.

Photos by U. S. Army Engineers



Part of the over 15,500,000 persons who have visited giant Lake Texoma since its completion watch a speedboat race.

Creek Reservoir, and Dam "B" Reservoir, there are five new Corps of Engineer reservoirs in Texas waiting the downfall of enough rain to fill them. There are four more dams under construction by the Corps of Engineers in Texas scheduled to be completed in 1953 and 1954, plus the Addicks and Barker dams in the vicinity of Houston. However, since these latter two are run-of-the-river projects and do not store permanent waters they are of little interest to recreationists.

When and if it rains again on the watersheds of all these dams, there will then be added some 202,000 surface acres to the inland fishing, hunting, and recreation waters of Texas.

LAKE TEXOMA: Denison dam, located on Red River five miles northwest of Denison, Texas, started impounding water in January 1944, creating the granddaddy of all lakes in the Southwest—Lake Texoma. There is no doubt it is the best known Corps of Engineer project in this part of the country. It is certainly the most used. While built primarily for flood control and hydro-electric power, it has provided a by-product of 16½ million man-days of recreational use since it was built. During the calendar year of 1952, a total of 4½ million man-days of recreation were recorded. Of these, 1,143,000 were fishing days and 11,300 were hunting days. The lake at its normal operating level covers 93,080 acres, extends some 54 miles east and west, and 42 miles north and south and has a total of around 600 miles of shore line. To get to the lake, we advise Texans to drive to either Gainesville, Whitesboro, Sherman, Pottsboro, Gordonville, or Denison and ask for directions.

Like all Corps of Engineer reservoirs, fishing, boating, swimming and hunting are free to the public at Texoma. At 26 resorts or concessions built and operated by private business interests on leased Government land, you may rent boats, buy tackle, meals and lodging, and guide service. There are around 1200 or so boats for rent on the lake, but if you plan to visit the lake on a Labor Day week-end or

Fourth of July, we advise you to get reservations. Around the various resort areas you may camp without charge. There are four bathing beaches located at Burns Run, Willow Springs, Highport Resort and Sunset Camp (colored). You can launch your boat at many spots where old roads enter the lake, although there are public camps at the resort areas for use. If you want to fly your plane up to Texoma, you may land at Caney Creek, Burns Run Resort, Hickory Creek Camp, and Highport Resort.

While the big lake yields lunker class black bass with considerable regularity, the most popular fishing is probably for white or sand bass, crappie, and catfish.

Texoma is the only Texas Corps of Engineer reservoir at which planning and development of facilities for recreational use is essentially complete. The rest listed here, with exception of Hords Creek Dam, have so recently come on the scene that the development of public use and recreational facilities is nowhere complete.

HORDS CREEK DAM AND RESERVOIR: Hords Creek Dam is located on the stream of the same name near the town of Coleman, Texas. It was built for flood control and to supply water to the town of Coleman. The permanent lake pool is relatively small, covering only 510 acres. However, it enjoys a fairly heavy public use by waterfowl hunters, anglers and recreationists. It was completed in 1948 and provided a total of 143,700 man days of recreational use in 1952.

At Hords Creek reservoir you will find picnic units for free use, and a concession offering boats and motors for rent and fishing equipment and supplies for sale. You may rent cabins for a reasonable price. Sanitary facilities are available, but since the town of Coleman obtains its water supply from the lake, no swimming is permitted.

WHITNEY DAM AND RESERVOIR: We predict that when the lake pool at Whitney fills and when the facilities supplying needs of hunters, anglers and recreationists become developed and available, this project will occupy an important place in outdoor

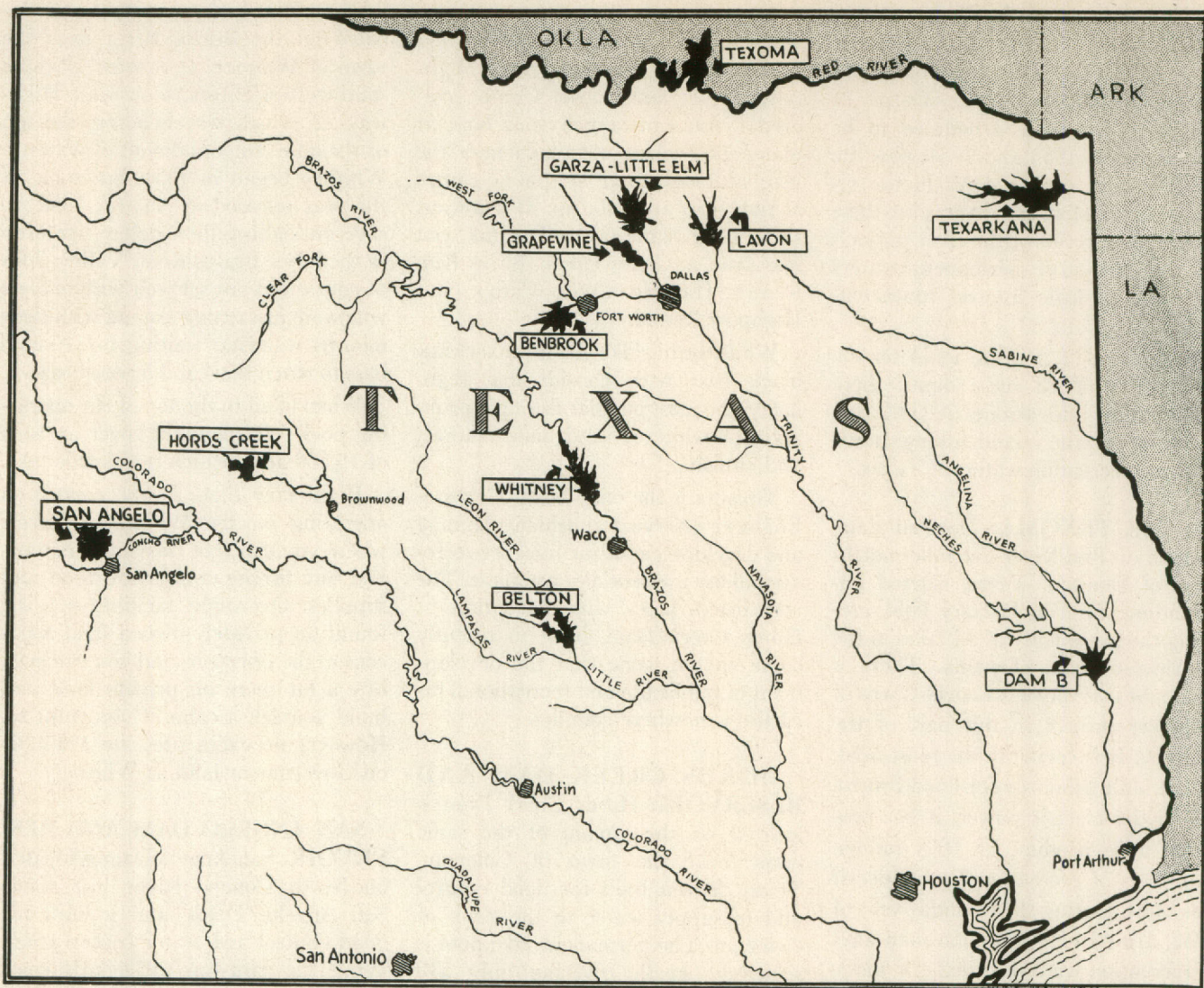
Texas. Whitney Dam, built for flood control and hydro-power generation, with some conservation storage, is located on the Brazos River near the town of Whitney. It is some 19 miles southwest of Hillsboro on State Highway 22, which travels across the top of the dam. Impoundment of water in Whitney began in 1951, but some of this was released in August, 1952, to save an eight-million dollar rice crop in the lower Brazos River Valley. This of course did not set well with anglers who were just sitting around with their mouths watering waiting for 10-inch bass to reach the 4 and 5 pound size.

When filled to the top of the operating pool, Whitney will cover an area of 15,800 acres which is a sizable lake.

Right now there is one concession operating on the Whitney reservoir where you can rent boats and motors, and buy fishing equipment, food and supplies. Overnight facilities may be found on privately owned land adjacent to the reservoir, and you can even buy a lot there on private land and build yourself a cabin if you want to. However no cabin sites are available on Government land at Whitney.

SAN ANGELO DAM AND RESERVOIR: San Angelo Dam is located on North Concho River just above San Angelo, Texas, and is built for flood control and water conservation. While the dam was sufficiently completed to store water in 1952, drought conditions on the watershed have prevented filling of the pool, which at normal elevation will cover about 5,500 acres. During the last 9 months of 1952, records show a visitor use of 109,900 man-days. As with all Corps of Engineer reservoirs in Texas, the Texas Game and Fish Commission provides the technical fishery management measures. On San Angelo, the Commission removed the undesirable fish species from the river and feeder streams above the dam and stocked with hatchery reared fish before closure of the dam. The Commission also constructed brush shelters at strategically located positions in the lake area to improve fishing.

Development of public use facilities at San Angelo reservoir is still in the planning stages, although the area is open for public use. Plans include a



sizable area of land to be managed by the Texas Game and Fish Commission and the San Angelo College. Picnic areas, play areas and access roads and other needs will be provided as funds become available.

BENBROOK DAM AND RESERVOIR: Benbrook Dam, a flood control project, is located on the Clear Fork of the Trinity River about 10 miles southeast of Ft. Worth. Impoundment of water was started in October, 1952, but only a small amount of water has been collected to date due to drought conditions. When filled to the top of the operating pool, Benbrook will provide a lake of 3,760 surface acres. No facilities have been as yet provided at Benbrook, although

plans include development of picnic areas, access roads and other recreation requirements as funds for such become available.

GRAPEVINE DAM AND RESERVOIR: Grapevine Dam, a flood control water supply structure, is located on Denton Creek just north of the town of Grapevine in Tarrant County, with the bulk of the reservoir extending into Denton County. Closure was made at the dam during 1952, and when sufficient rains fall on the watershed, Grapevine reservoir will cover an area of 7,380 acres. The Texas Game and Fish Commission stocked the lake, which actually is presently at about the level of the banks of Denton Creek, in order to as-

sure an early population of game fish. It is expected that this lake will receive a heavy use by the public, located as it is in one of the most dense human population areas of the state.

At present the City of Dallas Recreation Department has installed picnic units and sanitary facilities in two areas. Concession privileges will be awarded to private development interests in the near future.

DAM B RESERVOIR: Dam B, located 12 miles below the junction of the Neches-Angelina River and 1/2 mile north of Bluff, Texas, was built for regulating water flow for irrigation purposes in the Neches River. Dam B reservoir, under present conditions, is subject to extremely wide fluctuations

ARMY ENGINEER RESERVOIRS IN TEXAS—COMPLETED

Reservoir	Permanent Pool (Acres)	Date Placed In Operation	Fishing Use 1952 (Man Days)	Hunting Use 1952 (Man Days)	Total-All Recreation 1952 (Man Days)
Benbrook	3,769	1952	No data	No data	100,000
Dam B*	13,700	1951	3,600	400	76,000
Grapevine	7,380	1952	No data	No data	85,000
Hords Creek	510	1948	65,000	2,500	143,700
San Angelo	5,551	1952	No data	No data	106,900
Whitney	15,800	1951	291,600	11,600	556,500
Texoma	93,080	1944	1,143,500	11,350	4,574,300
	139,790		1,503,700	25,850	5,642,400

RESERVOIRS UNDER CONSTRUCTION

Reservoir	Permanent Water Area (Acres)	Date of Completion
Garza Little Elm	23,470	1954
Lavon	11,080	1953
Belton	7,400	1954
Texarkana	20,300	1954
Total	62,250	

in pool elevations due to the summer demands of water by rice growers in the lower valley. If the authorized McGee Bend Dam were in operation upstream, the characteristic would be less marked, however. The lake presently does not present attractive recreational features, although duck hunters would do well to keep their eye on Dam B. The Texas Game and Fish Commission is looking it over and is being granted a license to 15,700 acres of land on the project which will be developed for waterfowl hunting. While the project is open to public use, no facilities have been constructed on the project area to date.

Under construction at the present time in Texas are the Garza Little

Elm Dam, Lavon Dam, Belton Dam, and Texarkana Dam.

GARZA LITTLE ELM DAM will sometime in 1954 start impounding a 24,470 acre lake, inundating the existing Lake Dallas just east of Denton, Texas.

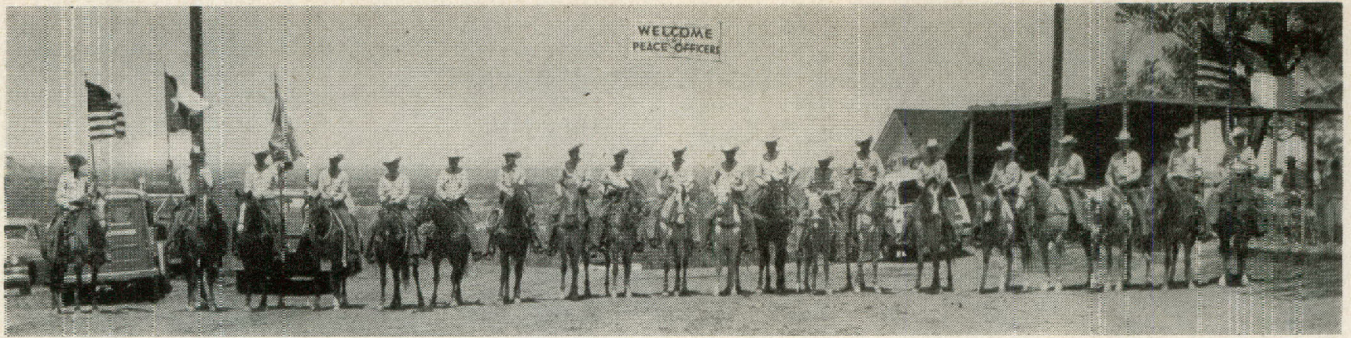
LAVON DAM, located between Wylie and Lavon on the East Fork of the Trinity River, will be completed in 1953 and will impound water covering 11,080 acres. This is a flood control and water supply project.

BELTON DAM, located on the Leon River near Belton and Temple, Texas, is a flood control and water supply project which, when completed

in 1954, will create a pool of 7,400 acres of water.

TEXARKANA DAM, located on the Sulphur River near Texarkana, is another flood control water supply dam, which, when completed in 1954, will impound a pool of 20,300 acres for public use.

Plans providing for picnic areas, access, concessions and group recreational use of these projects are now being drawn up. As construction of the dams progresses, recreation and public use plans will gradually take shape and when completed will represent a coordinated effort between the Corps of Engineers and the State and Federal Fish and Wildlife, Recreation and Public Health Agencies.



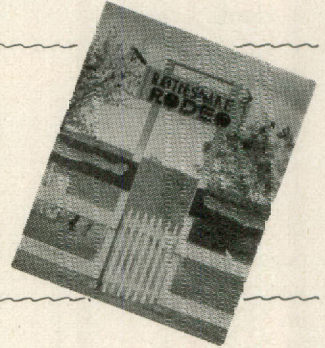
Dickens County Sheriff's Posse

Staff photos by Clyde Graham



Warden Fox and rattler.

Rattlesnake Rodeo



The strangest shooting test in Texas—vying for the best score at live rattlesnakes—brought out the usual crack shots at the annual Rattlesnake Rodeo held by the Caprock Peace Officers Association at the Horace Wood Ranch about 35 miles from Spur, Texas.

No cowhand, trying a do-or-die shot, worked harder at his assignment than the galaxy of experts representing Texas Rangers, the Highway Patrol, City Police, Game Wardens, and County Sheriffs.

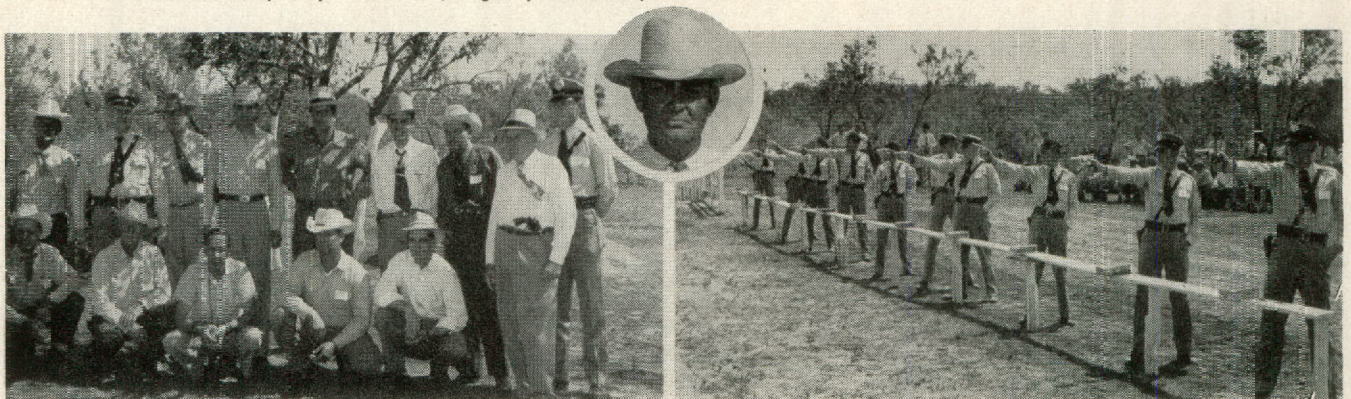
As a direct result, about 25 rattlers bit the dust and some officers of the law took home new anecdotes.

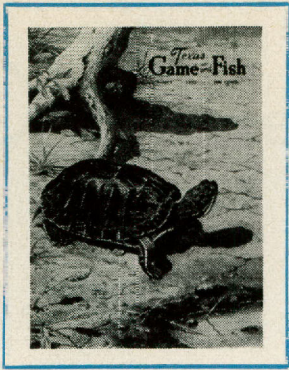
The warmup shooting, following a barbecue, courtesy of Rancher Wood, and program, was at bull's eyes. Two best shooters in each law enforcement group entered the final shot at live targets. Scores then were determined on the basis of where the bullets struck the snakes, with hits in the head counted as perfect shots.—Jay Vessels.

The marksmen, below, left, hit enough bull's-eyes to put them in the finals, where targets were live rattlers. The finalists were, crouching, left to right: P. W. Bailey, City Marshall; Cliff Bird, rancher; Don Kreble, Federal Game Warden; Wayne Stanland, Deputy Sheriff, Kent County (winner of second place); and Joe B. Simmons, Lubbock City Policeman. The inset is of C. C. Kimmel, former Dickens County Sheriff, the winner. Standing: Rancher Horace Wood, the host; Clay Touchstone, Highway Patrolman;

Jesse Helums, Texas Ranger, Lubbock; Jimmie Montgomery, Sheriff, Kent County; R. N. Clem, Sheriff, Hockley County; Audrey Elliott, City Detective, Lubbock; Cecil Fox, State Game Warden; T. J. Templeton, Lubbock, and Highway Patrolman Clay Bednar.

Below, right, each group of peace officers fired at targets to determine its two finalists. Shown are highway patrolmen taking their turn.





The

Cumberland Terrapin

The Story
of this
Month's
Cover
Subject

By AL FLURY

Aquatic Biologist

The Cumberland terrapin of the Southeastern United States is well known throughout most of Texas. Generally referred to as a slider, cooter or just plain turtle, it may be seen most any summer day in stock tanks, ponds, lakes or in slow moving pools of streams. One of its favorite past-times is to sun itself on a log or to float near the surface with just its head protruding from the water.

Sometimes one is caught with a hook but it isn't easy because of the tough jaws. Many are killed by indignant fishermen who shoot them with a trusty old .22 target rifle. Why, everybody knows that these turtles steal bait and eat enough baby fish to completely clean out a fishing hole in no time! Everybody "knows," that is, except turtle-ologists like Archie Carr of Florida, who, after he and other workers opened a lot of turtles to study their stomach contents, claims that the beasts are primarily plant eaters!

One investigation showed that the stomachs of several mature turtles contained 89% plant remains and only 9% animal remains (mostly crawfish). Stomachs of younger turtles contained 52% animal remains (small crustaceans and insects) and 30% plant remains.

Whoa, now—nobody said that they wouldn't eat fish; it's just that they are not nearly as serious a menace to fish life as most fishermen would like to believe. Part of their diet is minnows and small fish, not to mention cut fish and other flesh baits used by fishermen. No doubt, these turtles are not the most desirable pets in a fishing hole, and besides, they make such pretty targets to shoot at!

Two distinctly different kinds of

sliders occur in the Southern States, each kind consisting of several different races which range from the eastern seaboard to western Texas. The most common, at least in Texas, is *Pseudemys scripta*, which has a smooth, un-notched upper jaw and usually a red or yellow "ear spot" on the neck behind the eye. *Pseudemys floridana* is somewhat less common and may be distinguished by the roughly serrate upper jaw, which is notched below the nostrils, and by the absence of an ear spot. Both of these turtles grow to have a shell length of about 10 to 12 inches and for all practical purposes, may be considered almost identical by the fisherman.

In April or May the females leave the water for a short time, usually very early in the morning, to lay eggs in a nearby bank or mound. After choosing the site for the nest, the female scrapes out a hole in the ground with her hind feet and thoroughly wets it with water stored in the cloacal bladder.

The number of eggs laid varies from 5 to 22; they are about 1½ inches in diameter, almost round, and with a smooth, white shell. After laying the female plugs the nest entrance with wet dirt and smooths the area with her shell. Hatching usually occurs in late summer, but further north, the eggs may remain in the nest over the winter, and hatch in the spring.

Growth is rather rapid during the first few years until maturity is attained at about five inches for males and 6 or 7 inches for females. The males lose much of their green and

yellow striping as they mature and old males are usually a dark olive color on the back and an almost solid black on the belly.

These males also develop elongated fingernails with which they caress the female about the head and neck during the courting procedure. Can't you just imagine a big ol' lazy turtle swimming backwards in front of his lady-love, tickling her under the chin, and grunting "kitchy-koo sweetie"? Apparently, that is just about what happens, although I can't swear to the exact wording of the "sweet nothings" he would whisper.

Of little or no economic importance in Texas, sliders have several markets back east. Adults are sometimes caught by seining, trapping, or spearing and packed in barrels to be shipped to markets. There they are sold to be used in stews and soups, mostly to very high class restaurants. Few Texans seem to appreciate the palatability of hard shelled turtles, although the soft shelled turtles are frequently eaten by some people.

The suitability of the hatchling and yearling slider terrapins as pets to be kept in a little water in a fish bowl makes another market for the animals. Thousands are sold yearly in pet and variety stores, usually retailing for 25 cents each. Frequently the backs of the turtles are painted with enamel and a picture or name painted on the background. This paint usually peels off after a few weeks and, in my opinion, the small turtles look much better in their natural green and yellow stripes. The little creatures will eat small bits of meat, fish, vegetables and many other items and make very interesting pets.

The BRYOZ

Adapted from The Pennsylv

IF YOU have ever seen a glob of jelly-like material on a water lily stem or other submerged object, you have probably wondered where it came from, whether it was living or dead, or just what it could be. Actually you saw a colony of primitive invertebrate animals known as bryozoans. This name means, literally, "moss animals."

These animals may occur, depending on the species, as threads, or crusts on submerged vegetation, or as solid jelly-like masses which may reach the size of a football or larger. Each colony is composed of many animals which are usually so small that they can only be detected as individuals by the aid of a strong hand lens or microscope.

The individual bryozoan does not look like an animal at all, but has the appearance of a minute plant. However, when one is

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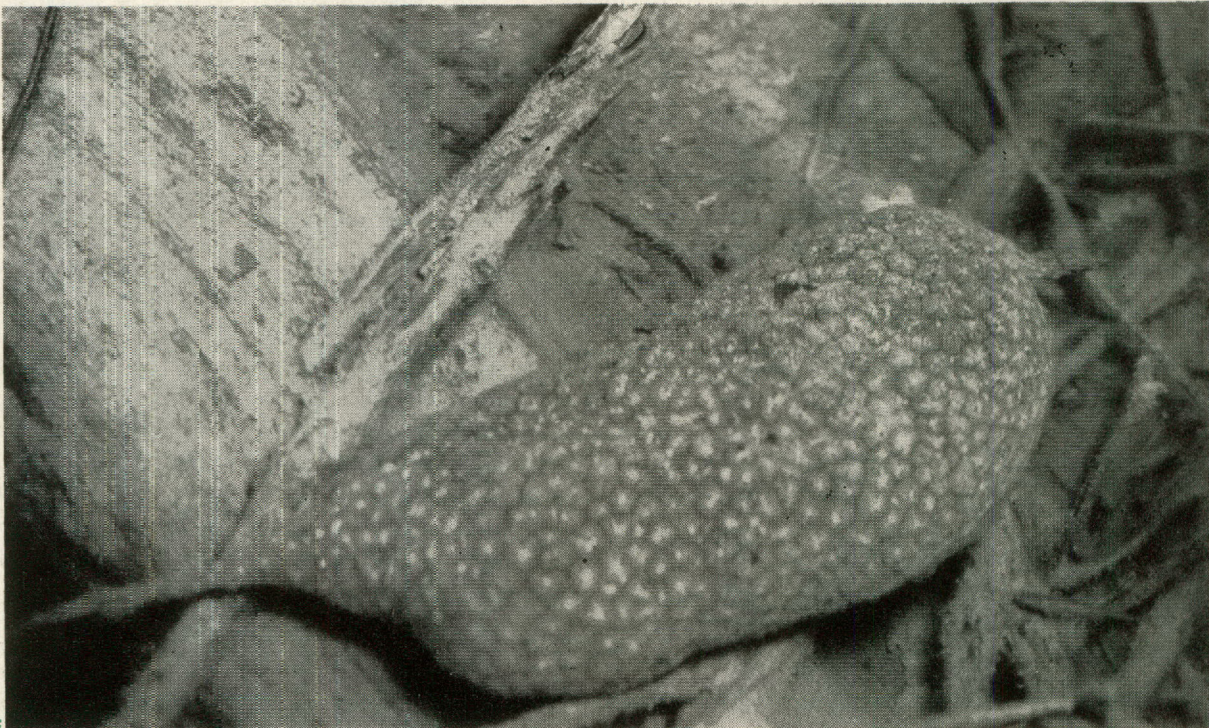
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Bryozoans usually are found growing around a stick in an underwater brush pile or on aquatic vegetation.

The jelly-like mass shown above is a bryozoan colony, such as found in Texas waters. The tree around which it grew has been removed from the water.

Photos courtesy Pennsylvania Angler



DAN or An Oddity of Texas Waters

er By **BOB KEMP** Aquatic Biologist

specimen through a lens or
cles can be seen to emerge
body. These tentacles aid
microscopic water organisms
l as food.

most bryozoans may oc-
erent ways. These include
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sts. These statoblasts are
freezing or drying, and
e bryozoans through un-
such as winter months or
d-like bodies may also be
owl from one area to an-
y distributing the species.

icularly the genus *Pecti-*
common in East Texas.
Harrison and Marion
abundance of the jelly-
y are also found in Nix

Lake near Henderson, Lost Prairie Lake near Palestine, and doubtless in other lakes and streams in the area.

Most species have little or no economic importance and are harmless. However many lake owners express concern over their presence until they have been identified and their nature explained.

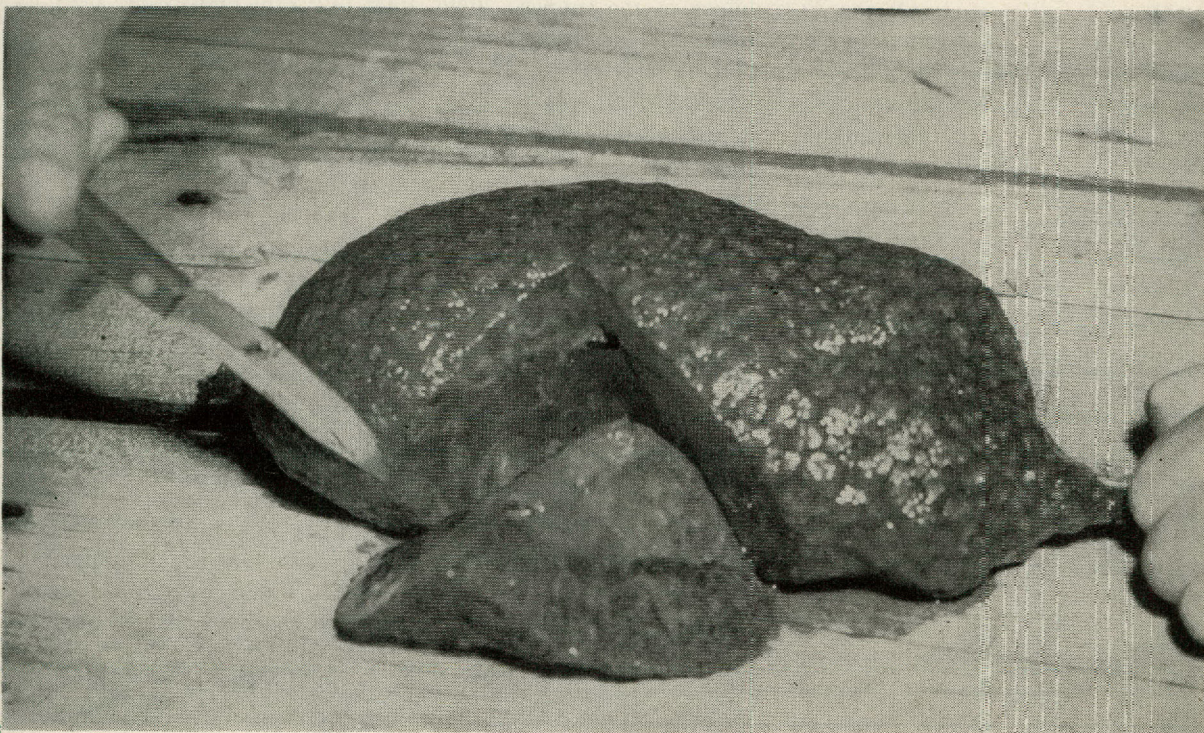
There is one species in the genus *Lophopodella* which causes trouble in Pennsylvania fish hatcheries. This bryozoan, due to heavy fertilization, encrusts all submerged objects. When these colony crusts are disturbed and crushed, a toxic substance is released which can kill most species of fish within a few minutes.

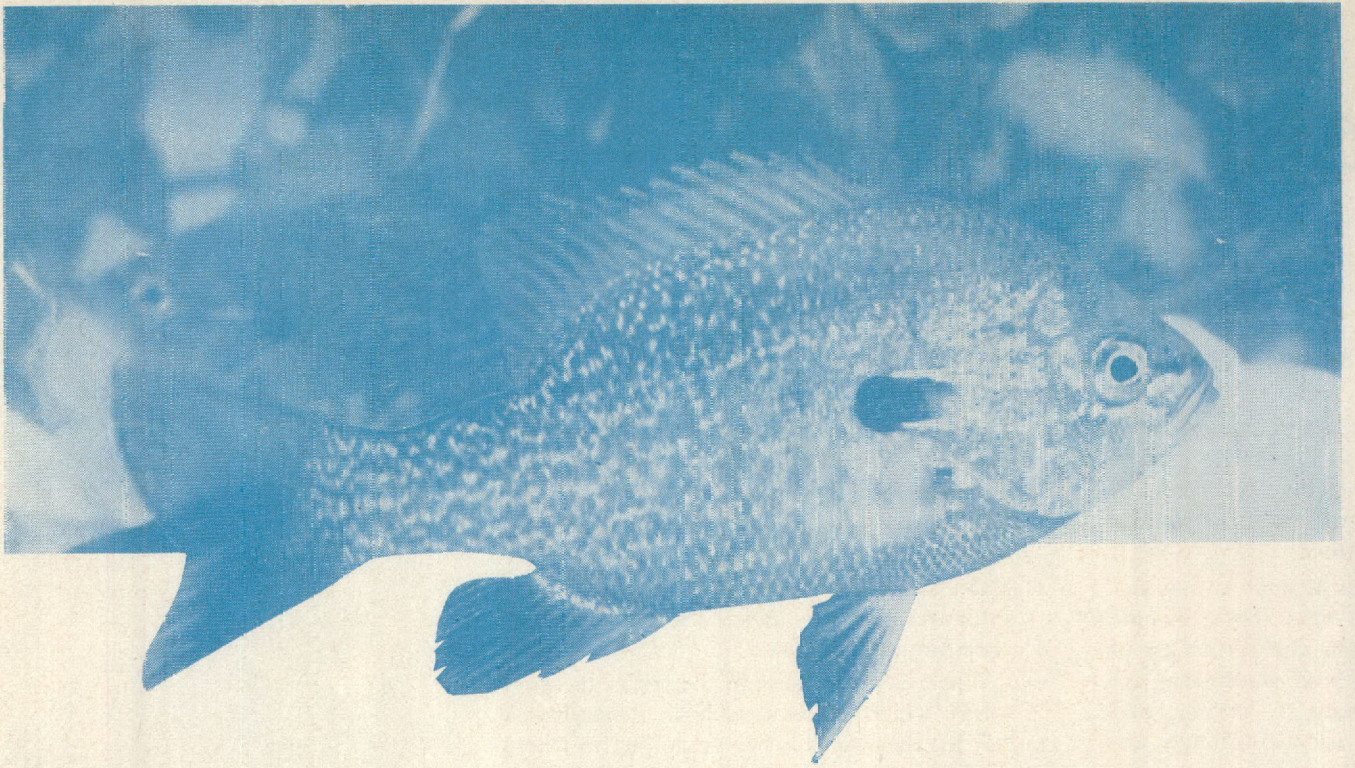
The accompanying photographs of the East Texas Bryozoan, *Pectinatella*, should help the fisherman and lake owner to identify this species when next encountered.



This close-up of the end of one of the colonies shows the typical branching pattern.

A chunk has been cut from the bryozoan below to show the jelly-like consistency of the interior. Actually the living part of this colony of animals is on the outside only.





By VICTOR L. HINZE

Do

You

Know

Your

How many Texas fishermen know their sunfish? Do you? Most fishermen know the sunfish (family Centrachidae) only as perch, although the only real perch in this state grow little more than three inches long and belong to a completely different family (Percidae).

Of the 25 members of the sunfish family in North America, Texas boasts 18. The most common of these are the bluegill, longear, redear, black and white crappie, spotted black bass and the largemouth black bass.

The largest of the Texas sunfish is the Largemouth Black Bass, *Micropterus salmoides*. It is sometimes known as green trout or black bass and ranges from the Great Lakes to Florida and to northern Mexico. A maximum

weight of 22 pounds and length of 32 inches has been reported. It is a highly carnivorous animal which feeds mainly on fish and any other kind of life it is able to seize and swallow. Spawning occurs in the spring. The eggs are deposited in shallow nests scooped out on hard bottoms by the male. The male then fans and guards the eggs until they hatch.

The crappie, white perch, or calico bass of Texas are of two species, the white crappie (*Pomoxis annularis*), and the black crappie (*Pomoxis nigromaculatus*). These fish are strictly carnivorous, they feed almost entirely on small fishes, crustaceans, and insects. A length of 8 to 12 inches and a weight of 4 pounds is not uncommon for this fish. The crappie, unlike the bass, spawns in colonies of nests. These saucer shaped nests are constructed and guarded by the males in 2 to 8 feet of water.

The warmouth (*Chaenobrytus cornarius*), goggle-eye, or red eye is usually a sluggish fish which prefers sluggish, weedy waters with mud bottoms. This fish reaches a length of 8 to 10 inches and a weight of 2 pounds. It feeds mainly on small crustaceans, snails, insects and small fish. The flesh

SUNFISH?

of warmouth is considered edible but with a rather muddy flavor. The breeding habits are the same as those of the other sunfishes.

The rock bass (*Ambloplites rupestris*) is more times than not mistaken for the warmouth or vice versa. The rock bass may be distinguished from the warmouth by its distinct, dark lines of broken spots running the length of its body and also by the difference in number of anal spines. There are five or six hard anal spines on the rock bass and three on the warmouth.

The rock bass spawns during the spring in shallow, cool water on sandy or gravelly bottoms. This fish tends to travel in large schools, and once a school is found, a considerable number may be taken, some weighing up to 2 pounds or more.

The other sunfishes such as the bluegill, redear, longear, and green sunfish more or less have the same habits. That is, they feed on minnows, insects and crustaceans and prefer quiet water for feeding and spawning. During the spring and early summer, the sunfish fan out shallow depressions and lay their eggs. The eggs are then guarded by the male until they hatch. On the average the sunfish group attain a length of 6 to 10 inches and a weight of 1/2 to 2 pounds. The banded pigmy, dollar, and flyer sunfish are exceptions because they seldom, if ever, attain a length of more than 5 inches.

The following key should enable the fisherman to identify a catch of sunfish. Since a special key covering the black bass was published last month, these sunfish are not included. The labeled illustration and the following definitions should help when using the key.

Pectoral Fin—The paired fins on the front and lower surface of the fish.

Anal Fin—The fin behind the vent opening on the belly or ventral surface of the fish.

Dorsal Fin—The fin on the back or dorsal surface of the fish.

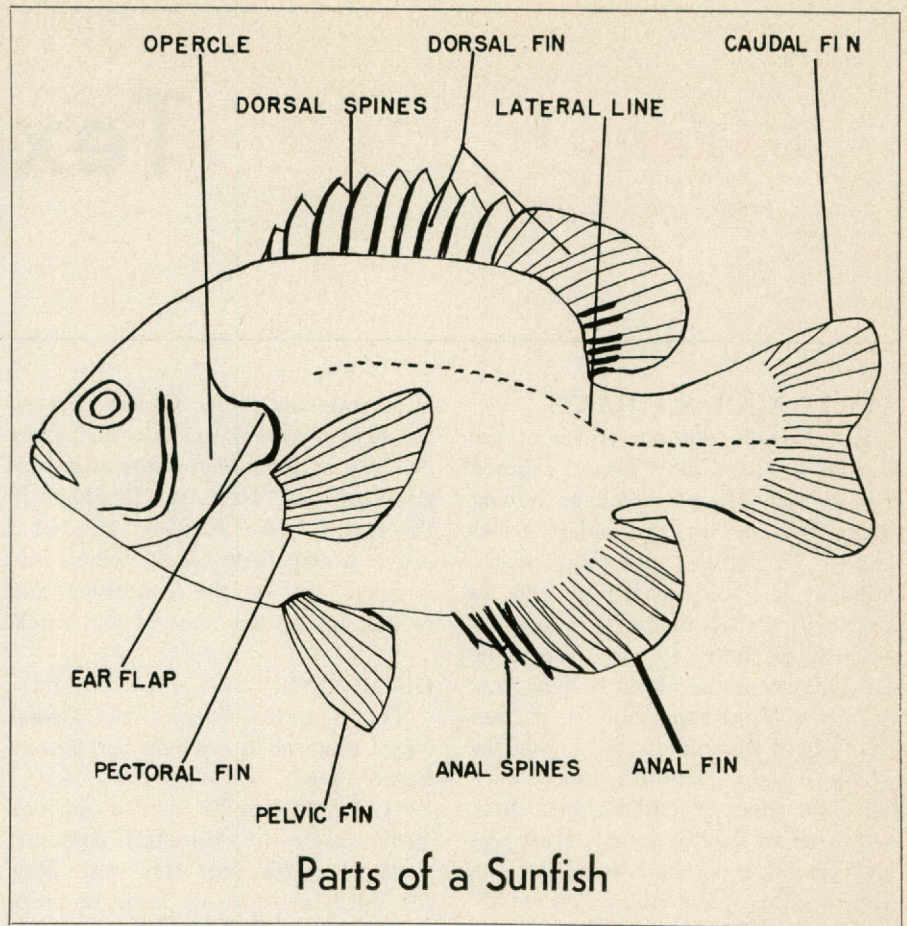
Caudal Fin—The tail fin.

Ray—The supporting cartilaginous rods of the fin.

Spine—Rigid and solid, more or less sharp-pointed ray.

Lateral Line—The distinct line running laterally along the sides of the fish.

From this key, fish may be identified



by their external features. If the fish is not a black bass go to number 2, 3, or 4 and choose the characteristics which seem to fit the best.

KEY TO THE SUNFISH OF TEXAS

Sunfish family (Centrarchidae)

1. Black Bass (See key in June, 1953, issue of TEXAS GAME AND FISH).

2. Crappie

2A Dorsal spines 8, 7, or (rarely) 6; no dark vertical bars on body, dark irregularly located spots.

Black crappie (*Pomoxis nigromaculatus*)

2B Dorsal spines 5, 6, or (rarely) 7; dark regularly placed spots forming more or less vertical bars.

White crappie (*Pomoxis annularis*)

3. "Goggle Eye"

3A Anal spines 3; teeth on tongue, dark lateral line radiating from the eye to rear of head. Warmouth bass (*Chaenobrytus cornarius*)

3B Anal spines 5 or 6; dorsal spines 11 or 12; faintly distinguishable, dark lateral lines running entire length of body. Rock bass (*Ambloplites rupestris*)

4. Sunfish

4A Pectoral fins pointed and long, when curved upward and forward, reaches past nape of neck; vivid red or yellow band on rear edge of opercle.

Redear sunfish (*Lepomis microlophus*)

4B Pectoral fins pointed and long reach past nape of neck when curved upward and forward, "ear flap" dark, dark spot on rear base of dorsal fin, small mouth.

Bluegill sunfish (*Lepomis macrochirus*)

4C Pectoral fin rounded and short, not reaching nape of neck when curved upward and forward; light margined caudal and ventral fins; anal spines, 3, dorsal spines 10; iridescent green streaks radiat-

● Concluded on page 31

By JAY VESSELS

SAY IT AIN'T SO, HART!

Roy Swann, outdoor editor of the Corpus Christi *Caller Times*, exposed Texas' own Hart Stilwell as having fallen for one of the oldest tricks known to ruthless practical jokers. Stilwell had told of his sale of an article to a slick magazine ridiculing kingfish as unfit to eat. When he came down to the Coast to join Pete Barrett of *True* magazine for a clam bake, he was treated to a fish fry which caught Stilwell's fancy in a big way. After he had finished three or four man sized helpings, Hart was informed that he had been working over nothing more than "no good" kingfish, itself.

SAFETY FIRST

Two common risks were pointed up in news reports one day recently. A 21-year-old La Grange man drowned in the Colorado river while seining for bait. A 15-year-old Galveston boy who couldn't swim drowned in the Gulf when his rubber raft struck a piling, was punctured, and sank. Rivers are so treacherous because of hidden holes that, maybe, life preservers are in order. And persons who can't swim might well inspect tire tubes or whatever inflated device they use to float into deep water.

THAT FEMALE INFLUENCE

No question about women infiltrating into just about every walk of life. Just no question about that. But over at the State Fish Hatchery at Tyler, they're beginning unusually early. The female influence there is Gloria Brady, nine-year-old daughter of Superintendent E. C. Brady. And Gloria, wearing blue jeans and a baseball cap, is indispensable, according to her dad. That seemed an

understatement since Gloria checked the delivery truck on its return from delivery of bass fingerlings and kept hollering out "Here, put 'im back in the water!" She retrieved at least a dozen pretty little blacks which had wiggled out of the container and wound up on the floor of the truck.

DOG GONE

The Kountze (Deep East Texas) *News* reported a tragedy up around Beech creek:

"J. A. McKim, Sr., had a sad look on his face as he told what happened to three of his dogs this year. Now Mr. McKim is an old hand at keeping dogs for deer, fox, squirrel. He has had many a dog in his day but what happened to three of his dogs never happened to Mr. McKim's dogs before—and shouldn't happen to a dog. One got shot and killed by a deer hunter who thought he was shooting a deer; the second ran under the wheels of a truck Mr. McKim was driving one noon while he was building a fence; the third got eaten up by an alligator. Mr. McKim said the dog was travelling a short distance ahead of him and he heard one yelp, and no more dog. They saw the alligator tracks, and next day they found the skin and bones of the dog."

WHAT'S IN A NAME?

The Animal Kingdom never will be exterminated altogether so far as preserving names are concerned. For several Texas places are named after wildlife, such as: Antelope, Jack County; Quail, Collingsworth County; Buffalo, Leon County; Deer Park, Harris County; Eagle Pass, Maverick County; Turkey, Hall County, and White Deer, Corson County.

HURRY, HURRY, HURRY

Game Warden Lucius M. Robertson of Port Neches reported on one sea cruise strictly for dyed-in-the-wool fishermen. The chartered boat takes ten hours to reach the fishing grounds and allows ten hours to get back. And—here's the payoff—allows only 45 minutes for actual fishing on the scene.

WILDLIFE SHRINKAGE

Long Beach, Calif., AP dispatch in *San Antonio Light*:

"Sportsmen of the future will have to content themselves with less fish and game, a meeting of wildlife officials was told here. Dr. Ira N. Gabrielson, president of the Wildlife Management Institute, Washington, D. C., said the number of hunters and fishermen is growing much faster than game and fish management can provide for them. He said the number of license holders in the U.S. has more than doubled in the last ten years. Last year 13,000,000 hunting licenses and 15,000,000 fishing licenses were issued."

GLOOMY OUTLOOK

San Antonio Light:

The diminishing herds of wild animals throughout the U. S. are faced with the same fate as America's buffalo. Only knowledge and practice of wildlife management can avert this ultimate tragedy, reports Dr. Charles M. Kirkpatrick, Purdue University professor of wildlife management. Kirkpatrick was in San Antonio routing a two-week safari into Texas Big Bend Country in which he intends to gather information to write a paper on one of the nation's last wildlife strongholds.

Press Views

Game Notes

X MARKS SPOT

Ney Oldham, Jr., who experts on wildlife and fishing for the *Palacios Beacon*, has provided a bonus for patrons of his sideline—running a general merchandise and sporting goods emporium. It is a free map of nearby coastal fishing spots, ranging from Whiskey Flat through Butter-milk Slough to Goose Draw. He throws in a plug for the climate—sun in the daytime, breezes at night.

CARP CORONATION

Recognition for the practical fishermen who takes his modest equipment and supply of doughballs to his favorite location is made by the Marble Falls Chamber of Commerce Fishing Derby chiefs. They included carp and buffalo in the prize winning category for the fishing rodeo, which includes parts of both Lake Travis and Lake Granite Shoals. For that matter, epicureans know that properly prepared carp or buffalo is delicious. Just try smoked carp sometime, sport!

BEE CAUSE NATURE'S GRAND

Houston Maples, superintendent of the State Fish Hatchery at Brownsville, was put on record as stretching to utilize Nature in every way. The specific reference in this department in the May issue was that Maples even had the friendly Indigo snakes policing up the hatchery grounds of undesirable snakes and such. The Animal Kingdom must have read about it, because right away a swarm of bees buzzed up and offered its services. That is, they tried to get into the Maples mansion through the roof. Failing, they tried to enter through the floor. Finally, the swarm took up its quarters under the house. Maples looked ahead to home-grown

honey on his pancakes and meanwhile was hoping that his Indigo snake pets also would see something good in a swarm of honey bees. Too bad if a feud between the two species spoiled the serene hatchery setting.

ANGLING SLANT

Bob Brister, writing in his column, *OUTDOOR ANGLES*, in the *Marshall News Messenger*:

"... fish management is not the simple expedient of catching fewer fish. More lakes, streams, and ponds have been ruined by underfishing than will ever be ruined by too much. And one of the best things that can happen to a fishing hole is for the public to fish it constantly and well."

BIG BEND PLUG

Editorial in *Dallas Morning News*:
"Big Bend National Park is on the up as an attraction for tourists . . . The Big Bend is one of the few places where one can find the West in its primitive state . . . Most of the improvements so far have been in roads and living quarters . . . But there is no intention of making the park a cushy resort for lounge lizards. It is being developed for those who like the big outdoors."

POWERHOUSE PRESS

Bill Lloyd, chief of the State Capitol bureau for the United Press and specialist in outdoor writing, forgot he was talking for publication the other day when he reported, incidentally, that he had landed a king mackerel. "Scared me to death; that thing was all I could handle," exploded Big Bill, who weighs in at 190. And just to think modesty forbids him from describing his own conquest in his own column!

WHAT, AGAIN?

Ernest G. Marsh, Assistant Director of Wildlife Restoration for the Game and Fish Commission, was impressed with the hard luck of a dog belonging to Fred Moore, Wildlife Biologist in charge of the Commission's Black Gap restoration project. The dog, going along on a field trip West of the Pecos, tangled with a porcupine. And finished second. Marsh said the poor animal suffered

all the agonies of death mainly because they were a long way from the pair of pliers finally used to extricate the multiple quills sticking into the canine's body. Seemed positively incredible that the dog would ever again clash with a porcupine, which occur in small numbers in scattered parts of Texas. Yet Marsh said a Big Bend rancher told him about the rancher's favorite dog that found the slow, strange porcupines absolutely irresistible and never passed them up, although the dog always got the worst of the engagements.

BUS MAN'S HOLIDAY

Where would a man go for a holiday, a man who makes his living on the water? Well, now, Ernest Simmons, Marine Biologist for the Game and Fish Commission, provided one clue. Simmons covers the Gulf waterfront out of Corpus Christi. He handles salt-water fish by the thousands, studying their kind, size, shapes, and habits. So he took a change of scenery to visit his old home town of Bastrop. Naturally he wound up fishing in the Colorado River. And did all right, too—a string of 20 odd channel cat.

PAGING ALL COYPUS

Hugh Williamson, the Austin public relations man, suggests that the newly emphasized vegetation feeders in Texas waters should be called Coypu instead of Nutria. The precise definition does better fit Coypu since the word Nutria covers a variety of rodents. Percival, summon the pack for a poll!

CHUG CHUG—COYOTES!

The *Amarillo Daily News* carried an illustrated story showing four big coyotes strung on a pole with a four-cylinder Buick in the background. The piece related how W. T. Stanberry, advertising manager of the *News-Globe*, and his colleagues used the wheezing puddle jumper to close in on the coyotes back in 1908. He recalled that waterfowl were so abundant then they could kill more ducks with one shot than the daily limit now.

balls for use as carp bait. One of the most popular is made by mixing one part corn meal with three parts flour, adding a little sugar and water to make a stiff dough. Pinch into balls about one-half inch in diameter. Drop the balls a few at a time into a boiler or kettle of simmering water, to give them toughness. Work fast when they rise to the top; skim off quickly and place separately on paper to drain. Store them in a cool place until ready to use. Carry them in a moist cloth to prevent drying and crumbling.

ANOTHER publication of the deep South, suh, also carried some hints for catching carp recently. *Georgia Game and Fish Magazine* says:

One of the baits rated highest among experienced carp fishermen is an ordinary marshmallow cut three ways with a sharp knife. If this is

done carefully, you get eight pieces of just the right size. These should be kept in a closed container to prevent drying out.

Another good bait is made by boiling licorice root, 2 oz., and aniseed, ½ oz., in water, 1 qt. Continue boiling the liquid solution until it is reduced to about 1 pint, then strain and stir in sugar, ½ cup, and enough flour to make a stiff, rubbery dough. Mold the dough into small baits and drop these into boiling water. When they rise to the top, remove and store in a tight container.

Another long-lasting bait is prepared by first wadding small bait-sized balls of cotton. Melt grated cheese, ½ cup, in a shallow container and immediately drop in the wads of cotton. When the cotton wads have absorbed all they will of the melted cheese, remove and place them on a piece of board or in a shallow pan

to harden. As soon as the baits have hardened, store in a tight container.

Two other baits the carp fisherman keeps on his list are corn hominy and small squares cut from a ripe tomato and, if he should run out of bait entirely on a day when the fish are biting especially well, he remembers to search the edge of the stream or along the shore of the pond or lake until he finds a moss-coated log or stone. A small wad of the wet moss is excellent carp bait.

WHOOSH! That was time passing. Now, we'll assume that you've baited a hole or found carp, that you've used one of the above baits, and that you've caught one or more nice carp.

It was great fun . . . but what do we do now? Most veteran carp fishermen once wondered the same thing, and most now insist that you're missing a good bet if you don't try cooking them.

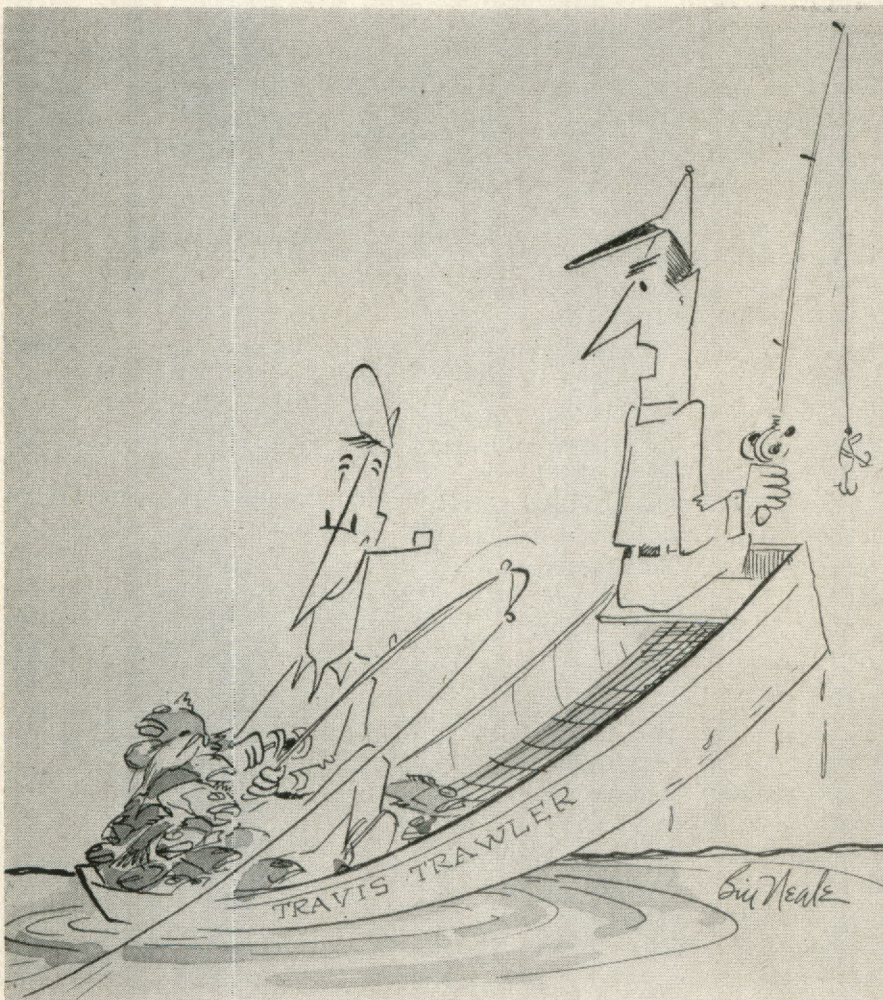
We'll go back to Ed Marth for a simple method which he swears turns out a tasty fish dish.

"First," Marth says, "skin the fish and remove the dark meat line along both sides, along with the featherlike bones near the head. Fillet the meat into chunks about one and one-half inches thick by not more than three inches square and soak these for two or three hours in milk to which salt and pepper has been added. Roll these pieces in good yellow corn meal, generously spiced with both red and black pepper, salt, and a pinch of chili pepper, and you're ready to do the frying.

"Cooking should be done in an IRON dutch oven or deep skillet, filled about two inches deep with medium hot bacon drippings or lard. Fry until done. Carp and buffalo should be cooked a bit longer than other fish; the fire should be lowered if you feel the cooking is too rapid.

"Sprinkle with salt and pepper to taste."

Now you've heard what the experts say about carp and carp fishing. The rest is up to you.



Well, then, what COLOR bait you usin', Gus?

Shootin' Shorts

By ADAM
WILSON, III

Summertime is small bore time!

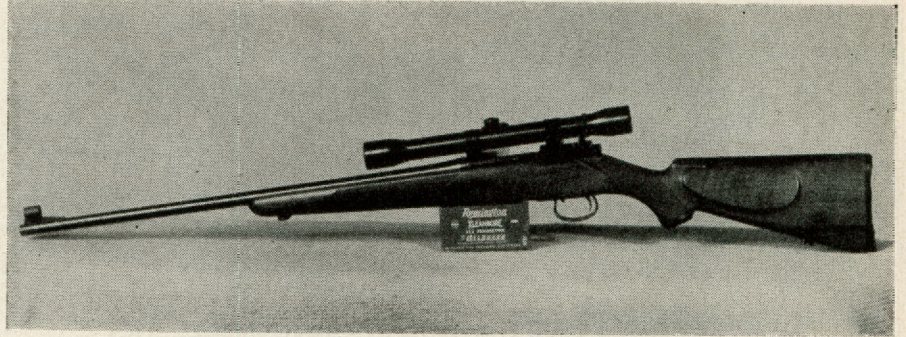
"Yes sir, I believe we'll see a lot of 'em in huntin' camps this fall," commented my shooting partner, gunsmith O. P. Couch, of Kerrville.

We had just completed another test firing of Winchester's newest—the .308 W.C.F. Featherweight Model 70. Ever since it rolled off the assembly line last year, the light weight '70 has been subjected to many testings for accuracy, power, strength, and "bugs." As far as I have been able to discover or gain knowledge of, the neat 6½ pounder has passed admirably all examinations—and with no flaws cropping up.

Handloaders, firing hundreds of rounds, have run between forty and fifty different weights and styles of bullets and powder combinations through the .308. Missiles varied in weight from 110-grain to 220-grain. We know, with powders available to handloaders, the new caliber is a very sensitive number, and that maximum pressures should be approached with extreme caution by "rollers of their own." A mere extra drop can split the dam wide open.

As yet, I have not had an opportunity to give the 110-grain varmint bullet, in handload or factory case, a thorough workout, but I can't see why the little pointed soft-point at 3,340 feet per second muzzle velocity wouldn't be a capable long range bunny buster. Through inadvertence one of the zippy pills was used on a buck last year by a hunter I happened to be guiding. At thirty paces the 110-grain penetrated only a few inches but pulverized an area the size of a Homburg.

My findings show the 150 and 180



The Finnish Sako, a sporter type of rifle chambered for Remington's .222 caliber, is no slouch on the target range. The rifle pictured, belonging to marksman Garland Scogin, shoots five-eighths inch groups habitually and one-half inch groups frequently—five shots at 100 yards.

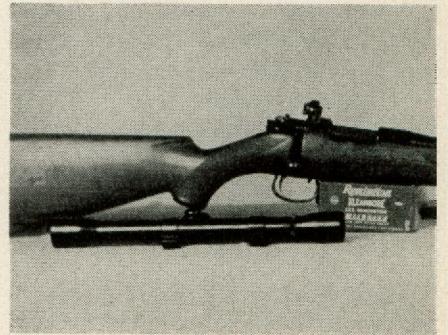
grain factory loads as leaving little to be desired for restocking the deep-freeze with venison steaks. Just a light sprinkle of .308's reached Texas by last hunting season, but I know of one in my territory which did well for its owner. It was two bucks up . . . two shots . . . two bucks in the cooler.

The new Model 70 is plenty accurate. The last time I had one on the 100-yard range, my first three shots showed a beautiful one-inch group, while I let the last two (shooting five shots for group possibilities) spread by pattern to a fraction over two inches. Since I was using the old standard factory open sights, there is no doubt in my mind that with a good optical tube the Winchester's groups would flatter any sporter.

Let's look at a bit of data on the Model 70 Featherweight. It is called "Ultramodern" with its 22-inch barrel, hinged aluminum floor plate, and standard or Monte Carlo stock. The walnut is special formed for weight reduction. Over-all length is 42½ inches—44½ with special order 24-inch barrel.

The mountain foot hunters, or men of small stature or soft muscles, or the gals with woody ways and yen to tote ".30-06 power" without the usual

A couple of twists of the wrist removes the scope and replaces receiver sight, or vice versa.



.30-06 rifle weight will truly appreciate the much lighter Model 70. Ballistically, the .308 cartridge is actually a slightly diluted .30-06. To compare, the '06's popular 150 and 180 grain numbers leave the muzzle at 2,960 and 2,710 feet per second, while the .308 sends these weights at 2,860 and 2,610 feet per second. I seriously doubt if a muley or big horn solidly hit by one or the other could distinguish the difference. I could feel no difference on the other end, as for recoil.

Here's the way the .308 factory loads act on the trajectory chart. Sighted in at 100 yards the 110-grain drops 4.5 inches at 200 yards, 15.5 inches at 300 yards. On the nose at

● Concluded on page 28



Camping Notes

A veteran Texas camper continues his discussions of camping hints and equipment for outdoor living in the Southwest.

Last month we discussed camping and camping equipment in general, then added more detailed notes about bedding and shelter. This month, our notes concern clothing and food.

Here again, the emphasis is on cutting down weight of the necessary equipment, with the ultimate goal the back pack, where we carry all our needs on our own person.

I have worked up my own preferred list of back packing camping necessities for camping in Texas. It contains all the essentials, yet, even with food for 12 meals, weighs only 32 pounds.

Here are my notes, in condensed form, concerning clothing and food:

Generally, old clothes that have proven comfortable are as good as any and better than new ones that turn out to be "chafers" or create other obnoxious problems.

HAT—For all around use, an old but quality felt hat with a medium wide brim is hard to beat—neutral color if used for stalking. Tie a red bandana around it if you think this will give you any protection from "trigger happy" hunters. A silk or nylon "bandana" worn under the hat and tied over the ears is fine for cold weather.

UNDERWEAR—The kind you usually wear. In cold weather, duck blind, etc., Duo-fold (thin cotton inner layer, wool outer layer) two piece underwear suits are fine. Nylon boxer shorts have several advantages for ordinary weather use—light, compact, long wearing, smooth and—big advantage—dry in just a short while after washing. Wear a pair, take a pair—rinse one out every evening and it's dry to pack next morning. They dry so fast that in a real dry climate you might get along with just one pair!

SHIRT—A good cotton poplin or twill shirt is hard to beat for year around use. In cold weather you can wear the Duo-fold undershirt under it and add a sweater or wool shirt over it. Long sleeves are best, even in summer, unless you are used to beating the brush or staying in the sun all day in short sleeves.

JACKET—A good cotton poplin, twill or duck water-repellant wind-breaker is best for year-around use. Vary the number of shirts, sweaters, etc., to stay warm. This should be carried even in the middle of summer, for it gets cool at night—the country-side doesn't hold heat like buildings and city streets. In the higher areas of the

southwest it's not at all unusual to find a 30-degree or more variation in temperature from mid afternoon to early morning hours during the summer.

Get a jacket that is nearly "all pockets." You needn't or shouldn't stuff them all full, but they are mighty handy for holding different size items, keeping them separated, and evenly distributing the weight of varied gear without cumbersome bulges. Then there is always room for any "booty" or game collected on the trail.

Avoid harsh materials for still hunting or stalking, especially in brushy country. The softer cotton or tough, thin wool materials are best for this. Wear a neutral color—khaki, O. D., forest green or a light dull gray, whichever blends best with your background. A dull plaid made up of these colors would be a honey for stalking. Knowing how to use your background, when to move and how to move quietly plus use of wind has more to do with success in stalking than the color you wear, as long as it is a dull color.

PANTS—Khaki, denim, poplin, twill or light weight duck that fit and are comfortable are fine except in cold weather. They are O. K. in cold weather with Duo-fold underwear of the long handled variety. Be sure and get the Duo-fold plenty big to allow for some shrinkage, or else they will be tight and rub you the wrong way.

Close weave wool pants (last year's slacks) are about the best for cold weather and still hunting if they are of neutral color. Remove the cuffs if they catch too much trash, heels, etc. Of course, there are lots of good wool hunting pants put out by the Northern mills, but they are fairly expensive for the occasional user. Avoid getting very heavy pants in either wool or duck for walking. They are all right for duck blind use, though.

RAIN GEAR—There are so many kinds of rain gear that this is a touchy subject. One thing for sure—it ought to be **waterproof**. Water repellent and water resistant stuff doesn't get the job done except in a sprinkle or very

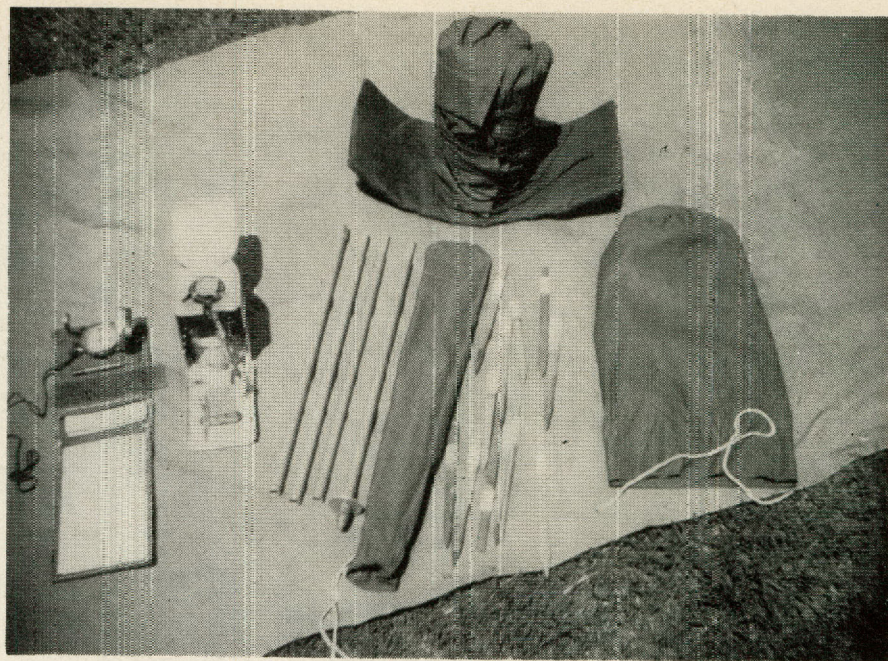
light shower. For duck blind and boat use, parka top and overall pants (Navy foul weather gear) is hard to beat if it is dead grass color (or the color of your blind).

For camping and hunting on foot, I think a medium to large poncho with leg protectors is the best bet. A raincoat is fine until your legs get sopping wet. A poncho protects your pack and gun as well as you and gives good ventilation so that you don't clam up with your own perspiration. The leg protectors slip over your pants legs and strap on your belt sort of like footless hip boots.

Here's where the felt hat with a medium wide brim comes in handy. If you like to wear a cap, better have a rain hood to put over your cap and around the neck of your poncho. If you plan or have a good place to sit out of the rain, a poncho will cover you like a little tent. In fact, it can be used as a small lean-to tent, cache tarp, ground sheet, sleeping bag cover—it is real versatile except when needed in more than one place at once. The best are made of plastic coated nylon; the cheapest are thin plastic which work fine if you are careful not to tear them.

BOOTS OR SHOES—For hiking and hunting, a sturdy, comfortable high-top shoe or low-top boot is best. My favorites are Russell Bird Shooter boots made-to-measure. Avoid stiff counters, slick soles, sharp toes, etc. Cowboy boots with about a 14" top (high enough to come above where the stirrup leather rubs your shin) are the best yet for riding, but don't try to walk in them unless you are used to it and then get the rounded, wide box toe, not the sharp pointed rascals.

Avoid Indian type moccasins in rocky or rolling grassy country. On rocks, even soft limestone, you'll be foot sore in just a few hours unless you are used to it and wear plenty of heavy socks—and then avoid loose rocks on a slope! On grass in rolling to rough country they get slicked up quick and you'll begin considering taking skiing lessons. They are good to rest in



Here is a good example of modern, lightweight camping equipment. Shown are map case with lensatic compass and mapping equipment, Primus 71-L stove opened for cooking, Hickory tent (rear) with stakes and collapsible pole, tent bag, and unfolded mosquito netting—total weight of all items, 6 pounds.

around camp, slip on to keep a night fire going, or maybe for hunting in level forest country.

A moccasin-type boot or shoe with low rubber heel and rubber sole with some tread on it is best for all around use in my opinion. Mountain climbing calls for a special shoe with a heavy, hard rubber lug type sole, special hob nails, or in some instances, both.

The rubber footed shoe-pac that made L. L. Bean famous is fine where you have lots of wet, boggy walking to do or wet snow travel. Be sure and wear plenty of heavy wool socks with them to carry off perspiration.

Rubber boots, waders and hip boots are handy when needed, uncomfortable otherwise.

SOCKS—Cotton socks on perspiring feet are mighty efficient blister producers. Some people's feet perspire more than others. Wool socks "breathe" and do not get "clammy." Nylon socks in the heavy rib type act much like wool for me. Get both wool and nylon socks large enough not to cramp the foot. They are too big only if you have to tuck the toe under or they wrinkle up. Nylons have the advantage that they dry very fast and don't shrink much, if any. If you use wool, be sure to wash them in cool to tepid water—no hotter. Even then, pull and stretch them before hanging up to dry.

Roughly speaking, our bodies need water, fats, starches, protein, minerals and vitamins in a balanced proportion for "fuel" to keep going in good condition. A food list for light packing for several days poses an entirely different problem from food for the home or where there is plenty of transportation and refrigeration. The usual standby's where transportation isn't too big a problem is cured meat, bread and bread makin's, eggs, and a variety of canned goods, always taking as much fresh stuff as you think will keep with or without a refrigerator basket.

Going light goes much farther than this. Since most of the weight in food is water, the light camper has to find a way to eliminate as much of this from the food taken as possible. This calls for a maximum of cured or dried meats, meat extracts, dehydrated vegetables, dried fruit and beans and the makings of bread or bread mixes instead of fresh bread, canned goods, etc.

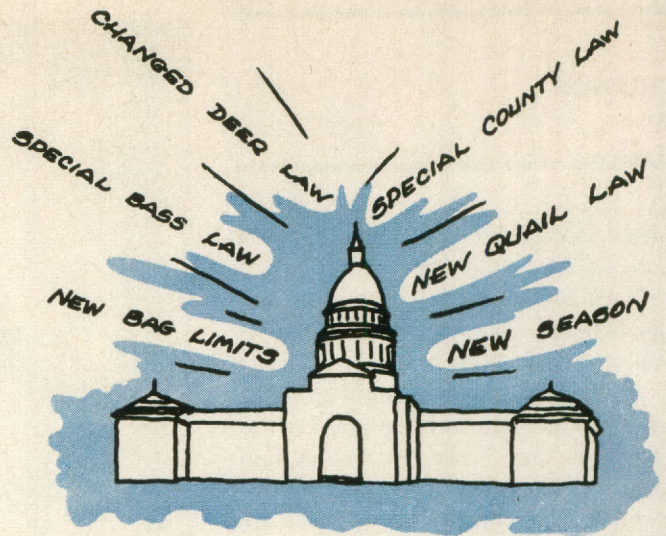
Modern science has helped man a lot in this. Specially prepared dehydrated meals are now put up in handy packets to provide well balanced and palatable meals with a minimum of preparation for this type food. Bernard Food Industries puts up both a two-man and a four-man kit consisting of 6 meals and 12 meals respectively, the

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NEW

Game and Fish

LAW S



Summarized by ERMA BAKER

Law Enforcement Division

The recent state Legislature passed a number of new game and fish laws and revised many former regulations. Presented here is a brief summary of this new legislation.

They here are classified in sections: Hunting, Fishing, Furbearers, Commercial Laws, Pollution, Regulatory Authority, and License Forfeiture. The Hunting laws are further broken down by species, and Special Laws under all classifications are listed according to the county affected.

HUNTING LAWS

LICENSE

Non-resident migratory bird, five-day: Price \$5. Permits any person required to have a non-resident or alien hunting license to hunt migratory game birds for five consecutive days without buying regular non-resident or alien hunting license.

DOVE

Kaufman County, in Combine Community, dove season closed for five years.

QUAIL

Coke County: Season closed for four years.

Borden County: Season closed until January 1, 1958.

Garza County: Season closed until January 1, 1954.

Johnson County: Quail hunting permitted on Tuesday, Thursday and Saturday only during regular open season.

Kaufman County, in Combine Community: Season closed for five years.

Live Oak County: Open season November 1 to December 15, both dates inclusive.

Upshur County: Quail hunting permitted any day except Sunday during December 1 to January 16, both dates inclusive. Written consent of landowner or person in charge of premises, or oral consent in presence of two witnesses, is required.

TURKEY

Coke County: Season closed for four years.

Colorado, Jackson, Lavaca, Throck-

Since this is intended to be only a summary, the reader is urged to consult local game wardens for further details regarding any law which might concern him. This brief is presented on the assumption that the General Laws are well known.

A new edition of the Digest of Game and Fish Laws, which will include these changes, will be available about September 1.

morton and Wharton Counties: Season closed for two years.

Delta, Franklin and Hopkins Counties: Open season November 16 to November 25, both dates inclusive, for two years. Bag limit two gobblers per season.

Eastland County: Open season November 16 through November 30. Bag limit one gobbler per season.

Freestone County: Bag limit one turkey gobbler per season.

Live Oak County: Open season November 1 to December 15, both dates inclusive.

Shackelford County: Season closed for five years.

WILD PHEASANT

Smith County: Season open all year.

DEER

Bell, Coryell, Duval, Morris and

Shackelford Counties: Season closed five years.

Coke County: Season closed four years.

Delta, Franklin and Hopkins Counties: Deer season November 16 to November 25, both dates inclusive, for two years. Bag limit one buck per season.

Eastland, Upshur and Wood Counties: Open season November 16 through November 30.

Jackson County: Dogs permitted for trailing only wounded deer.

Jasper and Newton Counties: Season closed until 1955.

Live Oak County: Open season November 1 to December 15, both dates inclusive.

Sabine and San Augustine Counties: Open season November 16 to December 31, both dates inclusive. Dogs permitted for hunting deer. Possession of shotgun and buck shot, regardless of whether shotgun is actually loaded with buck shot, prima facie evidence of violation.

Shelby County: Dogs may be used to hunt deer.

Throckmorton and Tyler Counties: Season closed two years.

Williamson County: Season closed two years in area lying south of South San Gabriel River and west of Highway 81.

SQUIRREL

Angelina County: Open season October 1 to January 1, both dates inclusive.

Austin County: Daily bag limit 10, possession limit 20 squirrels.

Jackson County: Open season May, June, July, October, November and December. Bag limit 10 per day, possession limit 20 at any time.

Jasper and Newton Counties: Open season November 10 to January 15, both dates inclusive.

Tyler County: In Precinct No. 4, season closed two years. Rest of county, open season November 16 to December 31, inclusive.

FISHING LAWS

Austin County: Unlawful to take minnows from public waters for transportation outside county for sale, or to transport minnows outside county for sale, or to sell outside of county any minnows taken from county

waters. Transportation beyond county of more than 250 minnows at one time by any person, or of any minnows by a commercial minnow dealer is prima facie evidence of violation.

Bastrop County: Seines and nets permitted as under general state law, and sale of fish, except bass and crappie, permitted.

Baylor, Archer Counties: Lake Kickapoo placed under same regulations as those applying to lakes and other waters of Big Wichita River.

Bosque, Hill, Somervell and Johnson Counties: Seines and nets prohibited in Brazos River, Lake Whitney and streams emptying into and tributaries thereof except minnow seine not longer than 20 feet for minnows, bream and rough fish for bait. On trotline and throw line, hooks may not be less than four feet apart and not more than 50 hooks permitted thereon. Aggregate of not more than 50 hooks permitted on all devices. Fish may not be sold.

Cameron County, in Laguna Madre, from April 1 through September 30, seines, nets and trawls prohibited except 20-foot minnow seine or cast net for bait and bait trawl 10 x 25 feet with boards not more than 12 by 18 inches. Effective August 26, 1953.

Chambers and Galveston Counties: Season closed on oysters May 1 to September 1.

Coke County: Sweetwater Oak Creek Lake closed to fishing until May 1, 1954, and season on bullfrogs closed in lake and within 200 yards thereof during March, April and May. Unlawful to transport minnows from lake for sale, or to transport beyond county more than 200 minnows for any purpose, or to sell any fish from waters, or to use game or rough fish, including gold fish, as bait except when cut up and used as cut bait. After May 1, 1954, throw line may not have more than 2 hooks; trotline may not have more than 30 hooks, and no trotlines may be joined together. Only one trotline per person or two per party of two or more persons will be permitted. No trotline may be within 300 feet of any dock, pier, beach or other place commonly used as swimming area. Seines and nets will be prohibited except minnow seine not longer than 20 feet for minnows; and bottles, cans or floats will be permitted only

when tied stationarily or held by fisherman.

Collin and Rockwall Counties: Unlawful to take minnows out of streams, except fifty minnows when not for purpose of sale.

Cooke and Grayson Counties, including Lake Texoma: Seines and nets of not less than 1½ inch square mesh may be used for taking any fish, and not more than 100 hooks may be used on trotline, set line or throw line. Hooks may not be spaced less than three feet apart.

Fayette County: Seines and nets permitted as under general state law, except hoop nets expressly prohibited.

Jasper and Newton Counties: Restrictions against transporting minnows have been removed.

Mills and San Saba Counties: Seines and nets prohibited, except minnow seine not longer than 20 feet nor deeper than 26 inches for minnows.

Cherokee, Henderson, Nacogdoches, Rains, Sabine, San Augustine, Smith and Van Zandt Counties: Seines and nets permitted as provided by general law, but sale of fish prohibited.

Tom Green County: North Concho River closed until May 1, 1954, from dam adjacent to north limits of city of San Angelo to where a road near the Shaw Gravel Pit crosses said river, approximately 9 miles upstream.

Tyler County: Seines and nets permitted under general law and any fish except bass and crappie may be sold.

Wood County: Seines and nets as provided by general law may be used.

FURBEARERS

Blanco, Comal, Hays, Guadalupe and Kendall Counties: Fox may be killed at any time and pelts may be sold.

COMMERCIAL LAWS

Commercial Quail Breeder's License, price \$25.00. Permits holder to sell pen-raised quail for food. Hotels, restaurants, boarding houses or clubs may sell pen-raised quail for consumption on the premises, without license.

Shooting Preserve License, law has been amended to define a shooting preserve as "any premises leased for hunting purposes which is a separate,

● Concluded on page 30

whipworms, and heartworms, will be discussed briefly here.

Tapeworm

Two common species affect dogs: *Dipylidium caninum* and *Taenia pisiformis*. Tapeworms are composed of a head (scolex) and several immature and mature segments (proglottids). The eggs are passed in the feces and usually are still attached to the segment.

In *D. caninum* the eggs are ingested by flea larvae and undergo further development. Later, when the flea is ingested, the dog becomes infected with the adult tapeworm. In *T. pisiformis* the eggs are passed in the feces and are ingested by an intermediate host, usually the rabbit. The larvae undergo further development in the viscera and the dog becomes infected with the adult tapeworm by ingestion of rabbit viscera.

Hookworm

The major hookworm species affecting dogs is *Ancylostoma caninum*. The adult worm is found in the small intestine. Eggs are passed in feces and develop rapidly into larvae in sandy loam soil in a moist, shady place. The larvae undergo several molts and the usual method of infection is ingestion with food; however, the larvae may penetrate the skin and reach the intestinal tract by way of the blood

stream and lungs.

Hookworms are a major killer of young puppies in the South. I have seen entire litters of bird and hound puppies destroyed by this parasite. Hookworms attach themselves to the walls of the small intestine and suck blood, which usually continues to flow after the worm has left the site of the attachment. On autopsy, large quantities of blood may be seen in the lumen of the intestinal tract in heavy infections.

Roundworm

The major roundworm species affecting dogs is *Toxocara canis*. The adult worm is found in the small intestine. Eggs are passed in the feces and become infective in a few days. Infection takes place by ingestion of these eggs. The eggs develop into larvae in the digestive tract and later penetrate the intestine, enter the blood stream where they are carried to the heart and lungs, eventually migrate up the trachea and are swallowed to develop to maturity in the small intestine. Heavily infected puppies usually have a distended abdomen and are in poor physical condition.

Whipworm

Trichuris vulpis is the species affecting dogs. The adult parasite is found in the cecum and colon. Eggs are passed in the feces, develop into larvae and are ingested by the host where they become mature in the cecum.

Heartworm

The dog heartworm is caused by *Dirofilaria immitis*. This species is found mainly in the right ventricle and pulmonary artery. Its principal occurrence is in the southern states. The female worm gives off ova which develop into microfilaria and circulate in the blood stream for months or longer. In order to complete the life cycle, the microfilaria must be re-

moved from the blood stream by a bloodsucking arthropod, usually a mosquito or flea. In the mosquito they develop further and when the mosquito feeds on dogs, the larvae escape near the site of the punctures of the skin to become adult heartworms later.

Heavy infection produces many pathological disturbances and frequently causes a hard working bird dog to become useless in the field. Infected dogs may collapse in the field after vigorous exercise, later to appear normal after a short rest. Usually such animals are in poor physical condition with a dry hair coat.

Treatment is often severe and a careful examination should be made by a veterinarian to determine whether it will be tolerated. Symptoms of toxicity must also be treated if they arise as a result of treatment; therefore, it is usually necessary that the dog be hospitalized.

Comments about some of the common internal parasites of dogs have been necessarily brief. Pathological disturbances and symptoms are many and differ with each parasite. The diagnosis of parasitism is made by examining the characteristic eggs under a microscope for tapeworms, roundworms, hookworms, and whipworms. Heartworms are diagnosed by demonstrating microfilaria in the blood under a microscope.

Treatment has purposely been omitted as any intelligent dog owner can readily observe that specific anthelmintics (drugs) must be selected for the specific parasite involved. Contact your local veterinarian and have him examine your dog. He can readily inform you if your dog has worms and, if so, the species found.

It may be that your dog is not infected. Many a good dog has been destroyed by the owner's constant worming with toxic patent drugs. Parasite-free dogs mean better hunting days ahead.—*Wildlife in North Carolina*.

ARE YOU CHANGING YOUR ADDRESS?

Then please fill out the following form and send to TEXAS GAME AND FISH, Walton Bldg., Austin, Texas, so that you will continue to receive your copies of the magazine. Allow six weeks for processing.

Name.....

Old Address.....

City....., State.....

New Address.....

City....., State.....

Shootin' Shorts

200 yards, it rises 2.5 at 100, falls 8.5 inches at the 300 yard mark. Hitting center at 100 yards the 150-grain drops 5.5 at 200, 17 at 300. Sighted on at 200 yards, it will be 2.5 high at 100, drop 9 inches at 300. The .308's

heaviest factory bullet (180-grain) connects 6.5 low on the 200-yard target with a 100-yard sight-in, 20 inches lower at 300. Going 3 inches high at 100 yards and dropping 10 at 300, when sighted in at 200 yards, the 180-

grain slug will stop a lot of bucks.

Know from what the .308 started? You're right . . . from that old versatile and famous caliber—the Thirty-O-Six. (S-sh. Don't be surprised to see other popular Winchester calibers in the new Featherweight by next huntin' time.)

* * *

Those Remington folks sorta slipped up on a lot of gunners the first part of this year by placing on their dealer's shelves a .270 Model 760. Last season was the 760 Model's first venture into the hunters' land—it's only calibers being, until recent months, the .30-06, .300 Savage, and .35 Remington. Having warmed the new pump-action's barrel in its new caliber, using both 130-grain and 150-grain loads, I can say that the latest entry didn't hurt the old lineup. Strangely enough—since most .270 rifles handle the 130-grain bullet more accurately—we got tighter groups with heavier missile.

The Model 760 in all borings comes up to the shoulder quickly and easily, just like a fine pump shotgun, and is a peach for targets on the run. Built to satisfy the whims of our many pump-action shotgun fans, who like to pop a rifle cap occasionally, the Model 760 in **any** caliber will not, however, stack 'em nearly as close in the bull's-eye as **any** good bolt-action rifle. Of course pumps and auto-loaders have always found their place with gunners who lean toward speed of fire instead of precision accuracy.

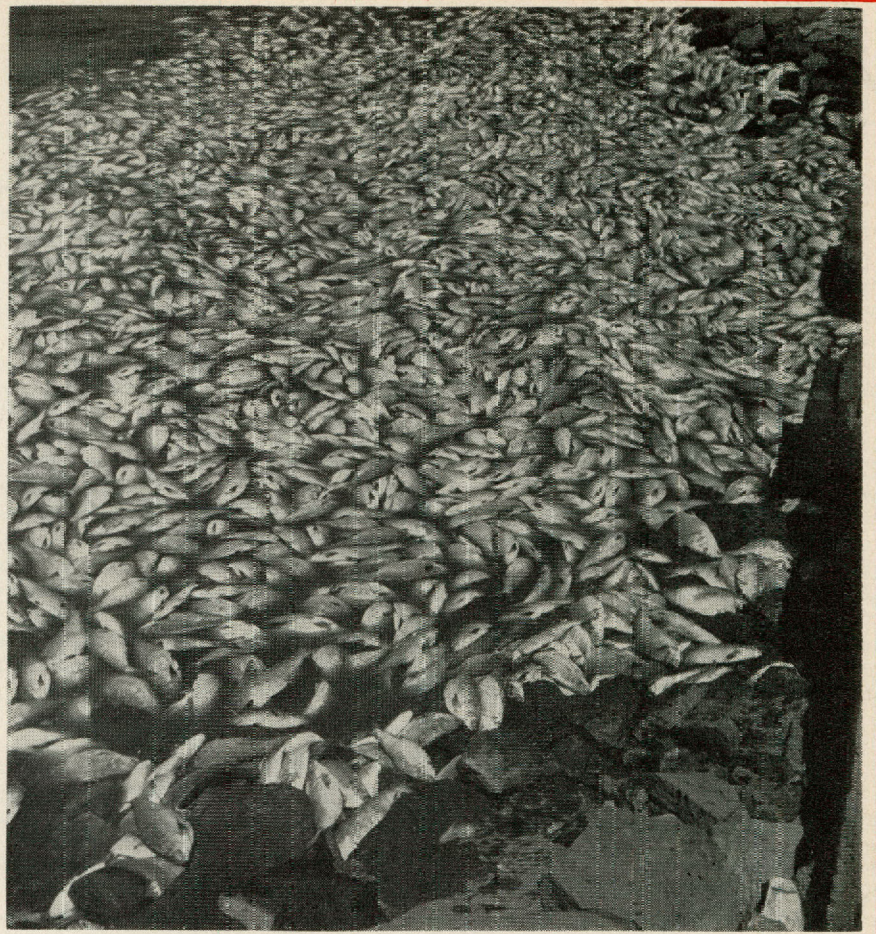
The Model 760's shape, style, and 22-inch barrel make it a slick job for the saddle scabbard, and, chambered for the well-liked .270 cartridge, it should make many more friends.

* * *

Another "new" for '53 is Savage's .222 Remington caliber in their Model 340. That's a third caliber in the Savage bolt-action line—the other two being the .30-30 W.C.F. and .22 Hornet. The 6½ to 7 pound .222 caliber has a four-shot magazine capacity, like the Hornet caliber, and may be had in either standard or deluxe grade. The lad or lassie of economical nature, who has wished for a .222 varmint rifle, should have a look-see at the Savage offering.

* * *

Was prowlin' 'round the other day with my ol' scatter-gun and an urge to



More Room for Game Fish

Largest of a number of big public Texas lakes treated by the Game and Fish Commission this year to remove excess rough fish was Lake Wichita. Part of the results are shown above—hundreds of dead shad. By carefully controlling the amount of chemical used, Aquatic Biologist Leo Lewis was able to spare the game fish. (Wichita Falls Daily Times photo.)

spray some number 6's into a snake den or whatever other legal target might show up. I stepped out at a timberline, and suddenly found myself beneath a low whirlpool of vultures. Screwing the Pclly Choke down to "Full," I started swinging on 'em. The three-shot Remington Sportsman emptied three times, and eight of the big black birds plunged earthward and bounced. Reminded me a bit of those "in the groove" mallard days out of the blind.

* * *

'Tis time then to unlimber those are busy sprouting new headgear for us to admire and attempt to take come next fall the old gobblers are taking it easy after . . . well . . . a busy spring, ya' know. Anyway, whether it be a buck or tom, they ain't fer shootin'.

'Tis time then to unlimber those

varmint and predator busters. And not only the small bore arms should receive regular workouts . . . it is the wise big game hunter who never lets his big bores grow completely cold. Of course, my small bores, like the .222 Remington Sako, get the most attention in the ol' summer time, but being a year 'round powder burner, the big and medium bores are never slighted for long at a time.

During the seasons our sights are high, and we are prone to overlook such shootables as foxes, hawks (bad ones), owls, eagles, coyotes, and the like, which take their annual heavy tolls of game animals and birds. Predator shooting not only helps control the rascals, but one's marksmanship is kept in condition and that old trigger finger can be relieved of some of its tantalizing itch.

Editor:

. . . concerning walleye in the Tennessee Valley ("Walleyed Pike Are Coming to Texas," TEXAS GAME AND FISH, April, 1953) . . . you are correct in stating that walleye were stocked in some of our lakes, but this action occurred apparently before we understood that stocking was a tool most effectively used as you are using it in Texas—to INTRODUCE walleye.

. . . Norris Dam was closed on March 4, 1936 . . . Later, in accordance with popular thinking of that time, a fish hatchery was located nearby, and walleye fry by the thousands were poured into the reservoir intermittently until 1942. Our creel records, population samples, etc., indicated that the stocking made not one jot of difference in the catch. The hatchery was abandoned in 1942, and we still have walleye.

Charles J. Chance
Tennessee Valley Authority
Norris, Tennessee

(The above came in reply to a query by the editor regarding the amount of walleye stocking done in the Tennessee Valley lakes. Some of the better walleye lakes received no stocking at all, yet the small native population expanded in the new waters to more than take care of the demand. All of which goes to show again that when suitable habitat is provided, for either fish or game, the supply takes care of itself in most cases. Fishery experts everywhere have come to realize that stocking has very little value, except for the INTRODUCTION of a species. This

New Fish and Game Laws

• continued from page 27

unconnected and distinct tract of land in a continuous and unbroken boundary" and a license is required for the operation thereof.

Game Breeder: In Waller County and in Combine Community or "Point" in Kaufman County, tame pheasant may not be possessed for eating purposes, nor killed for the next five years. Effective May 1, 1953.

POLLUTION

Cameron County, from April 1 through September 30, may not discharge bilge water in waters of Laguna Madre from vessels required to be registered or documented under United States or foreign nation laws. Effective August 26, 1953.

REGULATORY AUTHORITY

Fannin, Titus, Red River, Kerr,

is the reason more hatcheries are being abandoned throughout the nation these days than are being built.)

Editor:

I have just read your query regarding any readers who might have a complete file of TEXAS GAME AND FISH Magazine. I wish to advise that my husband has one, beginning with Volume 1, Number 1, dated December, 1942.

In addition to this file, he has copies of the *Weekly Bulletin*, which the Commission published prior to the beginning of the magazine. He began receiving it when he started selling hunting and fishing licenses in his drug store, and that is how we first learned of it. . . .

We both enjoy TEXAS GAME AND FISH immensely and have kept the file with the intention of having them bound.

Mrs. Ray Creswell
P. O. Box 225
Greenville, Texas

(Another reader with a complete set! D. W. Britain, Amarillo, is the only other we have uncovered. Anyone else?)

Editor:

Here is a story of a fishing adventure, written right after it happened in 1919. My two fishing partners, Gladden McNally and Philip Nixon, now live in Yancey, Texas, and will "back up" the yarn.

I'd like to add the warning that any fisherman who reads this should not hurry out to Lake Chicon to try to duplicate

our experience . . . for things are different now.

"While visiting near Yancey, we got word that fish at Lake Chicon would jump into your boat. So Gladden McNally, Philip Nixon, and I went over to see. It was a cold December night with a full moon, and we reached the lake about 9 p.m., where we found that the lake had been drained, and the only water left was a narrow strip—the original channel of the creek.

"We paddled slowly along about four feet from the shore, and it was my job to splatter water between the boat and the shore. Every so often, we would get into a bunch of largemouth black bass, and they would start breaking from the shore back toward deeper water. Many of them would jump clear over the boat, but occasionally one or two would fall into the bottom, and we would have to grab them before they bounced out again.

"As we rowed along, we tilted the edge of the boat down towards the shore to make it easier for the fish to jump in. One of them hit Gladden on the jaw, and the next day he said it was still sore.

"Finally we began throwing back all the fish under a pound. After a couple of hours we had to quit, as our four-foot string was entirely full, and we had no place else to put them.

"When we got through, we were splattered from head to foot with muddy water. Our hands were cut from the fins of the fish we had grabbed in a hurry. But we had over 50 pounds of largemouth bass.

"The biggest weighed five pounds, and we had several three-pounders and plenty of twos and ones. They all jumped into the boat and were caught with our bare hands."

I certainly have been enjoying your magazine. As a native Texan and graduate of the University of Texas, I feel proud of such a creditable publication.

J. Stewart Boswell
233 W. Exchange Ave.,
Sycamore, Ill.

(It seems that Mr. Boswell's fondness for Texas' outdoors runs in the family. His brother, Gordon Boswell, and his niece's husband, Felix Ankele, both are active officials of that fine organization, the Fort Worth Anglers' Club.)

Editor:

. . . you might be interested in knowing that the Texas Ornithological Society now numbers about 254 members and is growing by daily additions.

We enjoy your publication immensely and think the covers are absolutely classic.

Mrs. B. B. Watson
422 Sunny Lane
Tyler, Texas

ing on cheeks; dark spot on opercle; large mouth; body stout basslike.

Green sunfish (sometimes called "goggle-eye") (*Lepomis cyanellus*)

4D Pectoral fins short and rounded; long, dark, narrow "ear flap" with narrow red margin on lower edge.

Longear sunfish (*Lepomis megalotis*)

4E Pectoral fin short rounded, not reaching nape of neck when curved upward and forward; ear flap long and broad, red margined; distinct reddish-bronze spots on sides; small sunfish rarely exceeds 4 inches in length.

Orange spotted sunfish (*Lepomis humilis*)

4F Pectoral fins short and rounded; lateral line incomplete; dark spot at base of dorsal fin; spots on sides reddish bronze; rarely exceeds 3 inches.

Small sunfish (*Lepomis symmetricus*)

4G Pectoral fins short rounded not reaching nape of neck when curved upward and forward; ear flap narrow, flexible and fringed; vivid yellow to orange belly.

Yellow belly sunfish (*Lepomis auritus*)

4H Pectoral fins short and rounded; dorsal spines 4, anal spines 3; rounded caudal fin; distinct vertical dark bars on body, anal fin and dorsal fin; rare, small, maximum length 1½ inches.

Banded pigmy sunfish (*Elasoma zonatum*)

4I Pectoral fins short, pointed; lateral line complete; thin flexible projection on opercle more or less fringed; opercle margined with green; small, rare, seldom attaining over 3 inches in length; dorsal spines 9, anal spines 3.

Dollar sunfish (*Lepomis marginatus*)

4J Pectoral fins short, rounded, not reaching nape of neck when curved upward and forward; anal and dorsal fin relatively long and rounded; dorsal fin spines 11 to 13.

Flyer sunfish (*Centrarchus macropterus*)

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Jordan, D. S., Evermann, B. W. American Game and Food Fishes Doubleday, Page and Co. New York, 1902.

Hubbs, C. L., Lagler, K. F. Fishes of the Great Lakes Region Cranbrook Institute of Science, Bulletin No. 26, October, 1947.

Schrenkeisen, R. Field Book of Fresh-Water Fishes of North America North of Mexico, G. P. Putnam's Sons, New York, 1938.

Preserved fish specimens of the Wildlife Management Department laboratory of The A. and M. College of Texas.

Harlan, J. R., Speaker, E. B. Iowa Fish and Fishing, State Conservation Commission, 1951.

smaller weighs about 5 pounds and makes 12½ pounds of food with the water added; the larger weighs 9 pounds and makes better than 20 pounds of food with the water added. These are one-package sets of handy packets and will apparently keep indefinitely.

For working up your own light list, it will probably pay to read some of the camping books covering this subject. Horace Kephart's "Camping and Woodcraft" and "Camp Cookery," while old, are still among the best books on the subject, while the Sierra Club book, "Going Light with Backpack or Burro," is about the most up to date book I know of and a very good one. "Camping and Woodcraft" plus "Going Light" will answer most of your questions, while you can pick up a pointer here and there in nearly all of the many other publications on packing. The "Boy Scout Handbook" is the most readily available and has lots of good dope in it.

CAMPING EQUIPMENT

Ponchos—C & T Vinlite coated nylon Large, 66" x 90", wt. 1# 10 oz.....	\$ 8.75
Leg Protectors—Short, medium, long, X-Long, ea.	3.25
Sleeping Bags—	
C & T Atomwate 100% goose down filled w/ 36" side zipper and zip hood (good down to 32 F.) wt. 2# 12 oz.	39.95
C & T Mountaintop 100% goose down filled w/ full-length zipper and zip hood (good down to 0 F.) wt. 4#... ..	49.95
C & T Slumberlite Air Mattress—48" hvy. plastic w/ detachable pillow, wt. 2# 6 oz.	12.95
C & T Ezy-Up Tent, sleeps 2 w/gear, wt. 5½#	55.00
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Egg Container for 6 eggs, Swiss aluminum, 2 oz.....	1.85
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Bernard Kamp-Pack, 4 man, 12 meals.	9.00
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Per yard	1.25
Food Bags, Vinlite coated nylon. Small —25c ea.; medium—35c ea.; large 55c ea. Kephart's <i>Camping & Woodcraft</i> —15th printing	3.95
Sierra Club's <i>Going Light</i> —With Backpack or Burro	2.00
Primus 71-L Stove, white gasoline—1# 5 oz.	8.95

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Big Northern Bob White

Eggs—May, June & July—\$30.00 per 100

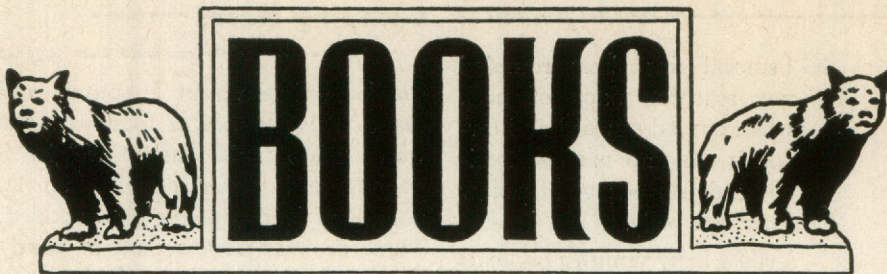
STARTED CHICKS, 5 weeks old July to October: 20 chicks for \$21.00 Instructions for care, with order

YOUNG BIRDS, 8 to 10 weeks old. 2/3 grown. Ideal for restocking, August to Nov.: 10 pair for \$25.00

MINIMUM ORDER: 5 pair quail or 50 eggs

Whitney Quail Farms

503 W. 30th St. Austin, Texas G. E. WHITNEY, OWNER



BOOKS

SPINNING FOR FRESH AND SALT WATER FISH OF NORTH AMERICA by A. J. McClane. 280 pages illustrated with line drawings by Walt Dower and 16 pages of photographs. Published 1952 by Prentice-Hall, Inc., 70 Fifth Avenue, New York 11, N. Y. \$4.95.

This is a remarkable book, the title of which is far short of describing its entire worth. Every angler, regardless of his favorite method of fishing, is sure to find here dozens of worthwhile hints.

It would seem that the introduction of spinning into this country revived "thinking" among our anglers, for a tremendous number of tricks discovered by those experimenting with spin fishing later have been adopted with great success to the more familiar methods of taking fish. As usual, Al McClane has done a superb job of jamming a bonus helping of these into one book.

For example, McClane tells of an instance when he was forced to break his line several times when his lures became snagged on underwater rocks. He lost long pieces of line each time. So, he tied a blood knot just above the lure. Next time it snagged, the line broke where weakened slightly at the knot, and McClane retrieved all but a foot or so of his line. Any reason why this shouldn't be used to save line when fishing by other methods besides spinning?

Of course the book runs the entire gamut of spin fishing methods and tackle, and McClane's experience in this field (he was one of the nation's pioneers) provides the necessary authority. McClane describes the advantages of spin fishing completely and offers dozens of ingenious hints for overcoming its limitations. Yet at the beginning, in the introduction, and at the end, in the final paragraph, he carefully points out these limitations, and it is this practical approach sandwiched throughout that gives the book its greatest value.

MARINE GAME FISHES OF THE WORLD by Francesca La Monte. 190 pages generously illustrated by Janet Roemhild with pictures of 138 fish, 80 of these in full color, and six pages of photographic plates. Published 1952 by Doubleday and Company, Garden City, New York. \$3.50.

This book is in the form of a handbook for identifying salt-water game fish from all over the world, but it is much more than that. Along with brief descriptions of each fish's color, shape, and size, there is also a list of its common names, an outline

of its geographic range, the food it eats and its habits. There are also brief notations on how it usually may be caught and when and its importance commercially and as food.

There are other interesting and informative sections, too. One lists official all-tackle records of the world, another presents fishing conditions in various localities throughout the world, and the entire book is made usable by a thorough index, which includes many common names.

The author, as associate curator of fishes at the American Museum of Natural History, executive secretary of the International Game Fish Association, and author of the highly successful "Game Fishes of North America," is more than qualified, of course, to prepare this fine book. And the

Youngsters—Up and Down

• continued from page 6

keen rivalry between the four working groups to see who could band the most doves and examine the most nests, but they worked rapidly and efficiently.

It was amazing to see how these eagle-eyed tree climbers could locate the flimsy nests in trees filled with ball mosses and dense foliage, but they did, and I'll wager that few were missed. They handled the young birds they banded with the care you would expect from trained biologists; and why not—the fellow doing the banding had two years of experience under his belt!

Each nest is examined by but a single climber so that the nesting doves are only slightly disturbed. Doves too young to band are visited later and nests with eggs only are given about ten or fifteen days rest between inspections.

Here is their report for the "kick-off" round:

1. Thirty-seven workers reported for action.
2. Banding time 9:30 a.m. to 11:30 a.m. (time shortened because of

illustrations by Janet Roemhild are exceptional.

SPORTSMAN'S DIGEST OF FISHING and SPORTSMAN'S DIGEST OF HUNTING by Hal Sharp. Each book 250 pages of one-page drawings by the author with text. Published 1953 and 1952, respectively, by Sterling Publishing Company, Inc., New York 10, N. Y. \$1.50 each.

Hal Sharp is best known as the hunting and fishing authority who draws a syndicated newspaper panel, combining text and art into a daily feature of outdoor information called "Sportsman's Digest." These books are collections of these.

The drawings are sharp and accurate, the accompanying text is brief and concise. Each page is a little "chapter" in itself, but Sharp groups them conveniently for ready reference.

The "Digest of Fishing" contains such chapters as Fishing for Bass, Flies and Fly Equipment, Bait—How to Get It, Knots You Should Know, etc. The "Digest of Hunting" has chapters about Small Game and Fowl, Deer, Trapping, Rifles and Shotguns, Your Dog, etc.

The nature of these books make them ideal for short-session browsing by the busy outdoor enthusiast or for a gift to one who is temporarily confined to the indoors.

opening day festivities and formalities).

3. 107 nests containing eggs examined.
4. 20 nests examined with birds too young to band.
5. 22 empty nests examined.
6. 21 young in nests—banded.

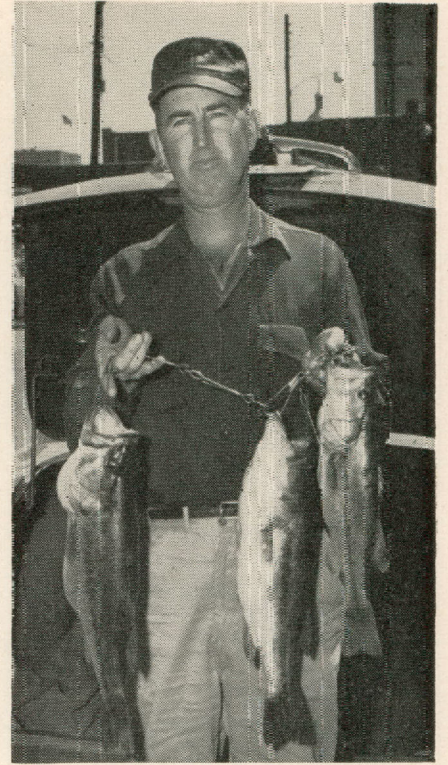
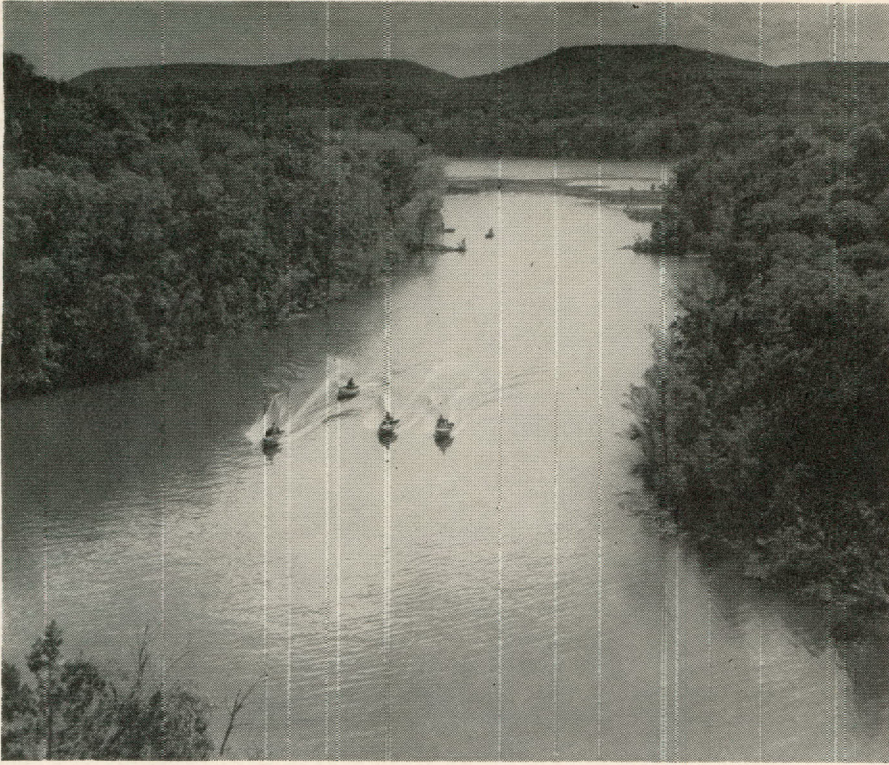
A good day's work!

Ice cream and movies help to keep the youngsters going but their greatest reward comes when they flush a nesting bird and see that little aluminum band around her leg, or when one of their banded birds is reported from some place far from Cuero.

"One of our birds was killed way down in Mexico" says a freckled captain with that gleam in his eye that tells you he's proud of the part he has to play in what his parents, his sponsors, and his community knows is "a job well done."

* * *

To the best of scientific knowledge, all North American and European freshwater eels spawn in an area in the Atlantic Ocean near Bermuda.



Tyler Telegraph Photo



Outdoor Activities Around About Texas

A summertime roundup of photos from the Texas wildlife front naturally is heavy on the fishing side.

The angler shown above (right) is Alton Williams with a fine string of black bass, the largest a six-pounder, from Lake Tyler.

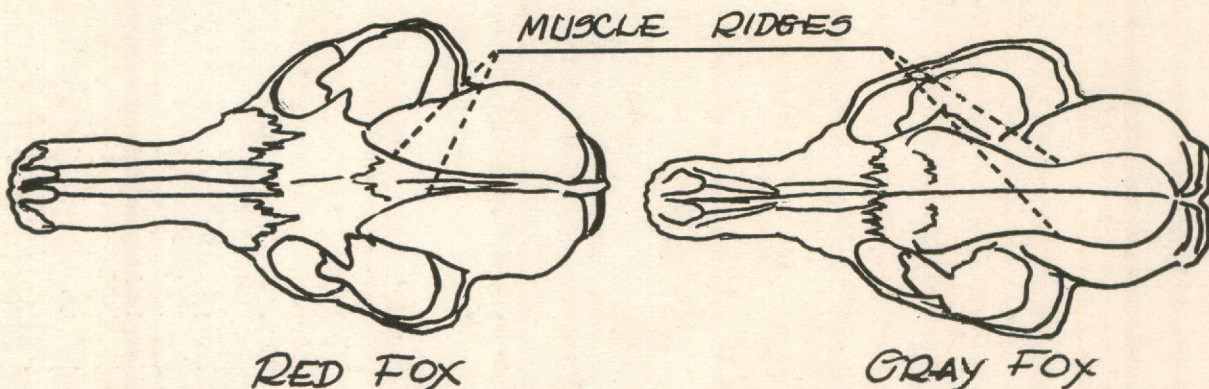
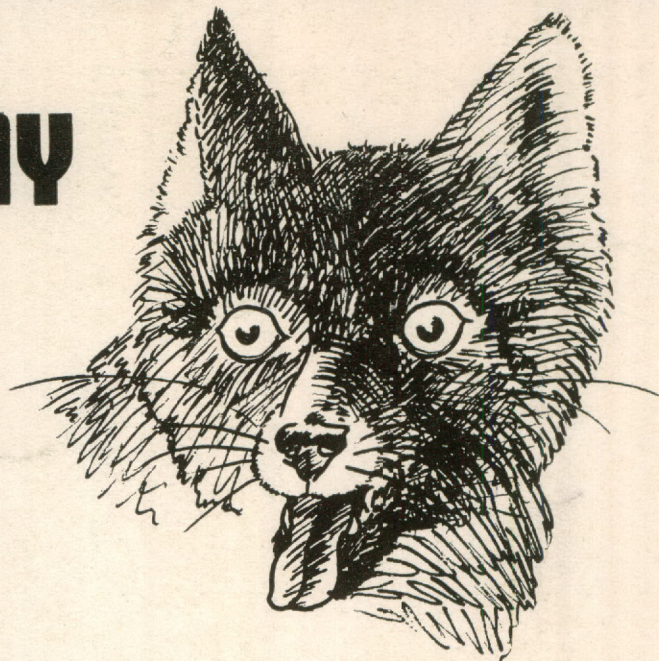
The peaceful scene showing four boats entering Dry Creek from Lake Austin actually is one of death—death for part of the lake's excessive population of rough fish. Personnel of the Game and Fish Commission are preparing to treat the creek with chemicals during an invasion by thousands of rough fish during spawning time.

Shifting to the coast, center left, Marine Biologist Ernest Simmons, left, takes research data on a catch of salt-water drum, assisted by Al McKenzie.

The lower photo shows W. C. Glazener, head of the Wildlife Restoration Division, telling about the work of his department. The audience is a group of game wardens from all over the state. They gathered at Bastrop State Park for annual refresher courses concerning law enforcement, service to hunters and fishermen, and work of the Commission.

RED & GRAY

FOXES



THE RED AND GRAY FOXES, UNLIKE THEIR PLAINS COUSIN THE KIT FOX, ARE OFTEN THE TOPIC OF DISCUSSION OF THE "HOUND" HUNTERS. ONE IS NOT JUST A COLOR PHASE OF THE OTHER, AS THE SKULL DIAGRAM SHOWING THE DIFFERENCE IN CONFIGURATION OF THE MUSCLE RIDGES WILL ILLUSTRATE. THE GRAY FOX INHABITS ALL OF TEXAS EXCEPT THE HIGH PLAINS, WHILE THE MORE SELECTIVE "RED" REMAINS IN THE ROUGHER LOWER-CENTRAL SECTION. THEIR HABITS ARE SIMILAR, WITH THE RED FOX USUALLY GIVEN A SLIGHT EDGE IN INTELLIGENCE. EITHER IS WORTHY OF THE HUNT.

WOOLDRIDGE

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