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July, 1956

Vol. XIV, No. 7

In This Issue

SCOT Nears Work Phase	3
A report on SCOT activities.	
The Collared Lizard	6
By AL FLURY	
One of Texas' most colorful and interesting lizards.	
How To Catch Carp	8
Compiled by TOWNSEND MILLER	
Methods, baits and recipes suggested by carp fishermen.	
Prairie Dog Town, Texas	9
By GORDON ROSE	
McKenzie State Park's remarkable colony draws many visitors.	
How Much Water Do YOU Use?	10
The average daily requirements for one person are amazing.	
A Suggested Water Use Policy	11
By OUTDOOR WRITERS ASSOCIATION OF AMERICA	
Suggestions on use and conservation of our vital water supply.	
Do You REALLY Want Quail?	13
By KENNETH FOREE	
Pertinent comments by a Texas outdoor editor.	
A Man Will Wonder	14
By DAN SAULTS	
Should hunting and fishing courses be offered in the schools?	
The Ivory-Billed Woodpecker	15
By JAMES T. TANNER	
Fifth of a series about our endangered wildlife.	
Waterfowl Crop 2 National Forests	20
Houseboat Pleasures 2 Boss' Mail	21
Legal Doe Hunts	22
Letters 4 Publicized Bobwhite Dies	22
Antelope Census	23
Limit Strings Caught 23 Port Isabel Tuna	26
Partridges 23 Boating Safety	27
Salt-Water Fishing License 24 Trotline Pays Off	28
Coastal Fishing Maps 25 Valley Whitewings	29
State Quail Ready 25 The Tree Toad (verse)	30
Texas Tracks	
Guns and Shooting 18 Bring Arrest	31
Tackle 'N Stuff 19	

Differences in Blue and Channel Catfish.....Inside Back Cover



The Cover

The collared lizard, subject of the cover painting by Don Hague, is well known a l over Texas except in East Texas and the upper Gulf Coast regions. It is notable for its brilliant green, yellow and black coloration and for the size of its head in comparison to its body. Because of its head size, this non-poisonous lizard is sometimes confused with the Gila Monster. (See story, page 6.)

BonusWaterfowlCrop Predicted for 1956 If Good Start Holds

Although much will depend on the weather from now on, present prospects point to a waterfowl crop as good as that of 1955, according to the June report from Ducks Unlimited. Conditions are now generally favorable and prospects excellent, but, due to earlier bad weather, the crop will be later by one to three weeks.

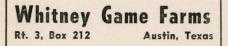
After the late start due to winter hanging on into May, nesting is now reaching a peak and broods are appearing in increasing numbers daily. The hatch of Canada geese is good and practically complete. This species is continuing to spread and increase through southern Alberta and southwestern Saskewatchewan.

Drought conditions prevail in a relatively small part of the range, and rains are needed in the drier areas to prevent some drought loss. Otherwise, throughout the rest of the nesting range there is ample water and no danger of drought loss, even if precipitation remains at its present low level.



Gregg and Carolyne Whitney with another brooder of day old quail chicks that are just out of the incubators.

Whitney Game Farms are ready to supply you with healthy, disease-free birds—quail, pheasants and chukars. Mail your orders as early as possible.





Texans Discover Houseboat Pleasures

One way to avoid paying real estate taxes on a summer cottage is to get one that floats—a houseboat rigged for outboard motor power.

Although houseboats are not yet in the craze category, they are becoming increasingly popular on many of Texas' larger lakes. Moved with an outboard to a favorite crappie bed or baited fishing spot, they provide an ideal way for families or larger groups to fish together.

Many are "home made" and may range from a complete week-end cabin to a simple canvas-shaded ishing raft with protective railing. However, the Johnson Motors News Bureau says there are at least three firms in the country manufacturing houseboats with serious intent. They're located in Alabama, Indiana and Missouri. The prices of their boats range from \$4,750 down to \$1,595.

For the top figure you can purchase a 30-ft. craft eight feet wide made of aluminum alloy. The cabin is fully insulated and the roof doubles as a sundeck which will support a dozen people. It's equipped with a galley, dinette, enclosed toilet, built-in icebox, a large water tank, gas for cooking and heat, a six-volt lighting system and a 110-volt system for plug-in appliances.

Another firm manufactures an allsteel houseboat. The dcuble cabin craft, 30 feet long, goes for \$3,490 while the single cabin, 24-footer sells for \$2,695.

Most houseboats draw up to six or seven inches of water. This allows them to go practically anywhere just so there is room to maneuver. Many houseboaters carry or tow a small boat so they can get ashore in case they choose to anchor offshore for the night.

Houseboat speeds vary according to size, weight and loads, of course, but the average houseboat, such as those described, will go from 8 to 12 m.p.h. Some will experience 14 m.p.h. with twin motors on the back. Actually their owners usually care little about speed.

If you can't stand the scenery passing by at anything less than 30 m.p.h. the houseboat is not for you.

But if you con't mind driftin' along lazy like, your feet propped up on a rail and sippin' on a cool drink while the evenin' sun sorta makes you feel mellow, you'd better keep watch on your checkbook because before you know it you'll up and buy or build one of these things.

SCOT Nears Shift From Planning to Work Phase

Sportsmen's Club of Texas, the new federation of local outdoor organizations throughout Texas, plans to move a step closer to active participation along the outdoor front following a board of directors meeting scheduled in Austin July 12.

The meeting will be the second for directing officials since SCOT's organization in late March. Meanwhile, officials and committee members have been at work ironing out legal aspects of the organization necessary prior to launching an all-out financial drive. The final go-ahead

32 States Hold Legal Doe Hunts

In order to compile a national record on deer herd management problems and the steps taken to offset them, the Associated Sportsmen of California sent a detailed questionnaire to each state. The replies bare the latest thinking on the value of antlerless or hunter's choice deer seasons. The ASC requested the information so that it could determine a course of action to recommend in California.

Thirty-two states reported that they permit the shooting of both buck *and* doe deer as a herd management tool.

On the issue where sportsmen might expect the greatest controversy—the hunting of deer of either sex—the states showed overwhelming accord. All replying to the question agreed that the harvest of both sexes of deer was a useful and necessary big game management practice. It was emphasized, however, that this authority should be flexible so that the game departments could apply the management technique at times and in regions where it was found necessary.

Of the five states where deer of either sex are *not* being harvested, four states do not think the practice is detrimental to the deer population, and the fifth gave no opinion. Seven states failed to return the questionnaire and Illinois, Kansas, and Rhode Island reported that deer were not legal game. signal was expected from attorneys in advance of the July 12 meeting.

This would pave the way for obtaining donations and contributions necessary to finance the broad program of SCOT, to employ a fulltime executive officer, and to maintain a state office.

Heading the list of items to be discussed at the directors meeting were reports from the finance committee and the employment and housing committee.

The finance committee, headed by Ed Harper, San Antonio, was expected to recommend a budget of \$125,000 for the first three years. Harper reported that organizational plans for the campaign were nearing completion and that some local groups already were doing advance work.

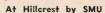
The employment and housing committee, charged with the vital job of employing SCOT's full-time executive official, also plans to submit a report to the directors. Charles F. Haas, Corpus Christi, chairman, says applications for the position are being screened and the committee hopes to present for consideration and discussion a select list of the most promising applicants. Subject to the financial committee, the employment committee hopes to offer an adequate salary on a threeyear basis to insure employment of a well-qualified person. Plans are to establish a headquarters in Austin as soon as possible.

Also on the agenda for the meeting is the possible formal adoption of a work program. Officials have been at work revising and strengthening a tentative program which

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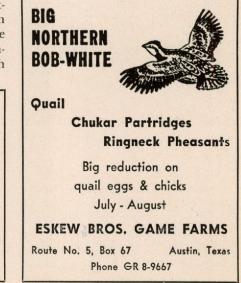
Designed by The Southwell Co.

Official insignia of Sportsmen's Clubs of Texas has been completed as shown above.

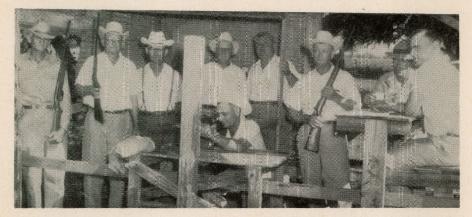
was drawn up prior to the final organizational meeting held in March.

Also due for discussion is a plan of coordination in matters of wildlife conservation and management between SCOT and the Future Farmers of America. FFA representatives are expected to attend the meeting.

All outdoor organizations in Texas are invited to join some half a hundred other local clubs which already have affiliated with SCOT. Further information may be obtained by writing Sportsmen's Clubs of Texas, P. O. Box 2060, San Antonio 6.



Letters to . . .



Another Schutz en Verine?

Editor:

This photo shows the opening of the 73rd annual King Feast, or Schutz en Verine, at Appelt's Hill, Lavaca County.

The Appelt's Hill Schutz en Verine, or Gun Club, was the first of seven such clubs and is the only surviving Verine in the county. August Appelt, founder and first president of the Verine, erected a platform on his land for the first Feast in 1882. Cap and ball, or muzzle leading rifles, were used, and marksmen shot at the target at a range of 100 yards.

The 3 to 13 ring count is still used in scoring Members receive three shots in the King Shoot, and a score of 39 rings is possible. The few who have

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scored this 39 record since the Verine was founded include Adolph Zappe, Joe Schulte, Julius Schultz, Fritz Korges and George Brunkenhoefer.

Carlwin Werner, Werner's Sporting Goods, Hallettsville, would like to know if there are any other Schutz en Verine active in Texas.

> Richard Melac, Editor Hallettsville Tribune Hallettsville, Texas

Muddy Waters

Editcr:

I have a problem that I throught you could help me solve. It is in regard to my farm pond which contains approximately three quarters of an acre. The water stands from eight or nine feet to shallow at upper end where it backs up into a draw. There was no stock in the pasture, but last fall the water began to turn muddy. It is still plenty muddy except the upper end which is shallow and clear.

I have caught some large turtles out of it, but don't believe there are many if any more left in it. Some suggest it is large fish working on the bottom that is causing the trouble.

Can you advise me as to the source of the trouble and a remedy for same?

C. W. Gimble Route 6, Box 153 Tyler, Texas

(Ordinarily fishes can cause the water in ponds to become muddy. Actually the fish that cause such trouble are bull-head catfish, carp, buffalo, chubsucker and shad.

(It has also been discovered that sometimes a change in the acidity of your water can cause a lake to become turbid. Usually water with a low acidity will prove to be a clear lake, and lakes that become more alkaline tend to become turbid. It might be that you have placed lime or limestone in large quantities in your lake.

(There is one other possible cause. The presence of a large number of crayfish. These animals are very bad about causing ponds to become muddy.— Marion Toole, Chief Aquatic Biologist.)

Banded Dove Returns

Editor:

Last summer W. E. Ritter, U. S. Game Manager, and I banded a dove. The unusual part of that story is that Grace Walker rescued the dove from a sidewalk while it was still featherless. He became pretty much of a pet, living near the porch and eating from the table. In the fall he left.

Last month the dove returned to his home. When Grace spotted the band she took some feed in her hand and went outside. The dove came right down and lit on her hand and ate. Later he came back again, onto the porch, and to his usual table. Grace got some good pictures of him.

C. M. McBee Box 213 Brackettville, Texas

Reds Grab Mullet

Editor:

Mrs. Sherwood Barber was so pleased when she saw her husband coming in with these nice redfish that she snapped this photo just as he entered the door. They were caught at Turtle Bay on cut mullet.

The Barbers have seen many good strings of fish taken by their guests at White Swan Courts, but they haven't lost their enthusiasm for fishing and fish.

> Lorraine Basford Grassy Point Bait Camp Palacios, Texas



... the Editor

Armadillo Antics

Editor:

I once observed an armadillo in a very interesting performance. He was in a leaf-filled hollow about 15 feet from a rocky ledge. He pulled the loose leaves under his belly with his front feet, compressing them into a wad against his hind legs. When he was loaded, he started hopping backward, stiff-legged, holding his cargo between all four legs.

When he reached the ledge, he backed under it and released the leaves at the opening. I guess you might say he pulled the hole in after himself.

Hal Ferrell 503 West Dabney Cleburne, Texas

Fishin' Thoughts

Editor:

Texas Game and Fish is "tops" and well worth the nominal two bucks price of anyone's money!

We enjoy the art work, photographs, interesting and informative articles, and most of all the emphasis on conservation.

Could you use an original "verse"?

THE FINISHED FISHERMAN

In the Spring a YOUNG man's fancy turns to—LOVE, they say;

But a guy don't feel "romancy" when he finds he's old and gray!

He much prefers a fishing pole, a hook, a line and sinker;

To sit beside some favorite hole

and play the part of thinker;

To ponder on what might have been if he could have his wish,

And have his life to lead again;

BUT MOST OF ALL TO FISH! Hadley Smith Box 1750 San Benito, Texas

Record Crappie

Editor:

Would you please tell me, what is the largest known crappie or white perch ever caught in Texas and the United States?

Louis T. Clabaugh Federal Reserve Bank Dallas, Texas

(The largest Texas-caught crappie recorded in the files of the Commission is one weighing 4 pounds, 4 ounces. It was caught by Isaac Burks, Denison, in Lake Texoma about 1951.

(So far as I know, no agency keeps records on crappie on a national basis. —Ed.)



Youngsters' Catch

Editor:

The photo is of a 22-pound blue cat —biggest we've caught in many years. And it was caught by the youngsters pictured, left to right, J. W. Smith, Johnnie Haas, and Owen Smith, my son and two nephews. The fish was taken on a trotline set in the Pedernales River near Johnson City.

Mrs. Marvin Haas 2010 Clower St. San Antonio, Texas

Test of a Man

(At the time the following verse was received several months ago, the name of the writer was lost. We will be glad to give credit if he will drop us a line.—Ed.)

If you are a guy that thinks it's smart To go out and violate the law,

You should see yourself as others see you:

A despicable a guy as you ever saw.

The buck you slip around to shoot, That costs you nothing, you think, Should just as well have been stolen. In a real sportsman's book, you stink!

He buys his license, and pays his lease,

On prospects he has seen.

You go sneaking out and speil it all. Now don't you feel sort of mean?

You laugh and brag around your kind,

Yes, it's funny to your little clan, For once try acting like a sport And see how it feels to be a man.

Antelope Herd Counts Indicate Good Supply For Permit Holders

Herd counts now underway indicate the antelope population West of the Pecos is sufficient to warrant an open season this fall, according to the Game and Fish Commission.

P. B. Uzzell of Alpine, wildlife biologist in charge of the aerial census scheduled for late June completion, reported that up to 500 buck antelope probably will be available for the proposed October harvest.

Whether the season will include surplus doe antelope will be determined when the Commission acts on the fall hunting program at its July meeting.

Last year, hunters took less than one-half of the buck and doe antelope declared surplus West of the Pecos. Permits were authorized for 1100 buck antelope and 250 doe antelope. The 590 persons obtaining the special licenses bagged 558 bucks and only 28 doe antelope.

After the hunting season failed to reduce the herds to the desired number, trapping crews moved in and transplanted approximately 600 head of antelope from the West of Pecos ranches.

Two hundred head were trapped from one ranch alone and the current herd count showed that this particular ranch still has surplus antelope which will be included in the proposed open season prospectus for this fall.

According to the Game and Fish Commission recommendations have *not* been made yet on the Panhandle where an open season on buck antelope is considered likely.

Antelope license holders generally are determined through a drawing for applicants held in the Commission's Austin office. Permit holders are entitled to one antelope.



This very colorful, non-poisonous lizard provides an interesting subject for this month's cover story.

The Collared Lizard

By AL FLURY, Aquatic Biologist

The Collared Lizard (*Crotaphytus collaris*) is a rather large and spectacularly-colored lizard often seen in much of the ranch country of Texas. They prefer to live in areas with scattered rocks and little vegetation and occur throughout the Southwest from Missouri and Arkansas westward to southern Oregon and southward across most cf northern Mexico. In Texas they inhabit all suitable regions except East Texas and the upper Gulf Coast.

Two subspecies are recognized by the scientists who study these critters and their approximate ranges in Texas are shown in the accompanying map. The "typical" eastern race (*C. c. collaris*) is found in the Panhandle, north and east-central Texas. They usually (about $\frac{3}{4}$ of the population) have a single row of enlarged scales between the eyes, and the throat area of males is not reticulate.

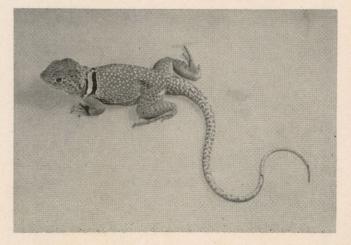
The western subspecies (C. c. baileyi) occurs in the rocky, mountain areas of central, south and west Texas. In this race there are usually two rows of interorbital

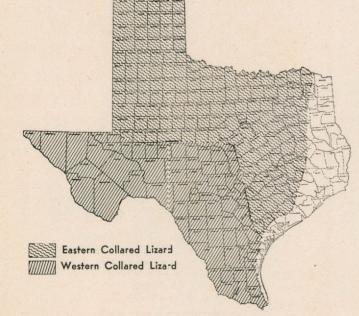
scales and the gular fin of the male is reticutate (having rounded, dark spots separated by irregular light lines). Some lizardologists make a big thing out of such small differences but the lizards don't seem to mind one way or the other, so you and I don't need to bother.

The coloration of the head and back is predominantly green in adult males, with a pattern of light gray spots, sometimes arranged in indistinct cross bands. The neck is gray or yellow and crossed by two eyecatching bands of black, usually incomplete at the middorsal line. Enlarged black, blue and orange spots are found along the sides of the body. The underparts, except the throat, are light colored with few markings. The females and young of the Collared Lizard have very little green coloration, tending more to yellow or tan, and the black collars of the neck are not as pronounced as in the adult males.

When caught alive these lizards are decidedly pugnacious, they open their mouth very wide and almost always try to bite. The inside of the mouth and throat are a startling blue-black in color and the strong jaws and many peg-like teeth can inflict a bite strong enough to break the skin. This is more amusing than serious

The "typical" eastern species of the Collared Lizard, below, is common in most of north and east-central Texas, however, only an expert could differentiate between it and its western cousin.





because the little beasts are *not* poisonous, despite widespread belief to the contrary. The Gila Monster and Beaded Lizard, which do not occur naturally within a hundred miles or more of Texas, are the *only* poisonous lizards in the *WORLD*.

The size of newly hatched Collared Lizards (females lay up to two dozen eggs under rocks) is about three to four inches and adult males may grow slightly over a foot in total length. About two-thirds of the length is composed of the slender, tapering tail. The head and body are robust and the hind legs are much longer and more muscular than the forelegs. Connected with this fact is the interesting habit of raising the forepart of the body off the ground and running only on the hind legs when they are chased across broad open spaces.

The lizards love the hot Texas sun and they may often be seen perched on a lookout station atop a small boulder. Boulders are chosen so that the view is unobstructed by trees, grass or larger rocks. When any large animal approaches the rock, the lizard shifts around to the opposite side, keeping his eyes barely cocked over the edge. Finally, when the intruder gets too close, the lizard ducks into one of his burrows under a rock, most often one under the lookout station rock.

Besides a safety measure, the lookout station also serves as a place to watch for food or other lizards. Food consists chiefly of grasshoppers but beetles, moths, spiders and almost any small invertebrate will be eaten if available. Small lizards, even of their own species, are sometimes eaten.

More than one male Collared Lizard is seldom found in the same area. Individual territories about fifty yards across are maintained and any competitor is driven off by fighting. Close observation, by the use of field glasses, of the habits and activity of these lizards is very interesting and there is no reason why they should be shot or beaten to death just because they are strange.

Two other species of the genus *Crotaphytus* occur in Texas, the Reticulate Lizard and the Leopard Lizard;

The Reticulate Lizard, below, is similar in size and appearance to

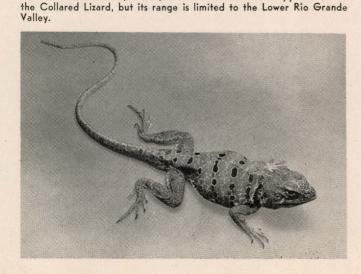
neither are nearly so common or well known as the Collared Lizard. The Reticulate Lizard (*Crotaphytus reticulatus*) is very similar in size and appearance to the Collared Lizard but the dorsal coloration is gray or brown with a network of lighter narrow lines outlining the rounded areas. Several rather large spots of black are arranged in two linear series down the back and sides. The black collars on the sides of the neck of the males are not so prominent as in *collaris* and in the females they are absent.

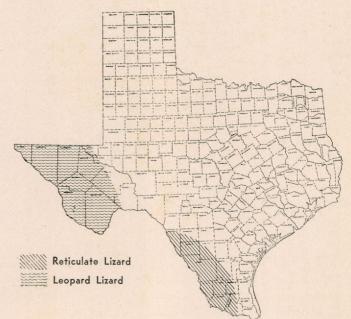
Besides the reticulate pattern and the less pronounced collars, the Reticulate Lizard differs from the Collared Lizard in that the former has at least three or four rows of scales between the upper lip scales and the enlarged scales under the eyes while the latter has only two rows. These animals live in sandier, less rocky situations than does the Collared Lizard and are much shyer. They are found only in the drier parts of the Lower Rio Grande Valley in northeastern Mexico and southern Texas. Little is known about their habits but they are probably generally similar to those of the Collard Lizard.

The Leopard Lizard (*Crotaphytus wislizenti*) occurs from Trans-Pecos Texas westward to Lower California and northward to Oregon and Idaho. In Texas they are apparently rather rare and any that are found should be sent to a museum along with locality data.

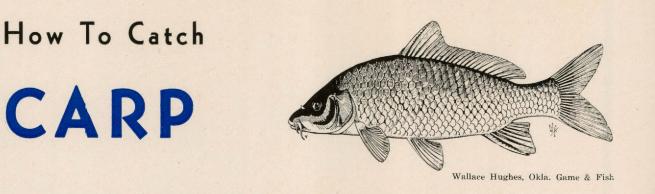
They grow little longer than the Collared Lizard but the body proportions are very similar except that the jaw muscles of the head are not so well developed. The smaller head gives this species a more streamlined appearance than the other two members of the genus. The coloration and pattern is variable but is somewhat like the Reticulated Lizard, the ground color being gray or brown with faint or prominent light lines outlining the darker areas. Many dark, almost jet black spots of different sizes are scattered on the back and sides. There is a single, elongate scale below

• Continued on page 20





Requests continue to come to the magazine for carp-fishing information and bait recipes. So we are reprinting a roundup which appeared in the July, 1953, issue.



Fishing method, baits and recipes suggested by carp fishermen around the country

Compiled by TOWNSEND MILLER, Editor

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

A T 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 carping 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:

- 11/2 cups Quaker yellow corn meal
- 2 heaping tablespoons of Quick Quaker Oats
- 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 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

• Continued on page 24

8

Prairie Dog Town, Texas

By GORDON ROSE



McKenzie State Park's remarkable colony is a must for Lubbock area visitors

The National Park Service Superintendent was perplexed and annoyed as he dolefully watched the energetic little prairie dogs scurry to and fro over land he was developing into Mackenzie Park in Lubbock, Texas.

"I just don't know what to do with them," he said. "We don't have funds with which to buy poison and get rid of those little rascals."

"Why poison them?" asked the tall West Texan standing nearby. "Let"s preserve them . . . and in ten years time they will be a big attraction."

Then Kennedy N. Clapp of Lubbock drew a circle on the park service's map pointing out the location of the town he wanted to preserve. The park service went along with the idea, and in 5 years, in half the time predicted, Mackenzie Park's "Prairie Dog Town" (pop. about 600) was the talk of Texas.

More than a million visitors from all sections of the United States come to Lubbock annually and make "Prairie Dog Town" a "must." Some even drive hundreds of miles out of their way to see the town. Pete the Prairie Dog has even become somewhat of a symbol of the Lubbock Chamber of Commerce, which has put out a descriptive folder showing Pete introducing the Hub City's attractions.

Clapp, a long-time resident of Lubbock and probably the best-informed person on prairie dogs, then undertook a task, voluntarily, of trying to confine the rodents in the seven-acre space so marked that day in 1938.

"The prairie dogs would always get out of any enclosure," said Clapp, "and would

Prairie dog sentinels are always alert and sound a shrill warning to the "town" when danger is sighted.

sometimes start new holes in the middle of the nearby golf course greens."

Clapp, on behalf of the city and irate golfers, sought expert advice, but since there was no definitive article on prairie dogs the zoo experts could only offer possible solutions. The National Zoo suggested that chicken wire be used, a proposal that Clapp thought had merit. He had no wire available, but was told the Texas Highway Department probably had some surplus material which would serve the purpose. He enlisted the aid of Marcus (Hop) Halsey, then state representative, to get some. Halsey secured an appropriation from the State for the surplus highway department wire, and Clapp began experimenting.

"It took me three years," said Clapp, "through a lot of trials and errors to get what I wanted. I finally ended

• Continued on page 21





It takes 800,000 gallons of water to grow one acre of cotton-326,000 for an acre of alfalfa.

How Much Water Do YOU Use?

Water—in truly staggering quantities—is used to create most of the products used by humans in everyday life. Often the fact that water played an important part in this production is not at all evident.

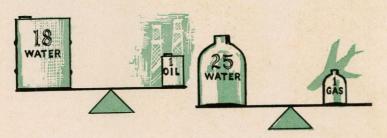
Would you believe that every cutting of alfalfa requires about 326,000 gallons of water per acre to grow it? Or that an acre of cotton needs 800,000 gallons of water to mature one annual crop?

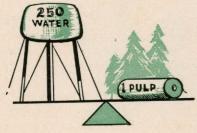
In other ways, too, our consumption of water is staggering: A large paper mill requires 50 million gallons of water per day—more than enough to supply the day's personal needs for a city of half a million. It takes 42 gallons of water to produce a pound of rubber, and 1,000 gallons of water are required to produce a pound of rayon.

Such facts show why farmers and urbanites alike are interested in protecting water resources and using water efficiently.—Soil Conservation.



The operation of a steam power generating plant requires from 600 to 1,000 times as much water as coal.





It takes 18 barrels of water to produce one barrel of oil—25 gallons of water to produce one gallon of aviation gas— 250 tons of water to make one ton of steel or one ton of sulfate wood pulp.



Each citizen of the United State uses—for industrial, personal, and other needs—about 1,300 gallons of water each day. And the total is rising all the time.

A SUGGESTED WATER USE POLICY



The water shortage is NOT local . . . it is NOT merely regional . . . it IS serious—to YOU! Members of the Outdoor Writers Association of America—acting as citizens like you and me—have studied all aspects and here offer an inspiring approach to this critical problem.

PRELUDE

By ARTHUR H. CARHART Chairman, OWAA Water Use Policy Committee

In the dim, misty beginnings of life on earth, ... "God said, Let the waters bring forth abundantly the moving creature that hath life, and fowl that may fly above the earth—and God saw that it was good."

We all are creatures of the waters . . .

We must have our minimum six to eight pints per day to maintain our bodies in health. Tons of water are in action in producing crops that are food or are necessary for growing flocks and herds to supply our other foods. No transportation could exist without water. . . Vast quantities of water traveled through the sap channels of trees that grew to sawlog size and then were cut to furnish timbers for your house.

In the headlong expansion of our technical activities, in the almost explosive development of new processes and new products, water is the greatest primary raw material utilized... The whole advancement and continuance of American industry, the American way of life, our entire economic and social structure, rests on the ready availability of adequate useable water.

It is that simple-water is that essential. . . .

In many quarters, commissions, committees, associations, officials, have realized that "something must be done about our water resources-SOMETHING MUST BE DONE."

We have had studies. We have had reports. We have had investigations. Volumes, weighty and meticulous, have been published about water resources, its use, and how it shall be managed.

When the Water Policy Committee of the Outdoor Writers Association of America approached the task of developing a policy statement, it faced these studies, investigations, reports. But there was a great, gaping void. . . . Not that there was any lack of excellent thought in these studies; there was much to be derived from them. But they did not get at the *basic*, *living facts* on which *all other* phases of water use and management must rest... the facts that cannot be controverted with regard to water wealth, without which all law, mechanics, administration that man may set up is on insecure foundation.

There is no marvelous analysis in the policy the committee developed; no super-man reasoning within it. It is, rather, the expression of ordinary Americans concerned with the fundamentals involved in water wealth management. . . .

It is, in no small degree we believe, common sense a creed for the average American, easily understood.

And now the OWAA offers it to YOU, as a personal, as a community, as a simple, basic national policy in water management, that may be easily understood and supply the foundation for all other extensions of policy based upon it.

INTRODUCTORY By MICHAEL HUBODA Conservation Director, OWAA

. . . There is no national policy for land resources, and no national policy for water resources. This does not imply a suggestion of planned economy; but rather for a program with basic ethics toward the use, development and concern with land and water resources. . . .

The Outdoor Writers Association of America, dedicated to conservation and without any selfish purpose, has . . . drawn on its best talents to prepare a proposed land and proposed water policy for consideration.

These proposed policies, approved by its membership, do not seek to urge one specific plan or program over another; but, rather to outline and suggest basic fundamentals under which land and water programs and policies could serve the largest area of public interest.

The Water Policy Committee, Outdoor Writers Association of America, Western Division, submits herewith its statement of what it regards as the primary and fundamental precepts in shaping a water management and use policy for not only the United States but at least for the North American Continent. We believe these are so basic in approaching water resource conservation they can apply universally.

Many prior studies by various groups have been overly concerned with administrative organization, special phases and in some measure influenced by specialized background in law, engineering or comparable training and experience. It has been our objective to present concepts and considerations that lie at the very foundation of all ramifications and phases of water conservation and use. We have tried to present the factors of primary policy as citizens, concerned with the conservation of natural resource wealth of which water is a major segment, and without bias, coloring or overemphasis on any area of the problems or the policies that should govern in managing our water rescurces.

These are the precepts we believe are universally primary and fundamental in shaping a national water policy.

1. Water is one of the essentials for life on earth. It is as indispensable as air, sunlight and soil. The best and fullest use of our water wealth must be the concern of all citizens.

2. The management of water and soil are inseparable if we are to sesure the greatest service from both. We have wasted and abused the soilwater complex. We have reached a point where wastage, abuses and mismanagement of such basic wealth can lead to national bankruptcy. National, as well as individual, survival dictates the necessity for applying a sound, universal policy to govern the management of soil and water wealth.

3. Water is basic wealth. The nation's wealth is not gold or goods; soil and water are real wealth.

4. Water is mobile. From arrival on the earth's land masses it continually moves toward rejoining the oceans. Such uses as it may serve occur at some point along this "line of transit."

5. Water is community wealth. By its very nature, its constant movement, no "piece" of water may be held in fee by anyone. No statutory law can controvert this fact of natural law, that water evaporates, seeps, flows, inexorably, to rejoin the "community bank account" in water.

6. Title to water rests in the sovereign state. It is placed there, in trust, for the benefit of all citizens.

7. A right to use water wealth can be granted by the sovereign state which is, in fact, the people. Title remains in the state, in the people. As owners, acting through the state, through democratic processes, the people retain the right to determine how this part of their wealth shall be utilized to return to the citizenry the greatest good for the greatest number over the span of state, national or community life.

8. The right to use water thus conferred, does not carry with it the right to abuse it. Inherent in the granting of a right to make use of water resources are two fundamentals; that in so far as feasible, the integrity of the water shall be maintained to release it after use so it may further serve, and that the use made of the water shall contribute the most valuable use of the resource in a totally all-inclusive use-plan for the water wealth.

9. Complete utilization of water wealth demands putting it to productive use, in all phases of coordinated uses, throughout the line of transit. To not provide for all services which water may render between arrival on the land masses and its rejoining of the oceans, is to deny the community the full return from this wealth. It follows that planning and management to secure this greatest return from water resources, over-all planning and management must begin with the arrival of the raindrop on the land mass.

10. The granting of a priority and monopolistic right by statute, decree compact or other action, to a downstream entity, which puts such entity in a position to demand release of water from high up on the line of transit to satisfy the downstream right, without first securing productive use higher on the line of transit, denies the principle of securing allinclusive use and service throughout the line of transit; and is therefore inimical to the public good.

11. Every use of water contributing to the public weal must have equal right for making claim to its proper allocation of water; no one use can be given such overriding monopoly that other good uses may not have just consideration in wateruse planning and management.

12. The assignment of use rights or privileges in water must be made on the basis of returning to the citizenry, the greatest inclusive productivity in management of the resource. At some point any good use may procure for the public, a greater return in values than the same amount of water demanded by other uses of high importance. To secure the fullest return from water wealth, there must be a balanced, all-use plan of utilization, so the aggregate shall be the utmost in values derivable from the resource.

13. A "fixed" or "frozen" scale of priorities in water use does not permit the necessary flexibility or adjustment to needs and demands on the resource. It is recognized that domestic uses in their support of daily living assume a natural priority. The production of food and fiber is hardly less secondary than domestic use. However, such values as power production and many phases of recreational enjoyment may be derived from water, higher up in the line of transit, without depreciating either domestic or food production uses of water farther down this line. The priority scale should not be so frozen as to prevent these coordinate, non-damaging uses of water prior to domestic or agricultural utilization.

14. The WATERSHED of any stream, large or small, is the primary area in which water management and control must be applied. The natural facilities for storage of water in ground reserves, the prevention

• Continued on page 28

Quail habitat in Texas is becoming an ever increasing problem to the farmer and hunters. Here are a Texas outdoor editor's comments on the situation as he asks . . .

Do You

Really



Want Quail?

By KENNETH FOREE, Outdoor Editor, The Dallas Morning News

Quail hunters and some landowners seeking to raise quail are far better at wailing than working to bring back that grand little bird, it would appear from a report of biologists.

In what is called a job completion report, State Game and Fish Commission Biologists Daniel W. Lay and Darrell Morris made inspection visits to "56 cooperators who received 172,725 bicolor lespedeza and/or multiflora rose plants during the last two years."

Those two plants are among the best for quail propagation, the lespedeza for late winter feed, the thorny rose for protective cover. What did they find about these vocal people who had written for free materials with which to bring back the bobwhite?

"Only 6.6 per cent of the plants shipped last winter are likely ever to provide food for quail," they reported. "A total of 73 per cent was either not planted or had disappeared."

Jarring, isn't it? So what do the biologists recommend? About the same as would you on a 61/2 per cent use: "Because instructions for proper care are rarely followed and because cheaper methods of increasing quail food are available, it is recommended that Texas stop distributing bicolor lespedeza." The multiflora results were not quite that terrible.

"Multiflora rose plantings that graded good or excellent constituted about one-fourth of the plants shipped." Another fourth of the plants may live, a third fourth was poor and probably would die and the remaining 25 per cent of the cooperators "had no plants to show."

Recommendation in this case was different. "Those roses (the hardy stock for most garden roses) can be grown successfully in most of the eastern half of Texas. Since cover is badly needed in many areas and multiflora is the best species known, it is recommended that the program be extended and intensified."

All of which brings up this: To do something for the myriads who love to hunt quail, the State Game and Fish Commission has spent \$250,000 on a hatchery at Tyler to produce quail for restocking Texas. But quail won't be stocked on billiard-table farms; the people getting state quail must first show suitable habitat—food and cover. Thus there is the possibility of the Commission turning up with a jillion quail and no place to put them.

When that comes about the hatchery will close down, probably will be sold and the big program to bring back the birds in Texas will go out the window.

It is up to three sets of people to prevent that calamity. The farmer or landowner, be he city or rural dweller, is the key man. If he snores on nothing will do any good.

But he can be awakened from this present lethargy-many of the applicants for quail don't know they must have suitable habitat, many don't know that almost everything loves quail from man to hawks, snakes, skunks, foxes, wolves, even possums, and that there must be protection.

That awakening can be done by the various outdoor clubs springing up over the state and by those most involved, the man with the gun.

Now is the time for the latter, particularly the city man with a gun, to make a spring visit to the chap he shows interest in only in the late fall usually.

What has the landowner done to qualify for birds, would be a fair question to ask him. Does he have time to make the necessary plantings? And will he? If not that's where you come in. Why not hire it done for him? That's fun for both of you. And a job done for Texas.

Or don't you give a concentrated whoop either?



"It's hard to understand why so many schools resist hunting and fishing . . . I'm not suggesting, just wondering . . . if a course in plug casting or gun handling wouldn't prepare our American boyhood for life just as adequately as football casting or basketball handling."

By DAN SAULTS, Missouri Conservation Commission

EVEN if it does irritate old grads, I'd like to think out loud for a while about football teams and their stadia, basketball squads with their monster field houses, track teams languishing in loncliness before vastly-empty stands, and the polo, tennis, golf, lacrosse, boxing, wrestling and cheerleading teams that are an integral part of high school and college life besides filling up sports pages when the baseball season is over.

Of course, these items in the Wonderful World of Sports are part of the American Way of Life and must not be questioned. They prepare Our Young Men and our Fair Womanhood for U. S. Citizenship and teach True Sportsmanship. We could not have won World War II without exhibition boxing matches by champions. And without the football squads of the Armed Services how would the Forces of Truth and Freedom ever have swept to Glorious Victory?

I do not question these virtues. But thinking aloud on a personal basis: I quit playing basketball 15 years ago and quit dreaming of stardom long before that; I haven't tossed a baseball for five years; I haven't engaged in fisticuffs since 1944, when an outranked second lieutenant decided to see if he should have been outranked.

But I still go fishing; I still hunt a little.

Nobody ever really taught me these sports I can practice as a middle-aged man; coaches were busy trying to develop a hook shot or a fast start in the dashes. I wish, now, someone had taught me how to fish a little better, because that sport will be open to me as a participant for a good many years yet, God willing. Gunning or angling, I don't have to confine myself to indulging in what we collitch-cultured journalists call "vicarious participation."

So at the risk of being disloyal to the sports sections of the Free American Press, I'm wondering—not suggesting, just wondering—if a course in plug casting or gun handling wouldn't prepare our American Boyhood for Life just as adequately as football casting or basketball handling. Seems to me the acquired skill might be more useful after Boyhood has become Manhood, might even teach a man or a woman to live with themselves better than they would learn by watching matched teams beat each other's collective brains out.

If this be Treason, make the most of it.

You can't draw 50,000 people to a fly-casting contest, nor get Old Siwash's name in headlines with an exhibition of gun safety. But the air is fresher on Blue Bonnet creek than in Yankee Stadium and there's more exercise in following a dog across a field than in sitting on a hard board using eyeballs and vocal chords. Techniques of live-bait fishing may not build School Spirit, but it surely wouldn't hurt academic standings any more than a 10-day jaunt in Madison Square Garden. Travel may be educational, but so few people get on basketball squads—someone has to be under seven feet.

It's hard to understand why so many schools resist hunting and fishing as "specialized interests" while paying a football coach more than the Dean of Men to instruct one-fiftieth of the student body. There are

• Continued on page 26

Fifth of a Series About Endangered Wildlife Species

The Ivory-Billed Woodpecker

By JAMES T. TANNER

THE IVORY-BILLED woodpecker was never a common bird, but it has long been famous. Its large size and imposing appearance captured the imagination of both Indians and early naturalists. It is the largest woodpecker in North America, larger than a crow. Its shining black and white plumage, scarlet

ing leaves characteristic signs—bare and barkless areas on dead limbs and trunks of trees too sound to be attacked in the same way by lesser woodpeckers. The preferred insect foods are often very abundant, but they are present for a relatively short time, disappearing when the bark loosens in the process of decay. Thus

crest in the male, and large white bill combine with its vigorous and graceful actions and far-carrying voice to impress any observer. It differs from its relative, the pileated woodpecker, in being larger, showing more white in its plumage, especially on the back when perched, and the voice sounding like a nasal tin trumpet.

Ivory-billed woodpeckers originally lived in the swamps of the southeastern states. From southeastern North Carolina to eastern Texas they inhabited the

large river swamps along the Atlantic and Gulf Coasts, living in forests of oak, gum, and other hardwoods and cypress. In the Mississippi bottomlands they extended northward at least to the mouth of the Ohio, preferring the first bottom forest of sweet gum, oaks and ash. Throughout Florida they inhabited cypress swamps, frequently moving into the surrounding pine woods for feeding.

Ivory-billed woodpeckers' habitats are also the favored homes of other kinds of woodpeckers, which are more abundant in these forested swamps than in upland forests and which always have been more abundant than ivory-bills. To illustrate this a tract of 6 square miles can be cited which supported one pair of ivory-bills in addition to an estimated 36 pairs of pileated and 126 pairs of red-bellied woodpeckers.

Ivory-bills feed upon wood-boring insects, particularly those kind that live in the inner bark and between the bark and sapwood of trees or limbs not too long dead. The bark in this stage is still hard and tight, but the big woodpeckers hack and scale it loose by powerful side blows with their bills. This manner of feed-



National Wildlife Federation Photo

place and from time to time. To find an adequate supply they range farther and require more area than do other woodpeckers. Ivory-bills nest in cavi-

the ivory-bills' food is likely to be irregularly distrib-

uted, varying from place to

ties they dig in trees. From one to four eggs, two being usual, are laid in early spring. Both parents incubate the eggs and care for the young. One brood is raised each year.

Ivory-bills began to disappear from their original

range as soon as loggers invaded the southern swamps. In several instances the disappearance of the woodpeckers coincided with the cutting of the forests. The real cause was probably the indirect destruction of their food supply, for the young trees left in a cut-over forest provide much less food for woodpeckers than do the mature trees of a virgin or old forest. After such a forest has been cut, the different kinds of woodpeckers may maintain their status for about two years, then they decrease markedly in numbers. The ivory-bills, with their specific food requirements, were the first to go, and the ones which were lost permanently from the cut-over swamps.

By 1885 the birds had disappeared from the northern part of their original range. The greatest decrease occurred between 1885 and 1900 when the southern logging industry grew most rapidly. By 1915 the species was confined to about a dozen scattered localities in South Carolina, Louisiana, and especially Florida. By 1926 many naturalists believed that the ivory-billed woodpecker was extinct. But a few years Fish Reports Field Data Texas Tracks

By JAY VESSELS

AIN'T NATURE GRAND!

Outdoor Editor Neal Ellis of the Houston Press fully appreciates the efforts of wildlife to relax the pressures of man's work-a-day world. He indicated this by the play he gave the Game and Fish Commission release sent in by an Austin woman, about "a handsome drake" duck tarrying to pair with a hen mallard which had a wing injury that prevented migration. The gay quackquack family, comprised of sixteen ducklings, was spotted by Mrs. Joe P. Callan along the Pedernales river in an area where wild ducks rarely nest. Ellis, whose column is surrounded by frothy reports on the world of man-made sport, touched up his version of the exciting nature observation with this threecolumn head: "It's spring, and young drakes' fancies turn to romance, too."

CORNER ON COONS

George Stafford, Colorado county storekeeper, hit the raccoon jackpot. One of his hound dogs treed six adult coons in one tree.

WHAT IS HAPPENING!

Howard D. Dodgen, Executive Secretary of the Game and Fish Commission, reports a recent conference of wildlife biologists produced a sobering observation on the quail crisis. During a round table discussion, one Commission field man said that it is not only a problem of increasing quail habitat but also of holding what we have now. He pointed out that every year Texas shows a deficit in wildlife habitat, particularly in the food and cover that quail require. "Thus," said Dodgen, "we simply must check our slide backward before we can talk about climbing upward."

FAWN FANCIERS NOTE

Wildlife authorities writhe in agony every summer because people simply won't let wildlife young, particularly fawn deer, alone and insist on "adopting" these poor creatures which need only to be spared separation from their natural parents.

Uninformed persons and newspapers repeatedly tell stories of someone who picked up a fawn in the woods, citing the "hero" for rescuing the "orphan" and caring for it. Actually, doe deer often leave their young, unattended and apparently abandoned, for short periods. The human "heroes" do nothing less than pry the young from their natural habitat and deprive them of their mothers.

And they violate the law any time they possess a live wild deer for any reason.

SINISTER AFFLICTION

E. A. Walker, Director of Wildlife Restoration for the Game and Fish Commission, said appearances of deer that have starved to death sometimes are deceiving. He emphasized that the commonly accepted state of emaciation does not always characterize the victims' appearance. He cited the three deer brought to Commission headquarters by Wildlife Biologist Jim Teer from Llano County. The animals appeared to have died from some disease such as nose bot, rather than malnutrition. But a post mortem conducted by the Texas A. & M. veterinary science technicians found that starvation was the actual cause. Walker, a veteran of Hill Country field work, said such deaths generally are associated jointly with hunger and cold. "I have come upon many a dead deer lying on the ground under a protective limb, seemingly asleep," he said. "They lie down in their hunger and weariness and never regain strength enough to get back on their feet."

RIGHTFUL CREDIT

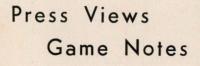
That male seahorse which gave birth to young at the Rockport Marine Laboratory of the Game and Fish Commission, did a creditable follow-through. Marine Biologist Patricia Pew, who observed the event, before and after, said most of the one hundred young ones survived. Miss Pew might get some credit for the happy affair since she kept the maternity ward supplied with brine shrimp which had been incubated in the laboratory.

THANKS, PODNER!

As long as any mention of Texasjust as long as it is a mention-is considered a plug, Florida may be credited with an assist to the Lone Star State through an observation by the alligator state's Marine Laboratory at Coral Gables. The Lab quoted a query stating the inquirer had contacted some persons from South America "who appear to be trying to exceed Texans in telling tall stories." The reason for this uprising was the question: "Can catfish climb trees?" The Lab spokesman described a South American catfish capable of "actually climbing vertical rock cliffs." Texans qualified to report on any tree-climbing "cats" should address Loren Monroe, Ft. Lauderdale. Fla. He asked the original question.

HOW BIG IS BIG?

Bill Lloyd, Chief of UP's Austin Bureau, was a picture of doubt when he asked, "Is a 121-pound catfish big?" He was assured that it was PLUS! But did UP's famed Texas byliner do a job of reporting on the giant? He did not. Somebody had told him about the huge fish and had provided the name of the fishermen. But Bill just forgot to make a note of it.



LEGAL PRECEDENT

Boat operators could be held responsible for water tragedies under a Federal court precedent whereby \$53,750 damages were awarded in damage suits resulting from a Missouri lake mishap that cost six lives. The court held the boat line responsible for sending out the craft in the face of an approaching storm, during which the vessel upset. The court ignored defendants' plea of exoneration from damages under admiralty law.

PUT ON THAT TAG!

Texans who patronize Colorado's wildlife harvest should be interested in this report from the Colorado Game and Fish Department. The greatest single law offense was for failure to comply with regulations about tagging wild game, such as deer. The Colorado warden force obviously has been pushing law enforcement since arrests increased more than forty per cent last year. Other leading offenses included fishing without a license, exceeding fish bag limit, illegal possession of deer and hunting without a proper license, such as a non-resident hunting on a resident license to avoid the higher fee.

A DAD'S GESTURE

UP carried a Fort Worth tear jerker about a veteran police officer giving a temporary home to David Massey, age ten, whose mothed had just died under distressing circumstances and whose father had been dead nine years. The officer, E. R. Forister, has no children of his own. He got probate court permission to house the lad pending permanent adoption routine. And what do you suppose Officer Forister placed first on the social agenda? A fishing trip!

IDEAL TURKEY FEEDER

E. A. Walker, Assistant Director of Wildlife Restoration for the Game and Fish Commission, suggested a model size for wild turkey feeders in response to requests for such information in connection with supplemental feeding during the drought, "If a wire fence is constructed to keep out livestock, tie small poles of about three inches in diameter along the top of the fence to facilitate entry of the turkeys into the feed pens. The pen itself works better if it measures 75 to 100 feet on the side. Feed should be placed under small trees or other brush affording protection from above. A good place is within 30 to 40 yards of a creek and under medium sized trees near an opening." Walker explained that supplemental feeding entailed some hazards since predators often ambush concentrations of feeding birds.

HIGH LEVEL LOOKSEE

Sometimes one cannot stop, look and listen even when the celebrated Whooping Crane is involved. At least Al Stine, traveling membership executive for the Associated Press couldn't. Stine overtook some big white birds at about five thousand feet while flying from Dallas to Kansas City. That was in late April when the Whoopers were moving northward toward their Arctic nesting areas. Stine said he was quite certain the big birds had the telltale black wing tips, but, flying his own plane, he lapped them so quickly that he couldn't be certain. "Better teach them to fly a flight plan with CAA," cracked Stine, after reporting the extraordinary experience. Gus McMammal, the layman observer, hurried to assure AP's Mr. Stine that wildlife folks have done about everything else to help save the Whoopers, which have been adopted as a symbol of the over-all strategy to spare wildlife from extinction.

PUTT PUTT PARADE

A fellow wrote the Dallas *Times Herald* to suggest that "rich" Texans are no longer judged by the number of oil wells in their back yard, but rather by the number of outboard motors on their boat.

FAITHFUL WARDEN

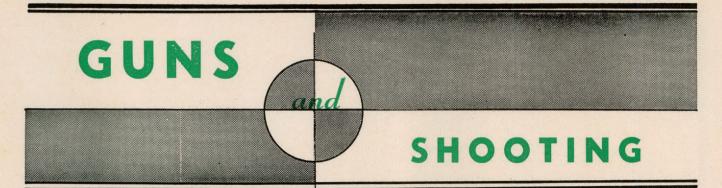
The morning the Game and Fish Commission headquarters in Austin got word that Pilot-Warden Claude Keller had been killed while shadowing illegal matters off the coast, the mail delivered this memo from Robert J. Smith, Program Director of Station KNAL, Victoria: "For the past three years KNAL has had splendid cooperation from State Game Warden Claude Keller of this city. Mr. Keller has come to our studios often, making brief but helpful talks concerning game conservation and game laws, particularly during the active hunting season." The memo was in response to a questionnaire concerning information services used and any desired by radio stations.

2-TONED ROAST GOOSE

Texas goose hunters may get an extra dividend or two next fall all because biologists have adopted surface coloring of snow geese to supplement the usual banding program. The coloring makes the geese more easily identifiable in aerial census work. W. S. Jennings, Assistant Director of Wildlife Restoration for the Game and Fish Commission, said technicians this summer will increase the snow geese dye coloring program in the far north nesting areas. Different hues are used to identify the geese as to their geographical source. Thus a white snow goose with a black wing tip might show in the Texas hunters bag as a two or three-toned pastel gem. Pink and blue colors are used generously to contrast the natural white tailoring.

TOMCAT LURE

Hal Berger heard about Texas predator problems way out at his Seattle home. He wrote how Washington helped cut down its wolf surplus by using plain domestic tomcats for lure. He said the technique called for putting the cats in an elevated cage, amply supplied with food and water, in the predators' area. Traps were set around the cage. Berger said wolves, attracted to the scene, were so intrigued by the cat that they neglected their natural wariness and fell easy prey to the traps.



This Month: Bench Rest Rifles

Since taking up guns as a hobby a number of years ago, I have at one time or another dabbled in just about every phase of rifle shooting. While my primary interest in the rifle is its use in the game fields, I have done a reasonable amount of small bore target shooting, and a great deal of bench rest shooting as a means of checking the performance of various rifles, cartridges, and hand-loaded ammunition.

There is, however, a growing branch of rifle shooting that is referred to as bench rest shooting. It is a particular phase of shooting that differs in some respects from formal rifle shooting, although matches are held in much the same manner as ordinary target matches. The rifle used in bench rest shooting is a particular breed, and the target used is a particular type also. Matches are decided on group size alone, the only requirement being that the group must form somewhere

By JOHN A. MASTERS

on the target. Normally, strings of ten shots are fired in each relay, and the competitor who puts ten holes into the smallest group wins the match. Usually matches are fiercely competitive, and the man whose rifle goes sour for a single shot is out of the running. When one considers that bench rest shooters have been able to fire a string of ten shots that all went into a single ragged hole less than one-quarter inch in diameter, it is readily seen that one "flyer" is all that is needed to foul up a good group.

The bench rifle is usually quite heavy. The barrel will usually be from 26 to 30 inches long, and will be a straight cylinder, usually around one inch in diameter. The action may be Mauser, Remington or Winchester in origin, but the barrel is almost without exception the product of a custom maker and usually

Shootin' Shorts

Texas will be host to the National Bench Rest Matches this year. The matches will be held in San Angelo, Texas, at the San Angelo Gun Club range. Between 150 and 200 shooters are expected, including many of the country's best. If you want to see some really fine shooting and some strange and wonderful sights in firearms, plan to be on hanc.

The matches will be held about the middle of October, and should be one of the best ever held.

I have one of Bausch and Lomb's new 6-24 Balvar scopes for examination and testing. One of the finest things I have ever seen. It will require a full gun page to adequately describe it.

I have found that Sierra's 85 grain spitzer in my 244 Remington, backed up with 43 grains of 4831, is a really accurate load. Several 5-shot groups went into less than an inch at 100 yards.

Mossberg has come out with a gadget for throwing clay pigeons by hand that they call the "Covey Trap." It is designed to throw several birds simultaneously to simulate shooting on a covey rise. Should have one soon. has been fitted and installed by a gunsmith who more or less specializes in custom gun work.

The trigger is the heart of any rifle as far as good control is concerned, so the bench rifle must have a top-notch trigger above all. Many custom triggers are used such as Mashburn, Canjar, and Jaeger on bench rifles. Remington and Winchester both equip their rifles with good triggers that with a little polishing up do a wonderful job. Double set triggers such as the FN Mauser set trigger are not uncommon.

Most bench rifles are fired single shot, so it is not unusual to see a bench rifle rigged so that it may be fired only as a single shot. On actions such as the Mauser, Remington, and Winchester, all of which use a staggered column magazine, the magazine well follower, and follower spring usually are omitted, and the cut in the stock where those usually appear is left solid.

Without exception, a fine target scope is fitted to the bench rifle. A bewildering variety of scopes can be seen on bench rifles, but all are designed to assist the shooter in seeing the target clearly. Usually, they are high powered, with 20-30 power being quite common.

Bench rifle stocks are usually massive. The fore end is of necessity an exaggerated beavertail type and is flat on the under side. The barrel channel usually is cut out so that the barrel "floats," and a bedding device is used on the fore end tip to apply just the right pressure on the barrel. These bedding devices take many weird and and wonderful

• Continued on next page

forms, but all serve the same purpose. Some are hydraulic (Landwehr) and some use a threaded plug that is screwed up against the barrel (Swem). All sorts of things from batteries to dial point indicators are used to set the bedder to the exact right spot.

The bench rifle is usually chambered for a high speed center fire cartridge and usually is one of the 22 calibers such as 222 Remington, 22-250, Donaldson Wasp, or 219 Improved Zipper. Lately, the 222 Remington seems to be winning consistently, although the 22-250 and the Donaldson Wasp have long been record setters in bench rest shooting.

The rifle is fired from a heavy bench that is rigidly based. Sandbags or some mechanical arrangement are used to support the rifle on the bench. The whole object is to try to fire the rifle from exactly the same position every time, since moving it about will result in bigger groups.

The bench rifle always requires carefully loaded ammunition. Each competitor has his own pet load and usually a few theories about what can be done to produce top-notch ammo. To the beginner it seems that an old hand at the bench rest game is ridiculously careful in preparing his ammunition, but it must be uniform if it is to deliver the kind of results that bench rest shooting demands. Usually the cases are weighed to insure the same capacity in each one as nearly as possible. Then the necks and flash holes must be examined to make sure they are uniform, and each must be fire formed in the chamber of the rifle. Powder is weighed with exacting care, and bullets are checked for weight and diameter. Many shooters make bullets in home-owned equipment to exacting standards. Many matches have been won by such bullets, although good bullets such as Hornaday and Sierra are remarkably uniform.

Assembled ready to go, bench rifles are weird looking and could scarcely be used for any other purpose except possibly long-range varmint shooting. Weights of 12 to 15 pounds are by no means unusual.

Continued on page 31



Folks down Port Isabel way say anything can happen in the fishladen semi-tropical waters at the tip of Texas. Now comes the kind of story that seems to bear this out.

It happened to Phil Edie, who also happens to be president of this year's Texas International Fishing Tournament slated August 2-5. One of his fishing guests, Annie Laurie Richards, was fighting a Spanish mackerel when a porpoise tried to claim it for lunch. The porpoise, which is really a mammal and not a fish, got hooked. And that's something which is so rare it makes the record books of biologists and fishermen alike.

A grown porpoise usually will weigh several hundred pounds, and this one almost stripped the reel bare. Then came the best part of the story. Half a dozen other porpoises began circling their distressed companion, apparently seeking to help it. And they did.

They began rolling over the line-back and forth, back and forth. Eventually, whether deliberately or not, they wore the line until it parted.

And Edie has moving pictures to prove it!

* * *

In answer to Dan Saults' barbed plea (see page 14, this issue), perhaps there IS hope. A survey by the American Association for Health, Physical Education and Recreation showed that 12 per cent of the high schools and 25 per cent of the nation's colleges have casting and/or shooting in their physical education programs. More than 50 per cent desired assistance in setting up programs. An extra hitch on the front bumper can solve a lot of trailermaneuvering problems. By switching the boat trailer to the front hitch when launching on sandy or muddy beaches, the rear car wheels can be kept on firm ground.

Like 'em or not, the enclosed automatic type of spinning reel has switched a lot of cane-pole fishermen to rods and reels, simply because this type makes it so easy to learn to cast. And one--the new Johnson Century-undoubtedly is the sales-volume sensation of the 1956 tackle season. In addition to moderate price and basically good working qualities, its popularity seems to come from the handily placed adjustable drag, push bottom release, and the ease with which it can be converted to left or right hand cranking for alternate use on casting or spinning rod.

Carp fishermen (see page 8, this issue) in England and Europe make many of our most careful anglers look clumsy, according to Matt Thomas in Pennsylvania Angler. They never touch their bait with their bare hands, often scenting them with an aromatic such as anise to kill carp-scaring human odor. They wear rubbersoled shoes and cover their faces with bee veils or mud for fear a white face will "spook" the carp. And when they sight a school, they stalk the carp on hands and knees until the fish stop to feed.

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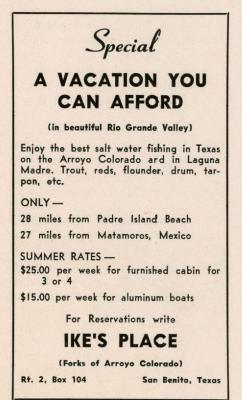
National Forests Lure Millions

Secretary of Agriculture Ezra Taft Benson reports that a record of 50 million tourists and vacationists are expected to visit American national forests this year.

As schools closed and families prepared their plans for the big trek to the out-of-doors, Secretary Benson said national forests were preparing to welcome visitors from all parts of the nation—some 5 million more of them than last year.

National forest recreation areas consist of simple, family type camp, picnic, and swimming developments with water and sanitary facilities designed to provide safe, healthy outdoor recreation. In addition, the national forests contain over 2 million acres of lakes and 81,000 miles of fishing streams. Wildlife on the national forests is of great importance since these areas support some 3.3 million big game animals which include a major part of the country's bear, moose, deer and elk. Hunting and fishing under State game regulations has increased along with the other types of recreation.

Persons going to national forests may obtain a copy of this year's edition of National Forest Vacations



free from the Forest Service, U. S. Department of Agriculture, Washington 25, D. C. The booklet lists recreation and wilderness areas on the 149 national forests, gives highway routes, and describes various facilities available. It also contains guides for safety, prevention of forest fires, and rules of good conduct to reduce litter and vandalism.

Handling the growing number of visitors to the woods will present problems this year since spreading this heavy use among the facilities of the 4,900 developed recreation areas will result in many cases of "standing room only."

Secretary Benson says that public use of these areas has increased so rapidly in the past few years that construction and maintenance of facilities have not met the demand. Recognizing this problem, the Secretary last March asked the Forest Service to give priority to developing a long-range program on National Forest resources, with special emphasis on public recreation. A study is now under way to develop a program that will take care of present recreation use and catch up with anticipated need in the next 5-year period.

The Secretary's plan for this program is to carry the development and management of National Forest

The Collared Lizard_

the eye in this species whereas there are two or three subocular scales in the Collared and Reticulate Lizards.

These creatures prefer desert country with loose, sandy soils, few large rocks and low scattered bushes. Rather than hiding under rocks, they escape by running very fast or by seeking refuge in the holes dug by mice and rats in the dirt mounds under bushes. They often run for several hundred feet and stop under a bush where their pattern blends into perfect camouflage with the lights and shadows cast by the leaves. The food and other life habits of these lizards is not very well known but is probably similar to the better known Collared Lizard with adaptations to the drier conditions of the desert.

resources forward in a balanced manner. All resources and uses of the National Forests—timber, water, and wildlife and mining, grazing, and recreation—must contribute to the fullest extent possible in meeting the requirements of our expanding economy and increasing population, he explained.

"Through this orderly planning," Secretary Benson said, "we can meet the recreation needs of our people and not jeopardize the other resources of the National Forests. Millions more Americans have become aware of the pleasures and inspiration afforded by our great outdoors. The national and state forests fill a real place in this picture, for here we find that which each of us needs every so often in these harried and hurried times-refreshment of body and spirit."

Secretary Benson pointed out that the great number of visitors, compared to facilities, has been of concern to the Congress as well as to the Department. Last year, a subcommittee of the House Committee on Agriculture spent more than a month studying national forest recreation and wildlife problems on the ground. As a result of this and other congressional interest, some 25 bills have been introduced in an effort to solve recreational problems.

• Continued from page 7

The three Texas Lizards of the genus Crotaphytus are very showy animals and if properly kept in a zoo, would make a fine display. They are dependent on much sunlight and plenty of insect food, however, and therefore don't make satisfactory pets except where these requirements can be furnished. Outdoorsmen who are likely to come across these lizards should learn to recognize them and try the pleasure of observing their actions rather than killing them for fear that they might be poisonous or dangerous. None of them can offer more than a slight nip if caught and their insectivorous diet makes them a desirable form of life to have around.

They are a bizarre and interesting part of the wildlife of Texas.

Prairie Dog Town, Texas_

• Continued from page 9

up by sinking chicken wire eighteen inches into the ground and extending it eighteen inches above ground with the top six inches of tin."

Since then, a cement block fence has been erected around the sevenacre plot.

Because of his intense interest in preserving the town, Clapp is known as the "Mayor of Prairie Dog Town."

The "dog" reference is certainly a misnomer. "They are rodents, actually," said Clapp, "members of the squirrel family, marmots, near relatives of the woodchuck or the ground hog." They received the "dog" appellation because of the barking cry of the animal.

Full-grown, the greyish to reddish animals are from twelve to fifteen inches in length, weigh from two to three pounds, and have a short black-tipped tail which always wags like it was attached to a spring.

The Lubbock Prairie Dog Town is a minute part of a much larger colony of these animals which existed only about a half-century ago. Dr. C. H. Merriam, in the 1901 Department of Agriculture Yearbook, writes: "Colonies twenty to thirty miles in length are not rare, and in Texas one is known which measures about 250 miles one way by 100 to 150 the other, covering an area of about 25,000 square miles. It is certainly a conservative estimate to assume the average number of animals to be twenty-five per acre. On this assumption, the number of prairie dogs in the great Texas colony must be at least 400,000,000."

Today, only about 5,000 prairie dogs are within a hundred-mile radius of Lubbock, the heart of the former giant prairie dog town. The remainder have been pushed off the prairie in the name of progress. Four hundred million created such concern on the part of ranchers and farmers that the government was called upon to help exterminate them as quickly as possible.

"I hope this small colony may be preserved," said Clapp. "It is of great interest to sight-seers, especially tourists from the south and east."

The giant colony at the turn of

A rek Into the Boss' Mail

Here's how the man who heads the Game and Fish Commission looks on his responsibility. It came from a letter written by Howard D. Dodgen, executive secretary.—Editor.

So many outdoor sportsmen shy away from the word "research," interpreting it as a scientific term that is above the head of the layman, therefore, embodying mysteries about which he has no hope of understanding. There was a time when I had the same feeling. But after learning that *research* is nothing more than *investigation*. it seemed to be less frightening.

I believe the segment of the public interested in wildlife conservation already has come a long way toward accepting the advice of people who continuously investigate wildlife problems and who come up with answers concerning better methods of management. We have quite a

the century was on its way out when Lubbock, now known as "The Hub of the Plains," began to toddle in its infancy. Lubbock, presently the fastest-growing city in Texas, has replaced the millions of prairie dogs with homes, housing an estimated human population of 125,000. In its haste to "grow tall," the city, led by K. N. Clapp, thought a bit of the Old West should be preserved, and Lubbock points with pride to the protected pets which were once pesky pests.

Over the former homes of the prairie dogs, more cotton, says the Texas Almanac, has been grown within fifty, seventy-five, or one hundred miles of Lubbock than has ever been grown within comparable distances of any other city in the history of the world. While Lubbock was a-building, excavations revealed thousands of prairie dog passageways. Clapp would often be called to a construction site to make drawings of the burrows and to make other observations of the prairie dogs' habitat.

"The prairie dog homes are L-

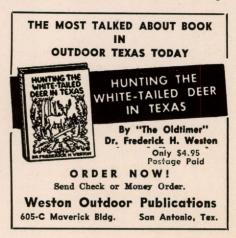
way to go yet for this to be fully accepted.

There are many persons who are excellent automobile drivers who will admit knowing little about automobile engineering or even doing simple repairs to the car they drive so well. It seems strange that the same individual, being an ardent hunter and fisherman, does not so readily admit that he is not an expert in the field of wildlife management.

From my point of view—as one responsible for coordinating the work of a wildlife conservation department for a public who has varied ideas about the services they want it seems that there is only one proper approach to our task and that is simply to continue to investigate, find facts, report the facts to the public, attempt to get them accepted, and base our management on that principle.

shaped burrows," said Clapp, "twelve to twenty teet in depth and six to fifteen feet horizontally. The entrance is banked with earth to keep out water. The size of the mound depends upon location and rainfall, mound and hole resembling a miniature volcano."

Clapp explains that from three to six feet below the entrance is a small room to which the animal retires when first frightened into his hole. There he may be heard barking and scolding. If he hears the intruder approaching too near, down he slips





LEAVE A NOTE ... INSTEAD OF TRASH By MARTHA C. BALZEN

In the spring of 1955 we began something which we had never done before as a family-camping out. Most of our camping has been done in apparently beautiful public camping spots in Central Texas. "Apparently" beautiful because we find that the public, whose privilege it is to use these areas, has left them dirty and defaced.

Everywhere empty beer cans, food tins with bent and rusty lids, paper and trash strewn about, and broken bottles, half-hidden and hazardous.

to the bottom. It is a place where he may halt, turn around, and go back up for a peep, or come out if the "all clear" is sounded by the other residents.

The horizontal passage has an upward elevation with the nests connecting and generally above it. Occasionally a nest is below, said Clapp, and sometimes one is built off the vertical passage. Where the horizontal passage continues to the surface, it appears to be used only in construction for the easy disposal of earth, being partially or completely filled with dirt and trash. A single entrance is the rule. However, double entrances are occasionally found but seldom is the dirt dump passage one of them.

The prairie dogs set up their own "civil defense" system. No vegetation within one hundred feet of their burrow is allowed to be more than six inches high. As an intruder approaches, signals are relayed throughout the town. The prairie dogs "freeze" until a final warning bark is given, then there is scurrying to holes until the danger is passed.

West Texas marksmen while following a favorite "sport" of shooting the little animals, have found the



How can people deface a lovely place in that manner? Particularly when it is so simple and easy to properly dispose of camping refuse.

At one site we found a large hole half filled with empty cans. (A step in the right direction but not carried quite far enough.) We used this until it was full, then closed it. At another camping place we dug a similar hole for our garbage, closing it before we left. The papers and trash we burned. When we left I attached a note to a tree, pleading with the next campers to leave the place as clean as they found it, by burning and burying their own refuse.

I shall continue to be a note-leaving camper. Perhaps, thereby, other campers may become more conscious of their country's natural beauty and their own obligation to preserve it.

prairie dogs seldom fail to make a death leap back to their homes. (Of course, no one is allowed to capture or shoot a Prairie Dog Town citizen.)

Construction of a home is always a delight to tourists. If the earth is damp, prairie dogs make mud balls and remove them to the surface. If the earth is dry, it is carried out in armfulls. The noses and heads are used to tamp the earth to firmness around the entrance hole and inside the crater. When there is general repairing of mounds, one may anticipate rain, said Clapp.

Prairie dogs are vegetarians by circumstance only, being omnivorous in captivity. Mackenzie State Park attendants have only to sprinkle the grass to provide food. Food is the plant life about them, grass, weed seeds, leaves, stems, and roots . . . plus whatever bread and cookies are offered by tourists. They subsist without water, obtaining necessary moisture from their green food.

The animals are semi-hibernating, the climate determining their sleeping periods. In Prairie Dog Town during the winter, they appear daily after noon when the temperature is above freezing and the weather is

Publicized Pet Bobwhite Dies

Several years ago Texas Game and Fish told the story of a bobwhite quail named Pete that had become a household pet in the home of Joe W. Caldwell of Paris, Texas. It is with regret that we recently learned that Pete had died at five years of age.

Pete, a quail hen, had been picked up as a 2-week-old chick by some misguided, though well-meaning hunter. J. B. Caldwell took the chick and he and his wife fed it on baby grasshoppers. When the bird was two months old they passed her along to Joe W. Caldwell, in whose home the bird has lived for the past five years.

Pete became thoroughly domesticated in the course of her stay with the Caldwells, and acquired some fame by taking meals with them, sipping coffee from a spoon, playing with cigarettes, and sleeping with the family bird dog. Her picture has appeared in various newspapers in the state.

The quail's misnomer was discovered when she started laying eggs in Joe's shoes. Over the years she has layed about 50 eggs each year, scattering them over the house.

Death came quietly to the little quail, and her owners feel certain that she died of old age, since five years for a quail is equivalent to more than 100 years for a human.

fair. When the mercury drops to 20, the dogs just stay at home. No winter storage of food has ever been noted, but the prairie dogs acquire a heavy layer of fat on their bodies late in summer and early fall which carries them through the winter.

The young are generally four in number and appear in late spring, from April 15 through April 30. Clapp said Prairie dogs and beavers (at least Disney included beavers) are the only mammals that will allow two sets of young in the den or nest at the same time.

Principal enemies are the rattlesnake, ferret, coyote, and badger. Burrowing owls are the only "out-

Texas Deer Count May Be Doubled

Improved censusing methods coupled with more intense population counts indicate that previous estimates of the number of deer in Texas have been far short of the actual count.

Estimates heretofore made of the total state deer population have set the figure at just short of half a million, mainly whitetails. However, the continuing improvement of counting methods by Game and Fish Commission biologists and the extension of them over a wider range has eliminated much of the former guesswork. It now appears that the total Texas deer population may be nearer a million—almost double the previous estimates.

For instance, the combined total of only seven Hill Country counties, heart of Texas' most productive deer range, has been set at almost 400,000 deer prior to the last hunting season.

Post-season investigations show that deer mortality from drouth, overpopulation, and parasites through last winter wiped out many thousands in four of these counties.

Commenting on these latest developments, Bill Jennings, assistant director of the Wildlife Restoration

sider" permitted, and then only reluctantly.

Prairie dogs' only defense is their home. To it they run for safety. But sometimes snakes invade the homes for food. When a snake enters, prairie dogs begin shrieking and excitedly chattering among themselves, then all pitch in. Dirt flies with the furious scratching, many noses tamp the earth, and the snake has been entombed.

Snakes are dumb, said Clapp, but not so dumb as to not know their fate in a prairie dog hole. Once he saw a rattler slither into a hole, and for an experiment, Clapp dropped a handful of dirt in the opening. The snake immediately scurried out. There is no response to the same treatment when a snake invades a subterranean pack rat's nest, he said.

The owls live only in abandoned burrows; they're too lazy to dig holes for themselves. Although not adDivision, said "It is obvious we are not harvesting as many deer as we should." He said extension of the experimental antlerless deer hunts is one sound management way the herds can be reduced to the carrying capacity of the land.

The investigations were centered in Kerr, Llano, Mason, Gillespie, Medina, Blanco and Sutton counties where the Commission has regulatory responsibility to regulate harvests on the basis of existing current conditions. But the first four named counties bore the concentrated studies since records from previous herd counts were available there.

Limit Strings Caught After Shad Removed

Removing an estimated one hundred tons of shad from the Panhandle's Buffalo Lake has done the job-made the game fish hungryaccording to reports to the Chief Aquatic Biologist for the Game and Fish Commission.

A record 1800 tons of the chemical rotenone was used to exterminate shad. Carp were to be attacked later when they concentrate for spawning in the shallows.

R. H. Johnson, lake concessionaire, told Aquatic Biologist Leo Lewis of Wichita Falls that the first calm weather after the gigantic selective kill produced limit catches of crappie and some big bass.

New Partridges Noncompetitive

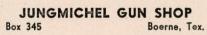
Red-legged partridges have been experimentally stocked in parts of West Texas without compromising scaled quail, one of the leading native game birds in the areas affected, according to the Wildlife Restoration Division of the Game and Fish Commission.

Two shipments of the comparatively large partridge, obtained from Spain, have been released in Texas to test their adaptability to semiarid climate, and Commission biologists have been painstakingly observing the results.

"At present," stated the latest field report, "there is no indication of antagonism or competition between the

verse to a meal of young prairie dog, owls caught in burrows are torn to pieces by adult dogs.

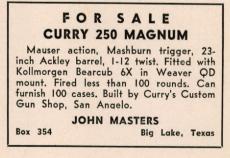
While more than a million visitors per year pour into Mackenzie State Park to watch the merry antics of Prairie Dog Town residents, the prairie dogs seem contented with their lot, and even seem to enjoy putting on a show for the visitors to their "town."



Dealer in Guns and Accessories, building Bench Rest, Target and Sporting Rifles, using Douglas Barrels. Sure I trade. redleg and scaled quail. Instead, observations of close contact between species show no opposition and food habit studies indicate very little competition. . . .

"The redleg is a grazer, being very fond of greens. Approximately 90 per cent of his food is green vegetation; whereas, the great majority of the food of the scaled quail is seeds. There is a slight overlap on food requirements, depending on the season, but not to a point of severe competition. And even though their territories coincide, the fondness for greens has led the redleg to be associated with winter grain fields. This is not true of the scaled quail whose associations with these fields are less pronounced and cover their territory in true 'gypsy' fashion."

Red-legged partridges are about twice the size of ordinary quail, are fleet on the wing and considered potentially prime game birds.



How To Catch Carp_

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 cottonseed 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)

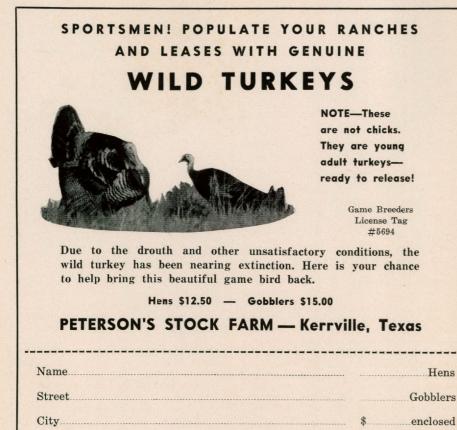
If fresh corn is abailable, use this in place

Alabama To License Salt-Water Fishing

The recent action by Alabama establishing salt-water licenses for residents who use "rod and reel" or "any artificial baits, fly or lures," or who fishes by "angling with a hook and line" extended a precedent previously set by Louisiana. Some years ago that state established a saltwater license for residents who angle within the state for game fish with the aid and use of a reel, artificial bait, or spinner or spoon device.

No license is needed if a hook and line or cane pole is used exclusive of the items mentioned. The non-resident, non-military angler does not benefit by these distinctions but must have a license in either case. Game fish legally include several salt-water species.

Thus, there are now two eastern states which require a salt-water license for at least some of their anglers. California, which licenses the vast bulk of its salt-water anglers, brings the current total for the U. S. to three. California's progressive marine sport fishery program shows the results.—Sport Fishing Institute.



TEXAS GAME AND FISH

Available for Bay Areas

Billy Wilson, outdoor editor of the Bay City Daily Tribune, has completed a new fishing map showing the areas of Sargent, Chinquapin, Matagorda, and Palacios. It shows the popular shell reefs in East and West Matagorda Bays, all new cuts from the canal into the bays, bait camps, new concrete boat ramp at Matagorda, and other boat landings.

The maps sell for \$1 and may be ordered from Matagorda Fishing Maps, 1726 Sixth St., Bay City, Texas.

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 No. 1/0 (the smaller the better) and should be kept very sharp. A Sobey hook of No. 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,

New Coastal Fishing Map State Quail Ready; Applications Needed

The first birds from the experimental state quail hatchery at Tyler will be ready for shipment July 23, according to W. J. Cutbirth, Jr., assistant executive secretary of the Game and Fish Commission.

At the same time, he said hatchery production has been geared to accommodate more orders from persons needing quail for local restocking.

The assistant executive secretary urged persons interested in the quail program, particularly those in East

"Flatten this mass somewhat to about 11/2 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.

MLAYTON 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.

• Continued on next page

Texas, to send in their orders to Commission headquarters in Austin with the assurance that their applications will be processed promptly, and game wardens assigned to make the final arrangements.

"We have, or will have, an abundance of the Virginia or Eastern quail which occur in East Texas," he said. "We will be ready to move them out at the rate of about fifteen hundred birds per week."

The executive secretary said there was a comparative shortage of socalled Texas quail which occur west of the Brazos River, or in southwestern Texas because of difficulties in trapping sufficient numbers of wild birds for brood stock.

The experimental hatchery was created by the Commission as a means of spearheading quail habitat improvement as a means of actually providing seed stock where native birds are scarce.

"The weather again has been a retarding factor in our quail population," said the assistant executive secretary. "But East Texas has been favored with some good rains, and food and cover conditions are not far from normal."



and sugar together into a large mixing bowl. Beat the eggs and cold water in an other 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.

How to Catch Carp_

• Continued from preceding page

JOHN MAJER of Portage, Pennsylvania, had this to say about carp fishing in a letter to *Pennsyl*vania Angler Magazine.

"Here is my best recipe for carp bait:

"Two cups yellow corn meal, put in two-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.

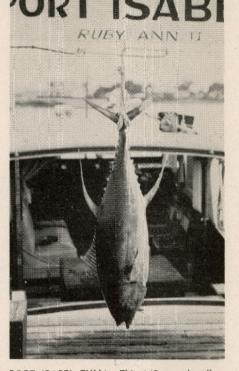
"Size of hook? No. 1 to 2-and do not bait too heavy . . . just enough to cover hook. This dough will not sour, and if there are no turtles around you may add a drop or two of anise seed oil.

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

A ND here is a carp bait recipe from Southern Outdoors Magazine:

There are many recipes for doughballs 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





PORT ISABEL TUNA—This 149-pound yellow fin tuna was brought into Port Isabel by Captain Blodgett of the shrimp boat Mirmar. Blodgett caught the fish and another 87pounder near the 100-fathom line off the coast of Mexico. Exploratory cruises by the U. S. Fish and Wildlife Service vessel the Oregon produced numerous Texas tuna catches. A though tuna catches to date have been too far offshore to make sport fishing practical, deep-water commercial fishing may have poss bilities.

place until ready to use. Carry them in a moist cloth to prevent drying and crumbling.

A NOTHER 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, $\frac{1}{2}$ oz., in water, 1 qt. Continue boiling the liquid solution until it is reduced to about 1 pint, then strain and stir in sugar, $\frac{1}{2}$ cup, and enough flour to make a stiff, rubbery dough. Mold the dough into small baits and drop these into boiling water. When

A Man Will Wonder_

Continued from page 14

required "gym" classes, of course, but these generally — there are notable exceptions—rate calisthenics more ennobling than plug-flipping. Push-ups may build bodies, but their value in soul therapy is doubtful ... and how many of you do pushups now you're at the age to need 'em?

Hunting and fishing aren't particularly virtuous pastimes, but they keep a practitioner in better shape now than he's kept by the memories of boxing he did twenty years ago. Can you honestly name any sport that's useful to you today, unless you're a young professional?

I'm not griping, you understand . . . just wondering if a course in using the outdoors wouldn't be as useful as a class in folk dancing.

they rise to the top, remove and store in a tight container.

Another long-lasting bait is prepared by first wadding small baitsized balls of cotton. Melt grated cheese, $\frac{1}{2}$ 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.

WHOOOSH! 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 cornmeal, 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."

Since the original article was published we have been furnished with the following information which may prove of interest.

This bait recipe, sent in by C. A. Wheeler, Austin, is reported by our readers to be pretty good.

One cup flour One cup yellow corn meal One-half cup oatmeal One-fourth cup grated cheese (The canned cheese is best)

One teaspoonful sugar

Mix these ingredients well while dry and then add just enough cold water to make a thick heavy dough. Knead well; if you have gotten the dough too thin, stir in flour until the dough ceases to be sticky. Roll the dough into balls (about the size of a chinaberry) and drop into boiling water in which an onion has been boiled until done and removed. Let the balls boil until they begin to float around; then remove and place on waxed paper to cool and dry; then place in a glass jar and set in a cool place. Do not wrap the bait or place in a container until it has become cold and dry.

This bait will keep for several days and may be refreshened by placing a slightly dampened cloth on top of the bait in the jar.

In response to numerous requests we are also including this carp canning recipe, which was submit-

Boating Safety, Water Rules Need Cited

H. E. Webb, boating enthusiast as well as a fisherman, has become quite concerned about the lack of water courtesy and complete disregard for the "rules of the road" which is becoming more and more noticeable on Texas lakes and rivers. Possibly a lot of the abuses are from ignorance as well as carelessness.

Some of the more obvious crimes against good water sportsmanship which he has observed are listed below.

1. Beer cans and bottles floating. People should not mix liquor and water sports any more than liquor and driving, but if they do drink beer, holes should be punched in the can so it will sink. If they use bottles, they should take them back to the land and dispose of them properly.

2. Glass bottles used for buoys or trot line markers. These are hard to see and can easily sink a power boat if rammed at a high rate of speed. This is unlawful in some states. A tin can (varnish, oil, or turpentine) painted a bright color, should be used for this purpose. Be sure to seal the can so it cannot draw water.

3. Speedboaters and water skiers invading fishing areas. There is plenty of water for all, therefore there is no reason for the speeders and skiers to ruin the fishing areas. Lake McQueeney is a good example of this.

4. Speedboaters not recognizing right-of-way. Row and sailboats always have the right-of-way over power boats. If a power boat must approach such craft, the operator should cut throttle in time to shed the wake before passing the nonpower boat. Also, passing should be done on the left of the slower craft unless an obstacle is in the way. In

ted by Game Warden Harley Berg.

Cut off fins and tail (bones will soften like tuna or salmon)

1 tsp. salt in a pint jar

Put in hunks of skinned carp meat Cook under 10 pounds pressure for 2 hours.

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

either case be sure the man in front knows your intentions. Keep to the right when meeting another boat.

5. Trash thrown into water. Paper cups, plates, newspapers, cigarette butts, and candy wrappers are not uncommon to see floating or on just below the surface of the water. If people knew that a cigarette paper can do serious damage to a high speed motor, maybe they would be more careful. This is very noticeable at boat races.

6. Use of life preserver aids. It is criminal the way some men will take their families, including babes in arms, out on a lake without life preserver aids. The air tank in metal boats is highly overrated and is worthless unless the person is cool headed and fairly strong. It should be a rigid law that the owner of a boat be responsible for life preserver aids, regardless if the boat is a rental or private one.

7. Speeding in channels and restricted areas. Common sense is the best guide, *i.e.*, an area where people are swimming need not have a sign to tell a person to stay away with a power boat. However, I have seen a careless boat handler endangering the lives of swimmers by washing them with his wake. Also, a person that will speed or cut up in a channel where other boats must pass, is as guilty as the driver who speeds his car in a school zone.



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- cery compartment, butane tank and stove, inside lights, tail lights, and clearance lights.
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Trotline Pays Off

When Jay Vessels, magazine staff member, moved to the shores of Lake Austin, he mace the most of his opportunity to enjoy outdoor living. Among other things, he determined -o master the science of trotline fishing. One result was his pictorial feature "Trotline Technique" in the May issue.

The article Fac barely come off the presses when his efforts paid off in a more material way with the fine 23-pound yellow catfish shown above—his first "sizable" catch after more than a year of careful study and experimentation. Mrs. Vessels is shown with the catch.

Credit also goes to Lamar (Peewee) Beard, one of Vessels' "teachers" and the featured expert in the earlier article.

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WRITE TO

TEXAS QUAIL FARM CALDWELL, TEXAS

A Suggested Water Use Policy___

of floods as against letting them form and then trying to control them, the maintenance of more uniform stream flow and many coordinate benefits lie in managing the soil-water complex, throughout the entire drainage basin of a stream. Action, effort, funds should be allotted to this fundamental mechanism of water management that lies in the stream's watershed as the most fundamental step and watershed management should have precedence ahead of constructional, mechanical watermanagement features lower down on the line of transit.

15. A flood is the most dynamic demonstration of lack of water management. Beyond all damage done by water out of control is the loss of the resource from the upper basin areas without it serving primary uses and producing values by being held within the area where it arrives on the land mass.

16. It follows that a policy of sound water management will drive first at preventing floods through increasing WATER RETENTION on and in the land, AS CLOSE AS POSSIBLE to where precipitation REACHES the land mass.

17. The big dam has a place in water management and utilization but it is secondary to more fundamental water conservation measures that exist potentially in what is generally termed "soil conservation." The impounding dam for whatever purpose, can serve best and for far longer time, if the foundation of continuing water delivery, in more moderate flow, is established by good soilwater management practices on the watershed. It is practically certain, that if watersheds were managed to produce a more constant flow of highly usable, silt-free water, there would be much less need for the gigantic dam downstream than if the watershed, lacking retentive and ground storage qualities, delivers water at one time in flood crest



volume and then has a flow well below what should be normal because the water got away from the higher areas along the transit line as outrushing flood.

18. The gigantic dams, big dikes, channel dredging, and all related constructural activities, . . . lumped under the term "flood control," are attempts to treat a condition resulting from a cause without much consideration in curing the cause of floods. The cause is the inability of the watershed, the collecting basin, to absorb, hold back, delay water in its race to mainstem streams. Some of the greater flood damage has occurred where . . . engineers have done the most constructional work. The concept of throwing man-made installations of the constructional type against floods is, essentially, one of man "conquering" nature; it is a fight against inexorable natural law, and natural law always governs. There is need for questioning the entire thesis of "flood control" . . . and weighing this against-nature approach as compared to a line of action which would follow the precept of fully utilizing natural law and nature's mechanisms in water management.

19. Present reclamation programs are basically worthy but questionable in their present super-engineered, stunt-loaded program of projects. The bringing of water to semi-arid lands of the West through irrigation schemes is, in itself, laudable. If costs, losses, other factors are disregarded, it may be conceded that reclamation projects now proposed, all would produce good. There is positive reason to question the soundness of many super-projects now proposed, at fantastic costs, as compared to applying the same funds and effort in other directions to secure more basic conservation and utilization of our water resources and the land-water complex involved in that complex. At the very most, there might be 16,000,000 more acres added to the irrigated lands of the West, at enormous cost per acre brought into production. A searching study might show conclusively, that the way to meet future demands on products from the soil lies in directing efforts to raise peracre productivity on the 400,000,000 acres in farms in other parts of the nation—at far less cost. Irrigation projects in the West, genuine as such, at reasonable costs per acre irrigated, should be developed with all support and approval; those that get out of bounds, become fantastic, are open to severe questioning.

20-A. The robbing of one river basin of water by out-of-basin diversions to another drainage should not be approved except where thorough and complete studies show that such a diversion shall produce benefits over years of the future of greater value to the community at large than if the water resource continues to follow its original, natural line of transit. It is against the public interest to design and construct great trans-basin diversions for immediate needs, because of political pressures and related campaigning for such a diversion, where future needs and demands on water in the natural basin will return more to the state. region and nation in the future. It is the rankest opportunism to promote trans-basin diversion for political, bureau aggrandizement, local demands of immediacy if there is reasonable question that if the water were to remain in the natural basin, within a few years it will serve equal or greater values. Mere "engineering feasibility" or the outcry of water-short areas that have overbuilt in relation to water supply in their natural drainage, are no justification for robbing a natural stream basin of its water wealth and the potentials of the community within it to use that water in producing values of high level in the future.

20-B. There is evidence suggesting that some . . . "water development" agencies . . . are either incompetent or not forthright and starkly honest in their actions as they promote, propose and pressure toward carrying out their proposals and program. Evasiveness is indicated in the man-



Arts of the Irrigation renuine as Hold Possibility of Future Open Season Favorable reports on the current in the Valley nesting grounds,

Improved Whitewing Conditions in Valley

whitewing dove status presage possible ultimate resumption of open seasons on the popular game bird, reports Bill Jennings, assistant director of Wildlife Restoration for the Game and Fish Commission.

The Rio Grande Valley habitat area has substantial grain areas for the nesting whitewings to feed on now, in contrast to recent years, and a survey just completed of favorite northeast Mexican feeding areas likewise was positive.

Whether a 1956 harvest on whitewings, now considered unlikely, can be permitted this fall will hinge on a population count now being made

ner in which "benefits" are magnified and damage and losses resulting from projects are minimized in official project proposals. There is either incompetence or evasiveness in the many instances of these agencies securing approval . . . for the construction of a project on the basis of a moderate estimated cost, and the ultimate cost being from double to as much as nine times the figure on which the agency is authorized to undertake the project. The government and the people it represents are entitled to know the ultimate and whole scheme and its total cost within the limits of a reasonable inclusive estimate at the time approval is given to a project.

21. No swamp or marsh area should be drained until there is a comprehensive study of its value as a natural facility for maintaining water in the Valley nesting grounds, said Jennings.

"The whitewings may not be ready yet for resumption of open seasons," he said, "but if the present trend continues, a shoot may be possible within another year or so."

The season on whitewings has been closed for two years because loss of habitat curbed the birds and cut drastically into the foundation flocks. The downward trend was checked last year which showed an estimated 28 per cent increase over 1954.

But food conditions now are favorable in the Valley and also in parts of northeast Mexico which have just been inspected. Conditions in nearby Mexico are reflected on the Valley prospects, since whitewings from across the border occasionally bulwark the native Valley birds during the Texas harvest season.

levels, acting as an equalizing facility in stream flow and its productive capacity in wildlife and other values if retained in its natural state.

22. The ground water resource is estimated to be several times the quantity in surface water of all types and there must be more emphasis on conservation of this portion of the water wealth. The need for instituting necessary conservation measures bearing on ground water and its uses is immediate and mandatory.

23. Wilful pollution of water by anyone constitutes destruction of wealth belonging to all; a theft from the community treasury. Pollutions



The Tree Toad

A tree toad loved a she-toad That lived up in a tree.

She was a three-toed tree toad, But a two-toed toad uas he.

- The two-toed tree toad tried to win She tree toad's friendly nod:
- For the two-toed tree toad loved the ground,

The three-toed tree tcad trod.

But vainly the two-toed tree toad tried-

He couldn't please her whim.

In her tree toad bower, with her v-toe power,

The she toad vetoed him.

Dubuque Cue.

of water are inescapable. Integrity of pure spring water cannot be maintained as water is put to service. The governing precept must be to insist that those who make any use whatsoever of water resources, return any unconsumed water to the general "water bank account" in such a condition that all possible additional uses may be protected and maintained farther along the line of transit. Minimizing pollutions is a high level of enlightened self interest.

24. National parks and monuments, and designated "wilderness areas" within the national forests, being dedicated to preserving in as natural a state as possible, the natural conditions and features within these areas, must not be lost or dedegraded in their highest human service values by construction within them of dams or the backing up of impounded waters within their boundaries by dams outside the

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OPTICAL INSTRUMENT REPAIR CO. 579 Avondale San Antonio 10, Texas areas. This is an example of water, in itself not decreased in volume or useability, serving recreational uses of the highest value, if allocated to that service, given total priority at that point in its line of transit, through maintaining it in its wholly unaltered, natural state.

25. In all water development or use projects, that almost universally affect wildlife resources, in some ways beneficially, and more often destructively adversely, there must be study, coincident with all phases of planning, not only to salvage all wildlife values that can be retained under changed environment resulting from the constructional installations, but positively to secure all possible wildlife values inherent in the installation of constructional features. That is, there must not only be the underwriting of wildlife values which come as a matter of course in the installation of dams and reservoirs, but there must be planned utilization of those factors created by the installation which, by a bit of cost and effort, may get from the project all possible wildlife values. The maintenance of the wildlife resource and its recreational and related values is of paramount importance in retaining hunting and fishing as part of the American scene. Beyond this, and in addition hunting and fishing underwrite a \$9,000,000,000 segment of national business each year and as a matter of sound economy, the wildlife that underwrites this business not only must be maintained, but increased however possible within reason. Therefore, all wildlife production potentials must not be regarded merely as incidental to major water development projects, but an integrated and essential part of the project and provided for as a genuine objective in planning and management of all other features.

26. We hold that the laws, commissions, agencies and all other of the multiplicity in administration and related factors, are of secondary consideration in the formation of an effective water policy. We hold that natural law, wholly inimitable, takes precedence; that common sense and justice must govern. And that the much-needed revision of both law and administration, all of which are backward-looking, will emerge logically, as the sound overriding policy is applied and developed. Policy is fundamental, natural law and facilities in water management dictate policy to no small degree, and there must be revision of law and administrative organizations to work constructively on a foundation of sound policy or the present confusion, conflict, hodge-podge development can do nothing but lead the nation into difficulties in relation to water wealth, and possibly bring us to final disaster through mismanagement of that community wealth.

Respectfully submitted, Water Policy Committee, Western Division, Outdoor Writers Association of America ARTHUR H. CARHART, Chairman

The Ivory-Billed Woodpecker_

Continued from page 15

after some were found living in the Singer Tract in northern Louisiana, and then some were seen in the Santee River swamp of South Carolina. An intensive study of the species was carried on in the years 1937 through 1939, at the end of which ivory-bills were believed to be living in those two localities plus about three areas in Florida. Since then, however, there have been no reports from the Santee River. The Singer Tract in Louisiana, where ivory-bills were best known and where practically all of the life history studies were performed, was cut over during World War II. Apparently the last bird to be seen there was a lone female observed in January 1944. The only recent reliable reports of this bird have come from northern Florida, but there have been no authentic reports since 1952.

Ivory-billed woodpeckers were originally most abundant, judging from a study of all the old records, in the area between the Suwannee and Apalachicola Rivers of northern Florida, where the flat pine woods are intersected and dotted with many swamps. This great woodpecker may now be making its last stand in the region that even years ago was the center of its abundance.

A program for the conservation of

Tackle 'N Stuff_

Tackle manufacturers have been somewhat surprised that salt-water spinning has lagged compared to its tremendous reception by fresh-water fishermen. High cost of heavier tackle has been one explanation given. In an effort to overcome this factor, Ocean City has introduced a fine salt-water spinning reel, the #320, at a price comparable to a good fresh-water reel — \$27.50. The capacity is 250 yards of 15pound line.

The life span of white bass is short—seldom over three or four

the ivory-billed woodpecker must include the following:

- 1. Determination of the location and range of surviving individuals. Persons seeing ivory-bills can help by reporting their observations to the National Audubon Society, providing they are certain they have seen a real ivory-bill and not the somewhat similar and common pileated woodpecker.
- 2. Protection of the survivors of the species from hunting by curious gunners who might be the final cause of extinction.
- 3. Management of the forests so as to maintain an abundant food supply for woodpeckers. This can be done in different ways, depending on whether the area must also be managed for timber yield or whether it can be maintained as a sanctuary for ivory-billed woodpeckers and other animals native to these swampy wildernesses.

Conservationists must take the initiative in working out solutions to some of the complex social and economic problems that are involved in the restoration of the ivory-bill through management of its timber-producing habitats. Their success or failure will determine the fate of this bird. years—so three- and four-pounders are rare. But recently Howard Dove, Pottsboro, landed one from Lake Texoma that weighed 4 pounds, $12\frac{3}{4}$ ounces. He was casting with a Shakespeare rod, Penn reel, and using Ashaway line.

Johnson Motors has adopted a new guarantee plan to protect the owner who buys a motor but doesn't begin using it right away. The guarantee now is good for 90 days from initial use or one year from date of purchase, whichever occurs first.

* * *

Quote—"Few people wish to loaf openly. Angling has the unusual advantage of being a socially acceptable dignified way of doing nothing."—Sport Fishing Institute Bulletin.

Guns and Shooting_

Continued from page 19

Probably the best way for a beginner to get a good bench rifle is to decide on a caliber and commission a good gunsmith to build it. A great deal of tuning up is necessary to get a rifle to deliver the kind of groups necessary to be in competition. Some of this will come in working on the rifle itself. A great deal of it will come from developing a good load for the rifle after it is built.

I can think of no better way for the tyro to inform himself than to obtain and study Col. Whelen's book "The Ultimate In Rifle Precision." Practically everything you need to know about precision shooting is contained in this excellent book.

Shooting in general owes a great deal to bench rest experimenters. These dedicated people have made shooting a science and have contributed more, perhaps, than any other group to the knowledge of firearms and ammunition.

If you like to shoot and game is



Picking Up Fawns Can Bring Arrest

Two prosecutions, bringing \$100 fines for illegally possessing wild deer, prompted the Law Enforcement Division of the Game and Fish Commission to caution Texans about mistaking fawn deer for abandoned waifs.

The court cases, listed in the monthly arrest report, showed that two Poteet men were each fined \$100 plus costs for having live deer in their possession.

"We have no choice when people, despite countless warnings, pick up fawn deer," said the director. "These deer would be reclaimed by their mothers if left alone. When deer are taken away, a crime against wildlife ensues since these animals cannot be permanently adjusted to domesticity. Therefore, the warden force has been instructed to discourage this unhappy practice by prosecution where advisable."

The arrest report listed 124 persons prosecuted for fishing without proper licenses and nine others filed on for hunting game out of season.

scarce in your neighborhood, perhaps bench shooting is your answer. My own range is a pit where a great deal of earth was moved in road building, and my shooting bench is a home-brew job that cost me less than \$20. You can start with just about any good rifle to learn the fundamentals before investing in a bench rest rifle. I know of no better way to learn the science of firearms and ammunition.



DR. JAMES T. TANNER'S studies on the ivory-billed woodpecker extends over a period of many years, making him the leading authority on the species. He is Associate Professor of Zoology at the University of Tennessee.



SWIFT IN THE NIGHT and Other Tales of Field and Wood by William Byron Mowery. 254 pages illustrated with black and white drawings. Published 1956 by Coward-McCann, Inc., 210 Madison Ave., New York, N. Y. \$3.75.

Here are stories of fact and fiction about North American wildlife. Stories of a fox and her cubs, habits of the common and often disliked woodchuck, unusual ways of the rabbit all help toward a better understanding of the creatures of the outdoors. How the woods provide plant as well as animal foods for the outdoorsman in the form of mushrooms and edible green plants is included among the many interesting discussions. All of these are illustrated with black and white drawings by Walter W. Ferguson.

The American wolf, its legends and myths, as well as detailed discussions and descriptions of the various species, their way of life, means of obtaining food, and characteristics which have caused them to be among the most feared of American animals, provides the basis for the major portion of the book. The American wolf is nearing extinction, today. The author is concerned over the future of the wolf, and much of the book is spent in a discussion of this animal in an attempt to "rescue" it through a better understanding of its behavior.

All of the stories are based on the personal experiences of the author during his extensive travels.—JR.

PHEASANTS IN NORTH AMERICA edited by Dr. Durwood L. Allen. 490 pages well illustrated with photos, drawings, graphs, and charts. Published 1956 by the Wildlife Management Institute and the Stackpole Co., Telegraph Press Bldg., Harrisburg, Pennsylvania. \$7.50.

Outstanding authorities and authors selected from throughout the North American pheasant range collaborated to present a comprehensive picture of all phases of the pheasant in this country. The volume covers thoroughly the history of pheasants from the time of their importation in 1881 to the present, habitat requirements, life cycle and habits, survival problems, and management.

It is written as a text or reference work and should be of interest and value to anyone interested in this highly-popular game bird. Few questions are left unanswered.

The book is one of the wildlife Man-

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agement Institute's superb series embracing species of North American wildlife, and the editor formerly headed the wildlife research branch of the U. S. Fish and Wildlife Service.—TM.

THE ART OF THE AQUALUNG by Robert Gruss as translated from the Franch by Richard Garnett. 66 pages, illustrated with drawings and black and white photographs. Published 1956 by Philosophical Library, Inc., 15 East 40th St., New York 16, N. Y. \$2.75.

Just after World War II a group of Frenchmen popularized a new sport —aqualung diving. The popularity of this sport spread rapidly over Europe and America. Today aqualungs are available in most sporting goods stores.

Many people would like to use the aqualung, but do not have access to instruction in its use. It is for these and others interested in the sport that this book was written. It is not intended to be a manual for the expert diver, but rather a book of instruction in the use of the aqualung, including elementary rules of safety, for anyone wishing to enjoy "free" diving.

The book is generously illustrated with drawings and diagrams, which illustrate the various pieces of equipment and their proper use, and a number of black and white photographs of actual divers in action.

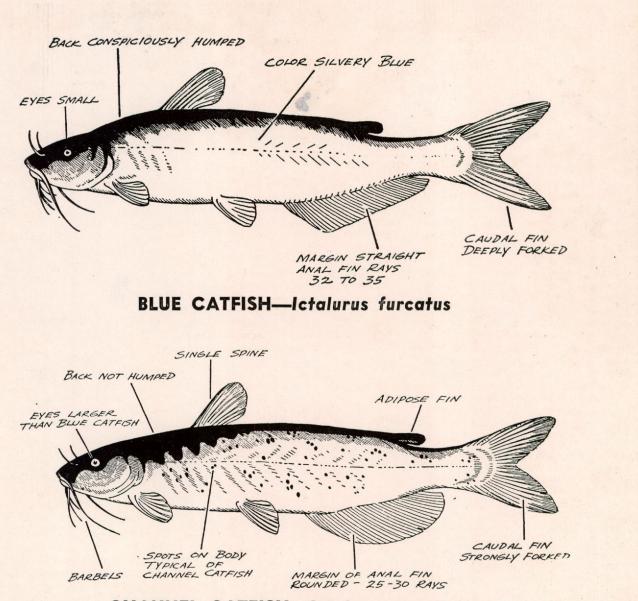
Robert Gruss, Frenchman and expert diver, wrote in French of French equipment and materials, however the book has been revised in translation to include British equipment and diving practice.—JR.

FOREST AND RANGE POLICY by Samuel Trask Dana. 455 plus xi pages. Published 1956 by McGraw-Hill Book Co., Inc., 330 West 42nd St., New York 36, N. Y. \$6.50.

The major portion of this text-reference-type book is devoted to a detailed chronological history of the development of forest and range policy and the events and forces which influenced it from the birth of the nation to the present. Pertinent legislation is traced, with the emphasis on the federal sphere.

A final section brings the entire picture into sharp focus in a summary and analysis. One valuable appendix discusses federal policy in related fields and the relationship between range and forests with wildlife, soil, water, and minerals and another offers a brief chronological summary of natural resource policies.

A selected bibliography and index concludes this book, which is one of "The American Forest Series."—TM.



CHANNEL CATFISH—Ictalurus punctatus

Two popular fish in Texas are the blue catfish and the channel catfish, but they are often confused because of their similarity in appearance.

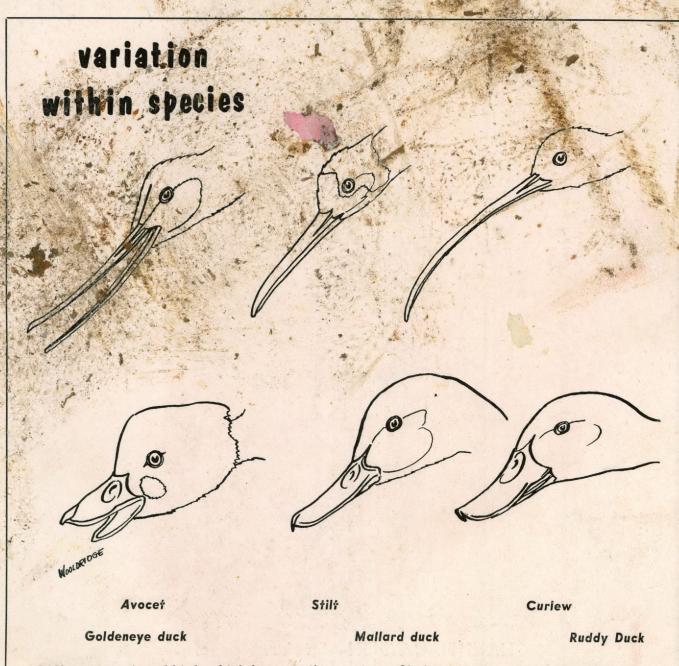
Channel catfish are typically stream fish, but may be found elsewhere due to artificial plantings from State Fish Hatcheries. Its body is slender with very little elevation of the back. Adults, after the spots are lost, are often confused with blue catfish. The channel catfish is a smaller fish than the blue cat, with its top weight being about 20-25 pounds. It is a special favorite of trotliners. Among the foods of the channel cat are fish, fresh water mussels, pond weeds, and crustaceans.

The blue catfish is characterized by its rather high

back and slender head and body. Spots on the body are very few or entirely absent in adult fish. Larger than the channel catfish, it has been known to reach 150 pounds. It prefers the deeper waters of river channels, coming into shallow backwaters in the spring. They are found in many Texas lakes and are abundant in Lake Texoma and Lake Corpus Christin Blue catfish are often caught on trotlines baited with cut bait, shad, or live minnows. They feed principally on aquatic larvae, fish, crustaceans, and fresh water mussels.

The only sure way to distinguish between blue and channel catfish is to count the rays on the anal fin of the fish. Blue catfish have 32-35 fin rays while channel catfish have only 25-30. (See illustrations above.)

34



Different species of birds which have similar feeding habits and environments may, nevertheless, exhibit a variety of bill formations. Slight variations in food preferences or methods of feeding may influence extensive differences in bills of different species.

