

Texas Game and Fish

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Smaller of cousin of the mountain lion in Texas is the bobcat. Two species occur in this state, Bailey's bobcat in the West, and the Texas bobcat in the East and South.

Rabbits are the principal food. The bobcat also feeds on rodents and birds, and its predation is considerable on wild turkeys and small deer up to one year of age.

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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In This Issue

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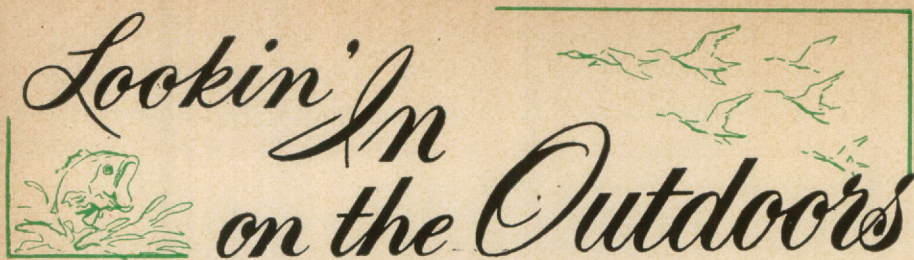
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The Cover

The mountain lion is second in size only to the relatively scarce jaguar among the cats of North America. He also is known as the puma, cougar, and panther. Because of his depredations on deer and occasionally on livestock, he is relentlessly pursued, and like many of our other larger wild animals, the spread of civilization rapidly is depleting his range. This month's painting is by Sidney A. Wooldridge. The story is on page 24.

Lookin' In on the Outdoors



Bow Hunters

Don't look now, but you are being surrounded by bow hunters.

Few hobbies have gathered as many new advocates in the past few years as the sport of hunting game with bow and arrow. And Texans, as always inclined to turn to outdoor entertainment, have fallen right in line.

Harvey B. Richards, Houston, an official in the fast-growing Texas Field Archery Association (a group differentiated from archers who shoot only at targets), recently appeared before the nine-member Game and Fish Commission. He was asking the Commission's backing of a legislative bill to give the archers a season when they could shoot deer unhampered by hunters with rifles.

Richards pointed out that 25 states now have separate deer seasons for bow hunters, usually just before the regular season. He said 30,000 special licenses were sold for bow hunting in one state, Michigan, the past year alone.

The archers say proudly that their form of hunting is truly the sporting way, pointing out that statistics show the average kill of deer with bow and arrow is at only 30 yards.

"Hunting with a bow definitely is not the method for the 'meat hunter,'" Richards points out. "The bow hunter must stalk his deer with skill and patience—compete with the deer on a common level. It takes a close shot to kill a deer with bow and arrow."

We don't quite see why the archery hunters feel they need a season all their own, but we've invited Mr. Richards to explain their position in an article for the March issue and to tell about bow hunting in Texas.

Texas Big Game

Texas is not ordinarily recognized as a "big game" state. But a few Texas trophies rank high in the world records. These are listed in "Records of North American Big Game," official publication of top trophy records. (See "Books" section, page 32.)

The world's eighth-ranking pronghorn antelope was killed by Lt. M. H. McGlamery, El Paso, in Hudspeth County, Texas, in 1951, on the Jay Kerr Ranch.

The 18th finest set of white-tailed deer antlers known was bagged by Floyd Burr, San Antonio, in 1949 in Dimmitt County. It is 10th best ever killed in the United States. This head was pictured in the November 1952 issue. J. T. Hogan killed a white-tail listed in 49th place in LaSalle County in 1950, and George W. Parker one listed in 75th place in Maverick County in 1951.

The 25th ranking mountain lion trophy came from the Bruni Ranch in Texas. It was killed in 1934 by John R. Wood.

High up in seventh place in the jaguar competition is one bagged by H. D. Attwater in Mills County way back in 1903. Jaguars now are scarce in this state.

Thanks!

Subscriptions pouring into the office have broken all kinds of records.

A total of 5,163 in the five weeks preceding Christmas knocked the staff groggy. Well over half were gifts, which meant that cards had to be signed, addressed, and mailed.

We had a hard enough time keeping up with the avalanche. The machines which make the address plates couldn't.

Christmas gift announcement cards went out on schedule, except for late orders not received until the last few days before Christmas. These went out shortly thereafter.

A few did not receive the January issue. The machines which make address plates simply could not keep up with the deluge.

We thought January would bring a let-up. It didn't. Even without gift subscriptions, the orders have been coming in at over three times the normal rate.

We've been cussed, cuffed, insulted, ridiculed, blasted, and bombarded by subscribers who didn't get their magazines as promptly as they would have liked.

We gradually are getting back on schedule.

We sincerely regret any inconveniences the rush might have caused, and we ask that you please remember that, even in normal times, the mechanical processing of new or renewed subscriptions usually requires at least three weeks. And for your eagerness and enthusiasm for the magazine, we give a heartfelt—THANKS, friend.

Record (?) Crappie

Strike from the records the giant "crappie" caught at Lake Texoma by Airman Richard A. Usher of Perrin Field last June.

The 5-pound, 7-ounce fish simply wasn't a crappie. It was a drum.

It had been hailed as the largest crappie ever taken in Texas.

Credit Upshur Vincent of the Fort Worth *Star-Telegram* with finally exposing the fish for what it really was.

A lot of people were fooled, including personnel of Flowing Wells resort, who should have known better, and John Clift, veteran outdoor editor of the Denison *Herald*, who sent in the letter and picture which appeared in the "Letters" column of the August TEXAS GAME AND FISH.

Shortly after we became editor of the magazine a month later, Ed Bonn, Game and Fish Commission biologist at Texoma, expressed doubt as to the identification. He had not seen the fish, and the picture was too small to make positive identification possible. We checked as best we could,

joining with Marion Toole, chief aquatic biologist, in puzzling over the tiny reproduction. Pictured details were just too small.

Eventually, Vincent received another copy of the fish picture from Texoma. He, too, published it in good faith.

But it worried him. Finally, he bundled up the picture and the accompanying copies of affidavits and sent them to the Commission.

The affidavits looked good. One was on Flowing Wells Camp stationery. It testified to the weighing of "this 5-pound, 7-ounce crappie." It was signed by Mrs. J. G. Nelson, who weighed the fish, and two witnesses, R. M. Moon and Mrs. Imogene Usher.

Another affidavit was signed by Milo G. Shocker, Edward B. Griffin, and Edward S. Brown, three airmen, who were "present at the landing and weighing" of the big "crappie."

But one look at the larger picture of the fish left no doubt whatsoever. It was a drum.

We understand that Airman Usher, who caught the fish, was not a regular fisherman and was unfamiliar with crappie. But it seems incredible that so many other folks could have been "taken in" by the story before Vincent's alertness finally produced the picture large enough to make positive identification possible.

Move Over, Pete!

Ever get a letter from a bobwhite quail? We did.

As you know, the inside front cover of the December issue carried a picture of Pete, a wild quail at Paris, Texas, which has lived in the home of Joe Caldwell for over a year.

That prompted a letter to the editor from Chickie, a bobwhite hen, who with a genuine share of feminine indignance told us that Pete was a piker.

Chickie, we were told, not only has lived in the home of Mr. and Mrs. Joe Reeves, Decatur, for almost FOUR years, but, what's more, she was hatched in the oven of the kitchen stove!

Chickie's whole story, with a picture of this letter-writing quail, will appear in the March issue.

Battle Pictures

On the inside cover of the December issue, the 10th Anniversary number, we ran a spread of action-packed pictures showing two antelope bucks fighting. They were reprinted from TEXAS GAME AND FISH for May, 1943. We had no record of their source.

Comes now a letter from Allen Richards, 325 Huisache Ave., San Antonio, which explains away the whole mystery. His interesting account of how the pictures were taken follows:

"I was startled to say the least upon going through the current December issue of your good magazine to find three of my old photographs on the back inside page . . . I thought you might be interested in the story behind the pictures.

"One morning about 1936 my mother and I went for a drive near Alpine. It was a dark drizzly day,



but I took along my battered old Speed Graphic.

" . . . I saw a young buck and a doe antelope grazing fairly close to the highway. Cutting the ignition, I let the car roll to a stop without scaring the antelope.

"After watching them for a few moments, I noticed something moving far down in the flat to the East. I finally made out a big buck running toward us. Knowing that the young buck had "cut out" the doe to start his own herd, I guessed that we were going to see a fight.

"But the big buck stopped and started to graze when he reached the other two. Naturally, I was disappointed. The big fellow grazed closer

and closer to the small buck, and then without warning he charged!

"They came together with a bang. With that I was through the fence and shot one picture at about 50 feet. Then I inched closer and got another at about 30 feet, and then the third.

"Those prints were given to Ray Williams, one of your game wardens at Alpine, in appreciation for the work he was doing in game conservation out there." (Williams, now a warden supervisor, is still at it. See page 18, Nov., 1952, issue—Ed.)

"Just one note in passing. After having shot antelope on a 4 x 5 Graphic without telescopic lens, I am not too impressed with some of our Texas nimrods who bring home the bacon with flat shooting rifles with big scopes on them."

Market Hunter

In going through some files the other day, we ran across a clipping of some years back which told of the annual white-winged dove shoot in the Valley.

In the margin was a scribbled note, written by Nat Wetzel, known at the turn of the century as "King of the Market Hunters."

Wetzel once headed a gigantic organization of hunters who killed and marketed game from coast to coast, and he has been featured in TEXAS GAME AND FISH's current market hunting series.

Yet Wetzel, according to the scribbled note, was appalled by the number of doves killed during the Valley's open season on whitewings!

He recalls that during his hunting days, most of the land was virgin forest and grassland—plenty of habitat and plenty of wildlife. Now little acreage is unspoiled by man.

"You just as well set a tombstone for the whitewing and place it beside the one for the passenger pigeon," he wrote. "Then get ready for the little mourning dove."

Rest easier, Mr. Wetzel. The sportsman of today will not repeat the mistakes of his earlier brothers. He has the advantage of modern game management programs not available in yesteryear. And, just as important, he has the good sense to be patient and let them work for him.



deer and turkey

report

for

1952

By EUGENE A. WALKER
Wildlife Biologist

Texas hunters after deer and turkey apparently enjoyed a generally better hunting season in 1952 than during 1951.

Reports from 32 representative game wardens, whose districts cover 60 counties which comprise fair samples of the deer and turkey producing regions of the state, showed some interesting trends when compared with the 1951 season.

Each selected warden was asked to answer a series of pertinent questions. The information covered the first two weeks of the 1952 season and represents the opinions of the men who are actively engaged from year to year in the protection of the sportsman's interests.

The field reports covered 12 counties in South Texas,

12 counties in the "Hill Country," five counties in the Trans-Pecos, 16 counties in the Texas Panhandle, six counties in North Central Texas, two counties in Northeast Texas, and seven counties in East Texas.

The accompanying table shows the warden's opinions on each of the seven questions covered in the questionnaire.

Notwithstanding the conditions of severe drouth which prevailed over most of the state during the year, deer numbers apparently made slight gains. Increases were reported in the Texas Panhandle and the area of the western portion of East Texas, where deer were restocked in recent years. Other gains were noted in parts of South Texas and one county in Northeast Texas.

Of the 60 counties reported, 36.6 per cent (22) reported deer increased; 25 per cent (15) showed decreases, and 38.3 per cent (23) reported deer numbers about the same as in 1951.

The principal areas where decreases were noted were from the Edwards Plateau and the Possum Kingdom area westward, where drouth conditions have been critical. Kenedy County, in South Texas, also reported decreased deer numbers.

Wild turkey made general gains with the most conspicuous increases reported from the Panhandle, portions of the Edwards Plateau, and South Texas. Decreased turkey numbers were reported from widely scattered points over the state in East Texas, South Texas, and the Edwards Plateau. However, 52.9 per cent of the counties reporting showed increases, while only 23.5 per cent showed decreases, and the turkeys in 23.5 per cent of reported counties were about the same in numbers as last year.

The deer and turkey the hunter bagged in 1952 were in generally better condition than those taken in 1951. Thirty-four counties reported these species in as good physical condition as those killed in 1951, 23 showed game in better condition, and only three reported game in worse condition than at the corresponding time in 1951.

Storage records to December 1, 1952, showed an increase in game

stored in 55.5 per cent of the counties sampled, as compared with the decreases in 44.4 per cent of the total of 45 counties reporting on this question. Some counties had no game stored.

The general increase in deer and turkey was accompanied by an increase in Shooting Preserves. Of the 54 counties reporting on this question, 42.5 per cent reported an increase, 3.7 per cent reported decreases, and 53.9 per cent stated the numbers of Shooting Preserves remained about the same. Increases were noted in some Texas Panhandle counties, portions of South Texas, and particularly in that portion of East Texas around Robertson and Brazos Counties, where deer increased materially.

Game violations increased in 41.6 per cent of the 60 counties sampled, remained about the same in 43.3 per cent, and declined in number in 15 per cent. More violations were reported from the Panhandle, a few scattered counties of the Edwards Plateau, South, and East Texas. Increases were also reported in the

Trans-Pecos Area where deer generally declined in numbers.

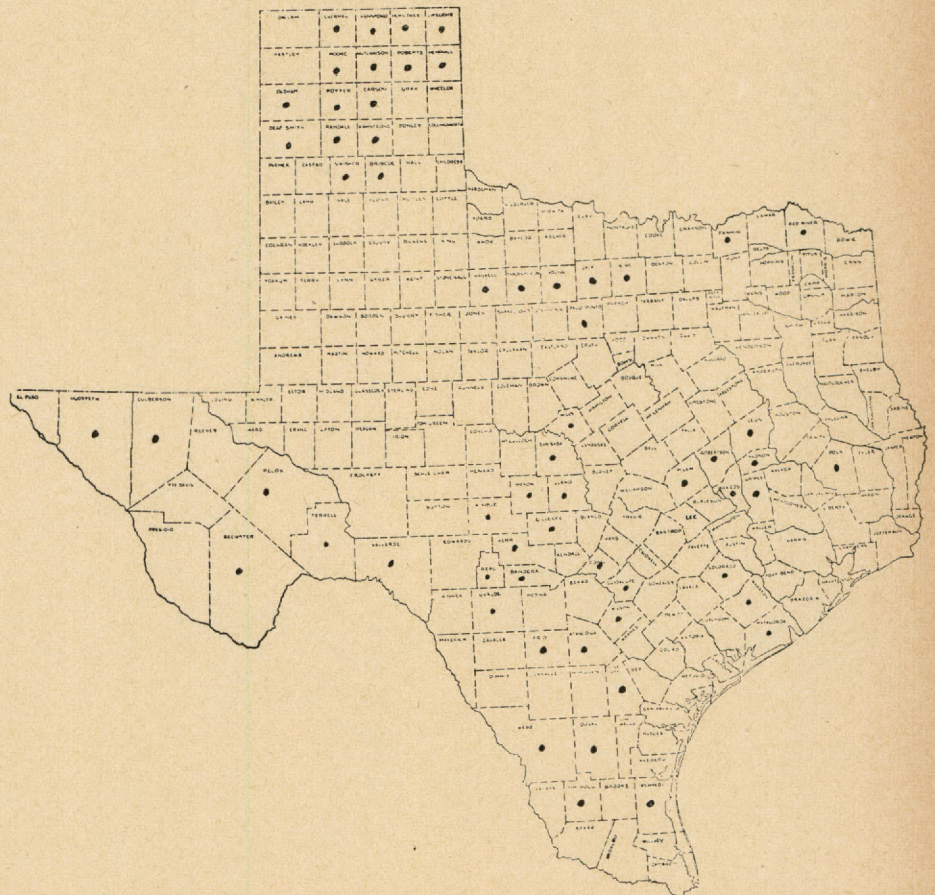
Texas hunters apparently turned out in considerably greater numbers than last year in pursuit of deer and turkey. Of the 59 counties reporting on this question 42, or 71.1 per cent, showed more hunters present in 1952 than in 1951, and only 17 counties, or 28.8 per cent, reported a decrease in the number of hunters in the field.

Mexican persimmons and acorns were present in unexpected quantities throughout a large portion of the eastern Edwards Plateau counties, and both deer and turkey were in fine shape at the opening of the hunting season.

The acorn crop in East Texas was spotty, and although both deer and turkey bagged during the first two weeks of the 1952 season were generally in good physical condition, only a few really fat deer were observed. Late in the season deer in this section were taking yaupon and other browse as the acorn supply had been exhausted by about December 1.

• Continued on Next Page

Counties Sampled by Questionnaire



Results of Warden Deer and Turkey Survey

Here, in tabulated form, are the complete reports concerning the 1952 deer and turkey hunting success trends. A few questionnaires were not returned by wardens in time for inclusion, but the survey covers

a representative cross-section of Texas deer and turkey country.

Questions asked of the wardens are reproduced below, together with their answers.

1. In your opinion have the number of deer in your district increased, decreased, or remained about the same as compared to last year?

2. In your opinion have the number of turkey in your district increased, decreased, or remained about the same as compared to last year?

3. Is the physical condition of deer and turkey as good, better, or worse than last year?

4. Did storage plants in your area store more or less deer and turkey to December 1, 1952, than to the same date last year?

5. Have the sale of shooting preserve licenses increased, decreased, or remained about the same for 1952? (Number of landowners leasing hunting privileges).

6. Compared to last year, deer game law violations increase, decrease, or remain about the same?

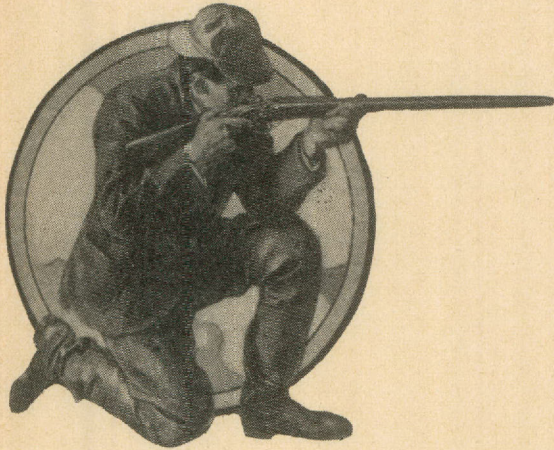
7. In your opinion were there more or less hunters in your district this year than last?

COUNTY	1. In your opinion have the number of deer in your district increased, decreased, or remained about the same as compared to last year?			2. In your opinion have the number of turkey in your district increased, decreased, or remained about the same as compared to last year?			3. Is the physical condition of deer and turkey as good, better, or worse than last year?			4. Did storage plants in your area store more or less deer and turkey to December 1, 1952, than to the same date last year?		5. Have the sale of shooting preserve licenses increased, decreased, or remained about the same for 1952? (Number of landowners leasing hunting privileges).			6. Compared to last year, deer game law violations increase, decrease, or remain about the same?			7. In your opinion were there more or less hunters in your district this year than last?		
	Inc.	Dec.	Same	Inc.	Dec.	Same	Good	Better	Worse	More	Less	More	Less	Same	More	Less	Same	More	Less	
Uvalde.....	x			x				x			x			x				x		x
Bandera.....	x			x				x			x			x				x		x
Real.....	x			x				x			x			x				x		x
Deaf Smith.....	x			x			x					x		x				x		x
Oldham.....	x			x			x					x		x				x		x
Potter.....	x			x			x				x			x				x		x
Randall.....	x			x			x				x			x				x		x
Armstrong.....	x			x			x				x			x				x		x
Swisher.....	x			x			x				x			x				x		x
Briscoe.....	x			x			x				x			x				x		x
Comal.....	x			x	x		x				x			x				x		x
Guadalupe.....	x							x			x			x					x	x
Wilson.....	x				x			x			x			x					x	x
Brazos.....	x							x			x			x					x	x
Grimes.....	x							x			x			x					x	x

Robertson.....	x			x			x			x							x		
Milam.....	x			x			x			x				x			x		
Leon.....	x						x			x				x			x		
Madison.....	x						x			x						x	x		
Frio.....	x			x						x				x			x		
Atascosa.....	x			x						x				x			x		
Fannin.....	x						x			x							x		
Val Verde.....		x															x		
Webb.....		x		x			x			x							x	x	
Jack.....		x					x										x	x	
Wise.....		x					x										x		
Brewster.....		x					x			x							x	x	
Live Oak.....		x		x						x									
Pecos.....		x		x						x							x	x	
Terrell.....		x		x						x							x	x	
Culberson.....		x					x			x							x		
Hudspeth.....		x					x			x							x	x	
Kimble.....		x					x										x		
San Saba.....		x		x						x							x	x	
Mills.....		x		x													x		
Mason.....		x		x			x			x							x		
Kenedy.....		x					x										x		
Palo Pinto.....			x														x		
Roberts.....			x				x										x		
Hemphill.....			x				x										x		
Ochiltree.....		x		x			x										x		
Lipscomb.....		x		x			x										x		
Wharton.....		x					x										x		
Matagorda.....		x					x										x		
Red River.....		x					x										x		
Kerr.....		x		x															
Gillespie.....		x		x														x	
Polk.....		x																	
Young.....		x					x												
Throckmorton.....		x					x												
Haskell.....		x					x												
Hutchison.....		x		x			x												
Moore.....		x		x			x												
Carson.....		x		x			x												
Sherman.....		x		x			x												
Hansford.....		x		x			x												
Jim Hogg.....		x					x												
Duval.....		x					x												
Llano.....		x		x															
Colorado.....		x		x															
Total.....	22	15	23	27	12	12	34	23	3	25	20	23	2	29	25	9	26	42 17	
	Total Answers 60			Total Answers 51			Total Answers 60			Answers 45		Total Answers 54			Total Answers 60			Tot. Ans. 59	
Percentages.....	36.6	25	38.3	52.9	23.5	23.5	56.6	38.3	5.0	55.6	44.4	42.5	3.7	53.7	41.7	15	43.3	71.1 28.8	

Cunning Wiles

of the HUNTER and the HUNTED



By NAT WETZEL

The following is the third in a series of articles concerning the old days of the market hunters in Texas. This one was written by Nat Wetzel, known at the turn of the century as "King of the Market Hunters" (see *Texas Game and Fish*, November 1952). It first appeared in the *Saturday Evening Post* and is reprinted here with permission of that publication. Here,

as is implied by the original title, "Queer Ways of Hunters and Hunted," Mr. Wetzel discusses some of the unusual methods and tricks employed by hunters and the means used by wildlife to outwit them. The reader should bear in mind at all times that this article was written almost 50 years ago. The illustrations are from the original article.

ALMOST every community has its own peculiarities in the practice of the hunter's craft, but never elsewhere have I seen anything quite so primitive in the way of game-killing as the "threshing" of ducks by the Mexicans of the marshes along the Gulf.

The price of powder and shot is very high in Mexico, as the Government, which holds a monopoly of these articles, considers it advisable to discourage the use of firearms among the poorer classes. Consequently the native finds hunting with a gun an expensive luxury.

He accordingly resorts to various expedients and makeshifts in order to secure even a small share of the great abundance of wild game about him—for Mexico must now be regarded as the paradise of the bird hunter, so far as the American continent is concerned. To a "Gringo"

hunter (one from the States) who is used to going after ducks with pump shotgun and an unlimited supply of shells, the first night of "flailing" with a band of Mexicans is an experience not soon to be forgotten.

My Mexican friends took me to the marshes just in time to catch the evening flight of birds.

They selected their ambush with great cunning, picking their station on a narrow opening in the marsh near a large bed of wild rice. Of course, this formation forced the ducks going to that particular feeding spot to fly compactly and very near to the ambush.

The only arms with which the Mexicans were supplied were rude flails, very similar to the old-fashioned threshing implements of the New England States.

Although I was familiar with the rapidity with which ducks fly when

making for their feeding-grounds, it seemed almost impossible to me that such crude implements of hunting could do any effective execution when used against so wise and wary a bird as the wild duck. However, all my doubts were routed as soon as the evening flight began.

The natives stood a little distance apart and waited with tense muscles and straining eyes for the first mallards to come whistling down the marsh lane. Suddenly, just as a flock came on, in close formation and at headlong speed, the flails flew out and raked the air—seemingly in all directions at the same instant! This hand-to-hand method of hunting proved surprisingly exciting, probably because of its novelty, and I found myself strained to an uncommonly keen pitch of excitement.

When the fruits of the first "flailing" were gathered in I was obliged

to confess that I could scarcely have done better work with a good gun. The bag of ducks which the natives carried home with them as a result of one night's "flailing" was really astonishing.

Of course, this primitive method of hunting is only effective where the flight of ducks is heavy and the natural "lay of the land" adapted to its practice.

Even the native Mexicans who are able to get hold of guns of outlandish pattern and a little poor powder regard shot as an unnecessary luxury. They generally contrive to filch a bit of telegraph wire—thanks to the invasion of "Northern capital"—which they cut up into tiny cylinders. When this substitute for shot is not to be had, they take broken nails and any other small iron scraps available.

Quite naturally they are careful to make the most of the ammunition that costs them so much trouble and expense, and they do not allow any of the ethics of sportsmanship to interfere with practical results. Any notion that firing into a flock of ducks on the water is not the right thing is beyond their calculations. To the contrary, they resort to various ingenious devices in order to increase the death rate among the ducks.

Of all these schemes, "steer hunting" is the most novel and interesting. A hunt of this kind presents a scene almost as picturesque as does the process of "flailing."

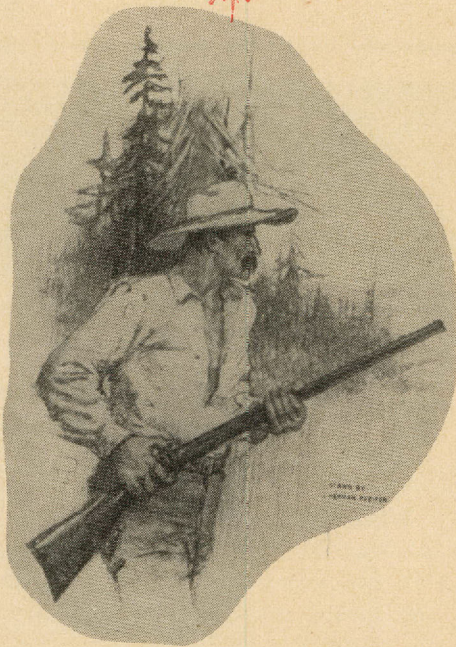
Only steers trained to the business are used for this purpose. Attached to each horn of the steer is a long stick of light wood that serves as a rein. When a flock of ducks is sighted "working" their feeding beds or resting on the water, the natives start their steer slowly in the direction of the birds, taking great care to keep the animal's broad side toward the game, thus using him as a screen or breastwork behind which they are concealed. Generally the men are partially or wholly stripped for wading, and their dark bodies, huddled together against the side of the bullock, make a striking and almost barbaric picture.

Ordinarily the ducks pay no attention whatever to the approach of the steer and allow him to come within a few rods of them. Then the guns

are cautiously leveled across the back of the animal and a broadside of musketry pours death and destruction into the unsuspected flock.

The slaughter of birds from one such fusillade is appalling. So long as the men do not allow themselves to be seen the ducks seem to have no suspicion of the steer, and allow themselves to be deceived by this kind of an ambush repeatedly in the course of the same morning or evening.

Duck hunting in the dense "flag" marshes of the Gulf coast, where the



birds congregate in thousands, is a very different thing from plying the hunter's craft in the North, where all the skill of the experienced woodsman, aided by decoys, "calls" and other accessories, is put to the test.

On the score of resourcefulness, let it be said that in no vocation is the faculty for making the most of present conditions and meeting difficulties and limitations with original and novel measures at a greater premium than in hunting. Many a hunter has returned to camp with a fine bag of game simply because he was able successfully to match his wits against adverse circumstances and unexpected conditions.

Never have I known this point to be better illustrated than by the cleverness of a woman who enjoyed

shooting quite as well as her husband and often accompanied him on short hunting trips.

One day they started, somewhat unexpectedly, for a small lake near their house and did not stop to take decoys with them. The wife remained at the nearest point while the husband rounded the end of the lake and took his station on the opposite shore. Ambushed in a dry "wallow" close to the shore, the woman waited for a stray mallard to come her way, realizing that both her location and lack of decoys placed her at a distinct disadvantage. Soon, however, she saw a duck flying high over the water and coming directly toward her. The shot was a long one, but she took her chances, and the mallard fell almost within her reach.

Instantly she secured it and at once saw that her shot had broken its wing without otherwise injuring it. Only the moment before she had been wishing for decoys, and as she held the live bird in her hands she thought what an effective decoy the mallard would make could it be staked out in the shallow water near the shore. Here was where her ready wit, her true hunter's inventiveness came into play.

Holding the bird in one hand, with the other she took off her shoes and then drew one string from the eyelets. Tying one end of the shoestring to the duck's leg, she knotted the other about a stick. Wading out a short distance from shore she planted the stake securely in the muddy bottom. Then she retreated to her blind and watched the mallard swim quietly round and round its stake. The bird's broken wing did not permit it to attempt to rise. Very soon a small flight of birds, seeing their fellow peacefully riding the water, settled down to join him. As a result they paid with their lives the penalty of their misplaced confidence.

This experience was many times repeated, and when her husband returned she had collected a heavy bag of mallards—despite the fact that he had found the shooting decidedly poor.

At first he was at a loss to understand the situation, but when he was sent for the live decoy and found it

● Continued on Page 29



The Bogs of Texas

By CHESTER M. ROWELL, JR.

**A true bog is more
than just
a swampy lowland.
It has
peculiar characteristics
all its own.
That's why the bogs
in Texas grow orchids
and plants that trap
and devour insects.**

When the word "bog" is mentioned in Texas, the first thought is of the northern states and their cranberry and quaking bogs. Many Texans may be surprised to know that Texas has its share of real bogs. Some are of the quaking type, and there are some that may yield peat which can be used in many ways by the gardener or even as a low grade fuel.

Bogs are usually sour or acid and are frequently characterized by the presence of a particular type of plant—sphagnum moss. This moss has the peculiar property of imparting an acid condition to any water with which it comes in contact.

Plants that may fall into this acid water do not decay as they usually do. Thus, in a low area with an abundant moisture supply, proper conditions for the accumulation of organic material, plus a few thousand years, you have the makings of a bog.

As the organic material accumulates through the years, the plants growing in that area are affected by the special environmental conditions

of the bog. The high water content and acidity seem to be the chief contributing factors.

This peculiar soil type results in a condition termed a physiological drought—and though the soil may be moist, many of the plants are built like plants that are found in desert regions.

Thus, bogs, in general, require a plant to be especially suited to their set conditions, if it is to grow and reproduce within its limits.

Through the years, we have come to recognize a large group of varied plants that are typical of bogs. In this group, we find many bizarre and interesting forms, varying from beautiful orchids to the remarkable insectivorous plants.

Two orchids are commonly found in Texas bogs. They are the Rose pogonia (*Pogonia ophioglossoides*) and Swamp tresses (*Spiranthes cernua*). Although these orchids are not the large ones seen at the florists, they are very beautiful and contribute a great deal of color to the bog during

their brief flowering periods.

The wax myrtle or sweet gale is a very interesting shrubby plant found abundantly in bog areas but not limited to them. The fruit of this plant has a waxy covering that may be melted off and collected. It is then used to make candles that have a pleasing delicate odor when burned.

There seems to be at least one type of dewberry in every bog. The plant called *Rubus velox* is frequently found in Texas. Although it is a large, coarse plant, the fruit are not as large as those found on the common dewberry (*Rubus trivialis*).

Three types of "bug eating" or insectivorous plants may be found in our bogs. The bladderworts (species of *Utricularia*) are small, frequently floating plants that are often found in standing water. They have submerged sack-like traps that have a very clever mechanism for trapping any small bug that may enter.

The sundew is another insectivorous plant. It is given the scientific name of *Drosera*. These unique members of the plant world have outgrowths on the leaves that are topped by a sticky substance that traps and holds the unfortunate insect visitor. When one outgrowth has an insect, the others usually bend over to it and soon the bug is securely held. Digestive juices are secreted by the outgrowths and it is believed that the plants utilize some of the food thus made available.

The third type is perhaps the most interesting. These are the pitcher plants. Nature has so modified their leaves that they form a tube with one side growing up and over the top and forming a sort of lid or cover.

The Texas pitcher plant is *Sarracenia sledgeii*. The inside of the leaf tube in this case is slick and at the bottom is a small pool of liquid. When an insect falls down into the liquid, it cannot climb out because of the smooth walls, and it soon drowns in the liquid.

There are also digestive juices in this pool, and the bug is turned into available food for the plant.

Our pitcher plants are from one to two feet tall and grow in clumps. The flowers are yellow-green and very beautiful.

Since most of the plants of the bog die back each winter, there is an out-



These insect-devouring pitcher plants are typical of Texas bogs.

standing series of changes from week to week when spring comes.

During the winter, the brown of dead plants mixes with the waxy green of wax myrtle. In early spring, the pitcher plants begin to green up first. They soon form many spots of

light green. Soon after that, the other herbaceous forms (mostly grasses) grow up, and the bog is a patchwork of varying shades of green. In their order at certain periods, the meadow-beauties (*Rhexia mariana*) turn the dominant color pink, the orchids a white or purple, the narrow leafed sunflowers a yellow, and some wild parsleys a white.

Of course, there are many other interesting plants in our bogs, and each separate bog has its slightly different flora.

The majority of Texas bogs seem to occur only in a rather narrow strip of sands running from the northeast through the southwest portion of the state. Bogs are known to exist in Anderson, Gonzales, Lee, and Robertson Counties. Probably they also occur in others along this line of sands and are not well known. The bog in Gonzales County is near Ottine, there are two near Lexington in Lee County, and two near New Baden in Robertson County.

Louisiana Sportsmen Win Game, Fish Reform

Neighboring Louisiana has become the latest state to adopt a commission form of wildlife administration, adopting proposals recommended by the nation's leading wildlife authorities for better state game and fish management.

Sportsmen of Louisiana, rallying behind the Louisiana Wildlife Federation, succeeded in getting a favorable majority of nearly two to one from the state's voters.

The new form of game and fish administration will be patterned along the same lines as that in Texas, with commissioners appointed by the governor. They in turn will hire a paid director.

But Louisiana sportsmen and voters went one step further in what Charles Callison, director of the National Wildlife Federation, termed "a progressive step forward in natural resource administration." Louisianans also voted to relieve the state legislature of the responsibility of setting

game and fish laws and place that duty in the hands of the Game and Fish Commission.

In Texas, the legislature still has the authority to pass game laws.

In speaking of the change in Louisiana, Callison said, "It has been demonstrated in many states that fish and game management involves technical problems that can best be handled by a small commission, meeting frequently."

The National Federation leader went on to point out that "a state legislature meets too infrequently and has too many other legislative responsibilities to keep up with rapidly-changing wildlife conditions."

The local Louisiana sportsmen's clubs vigorously supported the campaign for the new setup with paid newspaper advertising, radio announcements, and personal contacts, according to Charles W. Bosch, Jr., Baton Rouge, who heads the federation of state clubs.



Photo from MARSHALL NEWS MESSENGER

East Texas Blunder-or-Bust

It's one of a kind—this cross between an old-fashioned blunderbuss, a hammer shotgun, and the plumbing under the kitchen sink.

It was dreamed up by a couple of East Texas sportsmen, H. E. (Babe) Hines, Karnack, and W. L. (Beer) Smith, Marshall. They presented it to Morris Moore, also of Marshall, as a Christmas gift. The idea was to help their friend (?) hit more ducks on Caddo Lake.

The "blunder-or-bust" started life as a double-barreled hammer shotgun. It was altered slightly, to say the least, in Smith's machine shop.

The ends of the barrels now are split into a wide "V." Each is terminated with a flaring funnel. One

barrel points slightly upward. It is set for flying ducks and is labeled "Air Barrel." The other, pointing downward and designed for sitting ducks, is labeled "Water Barrel."

The front sight is nearly three inches high. There is a single ring sight at the rear, but an added feature is another pair of huge brass rings which may be brought into play when the occasion demands an additional aid for early morning "double vision."

The old hammer firing mechanism remains intact.

At last report, Moore, shown above, hadn't dared try to fire the contraption. And who blames him. He's not even sure it's legal! —Townsend Miller

Game Squirrels of Texas

The Gray Squirrel

By EVERETT F. EVANS

Last of a Series

THE gray squirrel is at home in the tall timber of the wooded bottom lands throughout most of the eastern half of the United States. The approximate western boundary of the gray squirrel range is a line from the southeastern corner of North Dakota southward along the eastern border of South Dakota, across eastern Nebraska, the eastern half of Kansas, the eastern half of Oklahoma, to the southeastern corner of Refugio County, Texas.

In Texas the approximate range of the gray squirrel is east of a line from the center of the northern border of Lamar County to the southeastern corner of Guadalupe County and southeastward to the southeastern corner of Calhoun County on the Gulf of Mexico. Such a line makes the range of the gray squirrel appear to be somewhat larger than it really is. Only the eastern portions of Lamar, Hunt, Van Zandt, Henderson, Navarro, Limestone, Robertson and Burleson counties should be included.

The former range of the gray squirrel in Texas included all of Lamar, Fannin, Grayson, Wise, Denton, Collin, Hunt, Van Zandt, Kaufman, Rockwall, Dallas, Tarrant, Ellis, Henderson, Navarro, Limestone, Robertson, and Burleson counties. Also in-

cluded in the former range were portions of Cooke, Montague, Jack, Parker, Johnson, Hill, McLennan, Falls, Milam, Lee, Bastrop, Caldwell, Guadalupe, Wilson, Karnes, and Victoria counties.

A mature gray squirrel weighs about a pound or one and one-fourth pounds and has a total length of about nineteen inches. Young gray squirrels attain their full growth at the age of six or seven months.

The gray squirrel has a tail about eight or nine inches long and uses it in much the same way as do other tree squirrels. These little forest dwellers take good care of their tails. Foreign material, such as grass and twigs, is promptly removed, and the tail is fluffed regularly. This is more than a matter of squirrel pride; it is good business in the contest for survival. Like the fox squirrel, the gray has slender toes and sharp claws adapted for climbing.

The typical color of the gray squirrel is pepper-and-salt gray. The underfur is lead color, with the outer hairs being dull gray at the base and shading into buff, blackish, and finally white at the tip. The head, back, and paws are gray tinged with rusty yellow. Ears, cheeks, muzzle, and upper parts of the paws are tan or yellowish

brown. The chin, throat, underpart of body, and inner surfaces of the legs are white. Like the hairs on the back and side, the long tail hairs are a mixture of tan, black, and white.

There is some change of color among gray squirrels in winter, but the amount of change is variable. In general, the winter coat has a silvery gray appearance, with the tan color being less conspicuous. Fur is longer and fuller in winter, and there is a projecting fringe of hair on the ears.

Hollow trees provide the best dens for gray squirrels. The young usually are born in hollow trees but may be moved later to nests of twigs and leaves. Squirrels begin to build these nests in May as places for refuge and resting. As the leaves dry, the nests may be seen easily. When the young squirrels are mature they construct nests for themselves.

Gray squirrels are born without fur and with their eyes closed. At birth the tiny squirrels do not have external ears, and the legs are undeveloped. For about six weeks they are completely dependent upon the mother's milk. At this undeveloped stage the little squirrels are easy prey of snakes and other predators. At the age of about six weeks the baby squirrels venture out to feed on flowers, leaves, and buds.

More young are born in late winter than at any other season. Litters also are born in July, August, and September. The number of young per litter varies from two to four. Under favorable conditions females usually produce two litters a year. Food supply may affect the number and size of litters, but the extent of this influence has not been definitely determined by research.

Young gray squirrels are half grown and fully furred at the age of eight or nine weeks, but they remain in family groups until they are about four months old. During this period of life they do not venture far from the home tree. Hunters know that the presence of one young squirrel may indicate that several others are in the same vicinity. The delayed separation or dispersal of families may be one reason why more squirrels are taken in May and October than in any other months.

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Pin oak (*Quercus phellos*) is the key food plant for gray squirrels in eastern Texas. Anything that affects production of acorns is directly related to the squirrel population. Vegetation in bottom lands where the gray squirrels live is more subject to frost than that on higher ground. A severe frost in spring may kill pin oak buds, causing a small crop of acorns. Ice storms break trees and reduce the nut crop. Shortage of acorns is believed to cause smaller litters, and lack of food definitely limits populations.

The hickory nut is a favorite food of the gray squirrel. Green nuts may be eaten in autumn before they are ripe enough to fall to the ground. The squirrel uses its sharp lower incisor teeth to open the shell and remove the kernel. Four openings are made, leaving the dividing partitions of the shell unbroken.

Other foods include walnuts, pecans, insects, buds, leaves, and flowers. The gray squirrel buries some of the nuts that it finds while feeding. The forepaws are used to dig a hole about three inches deep. One nut is placed in each hole and covered with soil and leaves or grass.

The gray squirrel normally feeds twice a day, in early morning and again in late afternoon. Feeding may continue after dark. Gray squirrels sometimes may be seen feeding during bright moonlight nights. Some hunters have observed that gray squirrels have a tendency to be more active on days following dark nights. Once started on a particular food, a gray squirrel will soon satisfy its appetite if enough food is available.

The daily feeding routine depends a great deal upon weather conditions. Squirrels are reluctant to face chilly temperatures and high winds. If conditions are favorable for feeding, activity begins at daybreak and almost ceases by 9 a.m. Gray squirrels spend much time on the ground digging in the soil for food. The food usually is eaten where found unless the animal is frightened. A squirrel handles food very skillfully with its forepaws, and very little is wasted.

Gray squirrels are gregarious. That is, they inhabit the same area in numbers and move about together in a rather close association. This habit may help them to defend their home

range against the larger and more pugnacious fox squirrel. Three gray squirrels have been observed fighting one fox squirrel, but one gray squirrel probably would not be a match for a fox squirrel. Squirrels may cooperate in defense against such enemies as hawks or snakes, but assistance usually is limited to giving the alarm.

The tendency to congregate in numbers makes gray squirrels easy victims of hunters and natural enemies. A field biologist of the Game and Fish Commission reported that thirty-four gray squirrels were counted in two trees and that one hundred grays were seen in a few trees and on the ground nearby.

Gray squirrels congregate where preferred food is abundant. They sometimes move from one pin oak area to another which has a better crop of acorns, or from pin oak to evergreen oak (*Quercus rhombica*). When the acorn crop fails, the squirrels near the Neches River move to shell bark hickory. Perhaps the main cause of local movements of gray squirrels is the food supply. These movements usually are not extensive, seldom more than four or five miles. It is probable that short range migrations are less than two miles.

The dates of the flowering and leafing of forest vegetation influences local movements of squirrels. They normally stay in densely timbered bottom lands in winter. As the plants on the poorly drained soils are the first

to begin spring growth, the squirrels feed there. The early-budding elm is one of the first trees to attract squirrels in spring.

When water recedes from flooded areas in spring the squirrels move in to search for acorns. There is no evidence that gray squirrels in sizable numbers move into upland areas, although individuals have been seen in pin oak timber more than a mile from bottom land.

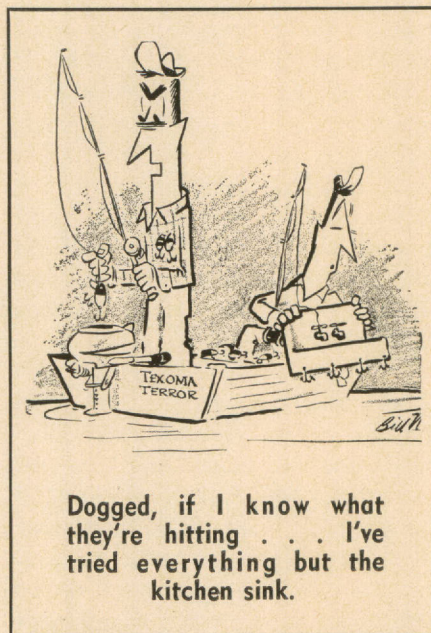
There are relatively few pecan trees in the bottom lands of East Texas, and good nut crops are infrequent. When a good pecan crop does occur, the squirrels congregate around the pecan trees if cover is near.

Wind, especially cold wind, affects squirrels more than any other factor of weather or climate. They will stay in dens without food for days rather than face the wind. In the northern states the squirrels go into a state of lethargy in cold weather. Texas squirrels become inactive for several days at a time to conserve energy but do not hibernate. Residents of southern Texas have reported that squirrels move out of areas damaged by hurricanes, but the extent of such movements has not been determined.

The home range of the gray squirrel may be one hundred acres or less. Pairs of grays have been known to roam over a circle with a diameter of one-half mile. This means that the animals normally may not go more than a quarter of a mile in any direction from the home tree. If good cover is available, squirrels may extend their movements in search of food. Also, they may abandon home trees to settle at a new site.

The gray squirrel normally is the noisiest of the tree squirrels. Its barking sometimes reveals its presence to hunters who creep through the woods or remain motionless listening for the chatter. There is no definite proof that barking of squirrels attracts natural enemies, but occasionally a squirrel may be caught as a result of its calls.

The gray squirrel seldom barks on the ground, but rather from the lower branches of a tree where the animal has the best chance to defend itself or escape.



Dogged, if I know what they're hitting . . . I've tried everything but the kitchen sink.

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Brown County Sportsmen's Club

. . . an organization that thrives on work

One of the most active and energetic sportsmen's organizations in the state is the Brown County Sportsmen's Club at Brownwood

Over 300 persons attended its annual meeting and banquet recently when the club celebrated its "seventh year of service."

Note the accent on the word "service." One official, in explaining the success of the club, says, "The members stay interested because we are always active in doing things constructive for the betterment of wildlife instead of just sitting around griping or asking someone else to do it for us."

Regular meetings are an important phase, and the club publishes its own periodical, edited by Ed McCrary.

Program for the annual banquet included wildlife movies by Jack Auld, Leakey; a talk by Eugene A. Walker, wildlife biologist, and election of 1953 officers.

New officers are President Charles

H. Eell, Vice-President Don Jordan, Treasurer C. O. Howe, and Directors Lucy Brown, Oran Evans, Ruel Crow, Lew Bennett, John R. Wood, and

A. J. Florey, Secretary V. H. Nodraft and Judge Advocate William O. Breedlove were reappointed for another term.

Outdoor Sportsmen Gain Friend In Washington's Official Family

Fishermen, hunters, and wildlife conservationists may be getting a real break in Washington's top-level official family

Governor Douglas McKay of Oregon, who is the new Secretary of the Interior under President Eisenhower, is an outdoors man. Game and fish enthusiasts could hardly wish for a better spot for one of their clan, for the Secretary of the Interior carries a big stick in the management of our natural resources.

It seems highly possible that Washington may at last be made to realize how important wildlife and the natural outdoors are to hundreds of thou-

sands of the nation's citizens. The outdoorsman has had few friends in high government previously.

Secretary McKay's knowledge of wildlife resources already has been recognized by his invitation to address the Eighteenth North American Wildlife Conference in Washington March 9 through 11. The conference is the most important annual international conservation meeting in North America.

As Secretary of the Interior, McKay will have charge of rational programs affecting public lands, migratory waterfowl, and other related natural resources



Wildlife Uprooted

By LAZENER
Director of Restoration

Wildlife was the forgotten loser when floods ravaged Central Texas, sweeping the lowlands clean of vital food and cover.

To residents of the Stonewall community in Gillespie County, Texas, the summer of 1952 was disappointingly dry. Grass was short and so was the peach crop. In spite of these handicaps, farmers and ranchers still hoped for gentle fall rains that would bring some relief and a promise of better things for 1953.

Tourists traveling U. S. Highway 290, from Johnson City to Fredericksburg, may have recognized some evidence of the drouth. They certainly failed to find the usually abundant supplies of delicious Hill Country peaches at packing houses and roadside stands.

Mostly, they admired mile after

mile of the tree fringed Pedernales River alongside the highway. The experienced hunter recognized its value as wildlife habitat.

Even through the dry summer, pools of cool water remained in frequent and shady stretches of the river—water for wildlife. Lofty pecans were developing their nut crops and wide spreading liveoaks had acorns galore—food for wildlife. Luxuriant willows, graceful sycamores and hardy cedars all helped to fill in the landscape from river's edge to rocky ridges—cover for wildlife.

The second week in September brought an abrupt end to the tranquil scene. Instead of gentle fall rains, a

gutting downpour of 17 to 20 inches fell over the Pedernales watershed in Gillespie County, all in the space of a few hours. The run-off piled up and tore its way down the river.

From Fredericksburg to Lake Travis on the Colorado River, gullied soil, tumbled rock, uprooted trees and tangled fences remained in the wake of the flood.

Water caught in Lake Travis was welcomed by lakeside residents and fishermen, hydroelectric people, and downstream rice farmers, but it collected a high toll from soil resources and property along the Pedernales. Flood damage followed a similar pat-

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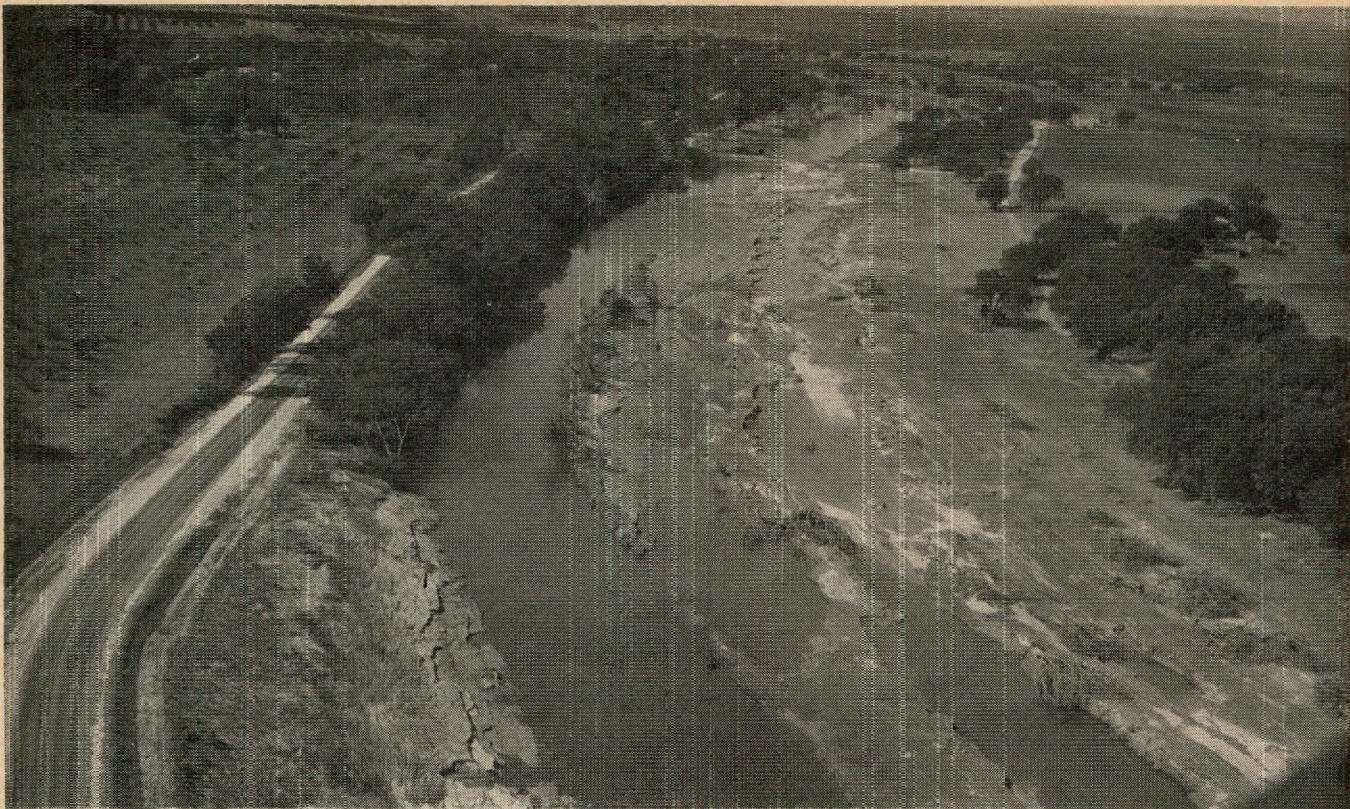
The flood swept away the bare topsoil from this peach orchard, leaving only gullied subsoil and rocks. In some places, ground that was covered with life-giving weeds and grasses fared little better.



The flood scornfully dumped this sign into a pile of the uprooted trees and plants it was designed to protect. Most of these photos were taken near Stonewall in Gillespie County, where Highway 290 parallels the Pedernales River.

This huge oak provided acorns for deer, turkey and squirrels for over a century. Its sturdiness was no match for the fury of the flood, and wildlife lost an irreplaceable food source.





Scene of some of South Texas' worst destruction was the narrow bed of the Fedsnales River. This is an upstream view between Hye and Stonewall, Gillespie County. U. S. Highway 290 is at left. Note how trees were

felled at right and how soil was stripped of grass on bank at left, depriving wildlife of food and cover. In many areas of Texas, such bottom lands provide the only suitable wildlife habitat.



Pressure on this giant pecan tree plucked out a mass of uprooted roots, and soil. The hole was approximately 5 feet deep and 12 feet wide.



Note accumulation of uprooted brush and trees in crotch of tree, center, towering well over man's head. The roots of a large overturned tree are at left. These had provided wildlife food and cover.

tern in other Central Texas regions.

The newspapers for weeks devoted page after page to reporting in word and picture the loss of *human* homes and food crops. Little was said of the destruction done to *wildlife* shelter and food sources.

Wildlife, too, took a terrific beating from the flood. Turkey roosts, already becoming more and more limited, were swept downstream. Food-producing pecans, oaks, grapevines, and other species were destroyed. Deer and squirrels, too, felt the effects, both as to food and premium cover.

To repair the damage to wildlife habitat would require many years and high costs invested in soil rehabilitation and protection as well as in a planned program of tree and herbaceous plantings.

Loss of this habitat means simply a loss of wildlife. And a similar loss from floods can happen again anywhere, and does occur periodically, for, unfortunately, the lowlands provide the last remaining areas of wildlife habitat in many parts of the state.

Protection against such heavy rains is difficult and expensive. Scattered and partial individual efforts cannot accomplish much. Success along that line can come only from unified action covering the entire watershed in question, with particular concentration on the upper portions of the drainage area.

It all lays another and stronger accent on the need for contouring and terracing, the installation of more farm ponds and series of smaller dams at strategic points.

The application of all known feasible methods of slowing down the runoff would spread the flow of water over a longer period and reduce it to a volume within the reasonable capacity of stream channels.

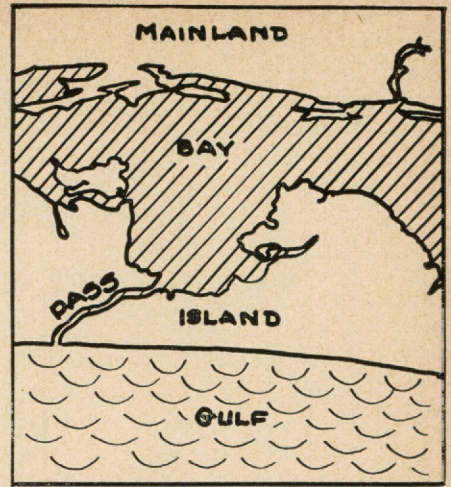
Rather than accept an uninterrupted future of "Down the River" action, plans and efforts need to be revised to the point of reversing them.

How Fish Use

Coastal Passes

Fourth of a Series

By ERNEST G. SIMMONS
Marine Biologist



What's the most plentiful fish in the bay? Ask any fisherman this question, and chances are you will get this answer: "The catfish or the hardhead, barbed trout, tourist trout, etc."—all names for the same fish.

This answer would not be correct. Golden croaker abound in all bays, in passes, and in shallow waters of the Gulf of Mexico. They far outnumber that greatly maligned catfish.

This article is another in a series telling the story of fish movements through passes to Gulf waters. In it will be discussed the golden croaker and its cousin, the spot or flat croaker. Movements of each are identical except in degree.

On several occasions, the author

and his crew at the Cedar Bayou fish trap were awakened by a loud droning or grunting sound. Investigation in each case showed that this noise was made by croakers, caught in the trap as they moved to the Gulf.

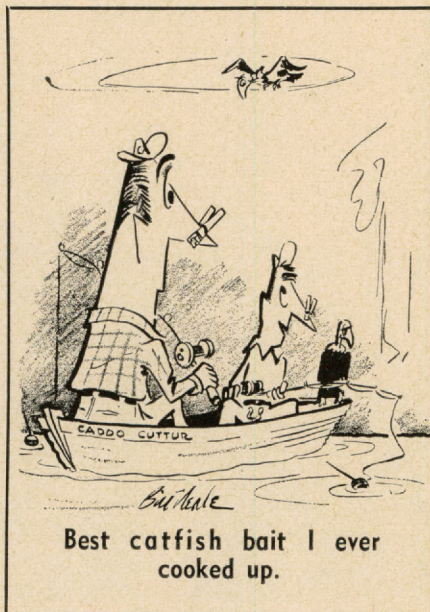
These fish were not large, but they were unbelievably numerous! All were counted and released and the total usually ran above 10,000. In several cases, it was above 25,000, and once it reached 35,000! What a job that was—all those fish to be counted and set free. All were small and were not going out to spawn.

In September, about 20,000 mature croakers went through Cedar Bayou Pass to Gulf waters to spawn. Later, literally millions of minute young drifted back through this pass into the bays.

Spot (or Flat) Croaker also utilized this passageway to and from Gulf waters, but they were fewer in number by far.

In summary, it appears that:

1. Mature golden croakers spawn in the Gulf of Mexico just outside passes.
2. Very small croakers move into bays through passes soon after hatching in the fall.
3. Thousands of croakers, less than one year old, move to Gulf waters in May and June.
4. This movement may be caused by increased salinity of bay waters.
5. Spawning fish move out into the Gulf through passes in September.
6. Flat croaker or spot croaker movements closely parallel those of golden croaker.



Is Early Season Fishin'

Then take solace from the poets, for "when winter comes, can spring fishing be far behind?"

As the lull between the hunting seasons and warmer weather nears an end, the average Texas outdoorsman begins to remember more vividly than ever the thrill of a fighting fish. He can almost "feel" the summer air and the excitement of rigging up tackle for a day of fishing. If summer air is a necessary part of it, there will be a

few more weeks to wait. But don't forget that late winter and very early spring brackets one of the best periods of the whole year for luring lunker black bass. And catfish, crappie, and bream begin to stir to the hunger call earlier than you might think. Why wait?

Just to whet your fishing appetite, here are some photos of catches made last summer in Possum Kingdom Lake.

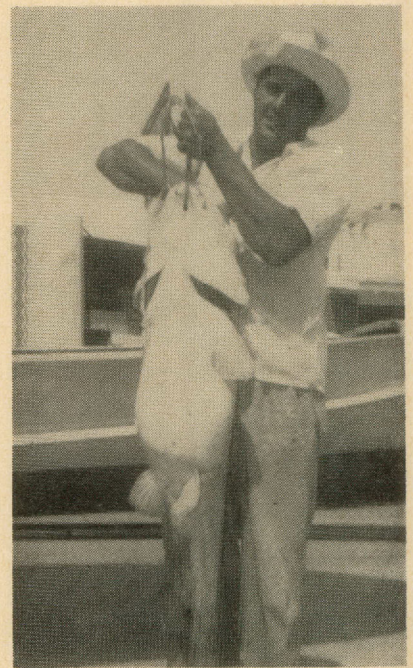


Buddy Crawford, right, displays a 52-pound catfish he and Al Meadows caught on a trotline baited with carp. The two Dallas fishermen also landed two others, weighing 49 and 38 pounds, in three nights last summer.

Henry Richardson, Fort Worth, shown at left with 13 big bass up to 6 pounds, landed strings like this regularly on small deep-running lures.

Another regular who knows how to get the big 'uns consistently is J. D. Crow, Dallas, shown with a 6 pound 12 ounce bass, below left.

Dr. W. D. Battrell, Mexia, below right, whittles his own lures to bring in strings like this.



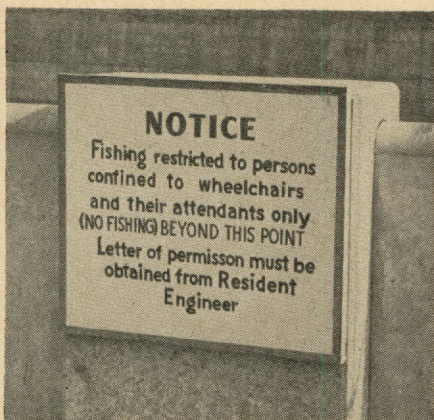
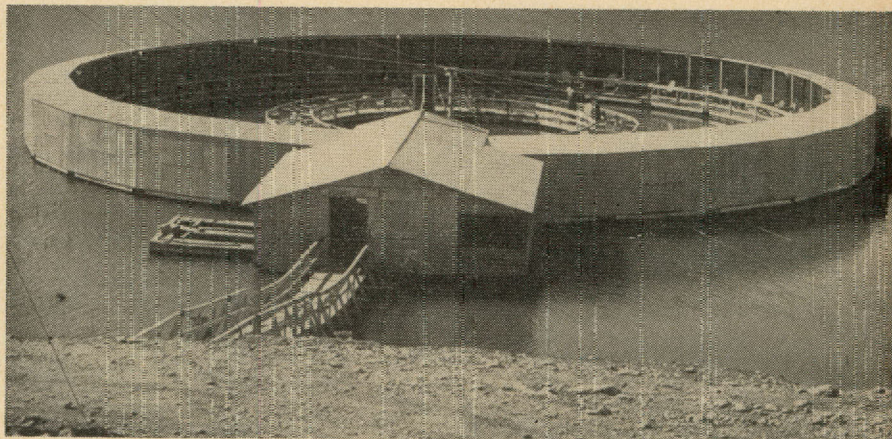
Photos by Lowe Fawks



Fever Bothering YOU?

Lake Texoma Provides a Wintertime Fishing Pier . . .

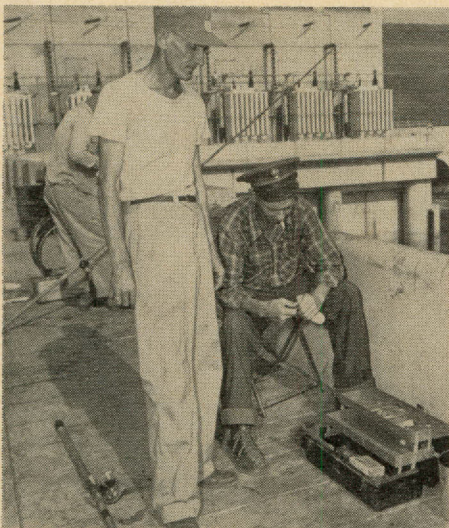
Bob Johnson, an enterprising camp operator at Lake Texoma, has provided die-hard winter fishermen with an enclosed pier. Located at the west end of Roosevelt Bridge, it provides everything necessary, including comfortable chairs. Originally built as a circular open pier, Johnson covered and walled it in time for fishing this winter. Catches have been good.



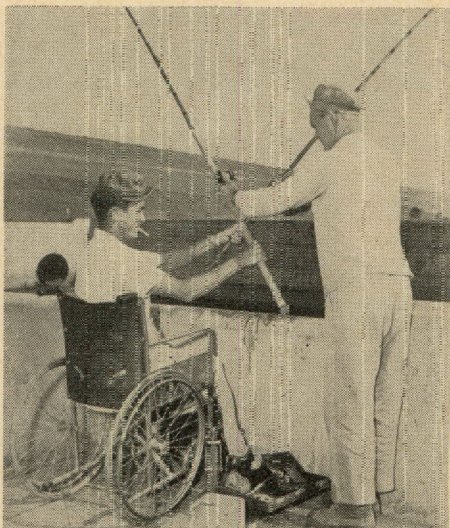
. . . and a Place Where Disabled Veterans Can Fish

Lake Texoma also offers disabled anglers a spot of their own. This haven is located at one of the lake's best fishing places, and consistently good catches, particularly of giant catfish, have proved it was well chosen. Disabled veterans, who are permitted to bring along an assistant, have come from all over the state to try their luck.

Photos courtesy John Cliff, THE DENISON HERALD



Charles Rogers, crippled by wounds he received in Korea, has his dad along, but, once settled at his fishing station, seems to need no help in baiting his hook.



Harrel McCurdy, disabled vet of World War II, is handed a freshly-baited rod by his "legs," J. D. Cleckler. He'll handle the fish, himself, thank you.



James (Bill) Horton journeyed all the way to Texoma from Big Spring to land this 32-pound catfish. Catches like this are not rare.

By JAY VESSELS

WHOA WARDEN!

The El Paso *Times* carried this AP dispatch from Las Cruces, N. M.: "Jerry G. Waltrip of Ruidoso was fined \$150 and sentenced to 45 days in jail on pleading guilty to shooting at a horse he thought was a deer. It's not that Justice of the Peace M. H. Herrera, who imposed the stiff sentence, thinks so much of horses—but this one was ridden by Richard Allgood, a state game warden."

JIMMIE CARRIES ON

Jimmie Burrows, the Kountze schoolboy naturalist who was written up in the December issue of *Texas Game and Fish* magazine, still is in business. He wrote this letter to the Commission:

"I have caught a bird. Mrs. Reid said it looks like a pheasant. I think it looks like a prairie chicken. Could you give me permission to keep it. I have a salamander, too. Would you see about that, too?"

From this corner's recollection of how Jimmie's mother reacted to his collection of snakes, she now will eagerly cooperate in housing a mere salamander.

MAN LOSES A FRIEND

The little old man visiting in the combination filling station and store at Perrin eagerly told the stranger where the road turned off Highway 281 toward Possum Kingdom. Then he said: "If you don't mind, I'd like to ride down to where it turns off."

In the car, the little old man's face became sad, his voice sadder.

"Just been down there checking on one of my fox hounds," he began. "Got hit by a car but managed to drag himself off the highway. No help came, though, and that poor dog just laid there three and a half days dying, and it a rainin' and cold

every day. Laid through it all and then died."

He shook his head mournfully. "If I just could have known he was there."

TALES OF TAGGING

Those sheepshead do get around, even though the yarns about them showing up in fresh water areas sometimes go unsubstantiated. Take the one just reported by Ernest Simmons, aquatic biologist, working out of the Game and Fish Commission marine laboratory at Rockport. This sheepshead was caught by a sports fisherman off Freeport, which is 170 miles from the point where the fish was tagged in Laguna Madre. The fish was caught five and one-half months after it was tagged. It weighed three and one-half pounds when tagged and five and one-half pounds when caught.

FISHING DATA DELUXE

The ranks of Texas outdoor writers includes persons in assorted professions. But the Abilene *Reporter-News* believes it has the only college professor serving in this capacity. His name is W. D. Bond, member of the Hardin-Simmons University faculty. Writing under the standard heading "HOOK, LINE AND . . .", he recalled that on one Thanksgiving day Lake Abilene yielded a five-pound black bass for his holiday bag. But he scouted the desirability of cold weather fishing:

"If you have read any of my previous comments on fishing in cold weather, you are well aware that I am no devotee of such things. I almost said such is a folly.

"Of course I am not going to waste a lot of breath arguing with the fellow who devotes his time, effort, energies, chilled frame, and aching hands and feet to the grand old sport

of fishing. If he wishes to be a martyr to a cause, that's all right. But as for me, nothing doing.

"Angling is a most desirable and admirable sport, when the angler is comfortable. I must contend for comfort, at least a fair degree of it, in the pursuit of angling enjoyment. A measure of comfort while fishing is a concomitant of the fun and enjoyment the sport is supposed to be. If not, then my fishing 'philosophy' is all confused.

"x x x Ruskin said, so I have read, something like this: 'There is no such thing as bad weather—just different kinds of good weather.' He evidently did not have fishing in mind when he made so rash a statement. It is hard to believe that he ever did any fishing, wouldn't you say? Else he would have modified his declaration."

WARDENS RECOGNIZED

Texas Parade magazine carries an article in its January issue about Texas game wardens. Game Warden John Wood of Brownsville is cited as typical of the versatile men now serving in this capacity . . . By the way, Warden Wood whose incidental talents range from Boy Scout leadership to penal sociology, has perfected a new detail. He's the man they call when someone drowns. Wood has his own special drag hook; has recovered seven bodies with it.

TEXAS SUCCESS

Another home-grown magazine, Texas' own WESTERN SPORTSMAN, is spreading out. Joe Austell Small, well-known outdoor writer who publishes the magazine in Austin, will have a new periodical on newsstands all over the nation next month. It's a deluxe slick paper job called TRUE WEST, specializing in all-

Press Views

Game Notes

in 1935, showing that there is hope for these birds."

REASON FOR SMILES

Out of the heavy routine in the game restoration department have come some reasons for definite optimism. These concern the hunting luck enjoyed in some counties which the Commission had restocked with deer and turkey. Six years ago some of these counties had no deer. Then restocking worked successfully, and now home grown venison is gracing the dinner tables.

PRECOCIOUS POOCH

Associated Press item in the *Houston Chronicle* under a Woodstock, Ill., dateline:

"A hunting dog shot a hunter. Fred Addante, Chicago, was hit in both thighs by pellets fired from a shotgun. A hunting companion placed the gun on the ground. Their dog struck the gun, causing it to discharge."

FISHING GOOD FELLOW

Field and Stream magazine devotes a full-scale article to Andy Anderson, outdoor editor of the *Houston Press*, and his activities in behalf of helping armless and legless war veterans to get in their fishing time.

ARDOR STARTS FIRE

This Toronto, Canada, news report was relayed via the Missouri Conservation Commission:

"Wildlife problems can get complicated, as the Ontario Department of Lands and Forests discovered after investigating a forest fire near Sand Lake. Giving substance to the adage that love is blind, a bull moose mistook the bellow of a diesel locomotive for the challenge of a rival and climbed on the tracks to do battle. The engineer threw the emergency brakes, sending hot ore from a gondola car spraying along the tracks. A bit landed on a mouse nest on the shoulder of the road bed, and in a minute a fire had started. A complicated business, this wildlife profession!"

HUNTER DEPARTMENT

Senator Carlos Ashley believes the experts on human behavior are passing up a fine opportunity when they

fail to study the antics of the rank and file of hunters. The Senator, who has a ranch near Llano, suggests it might be the fresh air "because they (the hunters) really take their hair down when they get out into the wide open spaces." "And," he added, thoughtfully, "I know all those who shoot at everything that moves do not drink strong spirits."

LURE BECKONS SUCCESS

The *Denison Herald* carried an item about how a man in nearby Durant, Oklahoma, cut a beetle bait out of a broken hoe handle and caught so many fish with it that it now requires 109 dealers in the Southwest to market the lure.

FLAMINGO PROTECTION

A New York *Herald-Tribune* report in the *Dallas Times-Herald* stated:

"The beginnings of a long-range project to protect the American flamingo, the weird, beautiful bird which ranges from the Bahamas to Venezuela, have been described by Robert P. Allen, research ornithologist for the National Audubon Society. Mr. Allen reported that prior to the nesting season last spring there were 23,110 American flamingoes. This would seem like a large number, but by visiting deserted flamingo cities and studying old records he estimated the flamingo population was once 164,000 birds. x x x x British and Americans have formed the Society for the Protection of the Flamingo in the Bahamas, and wardens are guarding the nesting colonies there. Similar steps are being taken in Yucatan."

KEEPING DUCKS LIMITED

Bill Walker, in the *Houston Post*:
"There is no state law limiting the time game birds or animals may be kept in storage. But any person accepting game for storage must keep a record, giving time of storage, name and address of person placing game on storage, and kind and amount of game stored by each individual. A federal law prohibits the possession of migratory birds and waterfowl longer than 90 days after the close of the season (December 29)."

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true adventure tales of the West, old and new.

Small's policies, based on a firm backing of game and fish management policies of benefit to the outdoorsman, have made his older WESTERN SPORTSMAN popular all over the nation.

DUCK DIARY

Two big events in the life of a male redhead duck occurred in widely separated areas, according to Game Warden M. B. Mullinax of Rockport. The duck was banded August 26, 1951, at Delta Marsh Portage, Manitoba, and was bagged November 5, 1952 at Aransas Bay, near Rockport, by Julio Perez of Fulton.

THE HOME FRONT

AP item under Huntington, Pa., dateline—

"A 200-pound, eight-point deer crashed through a picture window into the home of Dr. and Mrs. William Todd. It demolished three rooms of furniture before it was shot by a game protector."

TRUMPETERS RALLY

Upshur Vincent in the Fort Worth *Star Telegram*:

"Next to the biggest bird in the United States is the whooping crane; but the biggest bird is the trumpeter swan. And that accounts for the confusion which recently has been apparent over the numbers of each species still in existence. There are only 21 of the whooping crane in the Aransas Wildlife Refuge near Austwell and two in New Orleans, and these are all that are left of the big birds in the world. Of the larger waterfowl—the trumpeter swans—there are 571 birds known to exist. This compares with a total of only 73 trumpeter swans that were counted

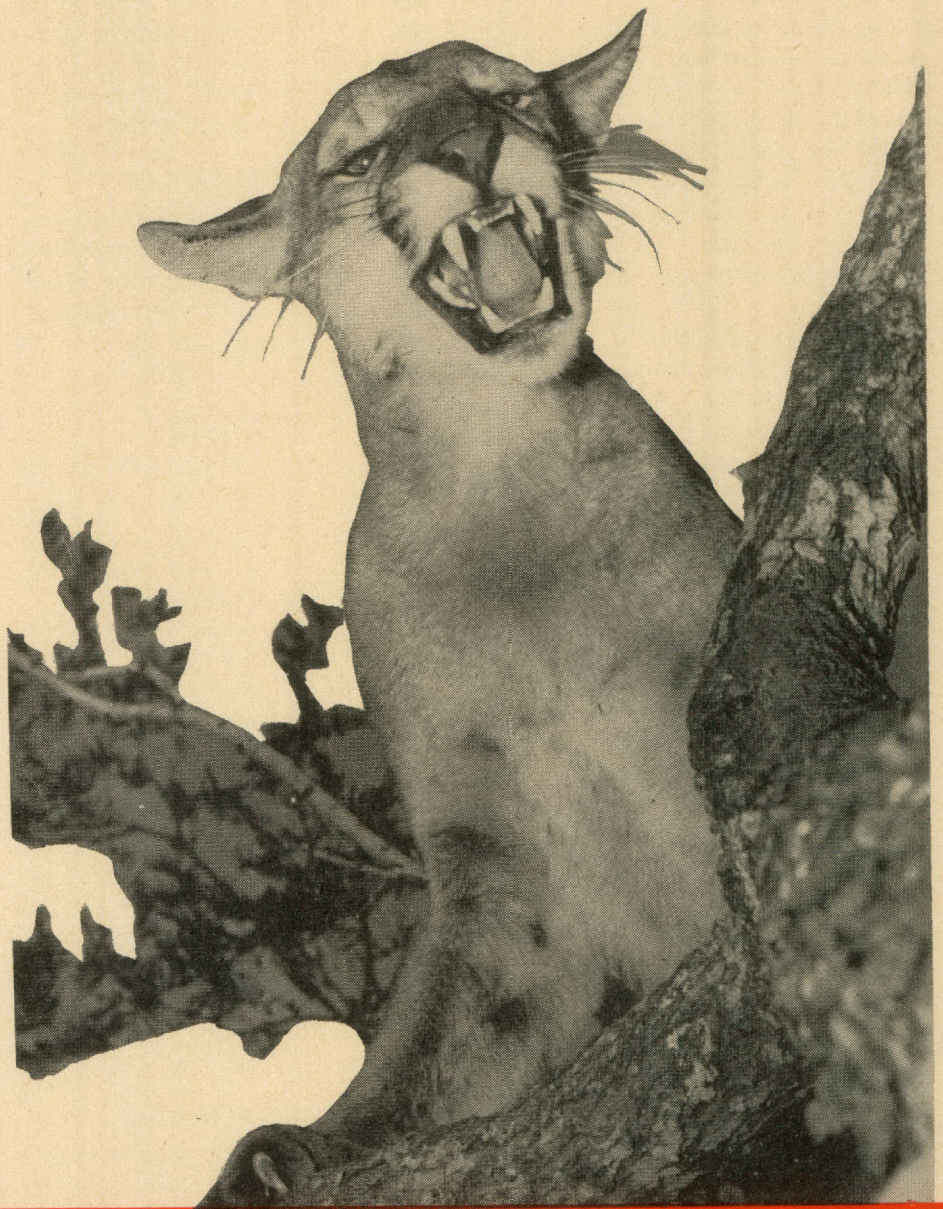
**Texas' mountain lions are fighting a losing battle
against civilization.**

THE MOUNTAIN

LION

IN

TEXAS



By RAY S. MESCHKAT

PUMA, mountain lion, cougar, or panther—call it what you like, but it is still the same large, tawny-colored cat (*Felis concolor*).

The puma is native only to the Western Hemisphere, and is one of the largest flesh-eating animals of the Americas. In its entire range, which at one time covered most of the continents of both North and South America, the puma is second in size among cats—second only to the jaguar.

At one time, the cougar probably lived in all parts of Texas. Since white man's entry into the state, however, it has been relentlessly hunted, killed, and reduced in numbers. Its range has been reduced to such great extent that it is now usually found only in the more remote, inaccessible, and thinly populated areas of south and west Texas.

Early records concerning the puma's status in Texas are not too numerous. Cope reported in 1880 that this big cat was common throughout the state. Bailey found it to be quite common in the Trans-Pecos in 1905.

At present its range is largely restricted to the more remote western and southern parts of the state, mainly west of the Pecos and along the Rio Grande Rivers. There are, however, periodic reports of one being seen or evidence of one found in the more populous and settled parts of the state.

A puma was killed near El Campo, Wharton County, in February, 1948. In 1950, George Kittley, Trapper, U. S. Fish and Wildlife Service, reported a puma in the river bottoms of Colorado County.

In those regions of South and West Texas where the puma is more plentiful, they frequently are trapped or tracked down with dogs and killed by federal and state predator control agents. Kills by hunters, particularly with the aid of hounds, are not infrequent.

The young of the puma usually are two in number, but on rare occasions five have been observed in one litter.* There apparently is no definite breeding season, but observations indicate the greater portion of the young are born in mid-winter or early spring. The gestation period is said to vary from 91 to 97 days. The puma seems to prefer a cave or rocky recess with a single opening as a den for the young.

The puma's diet consists almost entirely of animal matter, but it occasionally eats grass and herbs. It is known to kill and eat a wide variety of animals including mule deer, white-tail deer, rabbits, badgers, porcupines, skunks, foxes, beavers, birds, and domestic animals. Investigators have reported, however, that the puma has a decided preference for deer.

Many people argue that the puma kills large numbers of game animals that would otherwise be utilized by hunters. Others argue that the cougar is beneficial in that it seeks and kills only the weaker, older, crippled, diseased, or otherwise unfit animals; thereby acting as

* From "The Mammals of Texas" by Dr. W. P. Taylor and Dr. W. B. Davis.

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Bob Snow of the Game and Fish Commission's predator control force prefers hounds for bringing a marauding mountain lion to bay. He decided to take this one alive after it was treed by the dogs. Snow is shown here getting ready to pull it from a tree. A long stick was used to place the lasso around the cat's neck.

These six mountain lions were trapped after raids on deer herds. Trapping was done as part of the Game and Fish Commission's predator control program. Warden Supervisor Johnny Hearn, center, led this party and was assisted by Ruf Bishop, left, and Warden Jim Pond.



Mountain Lion

● Continued from Preceding Page

a selector, permitting only the more fit to survive. This is believed by some to improve the "sporting qualities" of game.

While both arguments have merit, neither have been proven wholly true. Hibben, on examination of 11 deer killed by lions, found that the deer were afflicted in some manner before they were killed. He felt that there was some relationship between the physical condition of the deer and its falling victim to the predators. This perhaps is true, for the weaker or sick animals are not as alert as healthy individuals. But whether or not the lion actually seeks weak or sick animals is questionable.

It is true that the lion levies a large toll on game animals. Estimates have been made that one lion will kill 50 or more deer a year, or an average of one per week. Dr. W. F. Blair, Department of Biology, University of Texas, reports that the lion is hunted in the Davis Mountains more for its destructiveness to deer rather than the damage done to domestic livestock.

To some, 50 deer a year may seem tremendous, but here another factor becomes significant—the reproductive potential of deer. Given some protection they tend to reproduce very rapidly, often overpopulating their range. When this happens, they literally "eat themselves out of house and home."

The Kaibab National Forest in northern Arizona is a classic example of what can happen when deer, lacking the control of a natural predator,

become too numerous. This area was remote and inaccessible to hunters. Drives, trapping, and even excessive hunting, which was encouraged by the authorities, was ineffective in reducing the herd which was too large for the available food supply. The result—several thousand deer starved on the Kaibab range during the severe winter of 1928-29, but worse, the range was severely damaged by over-browsing and over-grazing. The carrying capacity was reduced to a fraction of the original number.

It does not seem economically sound for the hunter to pay to have game produced only to have it killed by mountain lions, but it is worse to have large game populations that will eventually destroy their habitats and themselves as well. For this reason, it might be well for us to tolerate a few pumas on certain remote game ranges to help keep the game animals within desirable numbers.

It is true that certain pumas become livestock predators, but unfortunately the destructive actions of one or two individuals gives all lions the reputation of being livestock killers. Hibben said one lion that he trailed for some time subsisted almost entirely on porcupines. During his two year investigation, he found very little evidence of puma predation on livestock.

There can be no compromise, however, when a puma becomes a stock killer; it must be destroyed. One lion's periodic predations would affect a large rancher very little, but one lion could virtually ruin a small rancher.

The idea of placing the mountain lion on the game animal list in Texas

has been suggested. This is not new, but it is not likely to be done soon because of public sentiment. Classification of the puma as a game animal might keep this species from becoming extinct in Texas. To the landowner wishing to cater to lion hunters, the puma might become an asset instead of a liability. One state has already added the mountain lion to its list of game animals.

In any event, this animal perhaps should receive some consideration of its being allowed to exist in Texas, at least in small numbers. Otherwise, the puma may travel the same road as the heath hen, passenger pigeon, and other extinct species.

Texas Tracks

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BIG BIRD COUNT

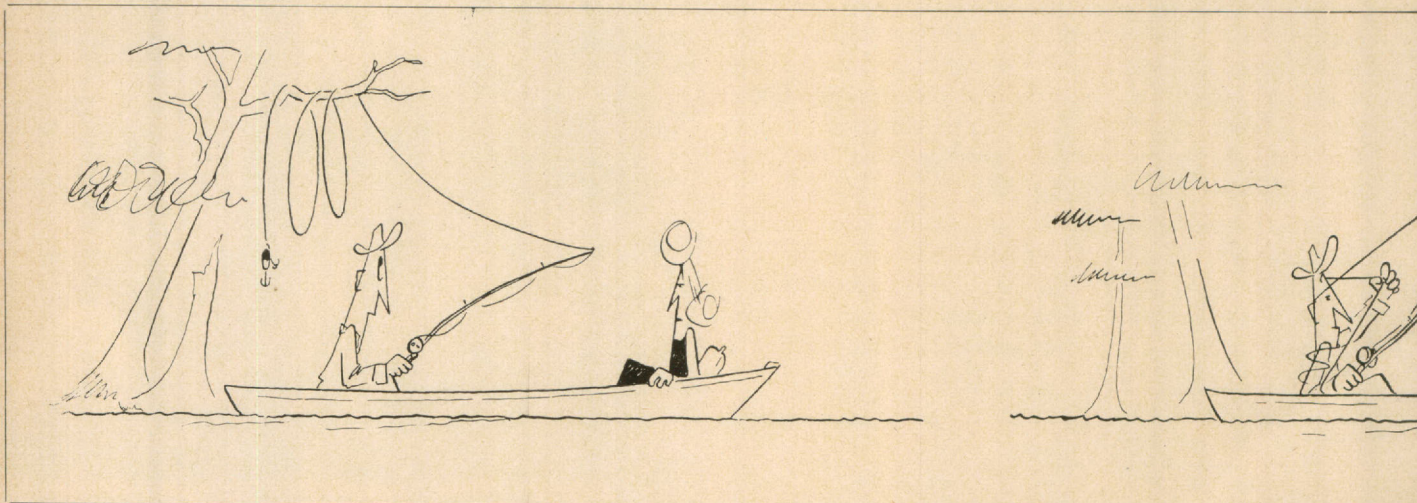
By land, by air and by sea, Julian Howard, manager of the Aransas National Wildlife Refuge, keeps count of his precious winter time guests.

He has been particularly concerned over the Whooping Cranes. And they don't always cooperate. Sometimes a few disappear from Black Jack Peninsula. But generally, Howard spots them a few miles away on Matagorda Island.

A heavy wild goose population has spiced interest this winter. Howard reported that geese, mostly Canadas but including a sprinkling of snows and blues, have been feeding on the green stuff along the bay shore.

LATCH STRING IN

A Port Arthur man has visited relatives in the Piney Woods of East Texas twice within six months. Both times he was arrested for hunting deer illegally. Same warden, too.



The Gray Squirrel

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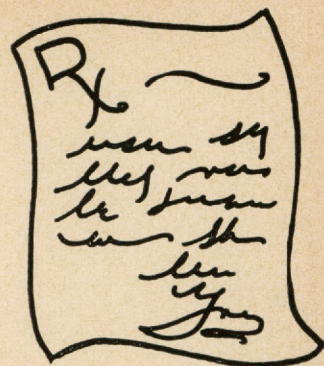
The squirrel voice is somewhat more musical during the mating season. Squirrels apparently use their voices to keep in touch with each other, and the need for maintaining contact may be one reason for congregating.

Playfulness is a trait which seems to be highly developed in squirrels. This behavior may be observed throughout the year and is not limited to seasons of reproduction.

The natural enemies of the gray squirrel include the Cooper's hawk, red-shouldered hawk, marsh hawk, barred owl, rattlesnake, chicken snake, and coach whip snake. Where the gray fox and bobcat are present, they prey on squirrels. The red-shouldered hawk and barred owl are generally abundant over the Texas range of the gray squirrels. On the basis of field observations and research, Phil Goodrum, formerly a field biologist of the Texas Game and Fish Commission, concluded that these two birds may be the principal enemies of the gray squirrel. He pointed out, however, that there is not enough available evidence to prove this.

Diseases and parasites probably do not seriously affect squirrel populations unless associated with lack of food or actual starvation. A good habitat with adequate food, water and cover is the best protection against diseases, parasites, and predation. Some predation is beneficial because it removes squirrels that do not have the qualities necessary for survival and production of healthy offspring.

Plug for an Oldtimer



By W. B. HUMPHRIES

If you are a hunting man, you know the thrill that whirring wings bring and the keen pleasure of bringing your gun up and lining the target up with your gunsights.

Perhaps you are a pump gun man, or maybe it's an automatic. At any rate you have at your trigger finger's control six quick shots. Those could be fired either at six different birds, if you are that good, or all at one bird, if you are a duffer.

But if you are a sportsman, you obey the game laws of the federal government, and you have your gun plugged to a capacity of only three shots.

If you are along in years and have pushed yourself too hard, as men will, you may have overdrawn on your health and energy account and "coronarily occluded."

Your doctor, aided, abetted, and encouraged by your family, will have

told you what to do. Most of these things will be "don'ts." You won't like it, but if you have any gumption, you will give better than lip service to their advice.

However, you are apt to observe that what you have gone through has placed more obstacles in your way than the doctor has.

You can't go into high gear from a standing start as you once did. You can't let yourself get all steamed up about the complete idiocy of those nuts who not only persist in supporting the wrong candidates but also are so lost to the rules of decency as to publicly proclaim their ignorance. You can't get too enthused in the pursuit of a prize buck or a covey of quail.

You will discover that time and nature have placed a governor on your engine to slow you down.

In short, Brother, your magazine has been plugged back, too.



Too Many Children

"Methods of the sports fisherman are inefficient. If hunter's tried to catch squirrels by dangling a pecan at the end of a line, we wouldn't need a closed season on squirrels."

WASHINGTON, D. C.—"Throw the little ones back to grow!"

Not many years ago that was a cardinal rule of sportsmanship among anglers. But if you still think it good conservation to turn back the little fish you catch, you are falling behind the times. The reverse may be true in most inland waters.

The outstanding development in modern fisheries management, according to the National Wildlife Federation, has been a trend toward more liberal fishing regulations. Open seasons have been getting longer, size limits disappearing—despite the fact that twice as many folks are going fishing these days as a decade ago.

The Federation is talking about sport fishing, or hook-and-line fishing. Mass commercial methods, such as netting and trapping, constitute a different story.

The trend toward more liberal fishing rules is based on two scientific facts about fishes.

One is that fishes are among the most prolific of animals. Under natural conditions they need no protection to repopulate or even over-populate the waters. A pair of wall-eye pike, for example, may produce 50,000 offspring in a single season. Bluegill, black bass and other members of the sunfish family bring off babies at the rate of 5,000 to 25,000 or more per year.

The other fact is that only a scanty few of every big hatch can ever grow up to whopper size, even if there were no human anglers. This is because fish have to eat in order to grow. In the competition for food and living space, thousands must fall by the wayside or be eaten by their brothers in order that a dozen or so may mature.

Recognition of these facts made former closed spawning seasons and minimum length limits look silly.

Why forbid fishing during spawning

season, when the fishes always overdo the restocking job anyway? And why protect the little fishes, when removing some of the youngsters only relieves an overcrowded situation and permits others to grow up? Besides, since most little fishes will never get to be big ones anyway, it is a waste not to keep them, once hooked.

The nationwide trend toward greater freedom for anglers has been documented by Dr. R. W. Eschmeyer, executive vice-president of the Sport Fishing Institute.

Dr. Eschmeyer, as chief fisheries investigator for the Tennessee Valley Authority from 1938 to 1950, had a great deal to do with starting the trend. After he proved that sportsmen were taking only a small percentage of the finny crop, the big TVA impoundments were thrown open to year-around fishing and size limits were discarded.

Dr. Eschmeyer points out the rather obvious fact that sport fishing methods

are inefficient. That, of course, is what makes it sport.

"If hunters tried to catch squirrels only by hiding behind a tree and dangling a pecan at the end of a pole and line," he commented, "we wouldn't need closed seasons on squirrels."

The former TVA expert cited the example of experimental Lake St. Mary's in western Ohio. A few years ago St. Mary's was overstocked with stunted crappie, mostly too small for angling fun. All restrictions were lifted and the fishing has steadily improved.

In general the Southern states were the first to liberalize. Fish grow faster, spawn at an earlier age, and year-around angling is both practicable and pleasurable below the Mason-Dixon line. Up north the winter freeze-up enforces a practical closure, except in places where ice-fishing is popular.

Even in the north the trend favors the fisherman. North Dakota not only permits anglers to keep the little ones, it forbids throwing them back.

An exception to the trend is trout fishing. Trout thrives only in cold waters, where natural production was never high.

Dr. Eschmeyer also believes that most northern states are wise in keeping protective limits on predator species like muskie, northern pike and walleyes. These predator fishes are needed to help keep more prolific kinds in check. Popular with sportsmen, muskies and pike are likely to be depleted by heavy selective angling.

Dr. Eschmeyer agrees there are places where closed seasons are needed, but he believes length limits are rarely helpful. The Sports Fishing Institute leader pointed out that most states now have competent research men keeping tab on fish supplies. "The state fisheries men know what they are doing," he advised anglers. "Depend on them."

HAVE YOU CHANGED YOUR ADDRESS?

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

Name

Old Address

City, State

New Address

City, State

Did You Know That . . .

The "wings" of flying squirrels are not true wings at all, but simply unbraced folds of skin along the sides of the body, attached to the front and hind legs.

* * *

A bird's feet are so constructed that the foot is forcibly closed when the leg is bent. Hence birds maintain a steady grip on limbs or perches even when asleep.

* * *

Frogs are able to sing under water because they normally sing with their mouths and nostrils closed.

More menhaden are caught in the United States each year than any other fish. They are used as food, fertilizer, and a source of oil used in making leather, steel plate and linoleum.

* * *

In September, 1632, Virginia became the first state to enact a law protecting game.

* * *

The marsh hawk roosts in trees only during the nesting period. At other seasons this bird roosts on the ground, preferably in sedge fields.

In order to make a tablespoonful of honey, a bee must visit about 2,000 flowers.

* * *

The Humming bird occurs only in North and South America. There are over 500 species in South America, but only one, the Ruby-throat, is found in North America east of the Mississippi.

* * *

Spiders of England and Wales are said to eat 22 trillion insects a year. This is a harvest weighing more than the human population.

Cunning Tricks

• Continued from Page 9

tethered to a stake by a shoestring he needed no further explanation. And by the same token he understood that his wife possessed one of the most vital of all hunting instincts: the faculty of dealing resourcefully with difficulties.

The acuteness of certain faculties and the dullness of others in the same animal is a constant source of wonder to the hunter.

For example, the deer depends for his protection almost wholly on his nose and ears, while his eyes seem to be little better than useless. More than once have I chanced to be sitting in an "open" when a deer approached me from the direction of the wind. He could not smell me, and so long as I did not make the slightest noise he would continue to come straight toward me with a freedom that showed he was entirely unaware of my presence. Not until he was within forty steps would his eyes detect me. On the other hand, if I had snapped a twig when he was ten times that distance away he would have vanished in an instant.

The delicate limbs of the deer are marvelously strong. I have seen a buck, when running from dogs, strike a rock twice his own weight, dislodge it and send it rolling down the hillside.

In fact I experienced one of the worst scares of my life from this cause, when a boy of thirteen years.

In company with several men I drove to the foot of a mountain and was left in the wagon to look after the horse while the men went up on the ridge to run deer.

Not long after I had been left to my solitary vigil I heard a rock come rolling down the side of the mountain.

Then followed another and another, and finally one big one that made a terrific crashing in the timber.

After that, for a few moments, all was still. Suddenly, and without any apparent cause, the staid old horse, which had been unhitched from the wagon and tied to a tree, gave one frantic leap, broke the halter and dashed away down the woods road by which we had come.

I was several miles from home and fully a mile from the hunters; the darkness in the woods was dense, and the terror of the horse naturally inspired me with a panic of fear. However, there was nothing for me to do but sit in the wagon and wait for the inevitable to happen.

The next two hours before the return of the hunters were fearfully long ones. When I told my father about the rumbling and crashing of rocks, the interval of silence and the sudden breaking away of the horse, he laughed heartily and then explained:

"The stag we started took the side of the mountain and got a little out of the regular run; his hoofs dislodged

some big rocks and these went crashing down into the valley. One of them passed close to the bed of a bear and routed him out to hunt for a quieter resting place. In his travel he happened to pass where the wind took a scent of him down to the old horse—and that settled it! Once let a horse get a sniff of a bear and he'll run as if a gun were fired under him."

Mention has been made in a previous paper of the foibles of the raccoon. This little joker of the fur tribe is one of the cleverest of fishermen. It is rare amusement to watch him sitting close to the edge of the water, shrewdly waiting for some luckless fish to venture within his reach. The instant that this occurs, his hand—for this member of a 'coon's anatomy is more than a paw—darts like a flash into the water and the fish is flipped out upon shore as cleverly as if hooked by an expert human angler.

As a frog-catcher the 'coon is also adept and plies this vocation very much as he does his fishing.

Though, as I have suggested, the 'coon is a confirmed humorist, he is himself easily "taken in" by a joke of a certain kind, provided it is sufficiently glaring. The traditional miser does not love to see and handle gold coin better than the 'coon loves to toy with anything bright and glittering. His nimble little palms have

an irresistible itching for any bit of metal that shines or sparkles. Because of this curious whim the trapper of 'coons need have no better bait than a particle of bright new tin securely tied to the pan or "tilter" of his trap. And if the trap is placed a little under the surface of a stream the 'coon is almost certain to find it and thrust his paw down to secure the sparkling trinket. This same passion for bright things makes the 'coon a confirmed thief of any small articles like teaspoons or spoonhooks that he can pick up about a camp.

The typical hunter of the Southwest has almost as many queer, wild ways as the game he hunts, and his habits and eccentricities are as novel to the average person as are the whims of the wild creatures upon which he preys.

Put a camp of veteran professional market hunters into a locality in which they are absolute strangers and the first thing they will do is to learn from the natives the name of every road, trail, stream, knoll, bayou, woods and swamp in the entire region.

But their geographical researches do not end here. At once they begin to play the part of discoverers and construct a "hunter's geography" of their own, giving graphically descriptive names to every local landmark. "Split-tree Knoll," "Goose-neck Swale," "Hog-wallow Creek," "Shingle Bend," and a score of other names are given to landmarks that have long been nameless in the local speech—and every one of these names is so aptly descriptive that it alone identifies the landmark and sticks to it for time to come.

This interesting practice of the hunter is not a mere whim, but has its origin in the necessities of his craft. He must be able, for convenience and safety, so to describe any particular point of the landscape that a fellow hunter may be verbally directed to it with a clearness that admits of no excuse for mistake.

Before starting from camp each hunter will tell his companions the route he intends to travel. Not only does this define his hunting field for the day, but it gives his partners an idea of where to look for him in case

he should not return within reasonable time.

Then, too, this practice of having a name for each special landmark acts as a constant reminder to the hunter of his exact location. When a rambler through a wild country does not have his exact location, relative to other points, constantly brought to his attention he is far more likely to stray or get confused. The habit of giving each prominent feature of the landscape a definite name helps to this end more than the layman would realize.

Though every hunter should carry a compass and should also be able to read the stars, comparatively few of them take the former precaution, and clouds so often obscure the stars that the careless woodsman, although an adept, sometimes finds himself hopelessly lost. In fact, losing his way is the one danger that constantly menaces the hunter.

Natural changes often so alter the face of a familiar landscape as to make it appear strange and new even in the eyes of an expert woodsman. One of the best hunters that I ever knew was after deer in the lowlands of Arkansas when a sudden and extremely heavy fall of rain flooded the bottoms, leaving only the points of the highest "donnicks," or knolls, sticking out above water. The land appeared to him entirely different; he became confused and traveled in the wrong direction with his boat, and was overtaken by nightfall on a little island—the top of a knoll.

Early in the day he had eaten all of his "snack" of hard-boiled eggs and bacon and had nothing left; the weather became suddenly cold and his slender supply of matches was soon exhausted. For three days he drifted from one "donnick" to another until too cold and exhausted to go further. When we found him he was almost gone with cold and hunger.

But the most terrible instances of suffering from being lost occur in the great "flag marshes" of the Gulf coast to which I have already referred. These tall reeds make a dense growth meeting above the head of the hunter in a roof of foliage; generally the bottom is shallow water or

thin mud, the only dry spots being the occasional shell-banks. Last winter (1905) a Beaumont hunter went out into a marsh of this kind and failed to return. Search parties were promptly sent out, but they found no trace of him until the seventh day.

Then he was seen emerging from the marsh upon a shell-bank; his gun and hat were gone, most of his clothing had been torn from him by the sharp teeth of the flag leaves, and he was so crazed by his sufferings that he did not know the sound of the human voice. Several months of careful nursing were required to restore him to his right mind.

It is a rule among hunters—especially duck hunters—not to discharge a gun after nightfall unless as a signal of distress. There are two reasons for this practice: ducks are more frightened by the flash of a gun than by anything else; then it is necessary to have some certain time when the discharge of a gun will be generally understood to be a summons for help.

When the heaviest flight of ducks is on in the Gulf coast region the farmers have to resort to strenuous measures to save their crops from sudden destruction by the vast flocks of mallard and teal. They station men armed with shotguns in the rice-fields, and these patrolmen keep up a constant fusillade with blank cartridges all night long. They do not use shot because it adds greatly to the expense and does not increase the effectiveness of the warning, as it is the flash and not the destruction caused by the discharge which scares away the hungry, squawking invaders.

I personally know of one instance in which a field of one hundred acres of rice, unprotected by patrolmen, was completely devastated in a single night by an immense flight of ducks.

Sometimes quail become so plentiful as to be a pest. Once, when I was at Phoenix, Arizona, the ranchers and small farmers of that vicinity appealed to the hunters to wipe out the quail in order to save the crops. A bounty of one cent a bird was paid, with the result that 25,000 blue quail were taken from that locality in two seasons.

Editor:

Recently while on a deer hunt in Llano County . . . I shot a turkey with a beard. Upon dressing the turkey, my suspicions were aroused as to the sex.

This was a small bird, and the feet were smooth, with no signs of spurs. The head did not have a long snout. In fact, it had all the looks of about a two-year-old hen, but there was attached a beard that measured seven inches long.

Do turkey hens grow beards, and if so, does it happen very often?

W. D. Cooper
Box 104
Gatesville, Texas

(E. A. Walker, wildlife biologist of the Commission, says, "The description of the turkey you refer to leaves little doubt that the bird was a bearded hen.

("You can verify the fact by examining the tips of the feathers of the breast and lower neck. Gobblers have a jet black margin on the tips of those feathers, while the breast feathers of the hen are tipped with white.

("The overall appearance of wild gobblers is long-tailed, long-legged, long-necked, with a black glistening appearance from the front. The hens appear more subdued in color, shorter of neck and leg and smaller of head.

("My observations have indicated that sometimes you can expect as many as one bearded hen to twenty non-bearded ones.

("We have had reports that bearded hens do not produce eggs and raise young, but bearded hens with broods have been observed frequently in our wild flocks in Texas.")

Editor:

Your magazine is an inspiration to me and my colleagues here in British Columbia . . . It helps to know that people throughout the continent share some of our problems. It also relieves some of that feeling of "aloneness" that a Game Warden often feels.

Material from your magazine is often used on my radio programme "Conservation Calling."

Bill Ward, Game Warden
Kamloops, British Columbia

(Another country heard from!)

Editor:

For some months I have been disappointed that no mention has been made in your magazine concerning the late Will Tucker, former Executive Secretary of the Game and Fish Commission, who died in July.

He was one of the first game wardens in Texas and later helped set up the framework of the state's code of game laws.

. . . His fame as an authority on fish and game was nationwide, and anytime Will Tucker was scheduled to make a

speech, the auditorium would be filled to overflowing.

. . . He was an ardent hunter and fisherman, himself, and he contributed a great deal to the conservation of game and fish in Texas . . .

F. A. Gildersleeve
2219 Ethel Avenue
Waco, Texas

(The late Mr. Tucker most assuredly, was not slighted intentionally. It is the policy of the magazine to concentrate on wildlife and wildlife management rather than personalities, for we feel our readers are more interested in fish and animals than in humans. The Commission has lost a number of key employes through death this past year, yet no mention was made in the magazine, despite the fact that they were active members of the organization. TEXAS GAME AND FISH welcomes the opportunity to recognize Mr. Tucker through Mr. Gildersleeve's letter.)

Editor:

. . . TEXAS GAME AND FISH is the first publication I have seen that kids find as interesting as the comics . . .

Mrs. B. M. Reid
Box 883
Silsbee, Texas

(Did any magazine ever receive a greater compliment?)

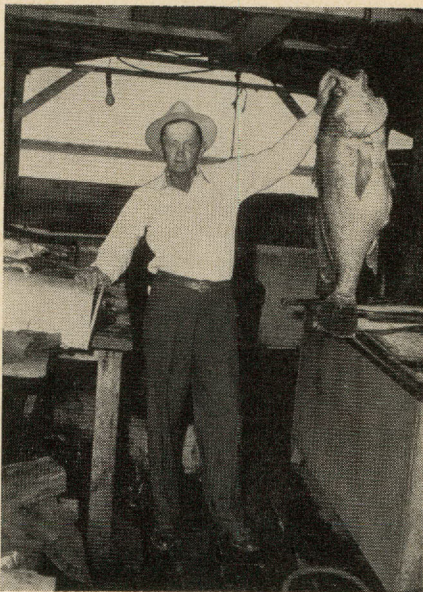
Editor:

I am sending along a print of a 34-pound drum netted in Lake Wichita by W. N. Fortenberry, commercial fisherman . . .

The picture shows Fortenberry with the fish, one of the largest drum ever taken from the Wichita Valley lakes.

Al Parker
THE DAILY TIMES
Wichita Falls, Texas

(That's a big drum from any place!)



Editor:

. . . I am enclosing a photo of an unusually small five-point buck, which was killed by Stanley Kahaneck of Yoakum (left in photo).

The little buck weighed only 52 pounds. It was killed on the E. Kahaneck ranch south of Sheridan December 10.

Shown with Kahaneck is Alvin Schneider, Jr., of Hallettsville.

James Holly
2810 Louisiana St.
Houston, Texas

Editor:

On the inside cover of your November issue there is pictured a fine white-tailed buck head. It says under the picture that "the longest outside curve of these horns measured 26 and three-eighths inches."

How is this measurement taken?

Jimmy Read

(Mr. Read failed to include his address, so this will have to serve in place of a personal answer.)

In measuring white-tailed deer antlers, the "outside curve" is known also as the "length of the main beam." To get this figure, measure from the tip of the main beam down to the lowest outside edge of the burr (or ring) at the base of the antler. Follow the outside edge of the main beam all the way.

Spread is a different thing. Deer antlers have three classes of "spreads." What is known as the widest spread is that distance between the widest outside points on opposite antlers. TIP TO TIP spread is the distance between the points of the main beams. INSIDE spread is the widest inside distance between the curves of the main beams. (See page 3 and page 32 of this issue.)



BOOKS



TRAINING GUN DOGS TO RETRIEVE by David D. Elliot. 128 pages illustrated with Sketches by Ernest H. Hart. Published 1952 by Henry Holt & Co., 257 4th Ave., New York City 10. \$2.95.

The reputation of Author David D. Elliot as a trainer of retrieving dogs in Scotland became so well known throughout the world that he was brought to this country as trainer of Jay Carlisle's famous Wingan Kennels.

The first third of the book brings us only to this point, but it is entertainingly told in first person and historically interesting. From there on, the author packs the pages with training "know how." Most unusual and most valuable aspect of this fine book is the attention given to the important psychological intercourse between the hunting partners, the dog and the trainer, with some novel thoughts on the importance of qualities within the trainer, himself, as well as the dog.

One of the *Field and Stream* outdoor series.

THE COON HUNTER'S HANDBOOK by Leon F. Whitney and Acil B. Underwood. 210 pages illustrated with sketches by Ernest H. Hart. Published 1952 by Henry Holt & Co., 257 4th Ave., New York City 10. \$2.95.

THE RACCOON by Leon F. Whitney and Acil B. Underwood. 177 pages illustrated with 36 black and white photographs. Published 1952 by the Practical

Science Publishing Co., Orange, Conn. \$3.75.

With these two books, Authors Whitney and Underwood have fired a double-barreled salute to the raccoon, which they insist should be our "national animal." 'Coon hunters and naturalists alike can join the celebration.

The "Handbook" is another in the new *Field and Stream* outdoor book series. It is just what the title implies and covers a wide variety of subjects concerning 'coon hunting and 'coon hounds.

A great deal of fresh new material makes it of particular value to the veteran "'coon hound man," who may find he *doesn't* know it all, yet it is just the kind of book the beginner will find most helpful.

"The Raccoon" is a detailed study of the animal, itself. The two authors spent a lifetime hunting, raising, doctoring, and studying the 'coon, and the book indicates their time was not wasted.

The reader is shocked into attention in the foreword, where the authors blast the popular idea that 'coons "wash" their food. From that point on, the book takes up one fascinating feature after another in a thorough study, which, although written in popular style, might well be used as a textbook.

RECORDS OF NORTH AMERICAN BIG GAME compiled by the Boone and Crockett Club. 178 pages profusely il-

lustrated with black and white photos and color frontispiece. Published 1952 by Charles Scribner's Sons, 597 Fifth Avenue, New York City 17. \$6.

The Boone and Crockett Club is recognized in international big game hunting circles as the authority on world records of North American big game, including such Texas species as the white-tailed deer, pronghorn antelope, mountain lion, etc. This is the club's official list of records and handbook of scoring systems.

Heart of the book is the section devoted to listing rank and measurements of record trophies by species, which in the case of the typical white-tailed deer, for instance, gives the leading 84 places. Full-page photos illustrate the top trophies. (See page 2, this issue.) Record trophies are not determined by size alone, and another section of the book explains how to score trophies under the official system, which takes into account conformation and other factors.

Other chapters include information about caring for trophies in the field and after they have been mounted.

WINCHESTER — THE GUN THAT WON THE WEST by Harold F. Williamson. 494 pages generously illustrated with photos, line drawings, diagrams, and old prints. Published 1952 by Combat Forces Press; distributed by Sportsman's Press, 1115 17th St., N. W., Washington 6, D. C. \$10.

The author is a specialist in research and writing concerning the histories of large industrial concerns. In writing this book he had at his disposal all the records and files of the Winchester Repeating Arms Co., subsidiary of Olin Industries, including those of its predecessors.

It is not primarily a technical book. But it contains much data and pictures of all the firearms ever made by Winchester as well as those of other companies bought out by Winchester.

The history of the company, its troubles, and its successes and the detailed story of the development of firearms and cartridges and their relationship to each other's progress makes it a valuable volume to anyone interested in guns in any phase.

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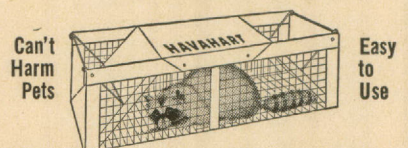
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When Is a Fishing License Required?

Early spring heralds the opening of the fishing season for many Texans. Then there is the frequent question, "Do I need a fishing license if I fish . . . etc., etc."

There are three general classes of fishermen who do NOT need a license if they fish for sport. You do NOT need a license if

1. You fish for sport in salt water only.

2. You are under 17 years of age.

3. You hold a commercial fishing license.

Even though you may not fall into any of the above exempt classes, there are other circumstances under which you may fish WITHOUT buying a license. The diagram below should help you understand when you do and do not need a license.

The price of a fresh-water sport fishing license is \$1.65.

When Fishing in Your

Home County

A license is required ONLY if you use artificial lures in fresh water.

When Fishing in an

Adjoining County

A license is required ONLY when fishing in fresh water

- (1) With artificial lures
- (2) Or with live bait (live bait as defined by this law means only minnows or fish).

When Fishing in the

Rest of the State

A license is required of everyone using any kind of bait or lure in fresh water outside his own or adjoining counties.

THREE OWLS



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