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# Texas Game and Fish

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The Texas peccary or javelina occupies much of our South Texas brushland. His neighbors are the coyote, the wildcat and the mountain lion. Although his daily food fare includes prickly pear, acorns, wild persimmons, pinon nuts, and other available vegetable matter, he has been accused of killing goats and sheep in the western part of the state. Locally, he is known as the "mush hog." As the result of hide hunting, he became almost extinct before being declared a game animal. Javelinas travel in bands, are vicious when attacked, and usually give birth to only two young.



# Texas Game and Fish

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

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Manuscripts should be addressed to Editor, TEXAS GAME AND FISH, Walton Building, Austin, Texas. All manuscripts should be accompanied by photographs. TEXAS GAME AND FISH always is interested in pictures of game and fish catches, unusual hunting and fishing scenes, bird dogs, and in group pictures of hunting and fishing organizations. Photographs used in TEXAS GAME AND FISH will be returned after publication.

★

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 TEXAS GAME & FISH invites republication of material since the articles and other data comprise factual reports on wildlife and other phases of conservation.

## ★ In This Issue ★

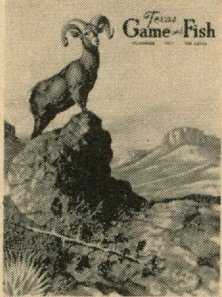
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## The Cover

The Texas bighorn, as depicted on this month's cover by Orville O. Rice, is an extremely shy creature. With advancing civilization, the bighorns located in the highest, most rugged terrain at timberline or above. Their coloration provides the perfect camouflage. In the summer, the dun color with touches of white blends with the rock rubble, the brownish soil and dead vegetation. In winter, the coat is paler, blending with frosty scrub timber. Competition from constantly increasing numbers of domestic sheep on bighorn range, losses from natural causes and illegal shooting, together with disturbance pressure of "civilization" have brought the Texas bighorn virtually to extermination. Efforts to secure an adequate block of land for a bighorn sanctuary have not yet succeeded.



A black and white photograph showing a vast flock of birds, likely ducks or geese, in flight over a body of water. The birds are scattered across the sky, creating a sense of movement and density. The water is visible at the bottom of the frame, with some darker patches that could be trees or land.

**A Duck,**

**or a What?**

By **THERON D. CARROLL**

*Supervisor of Conservation Education*

**N**OW you old experienced duck hunters need not bother to read these pages. Your years' experience will entitle you to comment though—and that would be appreciated. It's the fellow who's just taking up this winter madness called duck and goose hunting who might be able to use a few tips on identification of species. It's a sure way to increase your interest and pleasure in your chosen sport, and, with restrictions placed on some species from season to season, the knowledge might save you the inconvenience of explaining to the local Justice of the Peace just how you happened to have two Canada geese, one white-fronted goose, and two snows—when you thought you had two Canadas, one blue and two snows, or how the two wood ducks got in with those gadwalls and mallards.

You should make it a habit to identify everything you shoot. It won't be long until you begin to associate certain ducks and geese with certain characteristics in specific habitats.

This in turn will tend to make identification easier, and the cycle rewards you with a certain inner satisfaction and wealth of knowledge and bird lore that will allow you to take your place in the circle of those who know—the old heads.

Needless to say, the marshes, lakes, bayous, sloughs, and rivers are inhabited by birds other than ducks, but to the novice an ibis, coot, grebe, or rail might be just another duck—might be, but look at the feet! All ducks and geese have webbed feet. Sounds very elementary, doesn't it? Only, after you've heard several inexperienced hunters ask, "What kind of a duck is this?" as they hold up a grebe or coot for identification do you realize that some people are unaware of this simple fact. But all web-footed birds aren't ducks! Loons, pelicans, water turkeys, swans, and many other birds have membranes connecting some of their toes, but they don't have the combination of webbed feet and "duck" bill. Even to the novice

they don't look too much like ducks and, thankfully, they aren't likely to be numerous on your favorite shooting grounds. There's quite a story to be told by the feet of waterfowl. Now, assuming that our web-footed trophy is to be identified, how can the knowledge of feet help?

Dabbling ducks, or surface feeders, like the mallards, gadwalls, teal, pintails, etc., have a hind toe—the one not joined with the others by a web or membrane—that lacks a fleshy lobe. This lobe is thought to be an aid in diving and swimming to the other major group of ducks known as diving ducks such as canvasbacks, red heads, scaups, and goldeneyes. The fish ducks, or mergansers, and the ruddy and masked ducks also have the lobed hind toe. This lobe is lacking in the tree ducks. They have hind toes like the dabblers.

Geese, which even the novice can separate from the ducks on size alone, have no lobed hind toes.

So here we have a separation into

the lobed hind toe group and the group with the plain hind toe. See Figure 1 on page 4.

Another good physical feature that will aid us in our identification is color of feet and legs. Let's examine the plain-toed group first:

Members of the mallard group (mallards, mottles, and black ducks) have yellowish to orange to reddish-orange colored feet and legs depending greatly upon the age of the individual. The shovellers also go in for loud-colored footwear.

Pintails, green-winged teal, baldpates and fulvous tree ducks have gray to blue-gray feet and legs.

Blue-winged teal have yellow to orange feet and legs, as have the wood ducks. Gadwalls wear yellow to dirty-yellow socks.

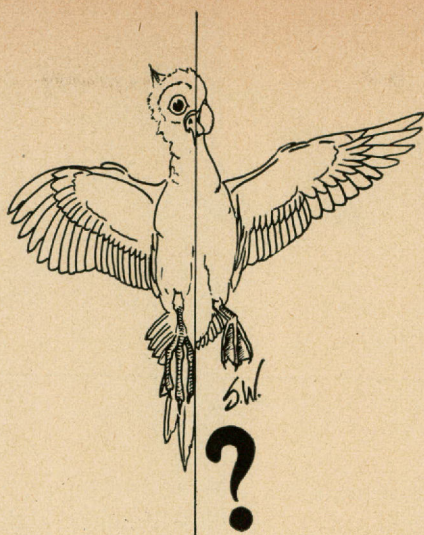
In our lobed-toe group we find canvasbacks, redheads and scaups with conservative blue-gray lower appendages, ringnecks and golden eyes with yellow, dirtied to varied degrees, and the mergansers with the orange or red-orange footwear similar to the elite mallard group.

Another physical feature that aids in identification is shape of bill. See Figure 2 on page 4. In the plain-toed group we might refer to the mallard bill as "regular." Only one of this group, the shoveller, has a decided variation from normal. He has a spatulate or "spoon-shaped" bill that makes him a marked man.

In our diving group we find the little ruddy with a very broad bill that might be called semi-spatulate; the mergansers with a long cylindrical bill that appears to be toothed down the sides — handy equipment for catching and holding fish—a main item in their diet; and the canvasback with a bill that's very thick at the base, giving him a triangular profile which invites the nickname "hoss head."

The color of the bill is another important thing to consider in our waterfowl "What is it?"

Our mallard group will probably give us the most trouble. The male mottles, mallards and blacks have bills that vary in color from bright yellow to olive-yellow to orange-yellow. The females of these species lacking facili-



ties and faculties that would promote the use of facial cosmetics are content with their drab-colored orange to mottled orange to olive-greens and yellows. The other dabbling ducks have bill colors ranging from black to blue-gray and blue-black with the exception of the male wood duck which displays pink, red, black, and yellow to set him up as the Valentino of duckdom to his truly fair.

The color of the bills of diving ducks varies from black to blue-black to bright blue and then abruptly jumps to red or reddish-orange. The mergansers sport the brighter red shades; the male of the ruddy sports the bright blue and the male canny is black. Both male and female ring-necked ducks have whitish bands across the upper bill—one near the tip and one near the base.

Now let us examine the outstretched wing. As we view the wing on the upper side from the tip toward the body of the duck, we notice the first bend of the wing which is the wrist. Between the wrist and the second bend of the wing we have the forearm. The trailing edge of the wing behind the forearm is made up of feathers called "secondaries." It is this particular area that is referred to as the "speculum," an area of brightly colored iridescent feathers on many of our puddle ducks. See Figure 3 on page 5.

The mallard group exhibits a speculum that varies from purple to bluish purple. The mallard species is the only one of the group that has a speculum prominently bordered, front and rear, with white.

Pintails have violet bronze and green in the speculum. Green is the predominant color found in the secondary patch of the teals, shovellers, and baldpates. The wood ducks have a blending of blue, green and purple and the gadwall is the only puddle duck that has a white speculum.

Toward the front of the forearm, gadwalls have a brown coloration and the blue-winged teals and shovellers have light blue.

The fulvous tree duck has a gray-black speculum and a brownish forearm.

The divers fail to show this iridescence in the secondaries. Canvasbacks and redheads are silver gray, scaups are white, ruddys are brown and the mergansers have white secondaries with white to steel-gray forearms.

The color of the head is very useful in separating the sexes in many cases. I suppose everyone is familiar with the glossy green head and white neck-ring of the male mallard. The "greenhead" is one of the favorite ducks of Texas sportsmen. The males of the mottle and black duck, however, are not blessed with such feathered finery and we turn to color of bill to distinguish them from their mates.

The pintail drake with his full-dress appearance, chocolate brown head, white neck front and upturned white collar makes him old "White-tie-and-tails" personified.

The male green-winged teal has a beautiful chestnut head with glossy green eye slashes. Mr. Bluewing has a mixture of gray and greenish purple iridescence accented by a crescent-shaped white patch in front of the eye.

The gadwall male is not too attractive if we just see his gray-brown head—he doesn't differ greatly from his spouse.

Mr. Baldpate with his white crown and forehead and green eye slash is easily told from his inconspicuous mate.

The highly-colored, crested head of the wood duck drake looks with bloodshot eye on the equally crested, but less gaudy, countenance of his brown-eyed babe.

The male and female of the fulvous tree duck evidently patronize the

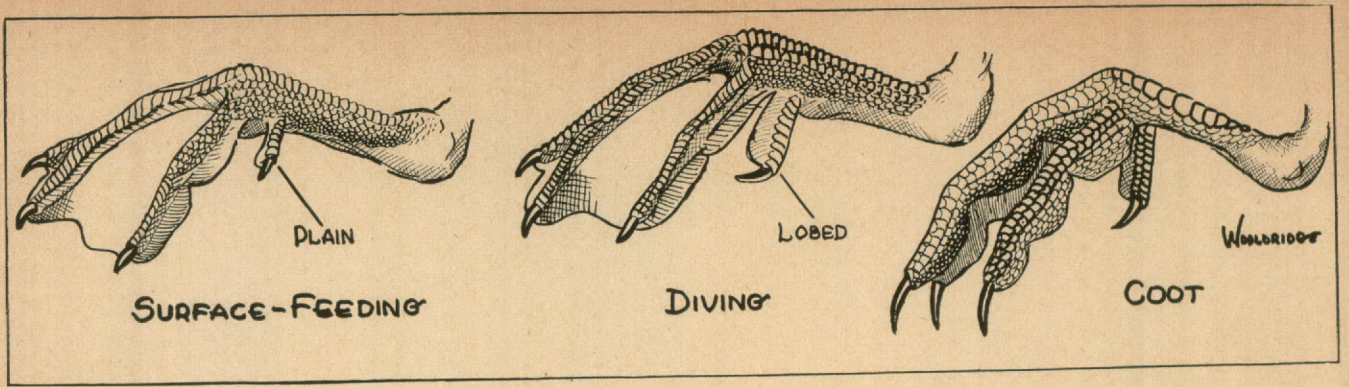


Figure One

same cosmetologist who knows only one kind and color of "hair-do."

In our divers we find male canvas-backs and redheads with beautiful chestnut head colors—just notice the difference in profile though! Canny has the base of the bill tapering up to meet the forehead and Mr. Red-

head conforms more with the typical forehead pattern. Their mates, both drab, in headdress show the same profiles as their respective husbands.

Lesser scaup and ringneck males have a purplish iridescence on the head but Mr. Ringneck shows more of a tendency toward a crest. Both of

their mates exhibit grayish brown heads.

The little ruddy male has a blackish brown head with a prominent white cheek patch. The female tends to be marked similarly but the colors appear faded.

Both American and red-breasted

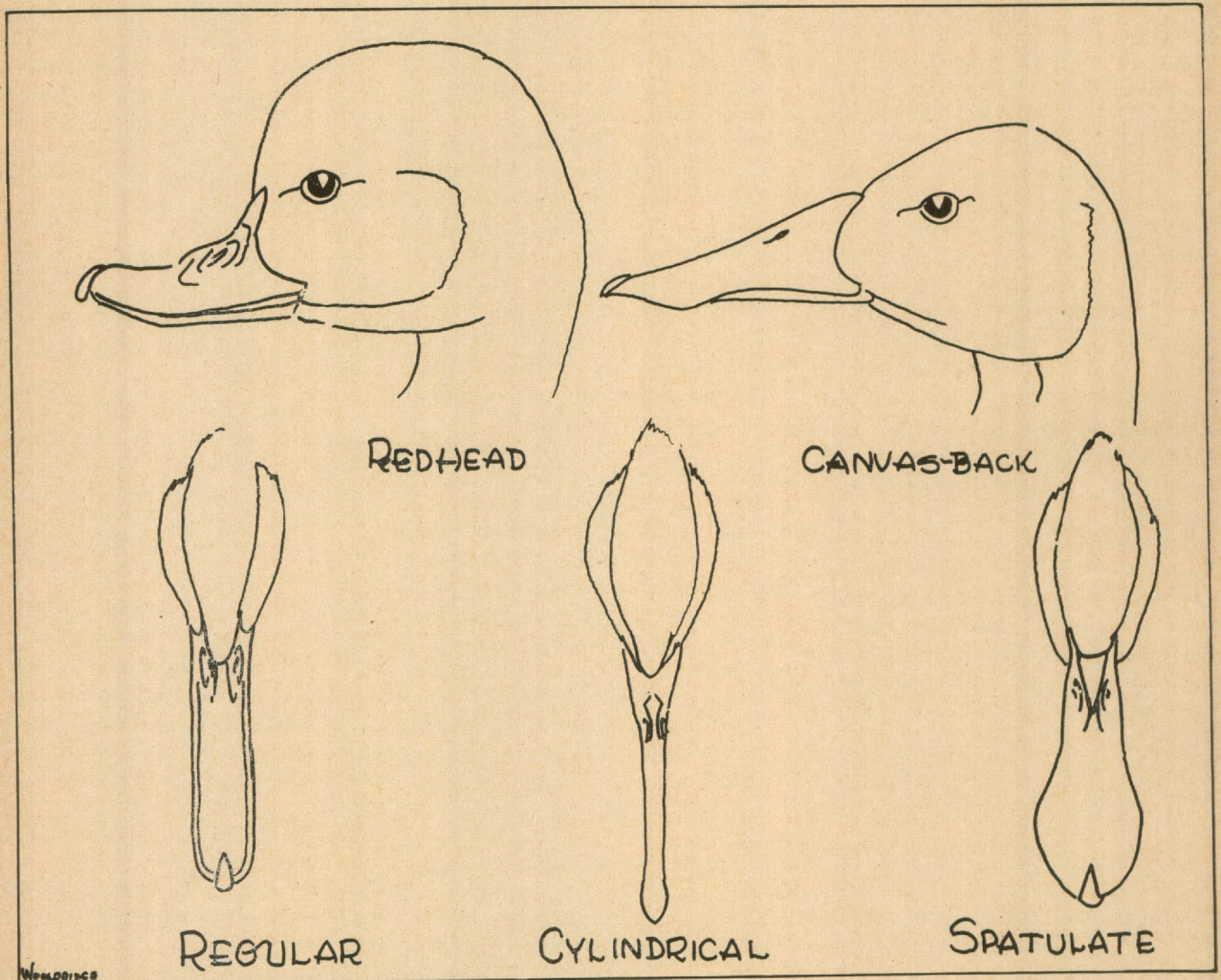


Figure Two

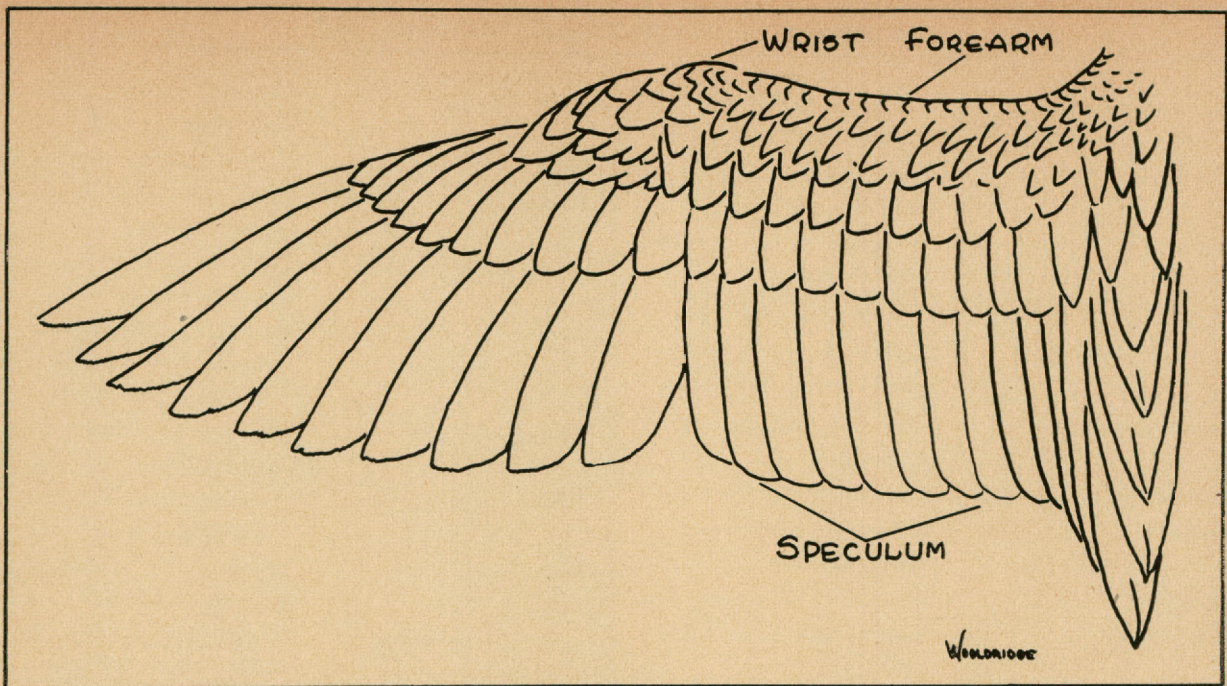


Figure Three

merganser males have glossy dark-green heads and red eyes, but the red-breasted male has a double-crest and a white collar. The female of these species look like sisters but Mrs. American is content with an inconspicuous single crest and Mrs. Redbreast shows a ragged, unkempt double crest.

Now let's turn to our bigger feathered friends. Only four kinds of geese frequent Texas. These are the Canada geese (three sub-species), the white-fronted geese (commonly called speckled-bellies), and the snows and the blues.

Canadas have black necks, white chin patches and black *bills, feet, and legs.*

White-fronts have gray breasts with black splotches, a pinkish to bluish bill bordered at the base by white feathering on the face, and yellow *feet and legs.*

Snows have pinkish to red *bills, feet and legs,* white bodies and *white wings* with *black tips.*

Blues have pinkish to red *bills, feet and legs,* a bluish gray color to the upper body except for the upper neck and head, which is *white.*

The only trouble you should have in goose identification might be cleared

up if you just notice the colors of the feet and legs. Snows and blues tend to be pink to red. White-fronts are yellow and Canadas black.

Now these identification points that we've been discussing should provide you with the information you need to identify your kill. Of course, there will be other ducks falling to the hunter's guns this winter. There will be a few buffleheads, golden eyes and possibly some old squaws and hooded mergansers but from waterfowl census and kill records we've just about covered the major species. In 1949 the reports of interviewed coastal hunters showed mallards, pintails and redheads, in the order listed, as most frequently occurring in the game bag. The ratio of males to females was 59.29% to 40.71% and adults to juveniles 55.66% to 44.34%. So if this season runs true to form, you should have more adult males in your bag and these are the more easily identified.

Now, not all of these identification marks we've mentioned are completely fool-proof. Waterfowl have seasonal moults and plumage changes that enter the picture; then, too, trying to separate mottles from blacks on the

basis of a dark spot at the base of the upper bill has proved only about 75% effective. Such things as flight characteristics—small flocks, large flocks, wariness, preference for small ponds or large open bodies of water, etc., will aid you in identification. It all adds up to studying your game; learning more about it; increasing your luck by increasing your knowledge of the animals you seek.

A "quickie" key (figure 4 on page 6) might help you put the finger on your feathered prize—after you're sure that it is a duck or goose.

Just to be on the safe side, be sure your gun is of the legal gauge, properly plugged and in safe shooting condition. Have the proper stamp, license and landowner permit. Be a good sport, try to kill your legal limit cleanly and hold cripples to a minimum; leave those stimulants in the car; and, if possible, take that boy along with you and give him the benefit of your experience, knowledge, and companionship.

I hope you find that there's as much self-satisfaction in knowing what you've killed as there is in making the kill. May the birds be on the wing, and good hunting!

## WATERFOWL IDENTIFICATION "QUICKIE" KEY

Mallard	Speculum bordered front and rear with white	Lesser Scaup	Small; compact; white speculum
Mottle	Black spot on each side at base of upper bill	Ring-Necked Duck	Light colored rings on bill
Black	No spots at base of bill; darker color	Ruddy Duck	Stiff tail feathers; smallest of our divers
Pintail	Pointed tail; long neck	American Merganser	Male has small crest; largest fish duck
Green-Winged Teal	Plain forearm; green speculum; our smallest duck	Red-Breasted Merganser	Males have high crest; females have double crest —And for the geese:
Blue-Winged Teal	Blue forearm; yellow feet, small duck	Canada Goose	Black neck; white cheek patch; black feet
Baldpate	Rose-purple on breast	White-Fronted Goose	Speckled breast; white face, yellow feet
Gadwall	Yellow feet and legs; white speculum	Blue Goose	White head; blue-gray; pink to red feet
Shoveller	"Spoonbill," blue forearm	Lesser Snow Goose	White with black wing tips; pink to red feet —Incidentally:
Wood Duck	Highly colored; crested head	Coot	<b>Lobed feet;</b> white bill and frontal plate
Fulvous Tree Duck	Long legs; long neck	Grebe	<b>Lobed feet;</b> cylindrical and pointed bill; excellent diver
Redhead	High forehead; bill regular at base		
Canvas-Back	Head and bill give wedge-shaped profile		

Figure 4

## Sportsmen Vital Aid in Civilian Defense

ONE of the greatest potential powers for the internal security of our country is the army of sportsmen who each year actively engage in their favorite forms of sport, hunting and shooting, according to Colonel W. L. Clay of Remington Arms Company, Inc.

"These people are all versed in the art of shooting," says Col. Clay. "All of them are capable of showing others how to operate and use firearms and a large per cent of them are capable of becoming efficient instructors in shooting proficiency. Every city and town should right now start planning a program that will utilize this special knowledge in the event necessity should arise.

"Our citizens must become organized and trained to protect themselves and their property, including their places of work, to the extent of their individual abilities. Comprehensive planning will be necessary, therefore, well in advance of actual hostilities."

Several years ago Remington Arms Company inaugurated a hunting and

shooting study that disclosed there were approximately 17,000,000 shooters in the United States in 1948. The study indicated that 37 per cent of all men 15 through 64 years of age did some type of shooting in 1948. As might be expected, the highest percentage (49 per cent) was found among the youngsters . . . the 15 to 19 age group. Most shooters, the survey revealed, took up the sport in their youth, more than 60 per cent of those interviewed having started shooting before they were 20 years of age.

"All these licensed hunters," says Col. Clay, "represent a tremendous potential basis for any plans for internal security. It will be remembered that thousands of firearms of various models were shipped to England for the use of the home guard or militia assigned to beach defense at the time of the threatened German invasion across the Channel.

"The proper use of commercial firearms can be learned quickly and can be of tremendous advantage in case of local disorders or raids. Since most of our National Guard and many

R.O.T.C. units are absorbed by Federal forces in time of war, it is important that a reserve of civilians experienced in the use of firearms not only can be readily trained to perform the usual functions of the National Guard during its absence but also can provide the nucleus for a civilian home guard with substantial firepower.

"Augmentation in the number of licensed hunters is, therefore, highly desirable in future years to offset the large number of men who will join the armed forces in a national emergency. It is probable that plans for internal security will be highly localized so that workers and those of the sufficiently able-bodied unemployed may each receive his individual assignment to meet any kind of emergency.

"Varied types of civilian firearms will probably be assigned for defense purposes as it would be most difficult and costly to equip all such personnel with regular military types. In such instance the sportsmen of this country are again of great importance, as many of them have more than one sporting firearms."



# Shooting Tips for Beginners

EACH fall finds a new "crop" of sportsmen going afield in quest of game birds and animals. Many of these novice hunters will be taking their trips in the enjoyment of the traditional sport of hunting. More than a few of them will be, figuratively, as "green" as the fields in which they hunt.

Henry P. Davis, public relations manager, Remington Arms Company, Inc., offers some shooting tips directed particularly to the beginner. "The beginner," says Davis, "should first acquaint himself with the rules of safe gun handling and make them the leading factor in his conduct afield. The quicker he does this the sooner he will gain the respect and aid of experienced hunters who are always willing to lend a helping hand to a serious-minded novice.

"The next important step is to learn how to quickly 'mount' the gun to your shoulder and properly align the barrel on the target. American-made guns are manufactured to standard stock dimensions. These dimensions are chosen because they more nearly fit the average gun. With practice a gunner can easily learn to place the gun on his shoulder in such position that when he looks along the top of the barrel the gun is aligned on the target. However, if the physical conformation of the shooter is such that the gun simply will not 'fit,' regardless of practice, it is a fairly easy matter for a competent gunsmith to alter the stock in such a manner that a proper 'fit' is obtained. Proper 'fit' is extremely important to good marksmanship, for no gunner can be expected to shoot consistently well if he has to continually 'work' on his gun to obtain proper sighting alignment.

"The knack of quickly snapping the gun to your shoulder in a comfortable position is best acquired through 'dry-shooting.' This merely consists of quickly placing the UNLOADED gun to your shoulder and aligning the bar-

rel on a target, WITHOUT taking your eye off the target. When you think you are 'on' the target, check your aim by closing the left eye and sighting down the barrel with your right.

"It will be well to practice this time and time again before a mirror. This will allow you to see that the gun is well up on your shoulder, your cheek is held tightly down in the stock and your head is not too high. If you can see a good portion of the front part of the barrel, you are holding too high and the shot would pass over your target.

"In pointing at a moving target with your unloaded gun, always swing a bit ahead of it before pulling the trigger. And be sure to follow-through with your swing after the hammer falls. You cannot hit a moving target by shooting straight at it, so remember that the follow-through is as important in shooting as it is in golf. Shooting behind the target is a very common error, and it is generally caused by stopping the gun.

"There are three types of wing-shots: the snap shot, the deliberate shot and the fellow who waits out or 'points out' his shots.

"Of the three, the deliberate shot will, in the long run, account for more hits, whether it be in the game fields or at the traps firing at clay targets. The snap shot is prone to 'jump' or 'push' his gun at the target and consequently frequently shoots behind it. The 'spot' shooter might come under the snap shot category, but there is a considerable difference between the two. The snap shot tries to shoot so quickly that very little lead is necessary and he generally points directly at his target. The 'spot' shooter shows very little swing in his gun pointing, does not swing by his target, but rather shoots at a 'spot' in front of it. This type of shooter really does swing his gun some, but the swing is not very apparent. An experienced 'spot'

shooter is usually a deadly marksman, but it takes a bit of doing to learn the knack.

"The deliberate shooter is the chap who combines his trigger pull with the grace and rhythm of his swing. He 'mounts' or places his gun against his shoulder quickly but smoothly, swings on the target, pulls past it, touches the trigger while his gun is still in motion, and follows through with his swing. Here is shown the perfect coordination of brain, eye and muscle.

"The 'pointer-outer' is the slow shooter who holds his fire until he is sure the target will be in his shot pattern. Sometimes he is cursed with the habit of flinching, which slows him up. Generally, however, his reflexes do not react as quickly as those of others, and often he waits so long that the game bird which is his target, has reached the safety of the cover.

"Quick, yet deliberate, shooting comes instinctively with experience. Authorities tell us it only takes about one-fifth of a second for the experienced hunter to get set to shoot. This means a shift into proper shooting stance, 'mounting' the gun, estimating the lead, swinging on the target and pulling the trigger. A lot of action in a short time, but it all happens. The novice, however, should take his time and not rush his shots. It is better to wait too long and know what you're doing than to blaze away and trust to luck.

"And here are just a few more important tips of especial interest to beginners:

Learn and observe the rules of safety.

Try out your gun before going afield.

Observe your state game laws.

Ask the landowner for permission to hunt on his land.

Get an experienced hunter to go with you.

Take prompt and proper care of the game you shoot."

# Nueces Catfish Derby

By ED EAKIN

News Editor, Robstown Record

ANY red-blooded fresh water fisherman knows that two-ton catfish are as scarce as hen's teeth.

But the picture of a monstrous catfish that appeared in a weekly newspaper in Robstown, Texas, last fall had repercussions throughout the nation and launched one of fishdom's most unique fresh water marathons.

To residents of that cotton and oil studded portion of the Texas Gulf Coast, it is known as the Nueces County Catfish Derby.

With regard to the better known but no more spectacular Tarpon Derby at Aransas Pass, Texas, the Nueces Catfish Derby will open its second season in November. What the results will be is anybody's guess.

The Derby was conceived by a catfishing parson, Rev. K. T. Melugin of Robstown, and promoted by a sportswriter, a commercial photographer,

and 65 Robstown merchants who contributed \$500 worth of prizes, from a \$45 rod and reel to a block of mineral supplement and a shave and haircut.

But the real promoter was the two-ton blue catfish that two Robstown anglers were supposed to have caught in "a forbidden mountain lake in south-central Mexico."

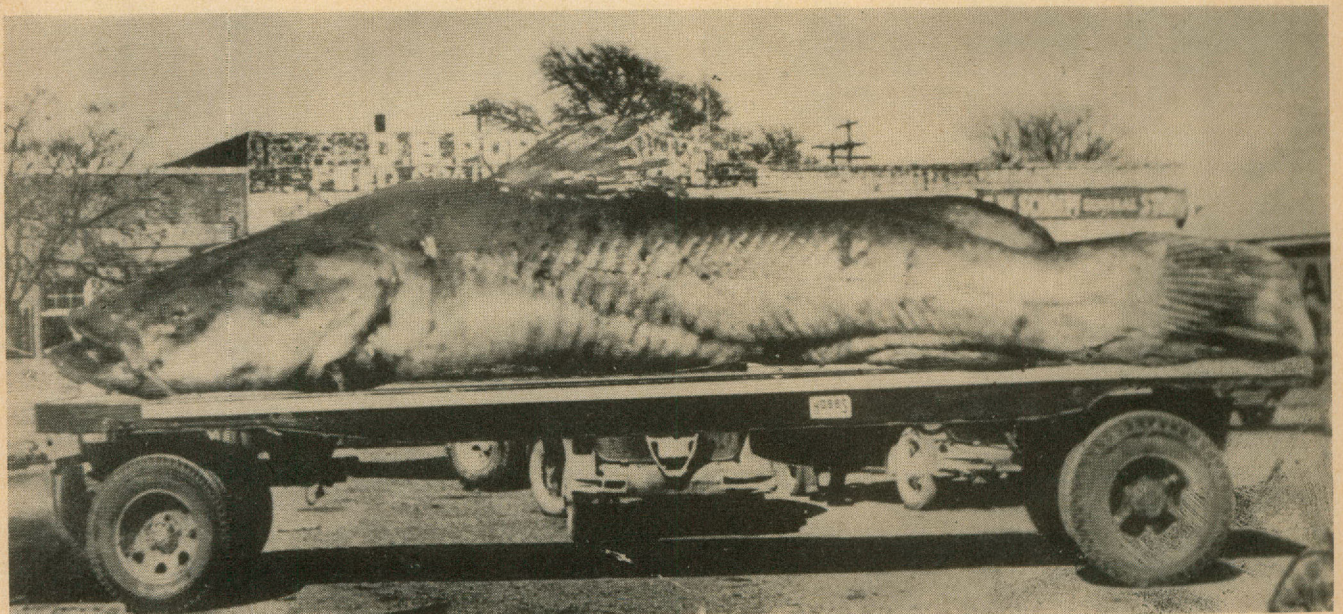
The picture of the catfish which is reproduced below stretched out realistically on a long truck bed appeared unheralded in the October 5 issue of the *Robstown Record*, shortly after the opening of the first annual Nueces Catfish derby. The caption under the picture contained these startling remarks:

"Ralph Bryant and Ray Smothers, well-known Robstown anglers, made fishing history recently when they hauled in this two-ton blue catfish

from the bottomless waters of a forbidden mountain lake in south-central Mexico. A world-record catch, the monstrous beauty measured 24 feet long and had to be hauled out of the mountain range on the backs of 50 burros. Bryant said they were going to bring the fish back to Robstown to be put on display, but the border patrol stopped them. 'Fin and gill disease,' they were told. The fish was then taken to a small Mexican village, Mentiroso Grande, where the natives devoured ten-foot steaks at a three-day feast."

Who could believe such a fantastic tale? Undoubtedly the picture was convincing enough for the newspaper had no sooner hit the streets, than inquiries and exclamations began flowing in.

Many, especially the women, whose sole encounter with fish was across



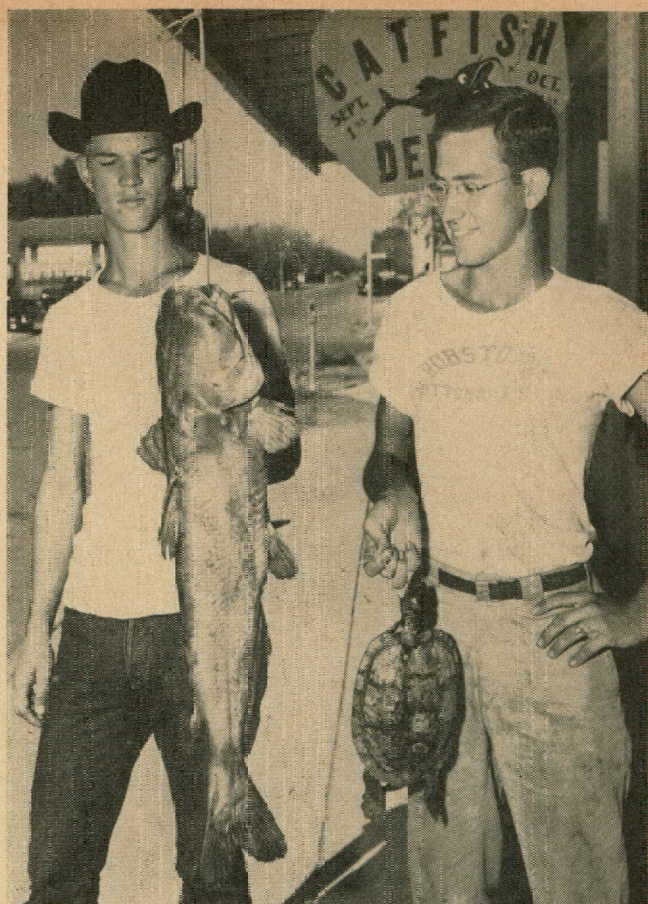
the butcher's counter, swallowed the tale, hook, line and sinker. Some avowed they didn't know fish grew that big; others merely gasped in amazement.

Smothers, one of the angling pair, came close to losing his job. Fellow employees put a copy of the picture on his boss' desk shortly after the incident. Glancing over the caption, he became furious. "I thought Smothers was working for me," he snorted. "When did he have time to go to Mexico?"

Employees of Bozell & Jacobs of Houston, one of the state's biggest advertising agencies, became quite perturbed. P. L. Pellerin, office manager, wrote that "there is quite a disturbance among the employees here in our office as to whether or not this fish is just a hoax or the real McCoy."

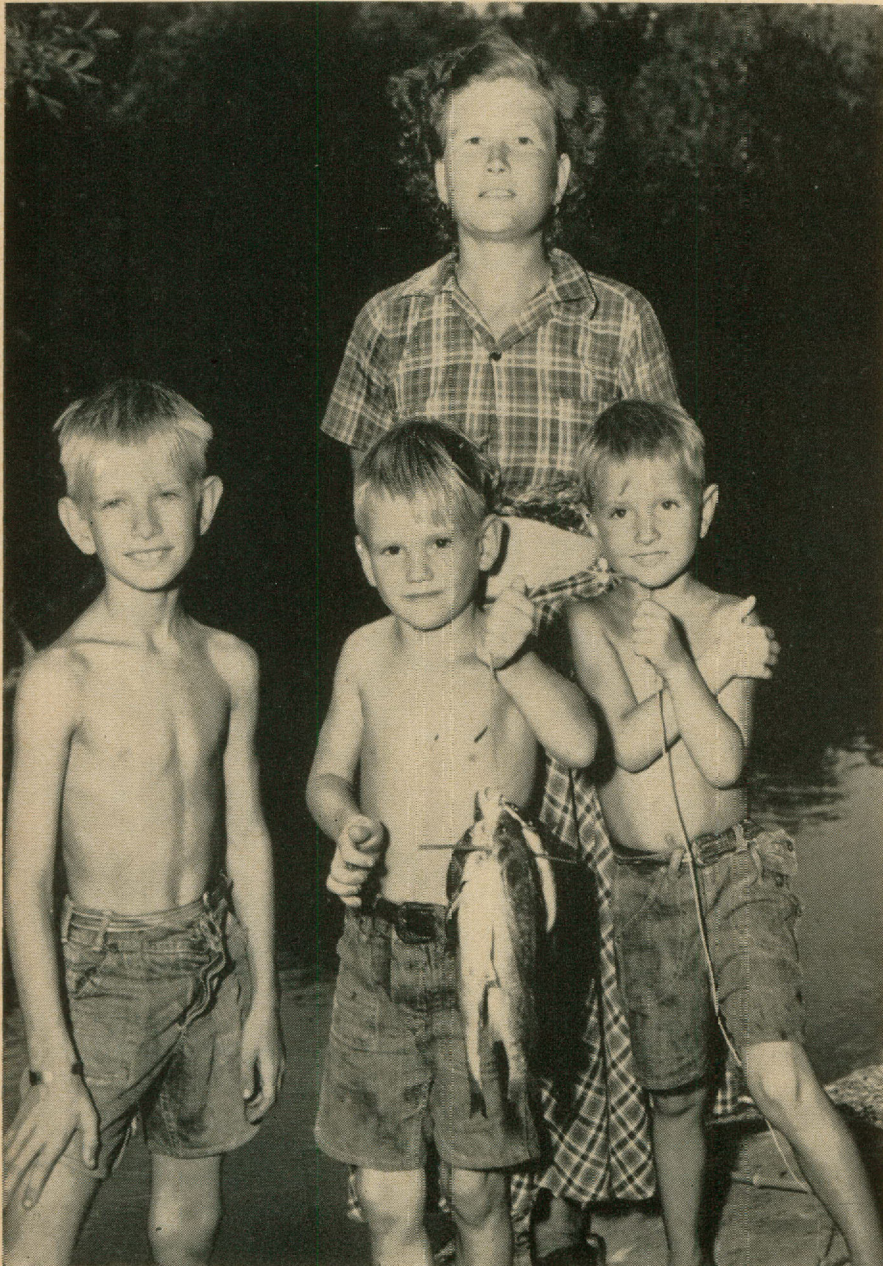
There were other skeptics. One, a friend of Bryant, refused to believe

Brownie Wasson (left) and Donnie Stevens of Robstown take a good look at their 17-pound bluecat hooked on a trot-line in the Nueces River. The fish tied for third in the bluecat division of the 1950 Catfish Derby. Some folks say that Dr. K. T. Melugin, pastor of the First Baptist Church of Robstown, is about as good snagging catfish as he is casting for sinners. Anyway, Preacher Melugin is much at home on the mossy banks of the Nueces River, the home of the super bluecats. Dr. Melugin is pictured below with his daughter, Sue, and son, Ramsey.





This is Catfish Derby "money" which is given to the winners. Instead of being given the prize, the winners were awarded these certificates which they presented to the merchant or businessman.



Cast an eye towards the Nueces River past Calallen sometime and you'll more than likely see scenes such as this. Mrs. Gilbert Gerland of Bishop, and her three sons, Devey, 9, Donald, 6, and Dwain, 4, usually make weekly trips to the river during the summer. With a line and pole, they hook such catches as these gasper.

the story at all. "I know Ralph Bryant, and he ain't been out of town in the last month," he explained. One old-time Robstown catfisherman looked at the picture for an hour before finally deciding it just couldn't be possible. Nueces County servicemen used the picture to convince skeptical "Yankees and Californians" that Texans still do things in a big way.

The week following the appearance of the picture, a "blow by blow" description of the record catch was published:

"With 53 burros, a one-half inch steel cable salvaged from an abandoned oil rig, and a Mexican guide, the pair arrived at the lake. Borrowing an anchor from one of the native's boat houses, the two anglers improvised a line using the steel cable and baited it with the loins of a Woofus Cow shot the day before. Tying it to the 53 burros, the men tossed the line in an waited. Two hours passed and then suddenly the line drew taut. The burros struggled but three were drowned before Smothers managed to mangle the line in two. However, they didn't give up. Obtaining a smaller anchor, they baited it with a large juicy cactus and prepared for another battle. This time the burros won; the monster was pulled to shore amid violent whacking of its tail."

Whatever doubt remained in people's minds after that was dispelled when the newspaper publishers admitted that Ralph Bryant—actually the perpetrator of the story—was unofficially the "president of the Nueces County Liars Club."

But interest in catfish and catfishing in Nueces County was growing and the Nueces Catfish Derby was under way. In addition to catfish, there were divisions for any other kind of fresh water creature that could be found in Nueces County ponds and creeks and in the Nueces

River up to and including Lake Corpus Christi at Mathis.

In spite of the emphasis on catfish, the initial entry was a 15-pound soft-shell turtle submitted by a 12-year-old Robstown school girl, Martha Land.

Robstown being only 20 miles from the Gulf, many an avid saltwater angler scoffed at the Derby. But before the contest closed 37 catches had been turned in.

Although Robstown was the headquarters, it took a Corpus Christi man, W. L. Green, to win the Derby. Green turned in a 29½ pound bluecat only two days before the end of the fishing marathon on November 1. Three youths from the Nueces community of Calallen, Carl Bickham, Kelly Bickham and Bobby Glenn, weighed up a 79-pound alligator gar to capture that division. Other prizes were awarded for buffalo, bass, gasper and crappie.

Two handsome trophies, one each for the biggest catfish and gar, were awarded in appropriate ceremonies by Robstown's Mayor Phil Magee, Jr., at the halftime of the Robstown-Corpus Christi College Academy football game shortly after the end of the contest.

The Derby was over, but hardly forgotten. "If Aransas Pass can have a Tarpon Derby, Cuero a Turkey Trot, why can't we have a Catfish Derby every year?" Robstown fishermen reasoned.

And so Robstown, center of the rich Coastal Bend agricultural section, and only a stone's throw from some of the best salt water fishing in the country, will again be headquarters for the Nueces Catfish Derby. And the historic Nueces River, steeped in the lore of cattle barons and Mexican bandits, will again be the center of one of the most concentrated fishing movements in its history.

But, whether the prize be a dollar



This 73-pound alligator gar, hooked by Carl Bickham, left, Bobby Glenn and Kelly Bickham (not shown) of Calallen, won the gar division of the Nueces Catfish Derby. The gar was hooked on a trot line just below the dam at Lake Corpus Christi.

tonic at a local barber shop, a thermos jug or a pair of nylons, scores of Nueces fishermen will shake the salt

water out of their boots, swap shrimp for worms and revive the ancient art of catfishing.

TREES grow in soil; squirrels live in trees; people shoot at squirrels (and miss 'em). It's as simple as that, or is it? Let's take a closer look at the wildlife-forest relationship to see what makes it tick.

One of the first things to remember is that plants and animals live together in "communities." A forest community may include many kinds of plants, from tiny mosses to giant oaks. Animal life in a forest may be equally varied, with the earthworm and deer each having a part in the natural balance. Even the skunk, with all his social limitations, exerts a strong influence on his environment. Many a predator with more enthusiasm than judgment has made the embarrassing mistake of trying to evict Monsieur Polecat from his chosen habitat.

A forest community does not just happen; it develops over a long period of time. According to the geologists, much of the land area of the South was once covered by water. That must have been the "good old days" for the ducks, frogs and fish. As the centuries whizzed by, more land appeared. Some of the upheaval of land masses was caused by pressure within the earth. Changes in topography and evaporation of inland waters gradually reduced the water area.

As land surfaces emerged, nature began the patient task of growing plants. Seaweeds, pond scums, and other aquatic forms followed the water line, while marsh plants claimed slightly higher ground. Prehistoric trees came later, leaving their record in deposits of coal. Willows, cottonwoods, cypress and other species grow in swamps and along streams as they did centuries ago. Pines and upland hardwoods apparently established themselves more slowly than did the bottomland species.

Some of the stages of forest development can be observed near a large stream or lake in a woodland area. Pondweeds, cattails, and lilies grow in

the water, while marsh grasses follow the shore. The marsh usually merges into a dense growth of cottonwoods and willows. Next come the walnut, hickory, pecan, sweet gum, oaks, and pines.

Forest development is never complete, nor is a perfect balance among plants and animals ever achieved. The forest community changes constantly under the pressure of competition for sunlight, moisture and plant nutrients.

Several different kinds of plant communities follow each other as the forest develops. The cycle of forest development may be changed at any time by drought, ice storms, disease, insects, fire, or cutting. For example, the removal of too many pines may cause a succession of hardwoods. Man may help or hinder forest development.

As trees and other plants establish themselves, they begin to spread to new territory by scattering seeds or by shoots from the root systems. The winged seeds of pines and such hardwoods as ash, elm, and maple are adapted for distribution by wind. Seeds of walnut, pecan, hickory, oak, cherry, dogwood, and beech are carried by animals. A large population of seed-eating animals in a forest area may hinder the reproduction of some tree species.

At every stage of development the forest community is invaded by other plants which are trying to establish

# Wildlife and

By EVERETT

themselves. A mixture of species, rather than a pure stand of one species, is characteristic of most natural forests. Pines, cottonwoods, willows, and other species which reproduce from windborne seeds usually invade other plant communities more rapidly than do trees, such as the oaks, which reproduce from heavy seeds.

Soil plays an important part in determining the character of the forest community. Trees and other plants can establish themselves permanently only on soils to which they are adapted. Bottomland hardwoods such as walnut, pecan, and gums thrive on deep, fertile, moist soils. The pines are adapted to acid soil and do not grow well in soils which have formed

from limestone. The kinds of trees which occur in a well-established plant community are one indication of the quality and character of the soil.

The wildlife pattern changes to some extent with each succession of plants in the developing forest. Food and cover largely determine the animal species and their populations at any given time. When grasses and shrubs are the dominant vegetation they are inhabited by the kinds of wildlife which can use the available food and cover. The final, or climax, vegetation likewise attracts the animals



A typical pine plantation in East Texas.

# FORESTS

F. EVANS

which prefer that particular habitat.

Man's use of the forests has always affected wildlife. Before white settlers came to Texas, woods tribes probably burned extensive areas of forests to create brushland. The purpose of the burning was to open the dense forests so that deer, turkey, and small game would increase.

As the settlement of the state got underway, farmers continued to burn the pine woods of East Texas. Clearing and cultivation increased the number and size of openings in the forests. Grains were the principal crops in the small fields. Natural boundaries, rail fences, stones, or artificial hedges formed field margins.

Lumbering was beneficial to quail and other wildlife for a time. In the virgin loblolly—short-leaf pine forests of East Texas the trees were tall and closely spaced. There was little shrubby ground cover beneath the trees, and quail foods were scarce. Logging changed some of the dense forests into open brushland. The growth of weeds and grass in the brushy openings was generally beneficial to the bobwhite.

The oak woodlands of central and northern Texas were not satisfactory for quail before clearing began. Good quail habitat was limited to the edges of fields and woods. The cutting of timber to make room for

cultivated crops also made room for the bobwhite and other wildlife. Farming and grazing increased woody cover by spreading trees and brush to the prairies. After 1880, farming, ranching and lumbering were generally unfavorable to wildlife.

Clear-cutting of forests destroys much of the natural habitat for deer, squirrels, and raccoons. Destruction of den trees has been a major cause of the decline of the raccoon population in some parts of the South. Beaver have disappeared from many areas in the region because of the misuse of forests and streams.

Forest fires reduce the area and quality of the range for wildlife. They also destroy young animals and bird nests. Fires ruin watersheds by removing the forest cover. Irregular flow and silting of streams in deforested areas impair the habitat for fish and other aquatic animals.

Forestry and wildlife management can be practiced on the same land. Woodlands can be made to produce both timber and game crops. Proper cutting of forests improves conditions for game animals and birds. A mixed pattern of cropland, grasses, and trees is preferred by many species of wildlife. The borders, or "edge," between woods and fields are favorite habitats for some of our most valuable animals and birds.

Reforestation is restoring forest cover on many areas. Tree seedlings

are being planted on approximately fifteen thousand acres in Texas each year. A much larger area is being reforested by natural reproduction, particularly in the piney woods.

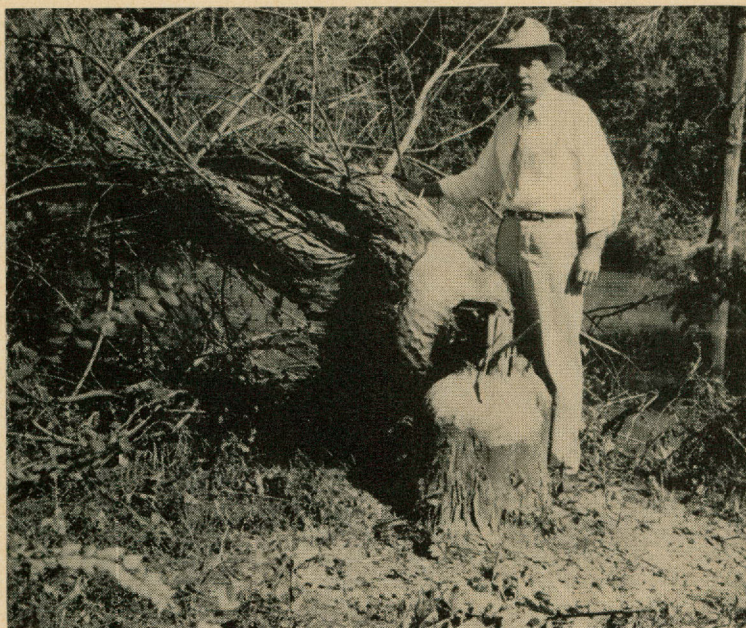
The commercial forests of the state are concentrated in thirty-six East Texas counties, where fifty-seven per cent of the land area, or approximately eleven million acres, is covered by pines and hardwoods. While the East Texas pine-hardwood forests are managed primarily for timber, they also provide food and cover for deer, quail, squirrels, rabbits, raccoons, and other wildlife species.

The post oak belt and the East-West cross timbers have a total area of approximately ten million acres. Several species of oaks and other hardwoods grow in these sections of the state, but most of the timber has comparatively little commercial importance. A mixed pattern of trees, pastures, and cultivated fields is characteristic of the land use, but much of the best food and cover for wildlife has been destroyed.

Cedar brakes cover approximately five million acres in south-central Texas. This region has much scenic beauty and affords excellent opportunity for hunting and fishing. Deer is the principal game animal in the cedar brakes.

Mesquite accounts for about fifty million acres in Texas. Overgrazing has contributed to the invasion of range and pasture land by this species. Some of the mesquite areas of South Texas have good populations of deer and bobwhite quail, but most of the mesquite region does not afford enough food and cover for an abundance of wildlife.

In forestry, as in wildlife management and other fields of conservation, the use of land for several purposes is the general practice. The principle of multiple land use also affects the relationship between wildlife and grasses, which we shall consider in the next article of this series.



A beaver was here. (Both photos courtesy Soil Conservation Service.)

*Carelessness—*

*or*

*Criminal*

*Negligence*

By

LEIGHTON

B.

DAWSON

BACK in 1949 one of my friends went big game hunting in another state. He had made elaborate preparations for his hunt, and had done everything possible to make it a success. But three days after he left, he was back home again.

"What was the matter?" we asked. "Did they run you out of the country?"

"No," he replied, "but it was almost that bad. Those hunters up there were taking 'sound' shots."

"What do you mean 'sound' shots?" we queried.

"Well, if they heard a 'sound' in the bushes, they would take a shot at it," he replied. "The day after we got there, a man got shot, leading a horse. He was 'mistaken' for an elk. . . . We decided it was time for us to get out of there."

Such acts as that are not only deplorable—they are criminal. The law says that even though a person is engaged in a perfectly lawful pursuit, he may be held criminally responsible, if someone is hurt or killed as a result of his negligence.

"But," you say, "whoever heard of anyone being prosecuted for a hunting accident?"

There have been a good many cases in Texas and other states where there have been prosecutions—and convictions—for negligent homicide, as a result of hunting accidents. In fact, we have a statute in Texas that specifically covers cases of this kind.

Article 1231 of our Texas Penal Code provides, "Whoever in the performance of a lawful act shall by negligence and carelessness cause the death of another is guilty of negligent homicide in the first degree."

In order that there may be no doubt as to just what this Article means, it is stated in an Article following that "discharging firearms on or near a public highway . . . in such a manner as would be likely to injure persons who might be passing (is an) example of negligent homicide in the first degree, in case of death resulting therefrom." Article 1234, Texas Penal Code.

In view of these articles, hunters should realize that being careful is not just a matter of politeness, and sportsmanship. It is also a matter of criminal responsibility.



The law says that a man with a gun in his hand is charged with a much higher degree of care than if he were carrying a camera, or a pair of binoculars.

Negligence, in the eyes of the law, is the failure to use that degree of care more than an ordinary prudent man would exercise under the same or similar circumstances. Apply that to a hypothetical case where you are involved in a hunting accident, and see how you would compare with an ordinary prudent man.

Perhaps the leading case in Texas on this point is that of *Bertrung vs. State*, 2 Texas Appeals 160. In that case the defendant had shot and killed

know that I can get back over to the house, and they are getting hungry and they are gone to dinner.'

"So after a time I went back into the swamp. I heard some rustling out in the swamp; thought I heard some rustling out there, and thought I would just whistle to see if I could attract anybody's attention; and walking along very slowly, I suppose this object at a distance caught my eye, and I turned quick, and, of course, thinking it was a deer, I shot . . .

"As soon as I fired, why at first there seemed to be no response. I could see nothing at the distance, and I thought, 'Well, I guess, Seavey, you have made a mistake this time—poor

tirely unloaded would not relieve him from responsibility in snapping it after having reassembled it, although he honestly believed it to be empty.

And then there is the case where shots are fired negligently by two or more persons at the same time, and a third person is struck by one of the shots. The question here is who should be held liable, it being impossible to say definitely which person fired the shot that inflicted the injury.

Such a case was that of *Summers vs. Tice*, 199 Pacific 1. In that case three hunters took to the field armed with 12 gauge shotguns, hunting quail. Here is the way the court described the accident: "Prior to going

## Be Careful of the "Unloaded" Gun

a man, mistaking him for some kind of wild game. The jury was instructed that before they acquitted the defendant, they must believe from the evidence that he exercised the same degree of care and caution that a man of ordinary prudence would have done under the circumstances.

Based on these instructions, the jury convicted the defendant, and the Court of Criminal Appeals affirmed the conviction of negligent homicide.

A person may not only be held criminally responsible for his negligent acts, but he may also be sued for damages. Take the case of *Webster vs. Seavey*, 138 Atlantic 541, for instance. In that case the defendant had shot a man, mistaking him for a deer.

After reading the testimony of the defendant, you be the judge of how his story would sound to a jury. The defendant described the accident as follows: "I met Mr. Glidden, and we went down towards the bridge, and we had a general consultation of what we would do. Mr. Webster went into the woods first, and we wanted him to go along a little farther with us boys, but he didn't seem to care to go.

"I went up around to the meadow; went across to Pigeon Hill. I waited there some time and whistled and nobody answered, and my thought was, 'I guess the boys have all thought I have been a little too long, and they

shot.' And I started to move along. Then I heard the noise of somebody—particular noise. And at first I thought, 'Well, I guess I have wounded a deer.' And then, a second—why I could realize it was a human being, and my thought was to rush over there and find out who it was; then I rushed over, and found Mr. Webster there."

Based on this testimony, the court reversed a verdict for the defendant in this case, and said the jury should have been instructed "that due care might require the defendant to refrain from shooting under the circumstances, even if he entertained a reasonable belief that the object before him was a deer."

Of course, negligence with firearms can take many other forms besides the cases where people are mistaken for some kind of game. There is the old, old case of the "unloaded" gun, for instance. The courts have not always been too lenient with people who snap "unloaded" guns, especially when they point them at someone else.

A typical case of this kind is that of *Bahel vs. Manning*, 70 N. W. 327. In that case the court held that a defendant was guilty of negligence in snapping a shotgun and discharging it while pointing it at the plaintiff. And the fact that the defendant worked the extractor until it failed to throw out any more shells, and then took the gun apart, believing it was en-

hunting the plaintiff discussed the hunting procedure with defendants, indicating that they were to exercise care when shooting, and to 'keep in line.'

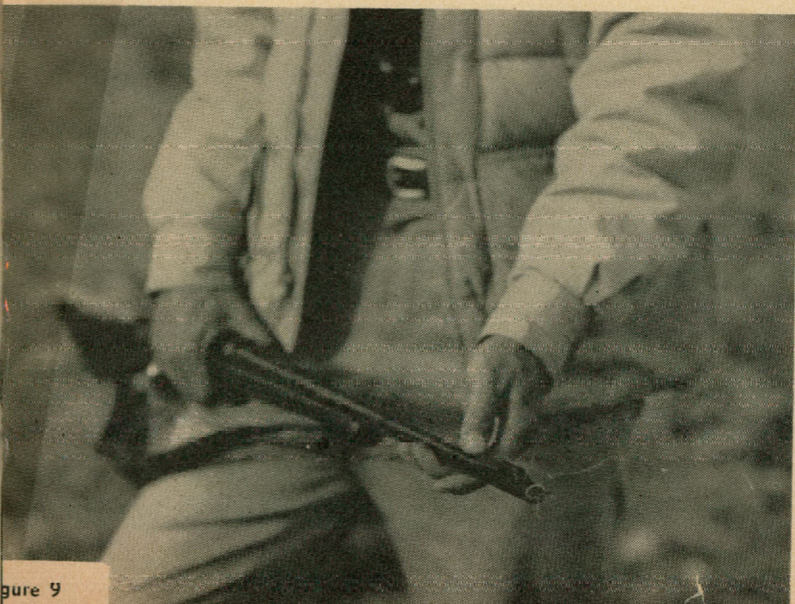
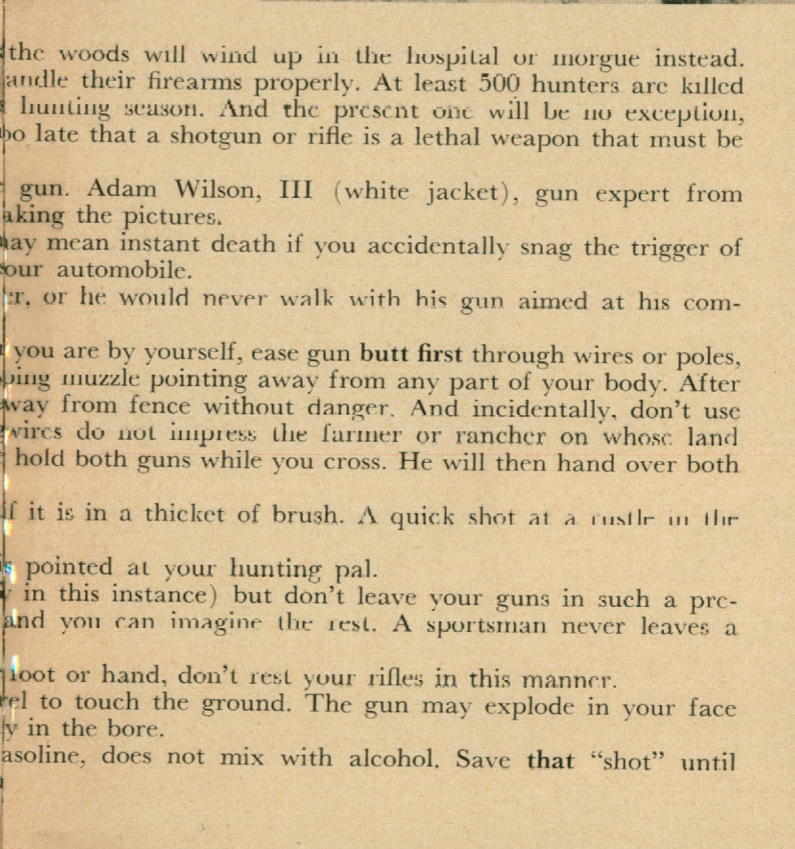
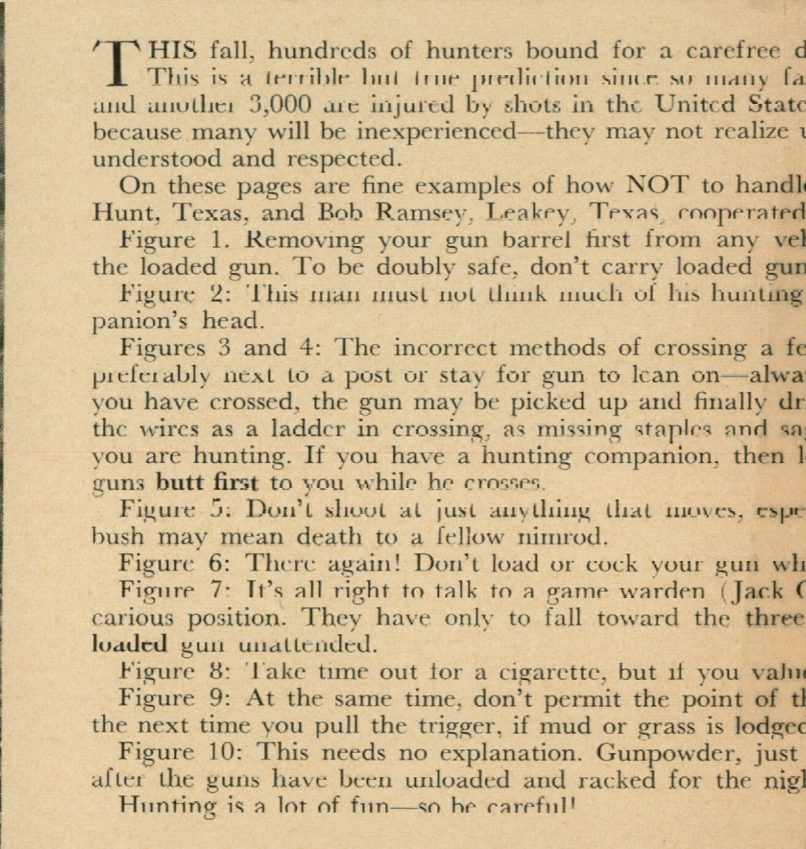
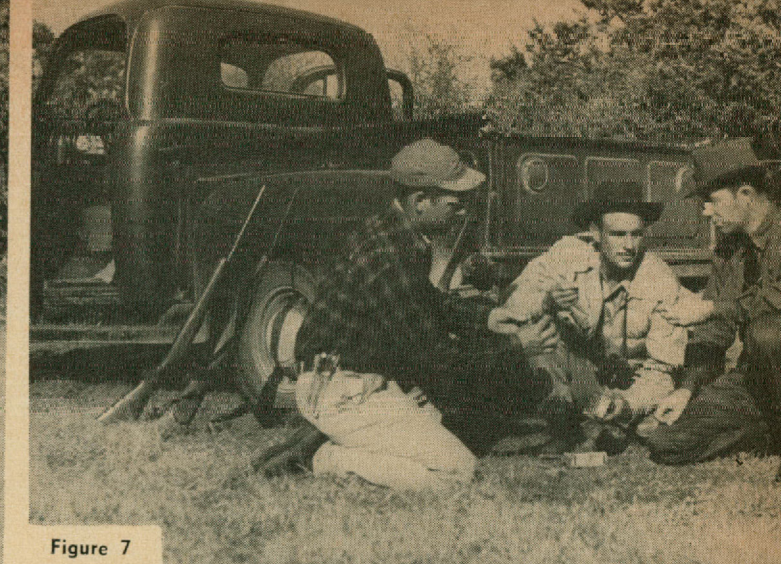
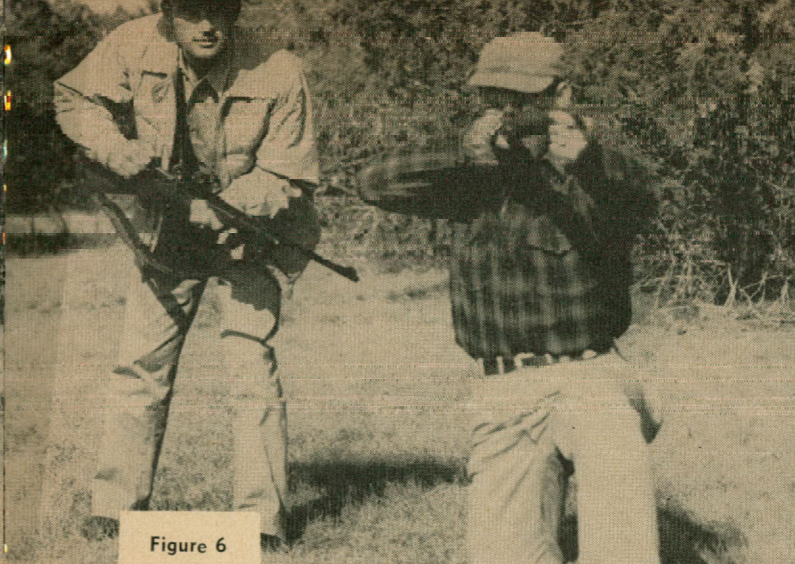
"In the course of hunting plaintiff proceeded up a hill, placing the hunters at the points of a triangle. Defendant Tice flushed a quail, and both the defendants shot at the quail, shooting in plaintiff's direction. One shot struck plaintiff in his eye," and he was thereby severely injured.

The court held that both defendants were liable, although the major injury was by a single pellet only. The court said: "To hold otherwise would be to exonerate both from liability, although each was negligent, and the injury resulted from such negligence."

Thus it will be seen from this that a person is not only responsible for his own acts, but he may be responsible for the acts of others where he is acting jointly with them.

This business of hunting is therefore something more than just getting a license, and observing the proper seasons, and abiding by the game laws. All of this is not enough—if a person is negligent. And if anyone gets killed or injured as a result of such negligence—it may mean a civil suit . . . or it may be criminal negligence.

**Editor's Note:** The following two pages feature a picture story on the proper handling of firearms. Learn how not to be a corpse, or the defendant in a hunting accident case.



**T**HIS fall, hundreds of hunters bound for a carefree day in the woods will wind up in the hospital or morgue instead. This is a terrible but true prediction since so many fail to handle their firearms properly. At least 500 hunters are killed and another 3,000 are injured by shots in the United States hunting season. And the present one will be no exception, because many will be inexperienced—they may not realize who late that a shotgun or rifle is a lethal weapon that must be understood and respected.

On these pages are fine examples of how NOT to handle a gun. Adam Wilson, III (white jacket), gun expert from Hunt, Texas, and Bob Ramsey, Leakey, Texas, cooperated in making the pictures.

Figure 1. Removing your gun barrel first from any vehicle may mean instant death if you accidentally snag the trigger of the loaded gun. To be doubly safe, don't carry loaded guns in your automobile.

Figure 2: This man must not think much of his hunting partner, or he would never walk with his gun aimed at his companion's head.

Figures 3 and 4: The incorrect methods of crossing a fence when you are by yourself, ease gun butt first through wires or poles, preferably next to a post or stay for gun to lean on—always with muzzle pointing away from any part of your body. After you have crossed, the gun may be picked up and finally drawn away from fence without danger. And incidentally, don't use the wires as a ladder in crossing, as missing staples and sagging wires do not impress the farmer or rancher on whose land you are hunting. If you have a hunting companion, then let him hold both guns while you cross. He will then hand over both guns butt first to you while he crosses.

Figure 5: Don't shoot at just anything that moves, especially if it is in a thicket of brush. A quick shot at a rustle in the bush may mean death to a fellow nimrod.

Figure 6: There again! Don't load or cock your gun while pointed at your hunting pal.

Figure 7: It's all right to talk to a game warden (Jack G. in this instance) but don't leave your guns in such a precarious position. They have only to fall toward the three of you and you can imagine the rest. A sportsman never leaves a loaded gun unattended.

Figure 8: Take time out for a cigarette, but if you value your loot or hand, don't rest your rifles in this manner.

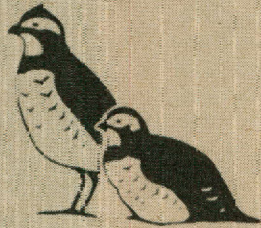
Figure 9: At the same time, don't permit the point of the barrel to touch the ground. The gun may explode in your face the next time you pull the trigger, if mud or grass is lodged in the bore.

Figure 10: This needs no explanation. Gunpowder, just as gasoline, does not mix with alcohol. Save that "shot" until after the guns have been unloaded and racked for the night.

Hunting is a lot of fun—so be careful!



**STATE OF TEXAS**  
GAME, FISH & OYSTER  
COMMISSION



**WILDLIFE  
REFUGE**  
FEDERAL AID PROJECT

# What Is It?

By W. C. GLAZENER

*Director, Wildlife Restoration*

IT IS a witness to the fact that land so marked has received some special attention from the Texas Game and Fish Commission (formerly the Game, Fish and Oyster Commission), through its Division of Wildlife Restoration. The land in question either has been restocked with some wildlife species, or it has been used by State technicians as an experimental wildlife study area.

The marker measures approximately 15 by 18 inches and is made of a substantial sheet metal. Black letters and figures are in conspicuous contrast to a yellow background. Installations are ordinarily on gates, posts or trees along property boundaries. You may see them in creek bottoms, on hillsides or flats at points anywhere from the Rio Grande to the Red or from the Gulf to the Oklahoma Panhandle.

When the State of Texas took advantage of the Pittman-Robertson program provisions, it agreed to indicate the relation of the Federal Aid in Wildlife Act to any land benefiting from such program. This accounts for the "State" and "Federal" references on the marker.

Presence of bobwhite quail likenesses on the marker does not mean that game on the premises is limited to quail. In fact, there is no implication that any quail even occur on the premises. They were chosen for use because bobwhites are more widely and commonly distributed over the State than any other resident game species. Otherwise, it would have been just as appropriate to depict deer, squirrels or wild turkey.

Erection of these black and yellow wildlife refuge signs is authorized only when there exists a contractual agreement between the landowner and the Game and Fish Commission. If the area is stocked with deer, antelope or wild turkey, the agreement specifies that the species will not be hunted thereon for five years, or until such later time as the increase is sufficient to withstand a reasonable harvest.

If game research work is set up by the Game and Fish Commission, and the control of hunting is essential to successful prosecution of that program, the study area may be designated as a wildlife refuge. This arrangement may involve a period of one to five years, or even longer. The Commission policy is to keep these agreement periods as short as study needs will allow.

Exposure of these quail-decorated markers to public view brought out numerous interesting developments.

Many people seemed to believe that the mere erection of such markers would bring about an increase in the game on their land—automatically, and with no further effort on their part. Still others clamored for a supply of markers to use on their lands as a means of scaring hunters away. It is even reported that a few people "borrowed" signs from authorized areas and put them around their own premises without consulting anyone else—not even Commission representatives.

What has been the attitude of hunters? Most of them respected the implication of protection, and avoided disturbance of game on lands involved. They usually made inquiries as to what circumstances were responsible for the "Wildlife Refuge" designation. Explanations of the program were readily accepted, as a rule.

Exceptions to the foregoing attitudes also came to light. To numerous individuals, the label of "Wildlife Refuge" acted as a challenge. They immediately wanted to go in and see for themselves just what wildlife was present. A refuge, they reasoned, must have a lot of game and should be really good hunting. For some, the temptation was stronger than their resistance.

In a few instances, neighboring landowners were reported to be highly uncooperative. Their custom had been to hunt all land around them. When releases were made on adjacent premises, they were in favor of beginning a harvest at once. Hunting for the current day appealed to them much more than waiting for development of any increase that might spread over on to their premises. No refuge sign was going to interfere with their personal liberties!

The most conspicuous thing that materialized was use of the refuge markers as targets by road hunters. In certain communities, markers were practically shot to pieces within a few weeks after being put up. Guns of all types and calibers were trained on the two black quail. In such localities only those markers near some residence or away from public roads remained intact for long.

What is the remedy for this situation? Should the Game and Fish Commission discontinue the purchase and use of markers on restoration areas? Is there any hope that the public, landowners and hunters alike, can be so informed that these markers will fulfill their intended purpose and receive adequate respect? Can this type be replaced by a more effective and less expensive one? What if we found one that would shoot back when fired upon?

# The Story in Shells

By J. L. BAUGHMAN

Chief Marine Biologist

SHELLS are one of nature's most beautiful creations, and one of her oldest. Some 600,000,000 years ago, there lived in the Cambrian period of earth's geological history snails with shells so complicated and so perfect that their presence can only be explained by the existence of ancestral forms in the far more distant past.

Shellfish or mollusks formed a part of the food of the earliest men. Great shell heaps called kitchen middens

dot the beaches of all the world, where coastal tribes lived and fed upon the oysters, snails and clams that inhabited the shores of the shallow seas. Primitive women made jewelry from shells to render themselves more beautiful in the eyes of their mates.

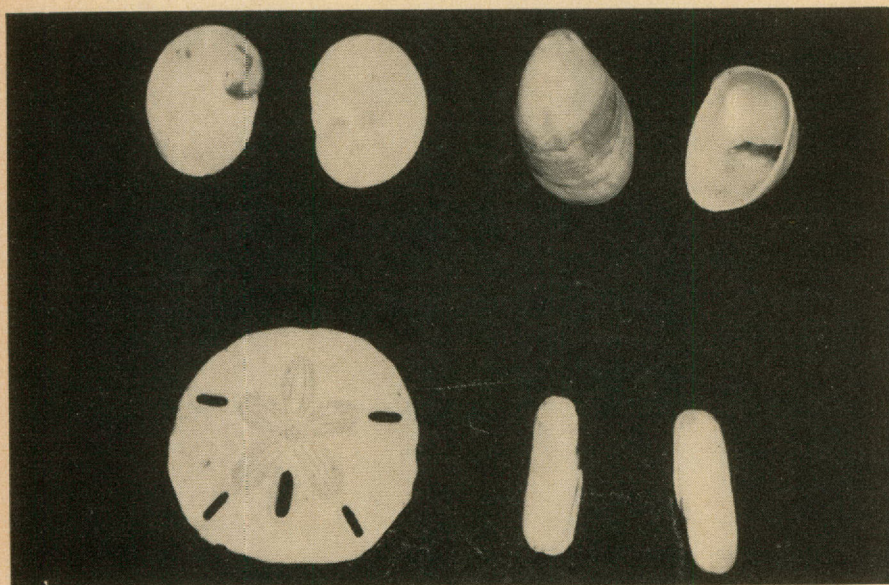
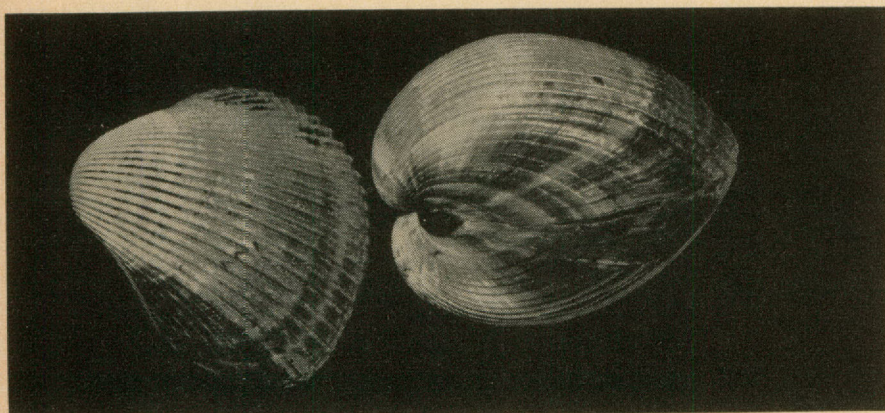
Shells, in the absence of metal and pottery, were used as cooking vessels, and were made into knives and spoons, into fishhooks and pins, and in many places were even used as money. The wampum of the Ameri-

can Indian, the cowrie currency of some parts of Africa, and the bridal price of the dusky Melanesian belle, all were made of shell. Shells have been used as hoes, as clubheads, as tweezers, and even, among North American Indian tribes which practiced totemism, in their ritual of death and resurrection.

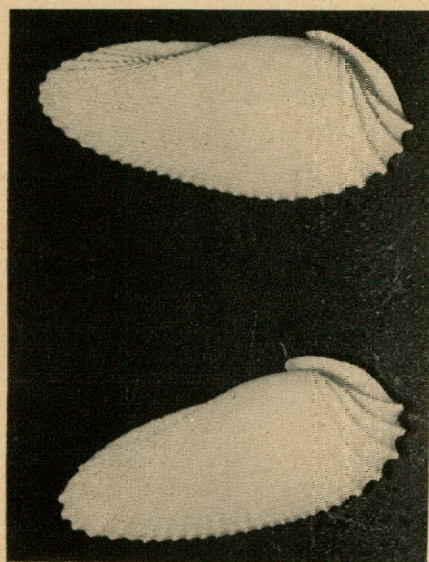
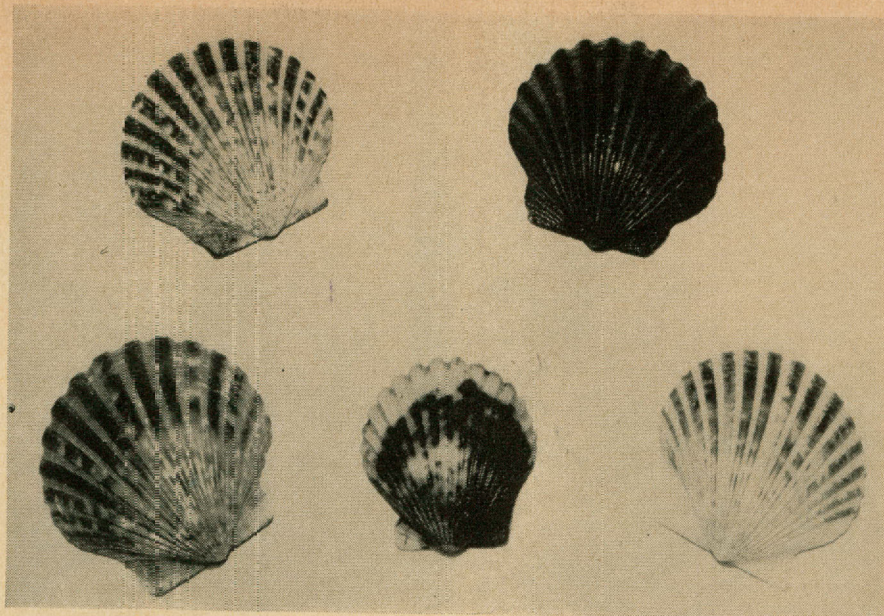
Emperor's robes were woven of the soft, silky threads by which the pen shell attaches itself to its home, and these same robes were dyed with Tyrian purple which was taken from another shell. The matchless pearls that the empress wore were taken from still a third, and were considered the peculiar treasure of kings.

The buttons on your shirt, the inlay on a Chinese cabinet, the handle of your knife, all these are made from mother-of-pearl, which is the lining of shells. Cameos are cut from helmet shells and conchs, and jewelry is made from tiny, brilliantly dyed shells, made up as flowers and birds.

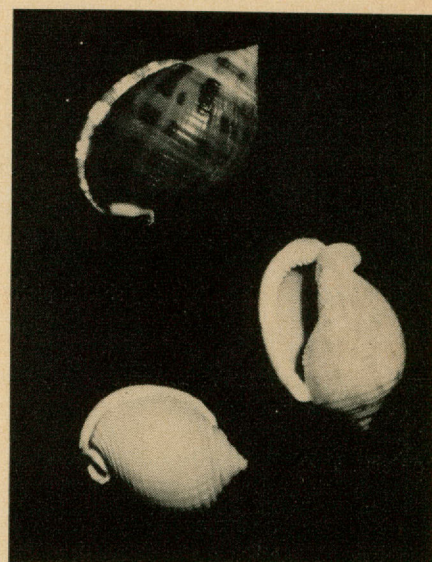
Shells are of all kinds, shapes and colors, and today over 50,000 are known to scientists, ranging in size from microscopic forms to the giant clam of the Pacific, which may weigh as much as 500 pounds. There are shellfish which leap and others that crawl. Still others burrow, swim, dive, float and even fly—for the graceful sea arrow that darts out of the water like a flying fish is a squid, and, believe it or not, a squid is a shellfish. No sort of locomotion is denied to them, nor any form of habitat. No other group of animals has so wide and so varied a distribution. All latitudes have their particular families and species, excepting only the polar seas. Land shells range from ocean level to snowy mountain tops, to the utmost limit of animal and vegetable life. Lakes and streams teem with fresh water forms and from the populous borders of the sea a substantial array of forms live on the ocean floor, far down into abysmal depths.



The large cockle, above, is used in making ash trays, inkstands, and other souvenirs. In the picture below are: ear shells, top left; slipper or boat shells, top right; sand dollar and razor clams, bottom. The razor clams are so named because of their shape and sharp edges.



Above are scallops or pectens. To the left are angel wings which the Havana folk consider a staple sea-food. Scotch bonnets, right, are one of the daintiest of the helmet shells.



Pelagic mollusks live on the surface of the open sea. Who does not remember Holmes' poem on the chambered nautilus, which says:

"This is the ship of pearl, which,  
poets feign,  
Sails the unshadowed main—  
The venturous bark that flings  
On the sweet summer wind its  
purpled wings  
In gulfs enchanted, where the siren  
sings,  
And coral reefs lie bare,  
Where the cold sea-maids sur their  
hair."

Is it any wonder, then, that all up and down the ocean beaches of the world—north, south, east and west—

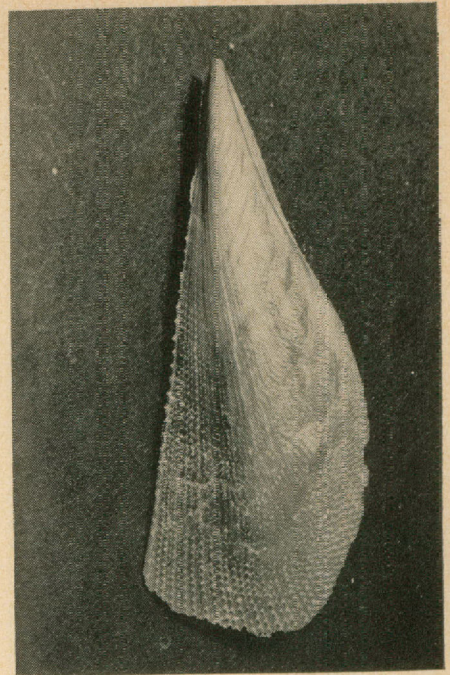
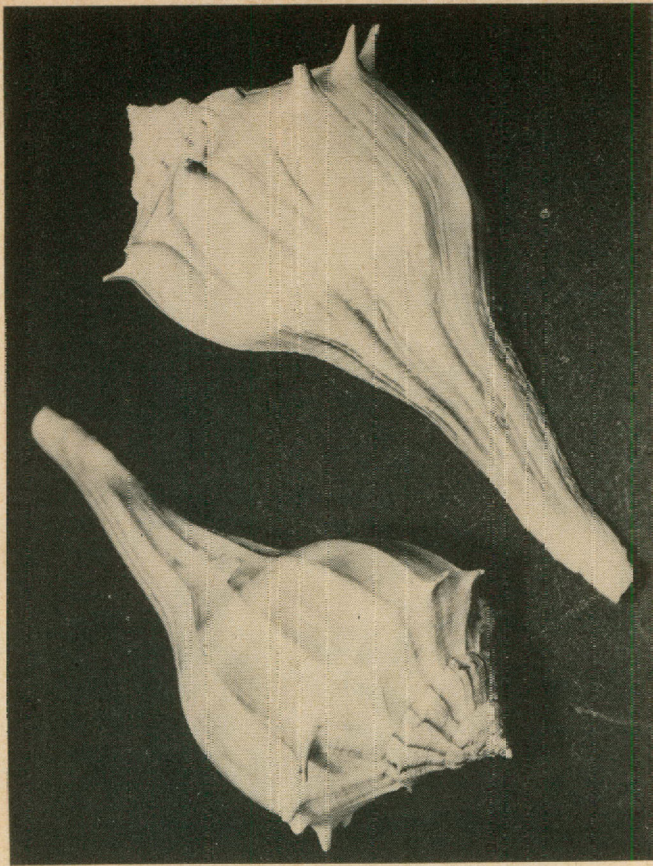
there are people picking up shells? Children and grown-ups both spend many a fascinating hour treasure hunting behind the outgoing tides, and it is a rare home along the Texas coast that does not have a shell, or a handful of shells, too pretty or too interesting to be left upon the sands.

There are, however, less than a hundred species of shellfish on our coast that are of any interest to the casual collector.

Among the rarer ones, we may list the moonshells, the helmet shells, the razor clams, and the various oyster drills. These last take their name from the fact that they are the possessors of a very complex and efficient feed-

ing machine, including a long, band-saw-like or flexible rasp set with countless teeth. With this apparatus, an oyster drill can make neat circular holes in the shells of its victims, who may belong either to the clam tribe or even to its own, for in its age-long code of morals only might makes right.

The oyster drill can hunt for its prey, creeping about on its muscular foot. Its viscera are coiled like a Chinaman's queue and tucked inside of a shell that rides like an elephant's howdah on the animal's back. This shell is like a fool's cap that has been twisted into a spiral. On top of the foot, behind the shell, is a stout oval



Lefthanded whelk or lightning shell is pictured to the left. It is one of the largest shells found on the Texas coast, sometimes reaching 12 inches in length. The prickly pen shell is on the right.

or circular shield. When annoyed, or in danger, the drill squeezes as much water out of itself as is necessary, and pulls back into the lower part of the shell. The last part that rolls into place is this shield, which serves as a trapdoor, completely closing the opening and forming a stout barrier to its castle.

Similar to the drills in its method of protection, if not in its method of feeding, is the slipper shell, much loved of children, because of the many uses to which it can be put when a seaside playhouse must be furnished. The boat shape appeals to their imagination, with its broad stern, rounded bottom and comfortable seat. Balanced on a table, or placed on the cupboard shelves of a playhouse, these shells are a little housekeeper's joy when setting forth a doll's tea party. Moreover, there is never any shortage of dishes, for the tide is always bringing in new ones.

Another family, the Murex, is represented on this coast by two species. One of this same family was used by the ancient Tyrians to make the dye used for emperors' robes, and later for the purple-bordered togas of the Roman senators. The shellfish were ground first in a mortarlike hollow in the rocks. Then the coloring matter, which is dull red when fresh, was squeezed out of the pulverized mass. Five or six times its bulk of water was added, and a little soda, and then the liquid was left in vessels of tin or lead, to evaporate until the desired color was reached. Wool dyed in this mixture was worth \$200 a pound.

Pen shells are common along the Galveston beach at times, as are sand dollars. These last, however, are not shells at all, but the skeletons of echinoderms or sea urchins, that have died and been washed ashore. When alive, they are covered with short, greenish spines, almost like fur, and

with the aid of these they can move about from place to place on the bottom.

Pectens are familiar to everybody, through their use as a trademark by one of the big oil companies, and we can dismiss them without further description. But we must not forget the clams. The razor clam we have already mentioned. Besides this there are the angel wing, so named because of its resemblance to a huge, outstretched white wing, and another, a big, heavy, white-shelled fellow whose Latin name means the Valuable Venus, though what that lovely lady had to do with these particular shellfish I have never been able to discover. This Venus clam is closely related to, or perhaps the same species as the "Quahog" or "little-neck" clam of the East Coast, where it forms the chief commercial species. There is no present use of them here as food, nor have I ever tried one. However the Karan-

kawas and other coastal Indians of Texas evidently considered them edible, for all along the shores of our bays, shells of this clam are found intermixed with the ashes of old Indian campfires and bits of bone and an occasional flint arrow point.

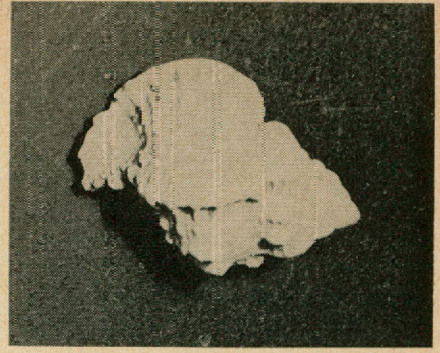
The Indians also utilized conches as food, and huge shells, much larger than those ordinarily found today, often are found on their campsites.

Another common Texas shell, and one of the most noticeable, especially along our southern coast, is the heart shell. This is closely related to the edible cockle of Europe, which is sold in almost every town in England by itinerant vendors, much as are our own hot tamales. Their sing song

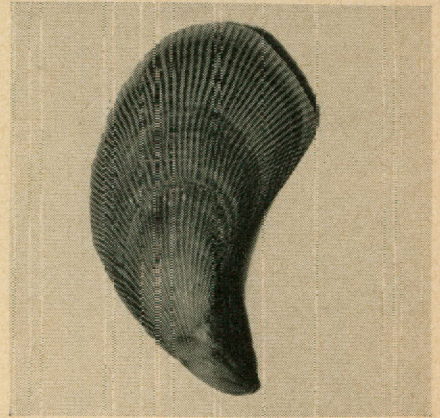
“Cockles ee-live, buy 'em ee-live-oh.  
Sixpence a quartern, thrupence a  
half-quartern  
Any cockles ee-live, buy'em ee-live?  
Fine big cockles!  
Great big cockles!  
Buy 'em ee-live, all ee-live-oh!”

is a familiar chant in almost any British seacoast town. Our own species is not eaten, although it may be good, but its white and brown shells are found in great windrows along the beaches of St. Joseph's, Mustang and Padre islands, where they are one of the most familiar objects in the sand.

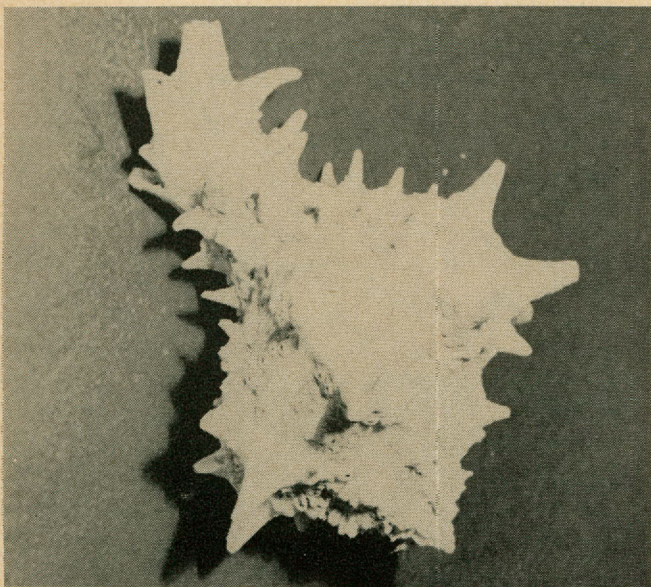
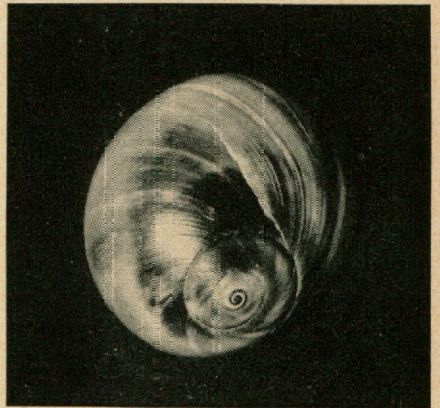
Murex rufus.



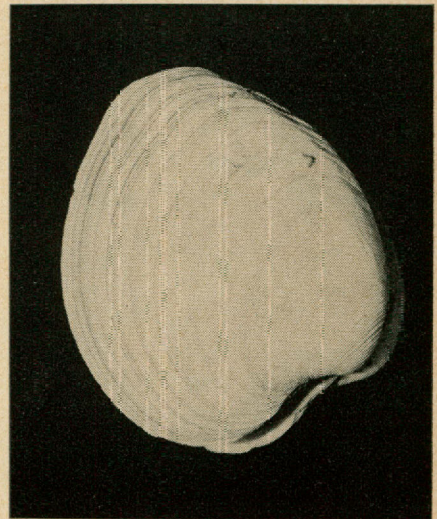
The hooked mussel which is often found clinging to an oyster.



Moon shells which burrow in the sand for other shells.



Rock murex or Porcupine shell.



The edible round clam.



# The Big Ones

## COME AT SUNDOWN

By

LLOYD H. GLOVER

ALL my life, I've heard about the big mossback bucks that come out at sundown during the last few minutes before complete darkness envelops the brush country. But I've always taken that bit of information with a handful of salt, for in 15 years of deer hunting, I've never seen anything even resembling a large buck at sundown; that is, until a couple years ago.

In fact, now I'm convinced that the largest bucks of the pasture, the real monarchs, the mossbacks from the thickest mesquite, huisache and cacti of the brush country of the Lower Rio Grande River never show their huge racks until at or near dusk. Those deer that do venture out a trifle ahead of sundown occasionally get bagged, and make a hunter like myself or my hunting partner, Tom Aycock, feel that he has outwitted a crafty old whitetail—one with warts on his antlers and moss on his back!

I have hunted bucks all over South Texas for the last 15 years. I have hunted them at break of dawn; I've hunted them at sundown. I've hunted them at noon—and I've seen as many at that time as any other part of the day. I've hunted them in the heat of the mid-afternoon. I've hunted them when it was so cold I couldn't stay

on a stand. I've hunted them when it was so hot I didn't enjoy it and couldn't find any game either. Through the years, I have killed my share of the bucks but none of them were easy. I've earned them all. It remained for the last season, however, for me to bag an outstanding trophy. One of my hunting partners, Tom, also got a record head for this area . . . and therein lies a tale. My other hunting partner, Sam Dramisino, didn't bring in a trophy buck but he did bag two that were worthy of any sportsman.

Sam, Tom and I were out on our lease not too far from the Rio Grande River in Starr County late in the season. We had hunted hard, but none of us had bagged any of the prize game. All three of us had had running shots at bucks, but a running shot in this brush country is about like knocking a Canadian honker down at 100 yards—it is done every now and then—but mostly then.

Sam and I elected to hunt together that morning, while Tom decided to go lone wolf to a tree deep in the brush which he had found on a previous hunt.

Sam and I took off at the crack of dawn, working our way cautiously through the mesquite and cacti, hoping we would jump a buck moving out of his bed. We decided to head

toward a very dense thicket about one-half mile deep in the brush, which bordered a small grassy lake. We had not gone far when we found fresh signs, made either the day before or during the night. As we worked our way along, pulling back a branch here and crawling there to keep from breaking a twig, we soon found more fresh signs made less than a half hour before. We followed these signs to the edge of the dense thicket. We had to get down on our hands and knees and crawl in order to get through without making any unnecessary sounds. We had made such a stealthy approach up to that point, which would do credit to an Indian, that neither of us wanted to ruin it. After what seemed an eternity of crawling, holding a branch here, squirming through a hole there, we saw a small aperture ahead, which we hoped was our destination—the little grass covered lake. In a matter of seconds, we found ourselves on the edge of the dry lake bed in the center of the pasture. It was just good daylight—the ideal time for a buck to be moving out of his bed.

We both gave the lake a quick look over—as much of it as we could see. It was covered with small trees, bushes and grass that was hip high in spots. We moved ahead a few more steps in order to see spots covered by trees or bushes when all of a sudden, both of us saw something moving on our side of the lake. In the half light of the early morning, visibility was poor, but when we saw the moving object again, both of us recognized it as a deer. However, its head was down.

As the deer was passing through some thin brush, Sam moved up a few steps in order to get a better look. Then the deer passed a narrow opening and we both saw that it was a buck—a small one—not too many points, but enough. When he showed himself the next time, Sam had the sights of his .35 Remington on him and quickly pulled the trigger. I was behind a couple of steps and had my gun up ready to shoot but the buck went down like lightning had struck him. We both ran up like kids to their first kill. He was a fat, slick five-pointer. He was small, even for the brush country of South Texas, but he was the first game of the season.

We had broken the ice at last. We were as proud of the long and noiseless stalk to the old lake bed as of the buck itself.

We hunted around the other side of the lake the remainder of the morning but didn't sight a thing and returned to camp with our "trophy."

Tom came in while we were preparing lunch. After admiring the five-pointer, he admitted he hadn't had that much luck, having seen only does, a spike buck and a fawn.

"Where are those mossback bucks?" Tom wondered. "We've each been out here three or four times already this season and none of us have seen anything even resembling a big buck."

"I know there are some huge bucks in here, but they are as hard to find as a needle in a haystack," Sam explained. "I've seen some tracks in here that look like a mule deer or an elk, and I know they are here somewhere. This five-pointer didn't make all those tracks!"

We all resolved to stay out until dusk and see if some of those big ones would show themselves.

I elected to go to an old trail where I knew there were several deer crossings. I had seen three does cross there on two different occasions. I reasoned that where there are does, there are bound to be bucks, sooner or later. It was early in the afternoon, so I brought an apple and a couple of Rio Grande Valley oranges (that was before the freeze) to help pass the time away.

I arrived at the stand, and sure enough, I found some fresh crossings. I went down wind about 100 yards from the crossing, and made myself as comfortable as possible on the ground, using a bush about two feet high as cover.

An hour went by and nothing stirred, not even the leaves.

During the second hour, three coyotes came across, within range. I was tempted but I was afraid that that big mossback buck I had always hoped for, but never seen, would cross that narrow trail at any time. I didn't want to ruin that chance, just for a lowly coyote.

Another hour brought only a little armadillo that made an awful fuss for his size as he went along rooting and searching for food. Meanwhile,

all the fruit had disappeared. I began wishing for just a little buck—even one smaller than Sam's five-pointer. Then I began wishing I had shot at the coyotes. It would have been fun trying to get two or three of them before they got across the trail. I even wished I had shot the armadillo. After all, the shell would have made a beautiful basket for milady.

Only one hour before sundown. I was tired from the long vigil. I forced myself to become more alert, for I knew I had sat there for three hours just for the one last hour before dark.

The sun peeped out behind a cloud momentarily a few minutes before it was to disappear behind the horizon. I was watching the trail carefully, for I knew a buck could cross that narrow brush sendero (as they are called in South Texas) in a matter of seconds. I was sitting on the north side of a little ridge, with the wind blowing in my face. Then I saw a buck coming and in an instant I knew it was the one for which I had been waiting. He pranced out of the heavy brush on my left, walking and looking for all the world like he was the king of the pasture.

His huge antlers were moving up and down like they were too heavy, and he acted like he was trying to

shake them off. Being in a sitting position, it required only a second to have my sights leveled. I could see only part of his back, his neck and those big antlers. I said to myself, "It is now or never." I aimed right behind his antlers and slowly squeezed the trigger. I jumped up, reloading in the same motion, ready for another shot in case he should bound across the trail, but I didn't see him run in either direction. As I ran up the little trail, my feet pounding hard on the soft sand, I wondered how he could have disappeared so quickly. With every step, my hopes were growing dimmer. I rounded a little clump of cactus, and there he was, flat on the ground. His antlers looked enormous. He had dropped right in his tracks. The 30-30 mushroom core-lockt bullet had struck him in the neck.

He had unusually heavy antlers for the Rio Grande Valley area. Above the brow tines, the antlers were broad and flat like a moose. Then I noticed on one antler, a long prong shooting straight downward about three inches, which made him all the more a trophy head.

His widest beam was only 16 inches, only fair, but antlers flared straight up from his head. He was fat and

● Continued on page 27



The author's buck is heavy beamed, with one prong shooting downward. The brow tines were exceptionally long, an unusual feature of the brush country bucks.

# Fishes of Texas

## The Sunfishes

By MARION TOOLE

Chief Aquatic Biologist

HAVE you ever caught a sunfish in Texas with a black blotch or spot at the base of the last soft rays of the dorsal fin? If so, it's a good bet that you have caught one of three species of fish; either a bluegill, green sunfish or small sunfish. Other species of sunfish found in the United States have the dark spot in the dorsal fin, but fish distribution studies made in Texas show that only the three species mentioned are likely to be seen in this state. These fishes can be easily identified individually. Sometimes the angler might catch an unidentifiable fish that carries such a mark because various species of sunfishes frequently crossmate, causing hybrids that can be identified only by a taxonomist.

### GREEN SUNFISH

*Lepomis cyanellus Rafinesque*

This attractive member of the sunfish family has a body color of green, usually olive, on the back and sides, with a yellowish color below. Each scale generally has a bright blue spot on it, forming rather distinct lateral streaks. It frequently has dusky vertical bars, also. On its cheeks can be seen three or four narrow emerald-green lines. The iris of the eye is red. There is a yellow or nearly white edging around the caudal and anal fins which is so conspicuous as to be observed even when the fish is in water. A large black blotch is found at the base of the soft dorsal fin. The green sunfish has a large mouth, with the lower jaw protruding, giving the mouth the appearance of the black bass's mouth. This fish usually reaches a size of eight inches and a weight of over five ounces.

These fish spawn from March to September. The nests are built by the male in shallow water to a depth of about three feet. Nests are placed on

shoals and in weed beds or around stumps. The fishes use their tails to fan away dirt and debris until a suitable bottom is obtained. Sand, gravel, and roots of aquatic plants are the most desirable types of material for their nest-building. The small sunfishes, unlike the basses and crappies, place their nests very near to each other. The author has observed as many as six nests in an area of seven square feet. After the nest is completed, the male entices a ripe female to the nest where she deposits the eggs, which are fertilized simultaneously by the male. After the egg laying is completed, the female is driven off, and the male zealously guards his nest of eggs from all intruders until the eggs hatch and the new fry are a few days old. The young then scatter about among plants in shallow water to start their battle for life. The author has seen the same sunfishes spawn more than once during the same summer.

Green sunfish are found mainly in small streams, rivers and small ponds and lakes and are well distributed over the entire state. In fact they thrive so well in creeks, they are called "creek" or "branch" perch by many anglers.

The author has also found that many anglers call green sunfish "rock bass" or "goggle-eye." This is a natural error, because the anglers are probably misled by the red eyes and the extremely dark color that these fish assume when they are taken from clear water.

The food of green sunfish consists of insects, worms, crayfish and small fish.

These fish can be caught by pole and line, plug casting and fly casting. Considering the size of green sunfish, it is indeed surprising how great a fight one of these small fish can

put up before it is taken from the water. Baits for pole and line fishing are earthworms, grubs, shrimp and cut baits. Flies, small spinners, etc., are readily taken during fly casting. The author has caught quite a number of these fish on shimmy wigglers and bucktails while casting for bass. Many green sunfish will be caught from casting with a shimmy wiggler and bucktail, if a small long shank hook is attached to the large hook of a bucktail. Stumps, brush, beds of vegetation and piling are the best places to look for these fish.

### BLUEGILL

*Lepomis macrochirus Rafinesque*

Bluegill have many common names, among which are bream, brim, blue sunfish, coppernosed bream, pumpkin seed and perch.

They sometimes grow to a length of ten inches and attain a weight of one pound.

These fish, like the green sunfish, have the dusky spots on the base of the soft dorsal fin but can easily be differentiated from the green sunfish because they have a very small mouth, not reaching back farther than the eye. The gill flaps found on the operculum are short and tinted a velvety blue-black. They have olive-colored black and light green or lavender-colored sides. At times the belly is yellow-colored. Dusky vertical bars occur on these fish.

The spawning habits outlined for the green sunfish are also applicable to these bluegill.

Bluegill are primarily a lake fish, but they are also found in rivers and small streams. They thrive excellently in ponds and are particularly fond of brush heaps and dense vegetation. Apparently the type of bottom in the lake, pond or river in which they live

does not affect them perceptibly, since they do equally well in muddy or clear water.

Bluegill feed mainly on small crustaceans, aquatic insects, worms and aquatic plants.

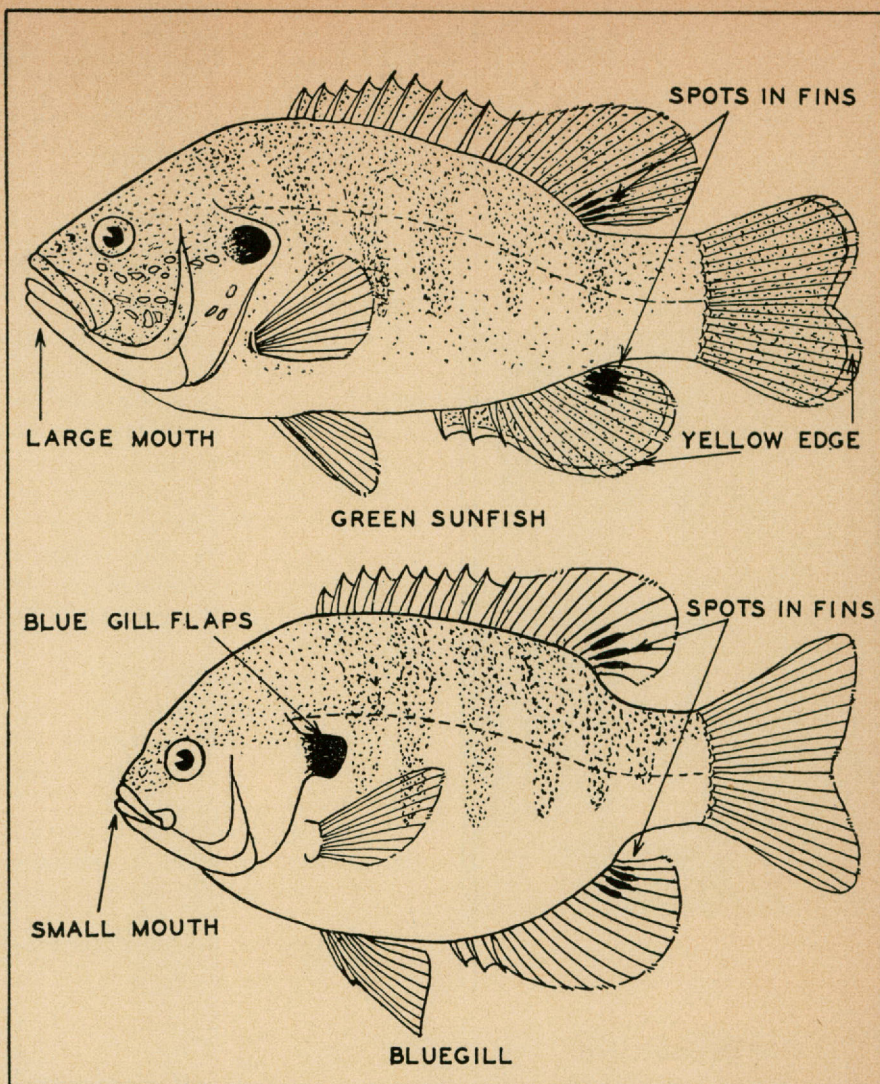
They may be caught by the same methods as outlined for the green sunfish, with the exception of plug casting. Their small mouths prevent them from taking a large artificial lure.

### SMALL SUNFISH

*Lepomis symmetricus* Forbes

These fish are so small, rarely reaching a size of two and one-half inches, that they are of little concern to the anglers; but they too have the dark spot at the base of the soft dorsal fin and are included in order that the reader may be able to differentiate them from the two species already mentioned in this article.

By looking at the accompanying illustration, you may discern a line on the sides of both fish. This line, running from the top of the gill cover to the middle of the tail, is called a lateral line. Both bluegill and green sunfish have a complete lateral line, but the small sunfish has one that is incomplete. The lateral line starts at the head, like that of the other fishes, but stops before it reaches the tail.



## Big Ones Come at Sundown

Continued from page 25.

glossy. I estimated his weight at 145 pounds field dressed. (He actually weighed 137 pounds the next day.) I paced the distance—107 long steps. A lucky shot indeed!

After dressing out the buck, I hurried back to camp and arrived in time to hear Tom's exciting story. He had found a good crossing along an old fence line and had decided to sit there until dusk. The sun was just going down and he was on the point of giving up for the day, when he saw a movement on the other side of the fence, about 150 yards away. He soon saw that it was a large deer, but he couldn't tell whether it was buck or doe. The deer went under the fence, which isn't unusual for this country (this particular bottom wire is 30 inches above the ground) and walked up the narrow trail towards Tom.

"I still couldn't tell what it was, as its head was low and the late shadows didn't help any. When the deer turned to cross the trail and go into the brush on the other side, I saw antlers, and huge ones. I had to shoot, and quick! I got my scope down on him in a hurry. If I hadn't had a scope, I know I wouldn't have gotten him."

Tom made a perfect neck shot at a distance of 125 yards. He really had a trophy, for the greatest antler spread was 22½ inches, which is exceptional anywhere. It was the record for this area for this season and one of the best in several seasons.

Our two mossback bucks came out at sundown. Both were different types of trophy heads for South Texas whitetails. My buck's antlers were heavy beamed, unusually so for a

whitetail, and were very high—15 inches at the highest point. One prong was shooting downward. Tom's buck's antlers were very wide—22½ inches. Both had the same number of points, ten, and they were within a half mile of each other. They were both battle-scarred, having many gashes and cuts on their necks and bodies. And they weighed within two pounds of each other! Tom's weighed 135 field dressed.

Yes sir, the big ones, the real monarchs of the brush country, come out at dusk. I'll always hunt that last half hour before sundown hereafter as long as I am able to hunt a whitetail.

Sam, after another thankful look at his five-pointer, said he wasn't giving him away, but he was placing his order, there and then, for a "sundown buck."

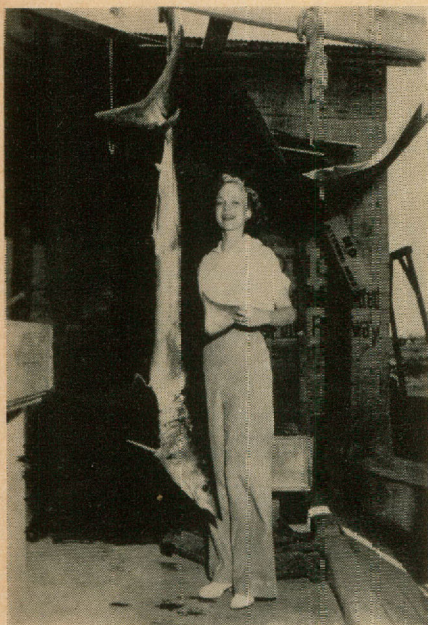
# The Marine Fishes of Texas

## MACKEREL SHARK, MAKO SHARK\*

### *Isurus Oxyrinchus*

By J. L. BAUGHMAN

Chief Marine Biologist



THIS shark ranges from Cape Cod to the West Indies, occasionally straying north to Maine. Several specimens have been taken about the Bermudas and it is supposedly common in the Gulf of Mexico.

Makos are known in Texas from the vicinity of Port Isabel, where several specimens have been caught by marlin fishermen. A small one has also been caught at the snapper bank off Port Aransas.

They are deep blue above in life (often appearing cobalt or ultramarine-blue in the water), but soon fading to a dirty slate gray; snow white below.

Maturing at a length of about 6 feet, makos grow to a maximum length of around 12 feet; recorded

weights are 135 pounds at about 6 feet, about 300 pounds at 8 feet, and about 1,000 pounds at 10 feet, 6 inches; largest West Indian specimen so far taken on rod and reel weighed 786 pounds.

This is one of the great sharks of the sea, swift swimming, high leaping, a vicious fighter, tireless and indomitable, that will leap, time after time, when hooked, and it is a favorite with sportsmen on that account. It is found near land and far out in the ocean, where it preys on small fish such as mackerel, herring and other schooling species. A half grown female caught near Ambrose Light, off New York Harbor, contained a quantity of the remains of large bluefish. They also attack larger species such as swordfish.

Data on the breeding of the mako are scanty. However, we have a most interesting description by Vaillant concerning the eggs and embryos. He described an embryo, the total length of which was 19.65 inches. Attached to the embryo was a yolk sac measuring 5.5 x 9.25 inches. Although the ova and embryo had been in alcohol more than 50 years, Vaillant says that they weighed 7.2 pounds.

Such a weight seems almost incredible were it not for the fact that other members of the mako family are known to produce eggs of almost equally huge proportions. Doflein obtained two eggs of some form of mako while collecting in the Sagami Sea of Japan. These eggs were considerably larger than an ostrich egg. Lohrberger examined two of the embryos attached to these eggs. The larger was 21.8 inches long and was attached to a yolk sac measuring 8.3 x 4.8 inches, while the whole thing weighed 5.9 pounds.

These and other large sharks of the same genus are quite palatable, resembling swordfish in texture and flavor, and they are often sold in the markets.

\*Abridged from Baughman, J. L. and Stewart Springer, Biological and Economic Notes on the Sharks of the Gulf of Mexico, Amer. Midl. Nat., July, 1950.



A small mako shark, above left, caught at Port Isabel, Texas. The photo below shows the tooth equipment of the mako.

# GAME DINNERS

**A**DMITTEDLY the greatest amount of fun to be had in the sport of hunting is in the actual hunting. But after the game has been bagged and dressed for the kitchen, there is still a lot of fun to be had in its preparation for the table, according to Henry P. Davis, public relations manager, Remington Arms Company, Inc.

"For instance, here's a recipe for an Old-Fashioned Gypsy Rabbit Dinner, as contained in the book 'Cooking Wild Game' by Frank G. Ashbrook and Edna N. Sater:

"Skin and clean a 3-pound rabbit. Cut into pieces for serving. Place in a kettle with an ordinary bouquet garni composed of 1 large bay leaf, 3 sprigs green celery leaf tops, 8 sprigs parsley, 1 sprig thyme and 2 whole cloves, tied together with kitchen thread, and 5 medium sized onions minced, chicken fat the size of a small egg, 6 crushed peppercorns, and salt to taste.

"Cover with equal parts of water and red wine; bring to a rapid boil, lower the flame and let simmer very gently for 2½ hours without disturbing. Then add 1½ cups diced carrots, 12 small white onions, 12 small fresh mushroom caps, peeled, and 18 small raw potato balls. Continue cooking, covered, until the vegetables are tender, or about 25 minutes longer. Remove the bouquet garni, and thicken the mixture with 2 tablespoons kneaded butter (equal parts butter and flour kneaded together), adding 1 generous tablespoon finely minced parsley. Continue simmering for 4 or 5 minutes, then bring to a full boil, and add the following dumplings:

"Sift together 1 cup flour, 2 teaspoons baking powder, and 1 pinch salt; then add alternately 1 whole

fresh egg beaten until light and enough cold milk to make a stiff batter. Drop by small tablespoons atop the rabbit ragout and let rise; then cover and cook for 12 to 15 minutes. Serve generously . . . and, Man, Oh Man!

"When it comes to cooking squirrels I know of no tastier squirrel-base dish than Virginia Style Brunswick Stew. Besides 2 or 3 squirrels, the ingredients are: 1 quart can tomatoes, 1 pint can butter or lima beans, 1 pint can green corn, 6 potatoes, parboiled and sliced, ½ pound butter, ½ pound fat salt pork, 1 teaspoonful black pepper, ½ teaspoonful Cayenne, 1 tablespoon salt, 2 tablespoonfuls white sugar, 1 onion minced small.

"Soak the squirrels ½ hour in cold salted water. Add the salt to 1 gallon water and boil 5 minutes. Then put in the onion, beans, corn, pork (cut in fine strips), potatoes, pepper and squirrels. Cover closely and stew very slowly 2½ hours, stirring frequently to prevent burning. Add the tomatoes

and sugar and stew one hour longer. Then add the butter, cut into bits the size of a walnut and rolled in flour. Boil ten minutes and serve at once. Then watch your guests unbutton their vests.

"In the preparation of young wild ducks and geese, it is well to remember that the birds should be basted every few minutes with fat from the pan when roasting. Here's the recipe for roast goose. Singe, draw, and truss young plump goose. (If goose is an old one, it should be parboiled.) The best stuffing for a goose is one of sage-and-onion. Depending upon the taste of those who have to eat it, onions should be chopped raw into the dressing for strong flavor. A milder onion flavor is achieved by boiling them in water before mixing with breadcrumbs, powdered sage, salt, pepper, nutmeg (just a dash), and two small apples chopped fine. Fill the bird with the stuffing, sew it up with coarse thread, sprinkle salt over it and set it in a pan with a little warm water. Baste frequently and do not remove from oven until done. You should allow 20 to 25 minutes per pound in a 350° F. oven."

For roast duck, follow this recipe. Pick and dress wild duck and wipe with damp cloth. (If duck is not fresh add ½ teaspoon soda to one quart of water and rinse well. Dry thoroughly inside and out.) Fill duck with skinned onions and drained sauerkraut, chopped apples, or raisins and apples, and place in roasting pan. Cover breast with thin slices of salt pork or bacon. Place in 450° to 500° oven. If you like wild duck from which the "juice runs red," cook 20 to 30 minutes. For less rare tastes, it may be cooked 30 to 45 minutes. Baste frequently with pan drippings.

## WILD GAME COOK BOOK

**M**ULLIGAN STEW, Duck a la Creole, Quail with Mushrooms, Broiled Venison, Caribou Collops, Hasenpfeffer, Roast Bear. No, this is not the menu to be found in the better restaurants of the present day. But none of these items is beyond the realm of possibility of the sportsman who wants them enough to take his gun and go after them himself.

After he's secured "the makin's," he can find out how to prepare these dishes by referring to the booklet "How to Dress, Ship, and Cook Wild Game," produced by Remington Arms Company, Inc., and just off the press in its third edition. It can be secured by writing the Advertising Department, Remington Arms Company, Inc., Bridgeport, Conn., and enclosing ten cents in coin.

# Letters

Dear Editor:

I consider your magazine the best publication for sportsmen that comes to the state of Texas. The articles are concise and of great value in regard to information about Texas fish and game.

Your colored prints of our fish, birds, and mammals are works of art. I have framed about 75 of the covers and inserts, and they make a wonderful collection for studies on Texas wildlife.

Allow me to congratulate you on publishing this splendid magazine.

D. J. BULLOCK  
2150 W. Huisache  
San Antonio, Texas

Dear Editor:

... Here's a top coast fisherman, Erma Swallow, with two fine Texas fish. She's holding a 12 pound pike and a seven pound red which she caught while fishing



Erma Swallow

for trout at Kline's Point in the ship channel at Port Aransas. There's no finer fishing place anywhere.

J. E. SWALLOW  
Rt. 10, Box 308 D  
San Antonio, Texas

Dear Editor:

I rather enjoyed Jay Vessels articles until reading "Dove Banding," page 25 of the September issue. "Elder Kallina got a case of shotgun shells . . . we must have killed a 1,000 after the 1,250 shell bombardment." Well, I sure have been getting gypped, for I sure don't get that many shells in a case (20 boxes, 25 shells to a box equal 500.)

JAS. A. BURCH, Editor  
BOSQUE SPORTSMAN  
Meridian, Texas

*(Vessels, an old cap 'n ball Kentuckian, reckons he stumbled over the inflationary water jump. Parlaying 500 hulls into 1,250 with a simple punch of the typewriter seems to stack up about right with current values.)*

Dear Editor:

Having read the article, "Dove Banding, Family Style," in the September issue of TEXAS GAME AND FISH, I am wondering if Mr. Waddell or Mr. Kallina took the time and trouble to obtain a permit from the U. S. Department of the Interior for killing those grackles.

Now, I am not trying to protect these marauders, far from it, because I know what they do to our whitewings down here, but, there seems to be a conflict between the State and Federal laws in regards to the grackles.

I have a letter before me now, dated July 17, 1951, from the Fish and Wildlife Service, Department of the Interior, and signed by Mr. Charles H. Lawrence, Assistant Chief, Branch of Game Management, and it reads as follows:

"In regard to your letter of June 10, I wish to advise that the Great-tailed grackle and the Red-winged blackbird are afforded protection under the Migratory Bird Treaty Act and Regulations thereunder. A permit would be required from this service to take those birds."

If this is the case, it seems to me that it would be a Federal offense to kill a

grackle at anytime without a Federal permit although it states in the "Digest-Game and Fish Laws" for the State of Texas that the black bird is unprotected.

How about this mix-up?

A. W. NATIONS  
Box 42  
Donna, Texas

*(Grackle-control, by proper authorities, is permitted where concentrations of these predacious birds menace game birds.)*

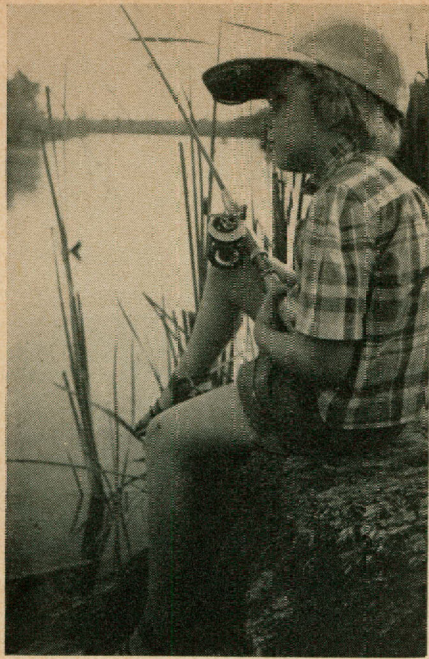
Dear Editor:

... We're also enclosing a picture of our son Jimmy with his first wild turkey that he shot in Brooks County last December.

LEE BAIR  
Rt. 2, Box 274  
Edinburg, Texas



Jimmy Bair



Nancy Lea Phillips

Dear Editor:

I am sending a picture of my little granddaughter, Nancy Lea Phillips, five years old, as she fishes in the Resaca near San Benito, Texas.

Her father, Major Thomas J. Phillips, who is in a hospital in Japan, sent the fishing tackle to Nancy. You can see by the expression on her face that she is very anxious to catch a fish.

MRS. ELLA DAVIS  
203 S. Reagan St.  
San Benito, Texas

Dear Editor:

In the past three weeks, I have killed what I believe to be two broad-banded

copperheads. Their descriptions fit perfectly those given in the February 1950 issue of TEXAS GAME AND FISH.

I notice none have been reported from Young County although Palo Pinto and Throckmorton counties have reported them.

My home is on a corner lot, both streets paved and located about 2,000 feet from Salt Creek both north and west of my place and about 1,500 feet from one of the typical Young or Palo Pinto County mountains. Pavement extends over 800 feet in all directions of my home. Both of these snakes were about 22 inches long, both were killed around 8:00 in the morning, on or within three feet of paved sidewalks and about 60 feet apart. One was killed June 16th and the other July 9th. My place is well-kept with a hedge around the fence line. I found the snakes between the hedge and sidewalk. The last one I killed had a full-grown English sparrow about half swallowed.

Is the location of these snakes unusual or do they inhabit home places where there are cats and always a dog? I am naturally interested as heretofore I have never had anything in the snake line other than one or two chicken snakes in almost 30 years.

I really enjoy my GAME AND FISH magazine every month and each year I give my complete file to our public library.

J. R. RAMSEY  
P. O. Box 808  
Graham, Texas

*(It is very possible for the two broad-banded copperheads to be found in your section of the country. The only reason that they were not included in the February 1950 list is that they were never reported before.)*

Dear Editor:

Master Stanley Harold Prather, age six, holds the speckled trout that won the



Stanley Harold Prather

Grand Prize Fishing Contest at Brownsville for July. Stanley's father caught the fish while wading in waist deep water just off Green Island in the lower end of the Laguna, north of Port Isabel, Texas. It measured 31 inches and weighed nine pounds two ounces. Incidentally the \$100.00 prize money went to the Cameron County March of Dimes fund.

L. L. CLINE  
325 Cedar St.  
San Antonio, Texas

## Ten More Rare Guns Found

Ten more of the rare "One of One Thousand" Winchester Model 1873 lever action repeating rifles have been

found, including a gold-plated beauty valued at \$5000, it was reported today. This brings to a total of 33 the number known to be still in existence of the 135 originally produced.

The up-to-date figures were reported by James C. Hartley, director of research of Olin Industries' Winchester Repeating Arms Company, New Haven, Conn. The "One of One Thousand" valued at \$5000 is the property of Robert Abels of New York City. It was acquired from a California rancher in whose family the famous rifle had been willed from generation to generation as a family heirloom.

The 33 rifles are located in 13 states, most of them in the west, as follows: California, 10; Washington, 4; Montana, Virginia, West Virginia, New York, Florida and Illinois, 2 each; and

Nevada, Wisconsin, Kansas, Massachusetts and Connecticut. The other two were discovered in Africa and England.

A. T. C. Hale, directors of the British arms firm of Parker-Hale, Limited, at Birmingham, England, expressed delight at coming into possession of a rifle of "such quality and historic fame." He reported the "One of One Thousand" was acquired by his firm when an elderly Shropshire gunsmith, H. Oliver of Ludlow, entered a hospital for treatment and was obliged, under the law, to dispose of guns in his possession.

Mr. Hale learned the gunsmith obtained the rare firearm from the estate of a British Army sergeant major who had seen many years' service in different parts of the world.

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# BOOKS



**UNCLE SAM'S ACRES**, by Marion Clawson. 414 xiv pages. Illustrated by 27 half-tones and 21 charts. Published by Dodd, Mead and Company, 432 Fourth Avenue, New York City; 1951. Price \$5.00.

The biggest landlord in America is your own Uncle Samuel whose real estate holdings now embrace just under 500 million acres. In quality this enormous acreage varies from alkaline deserts too arid to support a jack-rabbit to virgin stands of the tallest and biggest trees on the American continent. It includes the lands of the public domain, the national forests, the national parks, the national wildlife refuges, the Indian reservations, and the military lands. Water for domestic use, agriculture, and power; beef, wool, and timber; gold, silver, coal, and uranium form merely a partial list of the vast range of commodities it produces. Recreation and the preservation of scenic natural spectacles play an exceedingly important role. Administering these lands is a tremendous undertaking undershot with numerous problems.

In this new book, Mr. Clawson, director of the Bureau of Land Management, does a commendable job of handling this difficult and complex subject in a clear and objective manner. He deals first with the history of the public lands, the often wasteful and negligent disposal of a large portion of the public domain, and the legislation which provided for the preservation and management of the remaining lands. There is a good section on the use of the various types of public lands and a final section on "policies and politics" which makes very timely reading. Ending with a glimpse into the future, the author foresees more public ownership of land, greater demands upon these

public lands by all interests, and an increased effort by the government to make the lands produce a maximum of their many and varied products.

This is required reading for those interested in the natural resources of the Nation.

**TARGET SHOOTING TODAY** by Captain Paul B. Weston. 81 xxv pages. Illustrated with 20 half-tones. Published by Greenberg; Publisher, 201 East 57th Street, New York 22, New York; 1950. Price \$2.00.

This is a nicely planned basic text on handgun shooting by a man who is well known in target-shooting circles. Captain Weston has had long experience as a pistol coach for the New York City Police Department and the Navy and is winner of a number of championship matches. As such, he is

well qualified to write a book of this kind.

The author confines his discussion to the revolver, although much of the material on position, aiming, and range firing is applicable to the automatic pistol. The book, in general, will prove most interesting and most valuable to the beginning shooter who has purchased or who contemplates purchasing one of the many excellent revolvers on the market today. Although the text is brief, the material is direct and forthright and contains all of the information that the beginner needs to start him off on the right foot toward accurate shooting. Captain Weston takes his readers as far as any writer can in a field of this kind. Beyond this point, the new shooter must write his own text in burned powder, perforated paper, and experience.

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