Texas Fine and Fine a







CAREER STEER: The Natural Resources Council of America has put out a new book, entitled Careers in Conservation--Opportunities in Natural Resources. It meets a long unfilled need for concentrated top-flight advice on various occupations, ranging from soil and water conservation, through management of watersheds, fisheries and wildlife preserves, to park development. Qualified authorities in their chosen conservation fields give young people essential information for planning and choosing the right kind of education for a career in conservation. Personal qualifications for the various specialties are described, and relative degrees of compensation, Federal and State agency work and recent technological advances are covered. Copies of the book are available at \$3.75 each from the Ronald Press Company, 15 East 26th Street, New York 10, N. Y.

MULTIPLE USE MONEY: This fall, \$1,852,000 in additional Accelerated Public Works projects was approved, to be invested in a wide range of forest conservation activities in 19 states. The projects will provide approximately 4,200 man-months of on-site employment and generate additional jobs by creating a demand for goods and services. Included are improvements to public lands, national parks, national monuments, wildlife refuges and Indian reservations. Besides providing muchneeded employment, they will improve facilities used by millions of hikers, picnickers and campers; help promote tourism, and conserve the nation's timber and water resources.

DECREASE AND DECREE: The total population of golden eagles in North America has been estimated at not exceeding 10,000 birds. The golden eagle does not normally breed until five years of age, and a breeding pair produces an average of only one young every other year. Because of this slow reproduction rate, the species could not withstand the annual slaughter of 1,000 or more birds reported to have been killed by paid hunters in airplanes over Texas and New Mexico sheep country until the practice was halted by federal law. In 1962, Congress passed an act whereby golden eagles may only be killed in any state upon request by its governor to the Secretary of the Interior, and in measures prescribed by the Secretary.

SHOOT FOR QUALITY: Accurate shooting provides the best venison. When a wounded animal runs off to die at a distance, his physical exertions send blood coursing through the body into the muscles. This makes meat tough and coarse. If you don't like venison, trace events from the crack of the rifle to the time of cooking. You may learn the fault is not with the deer but with the hunter.

THAT'S THE STUFF: If you still don't like venison, then try a tip from a processor in the Valley. He adds pork to venison and makes a delicious smoked sausage out of it.

MATCH THIS ONE: To keep matches dry on a fishing or camping trip, dip several matchheads in finger nail polish and let them dry. The polish keeps them impervious to moisture, yet scrapes off instantly when the match is struck.

4-H CITY KIDS: Once, 4-H clubs were almost wholly composed of farm youngsters. No longer. As the number of farms shrinks, along with the farm population, the membership of these fine clubs is changing. It is now estimated that about half the current 4-H membership of 2,225,000 comes from non-farm homes.

CONTROLLED CONTROL: The USDA Plant Pest Control Division announced it has achieved "effective control" of grasshoppers in field tests with a new formulation of malathion in amounts as small as nine ounces per acre. Malathion, one of the phosphate insecticides, is believed to be less persistent and less toxic to warm-blooded animals than the chlorinated hydrocarbons formerly recommended for grasshopper spraying.

PUBLIC LANDS PAMPHLET: "The Public's Land--Our Heritage and Opportunity," is the title of a new booklet published by the National Wildlife Federation. Written by NWF Conservation Adviser Ernest Swift, it provides a summary of the evolution of public lands administration in the United States. Single free copies, and quantity orders at 10 cents per copy, may be obtained from the Federation at 1412 Sixteenth Street, Washington, D. C., 20036.—Joan Pearsall

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At the moment of sunrise a waterfowl hunter's hopes are as bright as the flaming sphere. But it's a thrill even for those who have no hunting designs to see ducks and geese silhouetted against the rosy sky. This scene was captured near Eagle Lake in ricegrowing and ranching country. Photo by Paul Hope

OFFICIAL MAGAZINE OF THE PARKS AND WILDLIFE DEPARTMENT DEDICATED TO PROTECTION AND CONSERVATION OF NATURAL RESOURCES; AND TO IMPROVEMENT OF HUNTING AND FISHING IN TEXAS.

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In Memoriam

D EATH has come to the team of men who enforce Texas' game and fish laws. John David Murphree, a game warden in Southeast Texas, has been killed while performing his duties.

Murphree belonged to the ranks of an unheralded band. Few jobs are as thankless or underpaid as that of a game warden who is a man from whom many hide or flee; a man who works in the darkness of cold winter nights and the heat of smothering summer days, guarding the wildlife which God gave to us all.

But the job of Murphree and his fellows is not all danger and heaviness. Moments of deep satisfaction steal into the life of a game warden. Often he can introduce some eager young person to the joys of the outof-doors. There are moments when he knows that he is making a real contribution to the conservation and wise management of Texas' outdoor resources. There are the times when he experiences a rich moment of quiet appreciation for the beauty of his outdoor office.

Murphree was such a warden. He had an intimate interest in his work—a heart as big as the outdoors he loved and a warmth for the people and wildlife he met there. He did not die without having lived.

His passing leaves a void, but his work will be quickly picked up by his fellow officers and done with the determination that would have brought the familiar quick little smile to his lips. It will be done in his memory and his honor, and the paths that he followed will not be forgotten.

A Fellow Employee



Pocketful of Squirrels

by ED HOLDER Port Arthur News

Photo by Bob Waldrop

THE TWO WORDS, "Devil's Pocket," may bring visions of Satan to the minds of those who first hear them.

But these words bring a far different vision to the minds of many East Texas hunters.

When they hear them, they're far more apt to conjure visions of squirrels dancing through tree tops to the accompaniment of shotgun music.

That's because Devil's Pocket is actually a place, an 18,000-acre wild-life management area, which contains some of the finest home sites for Mr. Bushy Tail that can be found anywhere in East Texas.

South of Newton

The area lies between Highway 87 and the Sabine River, about 25 miles south of Newton. It contains some

of the most beautiful hardwood forest still standing in the state—huge white oaks, pin oaks, sweet gums, cow oaks, overcup oaks and a dozen other varieties that reach skyward like green giants.

For almost 12 months of the year, this sylvan wonderland lies quiet and peaceful, so lonely and remote in some areas that someone long ago labeled one section of it, "Devil's Pocket."

Then, for a few days each fall, the silence is ripped asunder by the roar of hundreds of shotguns and .22 rifles as an army of squirrel hunters invades the area.

Two Hunts

One phase of this year's invasion was held Oct. 18-22. And again for five days in January the invasion will be reenacted (Jan. 10-14).

These onslaughts are in the form of public hunts open to John Q. Public, free of charge.

The hunts are conducted by the Parks and Wildlife Department, which manages the wildlife on the area. Owner of the tract is actually the Kirby Lumber Company.

Primary purpose of the hunts, as far as the Parks and Wildlife Department is concerned, is to harvest enough squirrels to provide biologists with important information.

Object Is To Learn

In other words, the biologists hold the hunts to check the squirrels that are killed and to obtain information vital to their studies in game management.

And this they do.

All squirrels killed on the area are brought by the hunters to a check station set up on Highway 87—the same station from which they are issued permits when they arrive for the hunt each morning.

Biologists examine the squirrels, noting such important facts as age, weight, sex, species and breeding condition.

Hundreds of squirrels are checked during each five-day hunt, giving biologists data on far more animals than they could check by ordinary methods.

Three-Way Cooperation

Charles Boyd, project leader here at Devil's Pocket, explained it this way. "It's sort of a three-way cooperative arrangement between the landowner, the Parks and Wildlife Department and the hunters," he said.

And all of it is designed to help the biologists learn more about proper management techniques.

But most of the hunters who come here to the Pocket are far more concerned about the wonderful hunting they find than with game management techniques.

Not that they don't cooperate. In fact, their cooperation is, for the most part, perfect. They hunt where they are told to hunt, and bring their squirrels to the check station when they've finished.

Nor are the hunters the only ones who cooperate here.

Biologists Work

In fact, the real story of cooperation is to be found in the corps of biologists who work long, weary, often thankless hours in an effort to show the hunters a good time. Their work on the Devil's Pocket hunt started in earnest, the Wednesday before the hunt began, when they took reservations from hunters by telephone.

Their telephone, in Buna, started ringing at 8 a.m. as hunters from as far south as Houston and as far north as . Henderson began calling in reservations.

At 10:30 a.m., the phone suddenly went silent. A quick check showed it was out of order. The telephone company said that too many incoming calls had overloaded the circuit and jammed it. It was repaired by 1 p.m. By 4 p.m. all of the

350 openings available had been filled—70 a day for five days.

Set Up Station

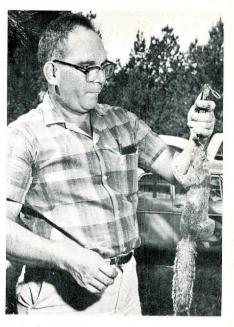
That was just part of their work, however. Thursday the biologists set up the check station on Highway 87. They lived there in tents until Tuesday night, when the hunt ended.

They rolled off their cots at 3:30 each morning, and with sleepy eyes met the laughing, anxious hunters who started arriving about 4 o'clock. Some of them helped the hunters sign affidavits and releases. Others guided them to their hunting areas. During the day, they checked squirrels brought to the station by hunters. Long after dark, usually about 10 p.m. they went to sleep. Less than six hours later, they were up again.

Other Hunts

And the Devil's Pocket hunt is only one of several squirrel and deer hunts which these same biologists conduct in East Texas during the fall and winter months.

Boyd, who lives in Nacogdoches, leads the team of biologists, which is composed of David Roe of Hemphill and Roy Oglesby of Alto, plus Technicians Billy Coats of Hemphill and Henry Schlueter of Jasper.



Biologist Bill Wright of Silsbee demonstrates one way to solve a weighty question and score up another squirrel statistic to be studied.

Bill Wright of Silsbee and Bill Hudgins of Huntsville, two other biologists, sometimes lend a hand with the work, as do the local game wardens. The Newton County game warden, Welby Fountain, and the late Orange County warden J. D. Murphee were here, to help where needed in the fall hunt.

Even though they do work long,

• Continued on page 30





Aim for Excellence

WATCHING a cloud of dust rise instead of a buck fall is a sickening sight for any hunter. But most hunters have been thus foiled by a rifle's performance some time in the field, especially those hunters who go for big game in the mountains.

Perhaps it happened to you just the way it did to me. I was high in the mountains just south of Alpine. We had traveled most of the day in search of something big and beautiful. As we bounced along a wagon trail scanning the mountains, someone in the truck thought he saw movement just beneath a ridge in the mask of evening shadows. He wasn't dreaming.

Through my binoculars it looked like a great work of art. I thought I was looking at another Mount Rushmore. Only this time the sculptor had deer on his mind. A majestic buck was there, seemingly carved from the very boulder on which he stood, just below the jagged rim rock. His harem of does, with all heads frozen in my direction, was etched in the huge rocks scattered below him.

A crisp mountain breeze chilled back the sweat on my forehead and temples. I squirmed and shifted a dozen times trying to line up the cross hairs just right. Sharp stones chewed at my elbow and down my legs. Finally everything was set. I breathed, let it escape, and slowly squeezed the trigger.

Dust flew just above the deer. I dropped my rifle a little and fired again. Dust flew up below and in front of the deer. Through my scope, he seemed nearly hidden by the

cross hairs. Now he was moving with a mighty stride toward the top of the ridge. With one last, desperate squeeze I fired again only to see dust puff up from the ridge and my deer disappear over the dark ridge. I decided, then and there, that I had the wrong kind of rifle for such long shots and vowed that when I returned the next season I would have the right kind of rifle.

Upon my return, I bought a 1903 Springfield military rifle through the National Rifle Association, for \$15. My mind was made up; I would build my own rifle!

A friend suggested that I go talk with N. B. "Stubby" Stubblefield who lived at 8515 Bowling Green in Austin. "If you want to know how to build a sporter from a military rifle," said my friend, "Stubby is the man to see."

At Stubby's shop behind his home I discovered he was a specialist in converting militaries into beautiful sporters. All about his workroom were rifles of various sizes, shapes, colors and calibers. Many of them were truly the work of an expert.

Stubby, a strong, likeable person, met me at the door. It didn't take long to make friends with him. When he saw the Springfield in my hand, he undoubtedly suspected what I wanted. In a few minutes of discussion, he was certain about what I needed, and we concentrated on details. As it turned out, the conversion of a military rifle into a beautiful, sturdy hunting rifle with exceptional accuracy is quite simple—at least to a gunsmith of Stubby's caliber and training.

It turned out to be one of the

most exciting ventures in which I have ever participated. We started from scratch by breaking down the old military rifle. The military stock was discarded. Only the barrel and action would be used. This had to be disassembled for polishing and bluing. A few inches of the barrel including the front sight were removed and crowned.

A person can polish his own metal, but unless he has an electric polishing wheel, he should let a gunsmith do it. He should observe the gunsmith in action and let him explain the process. Most gunsmiths don't mind if you watch. If a person isn't careful, he can ruin the works before he gets started. And, a mistake in polishing the barrel or in other

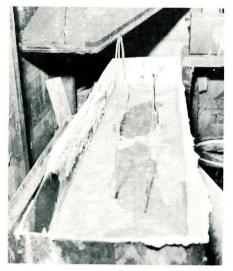


Stubby polishes the barrel, end to end, on a wheel coated with a special grinding compound.

stages in the shop can result in injury or death of the hunter in the field.

It's best to boil all the grease out in a special solution before you begin the polishing. You'll ruin a wheel if you don't. You should never touch some parts of the bolt. The barrel should be polished from end to end, not around. The cost of polishing and bluing by a professional is only about \$12 for the average rifle.

Once the metal was polished to a chrome finish, we dropped it into the bluing vat. Instantly, a change



The barrel boils in a bluing vat three hours.

took place in the metal. A bluing job can be completed in a short time, but to insure the best we left it to cook for about three hours. When it was removed, I cast my eyes on magic. What had been a rough, dingy barrel appeared now to be a beautiful, cobalt-blue piece of plastic.

Stubby explained that the bolt handle had to be altered for my V8 Weaverscope. This called for heating the center part of the handle, hammering it into shape and cooling it slowly. It looked easy, but I could see several precautions were taken by the expert. A novice would be wise to watch a gunsmith work out a bolt or two before he started banging away at the metal. Most gunsmiths charge about \$7 for this skilled work.

Once the barrel and other metal had time to set after bluing, we drilled and tapped for the scope mounts. Stubby charges just \$7 to do this and fasten the mounts in place. I figured the cost for labor in preparing the metal parts of the Springfield totalled about \$26. This seemed mighty cheap labor when all the machinery, time and talent were considered.

I picked a Bishop stock in beautiful dark maple. A good Bishop stock costs about \$15. It was roughed out by machine and needed considerable carving and sanding. This is where a beginner can do most of the work. If the barrel is to be glass bedded, consult a gunsmith, or at least talk to someone who has floated a barrel in glass before. The inletting (cutting groove which barrel fits into) calls for some know-how. It should be done slowly and a sliver at a time. A number of shapes and sizes of chisels can help make this task easier. It requires coating the metal with a dark, thick solution (preferably lampblack and heavy oil) to mark the places where the metal is binding on the stock.

Before beginning the inletting, the barrel should be fitted to the stock. This is done by lining up the lug holes in the barrel with those in the stock. The trigger guard and floor plate must be put in place and guiding lugs inserted. Stubby used only one guiding lug. An amateur should use two. The barrel and ac-



The groove is smoothed and finished before a thick layer of glass is plastered into it. As the barrel is inserted, the glass will be forced around the edges, cushioning the tube.

tion should be outlined with pencil on the wood. A straight-edged chisel is then used to outline the mark so the wood does not split out as the inletting is performed. Here, again, it would be unwise to start chopping away at the new stock blank or machine cut stock before consulting someone who knows the do's and don'ts.

In fitting a barrel and action tightly in the stock, a good coat of liquid glass should be plastered over the inletting back to the slot for the front barrel lug. A little more glass



Stubby skillfully scrapes off the excess glass after it has set but just before it hardens.

than is needed should cover the wood. Then when the barrel is forced down into the groove, the glass will be squeezed up and around the barrel. Before the barrel is set in the glass, be certain to coat all over with a special solution that will prevent the metal from becoming welded to the wood.

Stubby tightened the metal down in the wood with the lug screws and forced out the glass except for a thin coating which remained between the wood and the metal. Then he let it set and trimmed off that portion above the wood. The barrel when properly seated should be half clear of the stock. He removed the metal from the stock only after the glass had hardened. Now he was ready for the sanding job.

Once the stock has been sanded down with a heavy paper or on a wheel, the paper should be decreased in grit strength until at the end only a very fine paper is used. Be careful not to remove too much wood in places where the metal bolts and plates protrude. Make sure the wood is flush with such projections. Clean off the dust and check for smoothness. Remove all saw and lathe marks. When the wood is paper slick, you are ready for the finish.

Tru-Oil makes a beautiful finish. This is an oil with a drying agent. It penetrates the wood, dries rapidly and gives the stock just the right gloss. After the first coat, we sanded



To finish the stock Stubby spreads on Tru-Oil with his fingers and smooths it out to a light finish. The stock takes on a smooth glamour.

the stock back to the wood. We put on another coat, let it dry and rubbed it down again, this time using a piece of steel wool. We added another coat of oil, much lighter this time, being careful to smooth it out evenly. When this coat dried, we ran over the coat with steel wool, very gently. Then we got out the wax and spread on a light coat. Stubby used a special clear stock wax called Trewax. When we got a coat on, we buffed it out immediately. The nicest looking stock has a deep plastic appearance. If a person wants his stock to shine like shellac, he applies more coats of the Tru-Oil. Again, check with a gunsmith.

Once the stock had its glossy finish, we went back to the barrel and action which by now had set. Stubby slicked on a thin coat of WD 70 oil to keep the finger prints down, and to prevent rust from setting in. Then he removed the old trigger and safety. I told him that I wanted a smooth, steady pulling trigger so he sug-



A Timney trigger replaces the military one to provide a smooth, steady pull for accuracy.

gested a Timney SO3-A3 adjustable trigger. To replace the old military safety he suggested a Mark II Safety. The new safety worked more smoothly and eliminated any interference by the scope.

Next he added the mounts and fastened down the V8 scope. I wanted a variable scope for several reasons. The Weaver I liked because I have used them altogether and had faith in the outside adjustment. By having a scope with a range from 2½ to 8 power, I could loosen up for a close shot at a racing antelope, or brush deer, and reach out with more power to pick off the distant muleys or elk.

Finally we had the rifle put together, and I could scarcely believe my eyes. I was holding the most beautiful rifle I had ever owned. Perhaps it seemed so attractive to me because I had had a part in building it. Of course, this was not the only reason, as I proved to myself each time someone else held it. My friends liked what they saw.

"Now, I would get that big moose of a deer that got away last year," I smiled. It was a great feeling.

I learned more about rifles during my association with Stubby than I have learned from all the books I have read. From handling my rifle as the conversion progressed, I discovered a new interest in the mechanical parts which enabled me to send a round zipping toward a target at the squeeze of a trigger.

Anyone can build a nice hunting rifle from a military piece, if he has the right tools and equipment. Once

he has completed one, he will be able to build others, each one showing improvement. The appearance of the finished rifle will depend on how much money a person is willing to invest in it. The rifle will mean more to the person building it than any he could purchase in a store. And, he'll have more faith in it, especially if he invests in some of the extras which improve the accuracy, such as a fine trigger, glass bedding the barrel and a good scope. Even a store-bought rifle will perform better if it is glassed.

A bolt action rifle just naturally makes a more accurate hunting rifle. So if you want accuracy get a rifle with this type of action.

Enough emphasis cannot be placed on the importance of checking with a gunsmith before you begin and, in fact, checking all stages with him. A hunting rifle can be a useful tool and an enjoyable instrument if care is taken in its construction. A novice can ruin a good action and create an accident that can destroy himself if he doesn't know what he is doing. The rifle should be altered with care. Consult an expert in the profession before you ever fire a round of ammo in a military rifle, converted or not. Then, if you ever decide to load your own shells, check with him again. Every rifle has a maximum capacity for handling ammunition. Many hunters have killed or crippled themselves simply because they went beyond this maximum.

If you are not satisfied with your rifle now that the season is over, do as I did!

This is a before-after shot, with an old military Springfield at right and the new sporter, at left, which is described in the story.

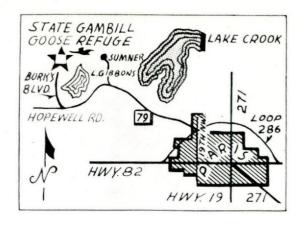


ONG wavy V's of wild geese bucking the late after-I noon wind are a part of the early winter panorama. Circling in a weird cacophony of sound, they bee-line

like a rocket formation seeking a target.

An observer standing in the feeding pen at the Gambill Goose Refuge, north of Paris, might well feel as if he were the number one target of such a flight. Swarms of geese-snows, Canadas, blues and whitefronts-chattering and hungrily honking ignore the dangers of man as they three-point in for a handout of state-supplied grain. To see them all at the same time, one would need a neck that revolves like the grid of a radar unit.

Refuge Manager Joe Wharton, Conservation Officer Hill Lawrence and many people near Paris welcome these migrants of the northland each year, about the middle of October. Most citizens of Texas are unaware of the drama unfolding on the Gambill Refuge, because they simply don't know that such a place exists in the state.



Here's how to go where the wild goose goes, when he touches down for rest and refreshment on the long journey, and man is friend, not foe.

by W. R. LONG I & E Officer, Tyler

Perhaps those who have managed the area through the years have spent more time planting grain for the birds than tapping on a typewriter. Perhaps more time was spent in setting posts and stringing wire than was spent in making public addresses extolling the refuge's virtues. At any rate, the refuge, state-operated since 1934, is the culmination of the dream of a dedicated naturalist with a heart as large as the outdoors he loved. and as warm as the southern waters where geese love to settle down for the winter.

Photo by E. P. Haddon



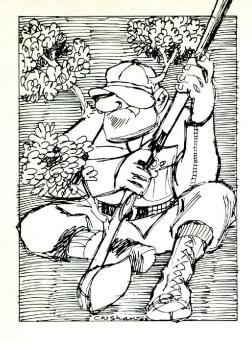
At first John C. Gambill had a personal goose refuge the size of a bucket filled with grain. Then it expanded in size to the exact dimensions of his barn feeding lot. More years and more geese expanded the project, as he scattered more grain each year, to an area of grain fields, feeding waters and feeding pens that now wel-

come some thousands of hungry migrants each year. Geese are not noted for being exactly friendly to the whims of man. But in the refuge area, their tolerance of a friendly face is almost beyond belief. A man-their natural enemy-gently pushes them aside so he can reach the feeders with his bucket of wheat and corn.

The Gambill Refuge is operated at a ridiculously low cost per annum, but even at that, who can appraise a child's first sight of a wild goose, gone tame? Who can affix a price tag to the beauty and wealth of what God has chosen for man to see and appreciate?

A guest log book is kept in a neat and waterproof box at the edge of the goose feeding pens. It carries the signatures and comments of passers-by from twoscore states, and hundreds from Texas. Each, it is plain to see, came, saw and stood amazed at a rare spectacle meshing wild and tame.

This year, perhaps in December or January, pick a day when cottony clouds are scudding down a windwhipped sky, perhaps when mist or rains or icy pellets of water are lashing the air and earth, and pay a visit to the transient, noisy ghosts from a land that you may never see. Gather your warmest clothes, your kids and your wits, and come to see John Gambill's dream-come-true an area set part for the sanctuary of man and bird.



Whitetale

It took a good hard blink of the eyes to tell for sure that this deer, antlers blending perfectly with the background, was indeed a buck.

Photo by Ronald Perryman



It was enough to make a person hate cows. I had just squatted at the base of a big oak tree when I spotted some deer over the fence in the next pasture. They were all females except for one little nubbin yearling. Just to see a deer made my eyes twitch. "I'll sit like a stump," I thought.

The deer were frisky in the chilled evening breeze. If they continued to bounce along in the same direction it wouldn't be long before my scent would interrupt the natural scene.

Several white-faced cows were grazing along in a scattered herd behind me. I could hear their tongues rip up the grass and their jaws chomp it into cud.

The oldest doe in the herd crossed the trail of scent and released a distinct and loud sneezing sound. I knew that if a buck was off to the side and heard he would be alerted and possibly gallop off through the thick brush. "I'll just freeze," I thought, hoping that if there were a buck behind and just down the rise, he might still appear.

Meanwhile, the cows were grazing closer, their noise indicating their lack of manners. One was under the tree and grazing past me. I rolled my eyes to the right. The fat, shaggy cow stared at me for an instant, stretched her neck and sniffed, then

resumed grazing. Now she was nibbling a path through the tall grass straight toward the base of the oak.

I focused my attention in the direction of the deer. The whole herd by now had inhaled my flavor and were searching the countryside with a rhythm of the head unlike that of any other creature. Each time the deer sniffed me they would point their shiny nostrils at me, raising and dropping their heads. I tried to blend in with the features of the oak tree.

The deer would cross the scent trail, lose the scent, then turn back and find it again. Their gradual zigzagging toward me reminded me of a sailboat making its way up a channel. I held back a smile, and a chuckle.

When I rolled my eyes back toward the cow, I gulped. The big, red beast had munched her way to within five feet of me.

I thought I heard movement down the rise. My eyes snapped back in that direction. A deer stood in the thick brush at the edge of the clearing. I knew it was a buck, but I wanted to be certain. The woods grew quiet except for the slurping and sniffing at my side.

As I flipped my eyes back to the cow, a hot, grassy breath nearly choked me down. The cow, not sure what she had discovered, was

Hunt

by CURTIS CARPENTER



That elusive man-scent had the deer tacking in nautical fashion toward the author, when they joined in his novel game of hide-and-seek.

stretching her neck to get a closer look. Knowing deer, I dared not make a sound. Instead, I slowly leaned away from the big, moist nose and shot a glance back toward the deer.

By now, the does and yearling had tacked their way to within 25 yards of me. If any human spectators had been about, it would have been an ideal time to place bets on which would reach me first, the cow or the deer. The cow had it cinched unless the deer suddenly broke into a gallop.

The show gathered momentum as an armadillo popped through the tall weeds, stood on his hind legs and squinted in my direction. "Oh no!" I moaned silently. "It's just not my day." This wasn't a hunt; it was a regular sideshow.

As the armadillo plowed its way

through the grass, flipping over rocks and rooting in the weeds, I tried to concentrate on the deer. A warm spray plastered my right ear and cheek. The does edged closer and the shadow moved out of the woods. I could almost make out the head.

By now I was leaning so far to the left that the tall weeds scratched at my ear. The armadillo passed right in front almost scraping my boots. It drew in a big breath of me, leaped straight up like a spooked cat and raced off through the weeds.

When my eyes locked back in the right side of their sockets, two much larger blinkers stared right back. The juicy nose sniffed like a hungry lion in a meat house. A large tongue reached out to taste my ear. That did it! I ducked to one side, instantly leaped to my feet and before the startled cow could realize what hap-

pened, I slapped her solidly on the nose. "Get out of here, you blasted beast!" I screamed.

The cow nearly sailed through her hind legs trying to escape; the does bounced up, swapped ends and bounded off in one motion; the armadillo jumped higher than before; and the shadow darted back into the woods and disappeared. I didn't know whether to laugh or cry. I felt like crying but yelled instead. Only the woods heard what I said. What did I care! It was only the last day of the hunt and the light was fading fast.

I felt better after reaching my car. After all, it was just a hunt—and hunts are exciting because a hunter never knows what is going to happen. "Cows?" I laughed. "Armadillos, deer! Oh brother—what fun."

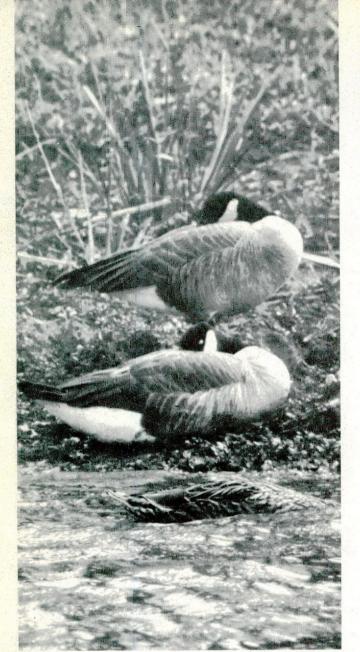


Photo by Paul Hope

A couple of Canadas snatch 40 more winks as an early-rising neighbor, a mallard hen, takes a dip into the morning water for a tasty bite.

Photo by Paul Hope



Mallards take to the water to dine on a variety of breakfast foods.

Rally Round

Photo by Bob Waldrop



These geese take their constitutional flight before alighting to eat.



Early morning finds a flock of ibis winging to the feeding ground.

Geese and ducks, wing by wing, settle down to feed in rice fields.



Photo by Paul Hope

he Rice Field

by STAFF

Photo by Gene Plummer



Snow geese are heading home after a meal.

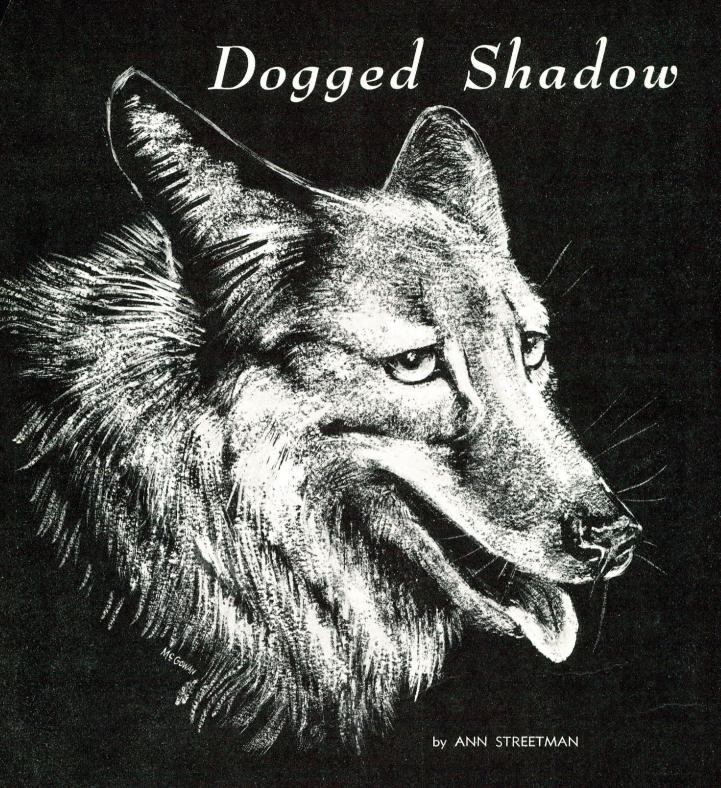


Photo by Paul Hope



Two Canada geese enjoy a serene evening swim.

Two snows and a blue (middle) preen away the rumples of a typical day in the life of a goose.



VERSATILE, wild and controversial is the coyote, animal of the Old West.

A dog-like creature with furry, grayish coat (although somewhat rangy in Texas' fairly mild climate), smartly pointing ears and unblinking amber eyes, the coyote steals across the country in spite of man's long efforts to control him.

This tough customer is a "good

family man" in coyote circles regardless of his bad reputation among men. He remains with his mate for at least a season and helps her rear their pups. Some believe he even mates for life. Although it is not certain how closely the father attends his family, especially whether he shares the den with the youngsters and mother, it is known that he brings food to the den for his off-

spring and guards the nursery.

In Texas a litter of five to seven pups is born in April, May or June after a gestation period of 60 to 63 days. The dark, furry fellows with limp ears and chopped off muzzles remain for several weeks in the nursery den, which is usually a burrow borrowed from a badger or ground squirrel. For three to eight weeks they are nourished by their mother's

milk supplemented as they grow older with food pre-digested by the parents. The little guys gain their evesight in nine to 14 days after birth, but there is not much for them to see except shadowy figures until they venture from the den at about three weeks old. By the time they emerge, their pelage has become lighter to match the outside surroundings. At first, they don't wander far from the mouth of the shelter, but time and food make them playful and bold. And soon they are venturing out to sun and hunt with their mother.

The early life of a litter is not always so uneventful before the youngsters discover the outside world. When danger from man threatens a den's safety, the parents move their pups to another nursery. The pair usually has several auxiliary dens in the vicinity.

In some semblance of a domestic unit, the family stays together for several months, usually until fall. The females of the litter are not ready to assume their maternal responsibilities until their second year.

Adults have a life of hunting and roaming, stealthily avoiding the number one enemy—man. About food, the adults are not particular, that is, not when the supply is scanty. Although they prefer to be carnivorous, they can be omnivorous just as easily. When meat is scarce, fruits and berries are an acceptable supplement. Carrion of diverse origins, garbage, rodents of many kinds, insects, frogs, birds and fish as well as livestock and game animals are on the menu.

In hunting, two or three animals sometimes team up to run down a deer or antelope or an elk calf. However, coyotes are seldom seen in aggregations of more than three or four, probably a family group. Their speed aids them in catching a dinner on the hoof. One coyote was clocked by a field observer at 43 miles per hour in a short sprint; another, by two biologists at 31 mph.

A number of observations record a teaming of the coyote with the badger on hunting expeditions. Such teams have been seen working in prairie dog towns. Both coyote and badger rush through the town at once, throwing the "dogs" into panic and reaping the tasty rewards. Apparently, however, the thieves which sometimes are partners do not always give each other a square deal. There are records of badgers digging furiously and expertly for a meal only to have a waiting coyote claim the prey. The depth and significance of the coyote-badger relationship is not known. But the observations of cooperation between the two are too numerous to be accidental or freakish. Early Indian art indicates that the aboriginal tribes recognized a relationship.

For decades, the coyote has been a controversial figure. It has been condemned by many because of its eating some livestock and game. But others have come to its defense, arguing that the coyote is not all bad and is necessary in the balance of nature, as well as having aesthetic value.

The report of a laboratory study of covote stomachs taken in the 1930's showed that 80 per cent of the covote's diet was not harmful to man's interests. This percentage, ascertained by the Bureau of Biological Survey, U. S. Agricultural Department*, included consumption of rabbits, rodents, carrion, insects, vegetable matter and miscellaneous mammals. The harmful 20 per cent included consumption of domestic livestock, poultry, deer, and wild birds. On the other hand, field examinations by government hunters working for the Biological Survey indicated that the covote's food habits conflicted more sharply with man's economic interests than was shown in the lab study.

Renegade coyotes are a known menace. Some authorities have suggested that the coyote control be directed at these habitual livestock killers rather than at the whole species.

In 1915 Congress first appropriated funds to control predatory animals, including coyotes. Trapping was the first method used by the Biological Survey. The old steel trap meant an agonizing and ignominious death for many coyotes. Finally in the 1940's the steel trap was largely replaced by a more humane and selective trap, the coyote-getter. Then poison*Now a division of the U. S. Fish and Wildlife Service.

ing became the primary weapon. Most poisoning campaigns in recent years have used small animals baited with a killer called 1080.

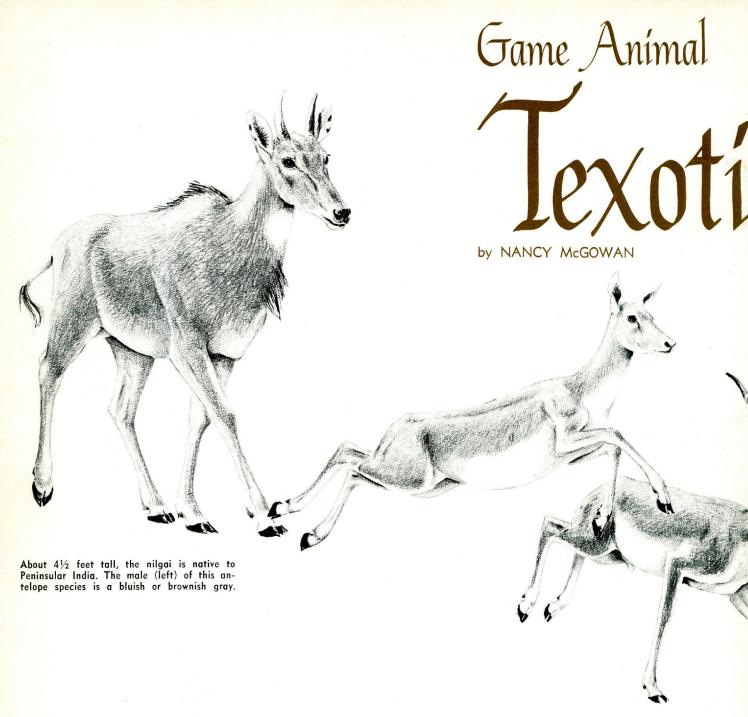
Coyote populations in the western states have been reduced to about one-fourth their former number. In Texas, the coyotes are holding their own, except in sheep and goat-raising sections, according to Dr. W. B. Davis, in *The Mammals of Texas*. Their distribution is practically statewide, with habitats as diverse as only Texas can offer.

The coyote is a persistent and freewilled hombre. He's an opportunist and an adventurer in the spirit of the '49ers. He moves in wherever there is a chance to strike it rich, at least to the extent of having enough square meals. For example, the coyote has extended his range eastward into New England, whereas, he formerly ranged only a short distance east of the Mississippi. The coyote also has learned to live in timberlands, as he does in Texas, and even above the timberline when necessary.

Another trick of versatility to the coyote's credit is his ability to become a city slicker. Many coyotes doggedly and brazenly inhabit Los Angeles. The determined, self-possessed critters frequent the best estates, including those of movie stars. Attempted control of the animals in Los Angeles has been practically for naught, according to Robert Froman, in his book, *The Nerve of Some Animals*, published in 1958.

The old arguments persist; some control efforts continue; and the coyote remains—apparently much the wiser and spunkier for opposition. **





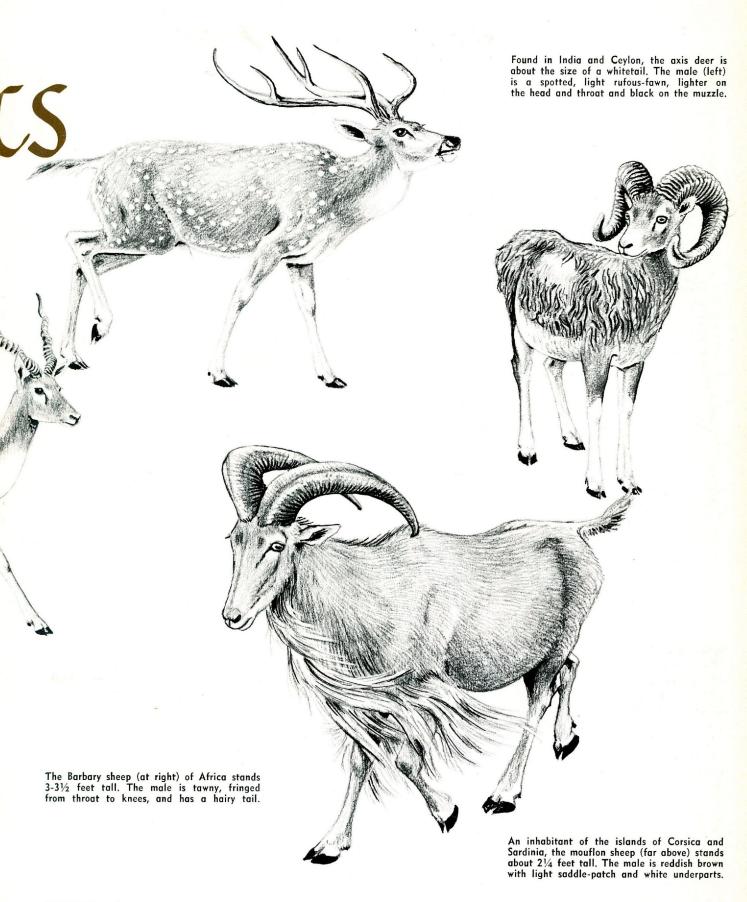
MORE AND MORE hunters and explorers in the field are seeing animals that do not fit into the guides to Texas mammals. These animals are exotics introduced into the Lone Star State by various means; they are Texotics.

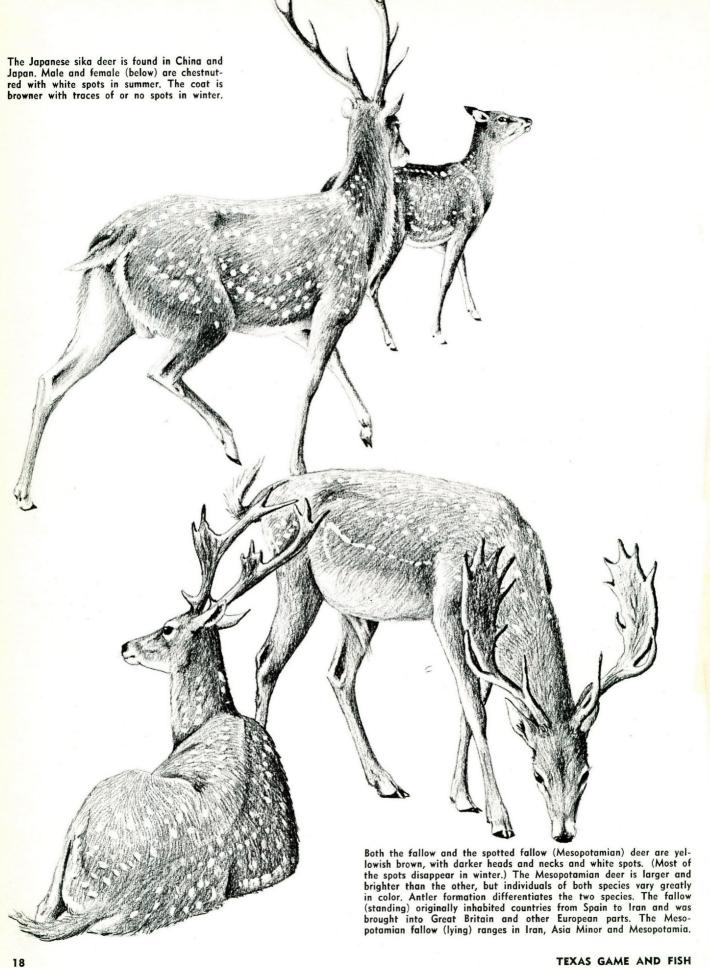
Currently, the wildlife restoration division of the Parks and Wildlife Department is conducting a survey of these animals to determine which foreign species are present and in what numbers. Eventually, the study will determine the value and significance of these animals, including their effect on native game.

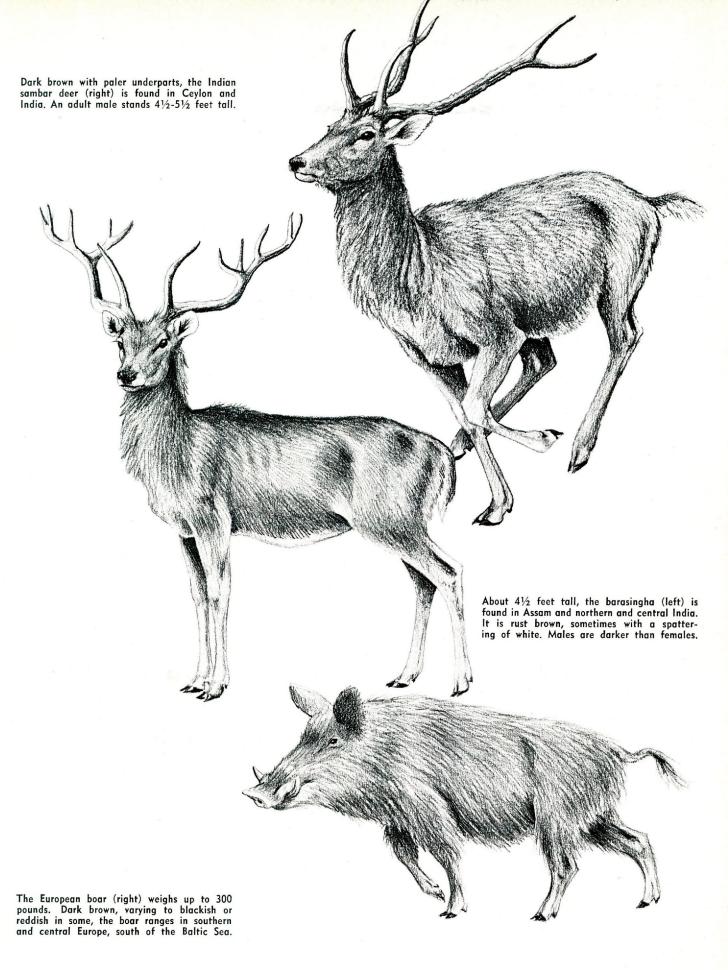
Although the results of the survey and study are not complete, the editor of this publication felt that Texans would be interested in meeting some of these animals, in art form, which are appearing in the survey counts.

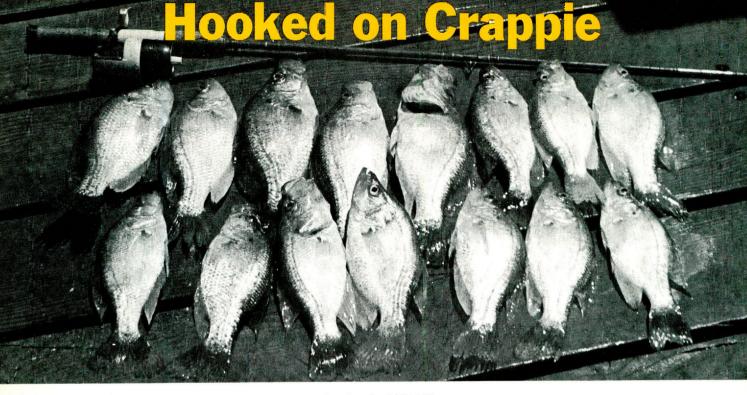
So far, 17 species have been found in varying numbers of 1 to 4334. Listed in descending order according to numbers thus recorded they are nilgai antelope, blackbuck antelope, axis deer, mouflon sheep, The blackbuck is an antelope of India. The young male and female (left) are yellowish fawn. The buck (right) is dark brown or black above, lighter on neck with white underparts and eye patches. It stands about 21/2 feet tall.

Barbary (aoudad) sheep, sika deer, fallow deer, sambar deer, barasingha deer, African antelope, English red deer, eland antelope, spotted fallow deer, albino phase of fallow deer, Asiatic sheep, Puerto Rican deer. The European boar is included in the survey, but an estimate of numbers is not available at this time.









by L. A. WILKE

X / HEN the north winds howl over most Texas lakes in midwinter, there's one spot where crappie can be taken in the sunshinemost of the time.

Falcon Lake, down on the Texas-Mexican border south of Laredo, can be listed as just about the best winter crappie fishing hole extant.

It hasn't always been that way. Crappie are fairly new to this huge lake which straddles the Rio Grande near the town of Zapata. Although the lake now is about 10 years old, crappie were slow showing up. A few were caught about three years ago, a few more two years ago, and last winter the fishing was excellent. It has been so throughout the summer and fall months.

Falcon is ideally suited for white crappie, according to guides on the lake. It has many good spawning areas, and plenty of good places to tie up to an old tree and fish 'em off the bottom with minnows. And there are spots where they will hit small artificials. That little jig known as the Bass Bug is a killer for them.

Although water has been low in Falcon for many months, the lake has provided enough food to keep them fat and sassy. In addition, a portion of the fertile lake bottom, because of low water, was planted in corn during the summer.

These corn patches usually have a few old trees around them, and as the water comes up, the crappie congregate around the trees. Several of the motels at Zapata also have provided floating docks, which are baited to bring in the crappie.

And if you don't think catching crappie is fun, then just check with a few of the professional guides around Zapata. When they are not taking out parties for black bass, they hie out to a crappie tree with a bucket of minnows.

Roy Weathersby, who has been at the lake for a long time, says he has all the fun he wants catching crappie off his own dock. "They are minnowstealers, but it is no trick for a man to get his limit of crappie that will run a pound or better," Weathersby says.

Over at Paradise Point, closest spot to the international boundary line, Bob Zindler takes his crappie on Bass Bugs and light tackle at night. The dock there is equipped with sealed-beam lights down close to the water. This brings in night bugs, and the crappie come in to feed on them. That's where the small jig pays off.

and who has caught perhaps the largest bass taken from Falcon, likes a big crappie tree down near the dam. He also operates the State Park fishing dock at this point.

Although the winds can get rough in a hurry on this lake, there's always a cove somewhere to give protection to the winter fisherman.

This winter big white crappie will be in style on Falcon.



Veteran Ray Creel, who has been at the lake longer than anyone else the lake longer than anyone else the lake longer than anyone else typical crappic catch from his own boat dock.

Tracers on Tree Ducks

by ERIC G. BOLEN Welder Wildlife Foundation

BOUT the only thing one finds A encouraging at 4 in the morning is a cup of hot, black coffee. I thus sat at Dot's Cafe in Mathis hoping that the second cup would activate those senses of my being that the first had failed to stimulate. Across the table, my fellow students at the Welder Foundation, Bill Forsyth and Fred Knowlton, and State Warden Frank Henze fared no better. I had dragged them out to assist with my black-bellied tree duck banding program at Lake Corpus Christi, and, at this time of day, a cup of coffee was the only compensation I could offer. Bleary-eved but surprisingly cheerful, we had hopes of bagging a bundle of black-bellies.

Banding was an important part of my graduate research on blackbellies—birds about which little basic biological data have been gathered. Without more information on the habits and makeup of the birds any future management program for them would not be feasible.

Because, like geese, male and female tree ducks wear the same form of plumage, they are indistinguishable from each other when seen in the field. My observations of nest selection, territorial defense and rearing of the young depended on recognizing each sex's role in these and other matters of biological interest. Banding was thus necessitated. Migration routes, homing tendencies, year-to-year survival and other banding data would, of course, add to my knowledge of the species:



Little information on the life history of the black-bellied tree duck is known. A current banding program at the Welder Wildlife Foundation is a link in research on this species.

but first of all, I wanted to get markers identifying sex on every bird possible. To do this, the ducks would have to be trapped, sexed by examining their reproductive organs, and marked accordingly.

Preparation for trapping had started at the Welder Foundation some time in advance of the actual banding. Federal permits had to be secured and landowners contacted

Waterfowl hunters are encouraged to look for banded ducks in their bag. Three species, the canvasback, redhead and black-bellied tree duck, are on the protected list, but other ducks and geese often carry bands. If a banded bird is taken, send the band, locality of gunning, and date, to the Banding Office, U.S. Fish and Wildlife Service, Washington, D. C. If desired, the band will be returned as a souvenir. Data derived from band returns not only provide pertinent biological information, but also often serve as a basis for sound waterfowl management. Your cooperation in reporting banded birds will help insure game abundance in future vears.-Editor

for permission to operate on their property. Next, some form of marker had to be devised to identify each bird's sex. These had to be relatively permanent, easily seen and harmless to the ducks. Elsewhere, waterfowl biologists had developed numerous methods such as neck collars, nasal

discs and wing tags, but these and other available devices were objectionable for my purposes. Plastic leg flags seemed a good prospect. The tough, brilliantly colored material would be easily seen at a distance and, when attached to an aluminum Fish and Wildlife Service band, it would be long lasting. No danger seemed involved. A handful of flags, of two contrasting colors, were made in short order and tucked into my banding kit.

Then too, the ducks had to be "prepared." In a short while the grain fields would ripen and the ducks would begin their scattered stubble flights, abandoning any baited areas at the lake. But for now, Frank's success with selecting trapping sites was confirmed by the flights of black-bellies that fed gluttonously on the grain bait. Another day or two of baiting the chow line and we were ready to trap.

Today was the day. Dawn was breaking now and the coffee warmed us to our task. At the lake's edge Bill and Frank laid out the large rectangle of netting, then began the careful job of folding it accordianstyle into a strip about three feet wide. Any snag or obstruction along its 60-foot length would later hinder its operation. Fred was busy install-

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A Auck Tale

by MAUDEEN MARKS

NE cannot live in the country without becoming inordinately attached to some of its creatures.

Falling in love with barnyard residents is not to be desired, since their collective destiny is usually a

kitchen pot.

An eighteenth century European was better conditioned to seeing his next-door neighbor sent to the guillotine than the peace-loving ruralite is to sending his pet to the abattoir.

Although one strives, therefore, to keep animal associations on an impersonal basis, now and then comes along a creature of such guile, clownishness or devotion that it is irresistible.

Such winsome ones were three downy dumplings . . . Rodger, Dodger and Blodgett (may the latter's soul rest in peace!) . . . a trio of wild ducklings brought to the sanctity of the house-yard by their wild mallard mother.

A friend endowed us with 10 penraised mallards. He didn't have a puddle to his name in the city and felt that the ducks would be more at home in the country. They took to the pond like the ducks they were and ignored all else, except in late afternoon when they would bumble over to the horse barn in search of stray grains of corn.

For two years we watched with interest for nests or ducklings. The nests were always destroyed by turtles and snakes, and occasionally weasels, skunks, and other inhabitants of the pond area. One season we diligently picked up the duck eggs, hoping to incubate them, but without any luck.

One day in late July when everything fowl had hatched for the season, we saw what appeared to be a demented duck come through the backyard on a lob-lollying trot.

Under the water tank was a halfcylinder of a water-heater which caught the cool drip of the faucet, for the benefit of the chickens, turkeys and dogs.

Madame Puddleduck doused herself up and down for 30 seconds, shook her feathers and headed back the same grass path at the same trot. This went on for several evenings; every time she came by someone would comment, "What's the matter with that crazy duck?"

One morning a few days later three fuzzy ducklings appeared by the back steps. Far from insane, Mother Duck had decided her family was safest near humans.

Two mornings later, we heard the falsetto quacks of the youngsters but couldn't find Mother Duck.

The entire family went on a fouracre hunt for the duck, but she was nowhere to be found. I am sorry to say we never gave her much credit, branding her an unfeeling mother who had deserted her children.

We furnished a bushel-basket apartment for the little ones, complete with baby chick starter feed and a banged-up ice-box tray filled with water.

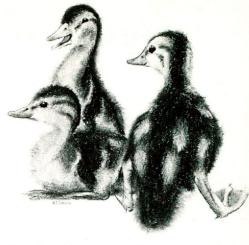
We named the babies Rodger, Dodger and Blodgett. Rodger, for his Mephistophelean eyebrows; Dodger, for her escape prowess when we tried to catch her; and Blodgett, for his sedentary nature. Blodgett's bottom was an enormous blob which he couldn't seem to get off the ground. When he did try, he would tip over on his bill and bob back onto his bottom.

Four days went by. By then the ducklings were happily adjusted to their cozy home. Mother and I were dressed to go to the city.

As we headed toward the car, there was the world's most bedraggled duck, feathers askew, moving like an arthritic patient.

"Why, I do believe that duck is blind," mother exclaimed. On closer inspection we could see that the duck had been in a terrible struggle with a varmint that had bitten her in both eyes. We realized that this was the missing mother duck.

Our sympathies surged at the



thought of her maternal courage and we felt pangs of conscience at having misjudged her.

What perils she must have experienced; we immediately named her Pauline. After she was united with her children, she regained a bit of confidence.

A council was held to decide the fate of the blind, crippled mother duck. The ominous opinion that a mercy-killing should be conducted was voiced but those of us who were vociferously against bringing Pauline to such an ignominious end overruled and we decided to keep the feathered family under an Indian bird trap in the back vard.

For days they amused us. We catered to them by making puddles with the garden hose and then sat by and chuckled at their antics. The chickens plainly regarded them as intruders.

Each day we released them from the coop and little by little Pauline regained sight in one eye. The "mercy-killing" idea was discarded. In fact, it never even got to the Ways and Means Committee.

I wish I could tell you that they all lived happily ever after, but such was not the case.

Blodgett came to an untimely end. With the innocent exuberance which can only be exhibited by a two-yearold, our waddling, toddling niece plonked her archless fat foot smack on top of him. Sad to relate, Blodgett lagged, sagged and expired.

When Pauline was again strong and confident, she marched her two youngsters back to the pond where

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Regional



Roundup

Region I - San Angelo

ONE saltwater redfish, released in Imperial Reservoir on the Pecos River in April, 1961, was recently recaptured by fishery crews—it weighed 25 pounds. Nine one-year-old redfish which weighed two pounds each were recaptured in Red Bluff Reservoir a few days later. Redfish grow rapidly in coastal waters, but such rapid growth is unprecedented in inland lakes like Imperial and Red Bluff.

Sandhill cranes in West Texas totaled 100,000 this year, according to Federal and State estimates. Sportsmen in the vicinity of Lubbock and Plainview took advantage of hunting opportunities while most other areas reported little interest in this fine game bird and few hunters.

Region II

POR the first time on record, in Central Texas, blue catfish reared in the fish hatchery have been known to survive in public waters. These desirable fish were stocked in Hubbard Creek Lake last year. Many of these catfish are showing up in routine net checks of the lake by Parks and Wildlife Department biologists.

Lake Proctor continues to show very good growth on the game fish stocked by the Parks and Wildlife Department. Initial checks by the department biologists show a large game fish population with many catchablesize black bass, crappie and channel catfish. W. H. Smith, DeLeon, reported that he and another fisherman caught 130 black bass on Lake Proctor in one afternoon of fishing. The bass were carefully released as soon as possible. The fish were also reported to be all about the same size, weighing approximately a pound and a half each. This indicated a good growth since these fish were released from the State fish hatcheries in the spring of 1963. Smith believed that a possible contributing factor in the rapid growth of these fish was the watershed's being composed of many peanut fields. The farmers use great amounts of fertilizer on peanuts and some of it gets into the streams and into the lake, resulting in a bountiful food supply for fish.

Rod Marburger, biologist, reports issuing 144,163 antlerless deer hunting permits to landowners in the Edwards Plateau District, between Oct. 30 and Nov. 15, for the 1963 hunting season. Antlerless deer hunting permits are issued only in areas containing a high deer population which this year included the whole of 13 counties and only parts of 8 counties, in the 21-county district which is the very heart of the deer country in Texas.

Data collected by walking the approximately 675 twomile long deer census lines indicate an increase in the deer population in 1963 over the corresponding deer herd for 1962. For the Edwards Plateau, however, the totals in two counties are below that of last year.

The fawn crop, according to Marburger, is shown to be 35 per cent of the herd in Bandera County, for the low reproduction rate count; the high count was in Llano County where it was recorded as 97 per cent. In Bandera County, the density of deer was one deer per each 9.59 acres, which possibly indicates the reason for its being lower than some counties in the fawn count. The highest density of deer was recorded as one deer to 3.53 acres in Kendall County, followed by one deer to 3.72 acres in Gillespie County and one deer to 3.84 acres in Llano County. Crockett County deer census record indicates the most sparse population, with one deer to each 36.93 acres, followed by Travis County, with a deer for each 24.97 acres, and one in each 21.57 acres in Schleicher County.

Over 900 landowners drew more than 18,500 antlerless deer hunting permits in Gillespie County. This is an all-time high participation record for this county, according to a report from Adolph Heep, game warden. In Mason County, the game warden, Hardin Bradley, reported issuing more than 18,500 antlerless deer hunting permits. E. A. Smith, biologist, reported 501 landowners receiving 6,921 antlerless deer hunting permits in Comal County, out of a possible 7,464 permits that could have been made available on 248,022 acres.

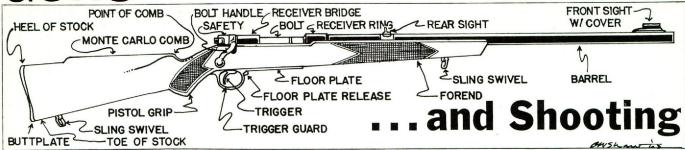
Region III - Tyler

NEWS in a nutshell could not be written from outdoor East Texas this month. It would simply overflow the nutshell. Widespread hunter-satisfaction, the general good condition of wildlife species and abundance of wildlife populations are evident on every hand.

To start in the proper place, at the beginning, dove season was disappointing to many hunters in some parts of the region, but extreme north and south parts of East Texas had a good harvest. Squirrel hunters had a bad start because the drought-stricken woods were noisy. However, the rains came, eliminating the fire hazard and making a walk through the woods easier and quieter. Most parts of the area enjoyed late squirrel hunts.

Deer are fat in spite of dry weather, and the acorn

• Continued on Page 29



COMPLETE BOOK OF RIFLES SHOTGUNS, By Tack O'Connor; 480 pages of comprehensive, fully illustrated guide to modern sporting rifles and ammunition. Harper & Bros., New York, \$6.50.

Jack O'Connor, who has been arms editor of Outdoor Life for nearly a quarter of a century, has put more know-how into one volume on hunting arms and ammunition than you ordinarily get in a half-dozen books.

O'Connor can write authoritatively on guns and ammunition. Reason: He's shot them all, and he's killed just about everything from west Texas jackrabbits around Alpine when he was a young man, to the wildest animals that roam in Africa.

In this book, which is sponsored by Outdoor Life, he begins with the origin of shoulder arms and winds up with a glossary of terms every hunter should know. The illustration above, covering basic identification points of today's modern rifle action, is an example of his

treatment. He covers all-over types of sporting rifles and shotguns in much the same manner.

He delves into calibers, their origin and their efficiency. He writes about the various shotgun gauges and how they came into being.

Technical information in the book, and there is much of it, is handled in a manner that is easy to understand and not boring. This is one book which you'll enjoy if you are at all interested in guns; it will introduce you to a worthwhile understanding of them if you are just getting acquainted.

From .22 to elephant cartridges, from rabbit shooting to rhino, they are all described, along with the effect of bullets and their killing

It is a book you'll read through, slowly and deliberately. And long after you've read it and memorized parts, you'll go back to it as a reference work for years. It is just that good.

For example, the glossary is almost unlimited. It gives you such information as:

BALLISTICS: The study of what happens to a fast moving projectile.

BEAVERTAIL: A wide, flat foreend of a rifle or shotgun.

BLOWN PATTERN: A shotgun pattern with erratic shot distribu-

tion.

BOATTAIL: The tapered rear end of a bullet.

CANNELURE: A groove around the circumference of bullet or case.

COMB: The upper edge of a rifle or shotgun stock upon which the cheek rests.

CORDITE: A double-base smokeless powder made of nitroglycerine and guncotton, used extensively in Great Britain.

DAMASCUS BARRELS: Barrels made of strips of iron and steel welded around a mandrel.

ENERGY: The amount of work done by a bullet.

GAS PORT: A small hole in the barrel of a gas-operated weapon through which expanding powder gases escape.

KENTUCKY RIFLE: A flintlock rifle with a long barrel and short, crooked stock and small bore, developed in the 18th century.

LOAD: A noun, one charge of powder and projectile. As a verb, to prepare for firing by inserting ammunition.

METAL CASED: A bullet with the forward portion enclosed in metal.

MID-RANGE: In trajectory, the point half-way between the muzzle and the target.

PRESSURE: The thrust of burning gases.

TWIST: The inclination of rifling grooves in relation to the axis of the bore, generally measured in the number of inches to a complete turn,

These are just a few examples of the glossary, one which every lover of a gun should have either in mind or at hand. Thus Jack O'Connor's newest work—Complete Book of Rifles and Shotguns becomes a shooter's must.-L. A. Wilke



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Morton's Monster

VISITORS to Wizard Falls state fish hatchery in central Oregon are often startled to encounter an ugly, octopus-like monster with waving tentacles, looking like some Martian or other critter from outer space. But the thing is merely an invention of Gene Morton, the resourceful hatchery superintendent.

Nicknamed "Morton's Monster," the mechanical device loads liberation trucks in a matter of minutes and makes possible the rapid transfer of fish from pond to truck, and thence to the release site, without manhandling a single trout. It is also used for rapid grading of trout, or to transfer fish from pond to pond. Morton says it will also make a handy fire-fighting machine, if necessary, since it can spew an 8-inch stream of water 100 feet or more.

Liberation crews speak in blue language of this mechanical marvel, for when they pull into the Wizard Falls hatchery the transfer of fish is so rapid that even a short coffee break is out of the question. One crew member said it isn't even worthwhile to shut down the engine.

Morton has constantly striven to upgrade the art of fish culture. His Morton Fish Grader and other of his innovations now are used in hatcheries throughout the world. His first model of a fish transfer device, built in his spare time, was too costly to be practical. So back to the drawing boards he went, and came up with a simpler one. He calls it the "piscatorial combine," because it scoops up water and fish, separates the two, and spews both ingredients into the proper place.

His persistence and confidence prompted the Oregon game commission to approve a sum of \$1,800 to get the piscatorial combine into operation, which he said he would save in fish and labor before one summer ended. From the initial goahead, his brain child took a year or more of sweat and worry before it became a reality.

Principal of operation is siphon and gravity or forced flow. Major components are a large boiler-like hopper standing on end, a pump and motor, a series of two-way valves, and several attachments of flexible tubing. A large 8-inch siphon tube connected to the top of the hopper is the main tube for either pulling fish into the tank or spewing them out. Other smaller flexible tubing is connected to pipes and valves at the bottom of the hopper and used for water manipulation. Two two-way valves allow either input or output of water and fish through the large siphon tube at the top.

When transferring fish, the hopper first is loaded in much the same manner as a housewife vacuuming a rug. The trout to be released, graded or transferred are crowded by movable screen into a narrow strip of pond. The hopper is filled with water through one of the small tubings at the bottom, and the air is bled out through a valve at the top. Now the siphon tube is lowered into the pond and the fish are forced toward the siphon opening. The input valve is opened and fish and water are sucked into the hopper. Excess water coming in is expelled out at the bottom and back into the pond. A glass window on the side of the hopper allows the operator to see what is going on inside, and when enough trout have entered the intake valve is closed.

The siphon tube is now raised from the pond and, if a liberation truck is to be loaded, the tube is coupled to a portable box-like "separator," set in place on the truck tank, while the water is diverted off to the side. When the connections are made, the output valve is opened and fish and water leave the hopper in the same manner in which they entered. Number of trout to be released is measured as they enter the liberation truck, by weight displacement as the trout fall into the water in the tank.

And there you have Morton's Monster, the piscatorial combine, or whatever other name you wish to call it, a handy gadget to have around a hatchery. And it would seem that the hatchery itself—Wizard Falls—is well named, with such an ingenious superintendent.

–From Oregon State Game Commission News Release

Garish Capture



Photo courtesy of Cuero Record

Brothers Alvin (left) and Erwin Rath of Green-DeWitt community caught this 6-ft., 3-in., 100-lb. alligator gar on a trotline in the Guadalupe River on the Burns McAlister place near Cuero last spring. To kill the huge gar, the men shot it twice with a high-powered rifle.



Correction

An error occurred in the by-line of the article, "Fleeting Target," appearing on page 19 of the December 1963 issue of Texas Game and Fish. The by-line should have been Jim Thomas, instead of John Thomas.

STICKY SITUATION

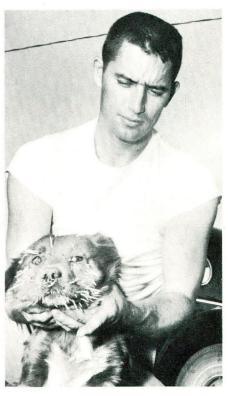


Photo courtesy of Neal Knox

C. L. Brooks who lives near the Red River in Wilbarger County inspects Red, an uncomfortable but wiser dog for a prickly encounter. Wilbarger and Hardeman County residents were surprised to learn that far-ranging porcupines had invaded the almost treeless sandy plains near the Red River. Two dogs were seriously injured by the rodents last fall south of Quanah and two others, near Vernon.

DEER HORN MOUNTING

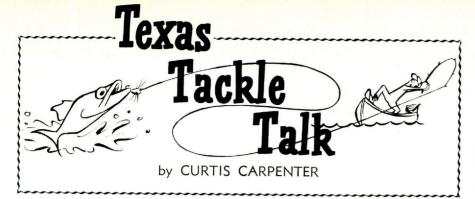
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READER recently wrote in Aasking if a catfish bait had been designed that would be attractive to catfish and unattractive to turtles. After a check through our files and consulting the authorities on this subject, we have concluded that there is no such bait. Actually, turtles will sometimes eat what catfish won't touch.

"What type of spoon is best to use on the shallow flats along our coastline?" writes an interested fisherman. It depends on a number of factors, such as the time of the year, the type of bottom (thick with moss or fairly clean), what type of fish you are after and the kind of rig you are using. If I had to choose two spoons I would pick the Johnson Sprite for clear bottoms, and the Rex Spoon for mossy bottoms. The weight would depend on your rig, the depth you wish to fish, the winds and the distance you want to cast. If you use a light fishing outfit, use a light spoon. If you must cast into a strong breeze, use a heavier spoon. If the spoon must ride high over the moss. a light spoon is best. If you want the spoon to sink rapidly, get out the heavier one. Silver and gold are the best colors.

Nothing suits the family like an adventure together on the coast. You may call crabbing an adventure or you may call it something else. No matter what it is tagged, crabbing was designed for the family. The simple equipment required to catch crabs and the fact that any member of the clan, including grannie and granpaw, can scoop up crabs put this activity at the top of the list for family fun on the coast.

Take along some cord, a crab net (small meshed and heavy) and a light, if you plan to fish at night. Better throw in a tub to hold the crabs and a pot to boil them in if you plan to have an outdoor crab cracking time.

The bait can be scrap meat or cut fish. Tie it on so the crabs cannot pull it free and carry it off. Tough bait is better than mushy bait. To attract the crabs, you can jab some holes in a can of sardines and drop it on the bottom near the spot you plan to fish. When the crab scents this, he'll come a'scooting.

Check the lines at intervals. As the crabs grab the baits, slowly lift the lines and then dip the crabs up with the net.

Fund for Murphree

The Texas Outdoor Writers Association is urging Texans to donate toward a fund for the widow and three small children of Game Warden J. D. Murphree of Center, allegedly slain by a duck hunter while enforcing conservation laws. John Thompson, outdoor editor, Beaumont Journal, and president of the writers group, said the dead warden left no insurance whatever. Donations may be sent to the Warden J. D. Murphree Fund, Orange National Bank, Box 969, Orange, Texas.

When you get a mess, toss them into some boiling salt water and let them turn orange. You're ready for some cracking.

Coach Tackles Fish



Photo courtesy of Jasper News-Box

This 81/2-lb. bass was caught by high school football coach Bob Jenkins of Kirbyville. It was taken with a rod and reel and a plastic worm from a 50-acre private lake near Jasper. According to Bob Sanders, news editor of the Jasper News-Boy, nothing on record caught with hook and line in East Texas tops this.

Rodger became a drake.

A Duck Tale--From Page 22 they reverted to their semi-wild stage.

In the crisp days of fall, Rodger developed the green head and the tail curl of a drake and Dodger kept the mottled plumage of the hen duck. Soon they will be indistinguishable from the others of the flock.

Will they, we wonder, wing north with the great migratory flight in the spring? Or is there, in their funny little duck brains, a seed of security rooted to the LH7 Ranch that will bid them stay?

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CRESCENT MFG. CO. P. O. Box 3303 — Ft. Worth, Texas Tracers on Tree Ducks——From Page 21

ing the four tubes of heavy pipe that served as "cannons." When securely anchored, they would be loaded with weighted, piston-like projectiles and armed with charges of smokeless powder; a stout nylon rope connected each projectile to the net's leading edge. I finished stringing the wire that would trigger the cannons, then started checking the banding gear. Pliers, bands, flags, scale, and other items were ready for use. Suddenly, from afar, the shrill squeal-like whistle, "pee-cheche-nee," that only a black-bellied tree duck can utter, drifted to our ears. The first flights of the day were approaching. We quickly finished the remaining chores, and while I crawled into the blind, the others retreated out of sight.

All ducks are wary, but blackbellies seem unusually so; the slightest movement or noise would betray the entire operation. In the blind, scarcely 100 feet away, I nervously hugged the ground. Closer, still nearer they came until possibly 100 ducks filled the air about the ground. Their calls shattered the morning's stillness. Circling now and landing, some eagerly started to feed. Others lagged suspiciously out of the net's range. An adage of expediency, "Take what you can while the taking's good," guided me to close the circuit. A single, pleasing boom from the cannons answered the battery's voltage; all had fired at once, arching the net over the feeding ducks. The possibility of a hang-fire and a hopelessly tangled net-minus ducks-was past. Seconds later, we were scooping up a mass of mightily indignant black-bellies. Unharmed but rather rumpled, each bird was weighed, banded, and above all, sexed and flagged.

The sleepy-eyed cannon netters watched a strange scene—black-bellied tree ducks rising into the air with flaming pennants trailing from their legs. One can never tell, maybe they'll hatch thataway next year and save us some trouble . . . I hope so, as at 4 in the morning, even good coffee is no substitute for sleep.

What Others Are Doing

by JOAN PEARSALL

POCKET POLLUTION PLAN: The Pennsylvania Dept. of Health has published a wallet-sized booklet entitled: "How to Improve Your Fishing by Reporting Fish Kills." Providing instructions on how to report a fish kill and suggestions as to how individuals can help reduce pollution, it contains six gummed water sample jar labels. Fishermen are urged to keep the booklet with their fishing licenses.

SHOOTING MATCH: Arizona sportsmen have expressed their endorsement of a recent decision by their State Game and Fish Commission to provide \$5,000 in annual matching funds for the development of public shooting ranges.

PEOPLE WITH A PORPOISE: A commercial fisherman brought in a live porpoise with his catch and dumped it, gasping, on a fishing dock in England. Dock workers and bystanders, shocked to see the animal so badly treated, took up a collection, bought the porpoise on the spot, and returned him to the water, apparently no worse for his experience.

DRY WEATHER FRIEND: The beaver is often maligned, but attention was called to its value during the dry spell New England suffered last summer. There, the beaver's water holes were utilized for forest fire fighting. Brooks continued to flow only because of beaver impoundments on them. One man in New Hampshire was grateful to beavers for having built a pond on his land. While many shallow wells in the area went dry, his held up beautifully. BRIGHT OUTLOOK: The Canadian Association of Optometrists recently adopted a resolution endorsing the use of daylight fluorescent orange as a public safety color and the ideal color for hunters in the field. They thus followed the lead of the American Optometric Association, the National Safety Council and the U.S. Bureau of Standards, all of which endorsed results of the safety color study conducted by the Massachusetts Division of Fisheries and Game. Massachusetts deer hunters during the shotgun season are required to wear at least 200 square inches of the material. Last year, the first year this law was in effect in the state, not a single firearms accident occurred in which the hunter was mistaken for game or was not seen in the line of fire.

SURE WAY TO GET BITES: Before taking some youngsters fishing recently, in Missouri, their grandfather told them to dig some worms. The ground was too hard for the kids to do much digging, but when they turned over some boards they found all the bait they needed. Grandpa was just baiting his hook with some liver, when one of the kids told him they couldn't get their worms on the hook, and the worms were biting. Grandpa investigated, then rushed the kids to the hospital. Their injuries weren't serious and they were treated and released. The worms? About a dozen small copperheads, four to five inches long. Their venom glands were not fully developed, but their fangs worked well-every time they got stuck with a fishhook.

FIRE SPARKS NEIGHBORLI-NESS: The Brazilian government called in five American fire experts to help control a large fire there this fall. One was the Director of Forest Fire Control for the Forest Service, and the others, experienced in firefighting in the Southern Appalachians, were selected because this part of the United States is most similar to the pine forest and coffee plantation country where the Brazilian fire raged. The fire burned more than a million acres, killing about 50 people and leaving thousands homeless.

Rain helped dogs find quail.

Regional Roundup -From Page 23

crop is reported as the best in many years. It seems that the food supply will be adequate for most animals through the winter. The early experimental deer season that opened Nov. 1 in Freestone County produced a satisfactory harvest of animals. Biologists patiently gathered a volume of material to aid them in deer management practices for the future. One buck in the area had 17 points, and one weighed over 140 pounds field-dressed.

Quail hunters had rain about the time the season opened, and dogs were able to find a good many birds that might have been hard to locate in drought conditions. Goose season was about average, and ducks are using the major reservoirs and inland ponds.

Region V - Rockport

S THE NEW YEAR starts, Reagion V game wardens breathe a sigh of relief. Deer season has closed and by the end of January all seasons will be over for another year. In addition to routine law enforcement, they must now join the wildlife biologists in trying to round up all shooting preserve record books and antlerless deer permits in order to compile kill records for their counties.

Because of the weather, marine biologists struggle to make the required number of samples, collections or surveys each week. High winds, which make the bays and the gulf too rough to work, are common this time of year, and weather forecasts are watched with an eagle eye. The windy days can be utilized in repairing equipment, reporting writing and other routine work.

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To Catch a Nutria

by BOLTON WILLIAMS



Dr. Everett Wilson holds a nutria caught by the tail method.

WHILE PEOPLE in many areas are trying to devise a means of killing the nutria, *Myocastor coypu*, members of the biology department at Sam Houston State Teachers College are catching them alive.

Dr. Everett Wilson and several graduate students working under him are capturing the nutria for laboratory research which ranges from reproductive endocrinology (study of internal secretions and endocrine glands) to haematology (study of the blood).

The nutria can be trapped but not in sufficient numbers to make this method practical. To capture enough of the wily beasts to maintain their research, Dr. Wilson and his students took to the marshes on foot and have captured approximately 100 nutria by chasing them through their marshy feeding grounds and catching them by the tail.

The prospect of catching a full grown nutria by the tail is a bit appalling, even to a graduate student who is accustomed to unusual undertakings, but it is not really so difficult as one might expect. The nutria, unlike the opossum, is incapable of swinging up high enough to bite his captor when held by the tail and is, therefore, helpless.

The problem, though, remains to *catch* one by the tail. This also is a relatively simple matter, for the nutria feed in shallow marshy areas congested with plant growth where a man on foot may offer chase. When pursued, the nutria will swim a short distance and dive to the bottom in an attempt to hide. It is then necessary only to locate it in the clear marsh waters and to secure a hand hold on its tail.

Numerous alternative suggestions have been offered for capturing these unusual beasts, but none has proved as effective as the "hand-tail" method, and until one does, Dr. Wilson and his graduate students will depend on the grabbing act for their source of experimental animals.

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Good Hunting

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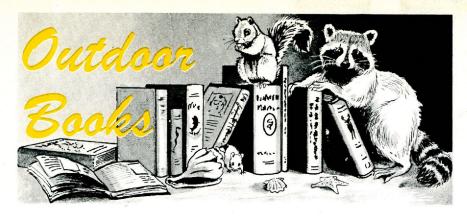
Buckskin Dog Boots Now Available. Light, Tough. Protects against Thorns, Grass Burrs. Sizes: Medium, Large. State Size, \$1.50 pair, plus tax.

M. R. MOEHLE 5220 Nolda St. Houston 7, Texas hunters who came out of the Pocket had at least one or two squirrels.

Most of them carried from three to five. And several killed their limits of 10. It was as good, or better, than last year's harvest.

And with kills like that being made by the "average" hunters—some of whom have had little experience stalking the elusive cat squirrels that make up most of the bag here—the hunting has to be very good.

So it's no wonder that Devil's Pocket, to many sportsmen in East Texas, means squirrels—and lots of them.



WE LIKE IT WILD, by Bradford Angier, 213 pages. Published by The Stackpole Company, Harrisburg, Penna. \$4.95.

How often does the average fellow just long to "shave it all off!" Go off into the woods and forget the choking tensions of work and tight coils of American middleclass society.

One fellow did. Brad Angier had long felt the tug of the wilderness-perhaps an ancestral rootedness to the land. At last he submitted to it and packed off to the frozen wilds of British Columbia with his wife for a year of rugged living.

The beauty and savage power of that year in the woods is re-created in We Like It Wild. The warmth and sheer joy of living in this setting spills from the pages into the reader's cache of experience. . . .

"The frozen river had become a silver ornament, twining across the throat of the world. There was a feeling of newness, as of spring, in the air, although this may have been the result of the wind dying down. Most of all, it seemed perfectly natural for the two of us to be here. It was as if we were first arrivals, no longer automatons in an aimless chaos but, all at once, integral parts of an orderly cosmos.

"That evening our coal oil lamp glowed, rather than shone, in a corner of the log cabin made snug by a hanging green tarpaulin. The soft light made our niche seem the cozier. Bushman was curled on a scrap of rug I'd found in one of the buildings. . . . When I turned on the portable radio, Mexican and Californian stations boomed in. . . . Mostly, though, we talked.'

In a demure, subtle manner, this book is also the story of a marriage-of a wife's willingness and ability to live the kind of life which is foreign and a little frightening to her but dear to her husband. With no flaming, best-selling passages of passion, Angier tastefully records the tenderness and consideration between man and

Regardless of a reader's agreement with the author's final decision between remaining and returning to the city, he can hardly miss experiencing pleasure in the richness of the wilderness' simplicity.-Ann Streetman

TEN TEXAS TALES, by Robert L. Gilstrap. Black and white illustrations by Betsy Warren. Published by The Steck Company, Austin. 160 pp. \$2.50.

Mention the subject of history to many youngsters and the chances are they will pull a face, or at least register indifference. Yet if you asked them if they were interested in adventurous stories, what a different reaction there would be. History is, of course, a study of man's adventures. Ten Texas Tales presents a certain chunk of it to youngsters in that light, mixing imagination, humor and some fiction into a true historical background.

In chronological order, each tale illustrates an episode in Texas' colorful past. Each has an introduction briefly describing life and events of that particular period. Starting off with a poetic Indian legend and a story of one of the early friars who warded off a devil, the reader goes on pleasantly digesting history along with hearing about the ghost of Jean Lafitte and pirate treasure, the one man who escaped

from the Alamo, Comanche raids, and the problems of a suddenly oil-rich family. There's also a chuckle in the accounts of the Johnny Rebs' "secret weapon," the little boy's scare in the churchyard, and the lonesome cowboy's strange pardner.

This book would make a fine present for a fourth-to-sixth grader. And the readers won't necessarily be limited to young people. These are appealing little tales and perhaps the more mature will also find a sharpened awareness of Texas' heritage.

-Joan Pearsall.

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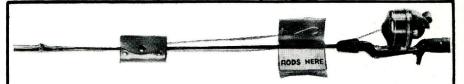
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Bob

Letters



to the Editor

Second Rate Bucks

Editor:

Some interesting things turned up during last season of deer harvest. Thanks to the antlerless hunt, and do hope it will continue a few more seasons. I inspected quite a number of the kill here and found three and four-year-old buck deer with hardened antlers protruding through the hide, some just nubs some three or four inches long. One in particular, a three-year-old buck, field dressed 96 lbs. He did not even have any buttons under the hide on his head.

The results here on this particular place did far more good than harm. I do not think this was caused by deficiency of mineral protein or food deficiency. I honestly believe it was caused by inferior bucks that stay with herd, and our better bucks hide out. I think after a time, when these deer are thinned out, then the does will find these better bucks. I have watched these deer and I came to this conclusion several years ago. We have several nice bucks left. Some fawns or young were seen this last season, but were not hunted. Houston Ellis

San Marcos

(Our biologists are conducting a study in the Hill Country on velvet-horned bucks, a subject we have been concerned with for some time. Many full-grown bucks in this area never shed the velvet and their antler growth is quite poor. The soil type may have something to do with this, and the lack of a needed mineral or the consumption of harmful mineral. Most of the bucks with poor antler growth seem to be showing up in areas with granite gravel soils. A number of factors affect antler growth. The deer in your area evidently are not including in their diet those things which provide adequate minerals for good antler growth. Research will eventually give us more information on this. -Editor)

Fish Casualties

Editor:

Recently I purchased a cottage on Granite Shoals Lake on the Llano River, and it is with deep concern that I have noted so many dead fish floating in the water. If skiers are the cause of this I think something should be done to protect the fish. Or just what is the cause? I have noted that it is always after a weekend

as well as during a time when the lake is churned up by so many boats.

Robert M. Liles La Marque

(Occasionally, fish are killed by propellers. Such fish show that they were killed this way, by the gashes cut in them. Studies of the effects of outboard motors and motor boats on fishing have been unable to find any detrimental effects caused by the use of boats. As far as catching fish is concerned, the only objection to the hot-rod boats and skiers is that they will swamp the poor fisherman and chase him off the lake so that he does not have an opportunity to do much fishing. Our SCUBA boys have found that about six feet under the surface of the water a motor boat going overhead has about the same intensity of noise as would a clock ticking in a room. They also stated that the fish did not show any sign of nervousness. Some of the open-water species of fish are attracted by propellers and will follow behind a boat, possibly hoping to pick up an occasional minnow that might be injured by the propeller. Granite Shoals has a tremendous number of weekend fishermen, and the tendency is to throw back undersized fish, the majority of which die. In fact, this is the reason size limits have been removed from most fish, to encourage a better use of our fish crops-Marion Toole, Inland Fisheries Coordinator)

Treasure Hobby

Editor:

We are collectors of fossils and Indian artifacts, all of which we find on our place. This family hobby is kept educational and our interest in it grows because of that fact. By studying wildlife, plants and the rocks, etc. about us, zest has been added to our everyday life. With parents and children sharing a mutual hobby, the companionship enjoyed by all is priceless.

We take pride in all the treasures found during our many hikes, and we have a most educational display mounted, that we have taken to the Comfort school to share with all 12 grades of students. We have had it on display to the public at our park during our Union Monument Centennial, and at the fair in another county. These exhibits interested many and the school children especially were surprised that such a collection was gathered not far from their school.

City visitors find our "inland seashore" of fossil shell hunting a special treat, and many specimens find their way back to other schools for classroom study—even all the way to California.



Artifacts, as well as vegetables, are reaped as we hoe the garden rows.

We have learned much about the common wildlife about us as we hiked and hunted treasure—all because of your fine educational magazine. Please keep up the good work—it is enjoyed by many a family circle.

The Perry Lick Family Comfort

(This is indeed a collection to be proud of and we are pleased you have found our magazine helpful. No doubt the greatest treasure you have found is the mutual family interest.—Editor)

Girl Duels Gar

Editor:

Glenna Lou, our 14-year-old daughter, caught a monster 149-pound, 7-foot, 4-inch gar unassisted, except for a gaff in banking him. She used a small whole croaker as bait, with a home-made 15-year-old calcutta pole, reel, 36-pound test line, and No. 8 hook—treble steel. She makes her own leader. The interesting thing to us was that the No. 8 hook held and caught him after about an hour-long battle.

Mrs. Eddie McWhorter Houston

(That duel between gar and gal must have been something to see. We admire your daughter's determination and skill.— Editor)

Junior Sportsmen



WE GET LETTERS . . .



inconsiderate of others—breaking the conservation laws and leaving others to suffer. Of course, there could also have been some other reasons for your empty stringer, but no doubt the practice of "telephoning" for fish had something to do with it. Keep up your interest and continue to do your part in outdoor conservation.—Ed.)

DUTY STANDS BY

three other men went first day they killed White's dog, Duty, a the grass for the men, ite had a heart attack, the hospital in a hurry, some and did not hunt or days when Mr. White he asked about Duty, camphouse and found a master's clothes. Duty a leave the camphouse, the hospital in 10 days, camphouse to get Duty.

Duty and Mr. White were so happy to see each other. Mr. White said, "Duty, you are the best friend I ever had."

Steve H. Coronado

(We are glad you told us this beautiful story, Steve. Duty certainly lived up to his name, didn't he?—Ed.)

EMPTY STRINGER

Last year we printed a drawing by Larry Du-

ane Thrapp of Texarkana. This picture shows Larry is also as successful as a fisherman.

Editor:

My grandmother took me fishing up in East Texas. We fished in a bayou in a hole where her father had caught 26-pound catfish. We set out our trotline and didn't catch a thing.

When we got home my uncle told us people used telephones at this creek. Now we know why we didn't catch anything.

Mack Rigby San Antonio

(It is indeed sad that a few people are

TEXAS MOOSE

Editor:

I went to a friend's cabin along the Nueces River one day and they own two acres. We were driving along a road and we saw a white deer that had horns similar to a moose but smaller. My friend's mother said that someone had shown her some horns just like the deer and said that it's a new kind of deer that's coming into Texas. I've never heard of anything about it so I thought you could tell me a little more.

Mike O'Neal Corpus Christi

by JOAN PEARSALL

(It sounds as if that unusual deer you saw was an albino fallow deer. This species seems to be prone to albinism. It is said that the deer originally inhabited the Mediterranean area.—Editor)

RATTLER BATTLER

This summer, my cousin, Ricky, and I were going along a country road when suddenly beneath my feet I spied a rattler. I yelled, "A rattler," and headed for the hills. About five minutes later, six grim hunters, my father, my aunt, my two sisters (seven and twelve), my cousin (fourteen), and myself (ten) reached the battlefield. On the first few throws, my father missed. Then he smashed the snake's head with two rocks. Then we did the rest. My big sister broke the rattler's head. I broke his back and my cousin smashed a rock on the snake's head. By that time, the snake was dead. The snake, that I think was a diamond-back, wasn't any longer than four feet.

> Mike Wooldridge Dallas

(That was a thrilling story, Mike. We are glad you were alert enough to spot that rattler before he could bite you!— Editor)

PISCATORAL PRIZE



Ralph Spence, Jr., a fishing enthusiast since he was big enough to hold a pole, is rightly proud of this 71/4-lb., 211/2-in. largemouth bass.



Venison Varieties

Venison is a rather dry meat and can be improved by adding butter or margarine, suet or other fat when broiling, pan-broiling or roasting. If you have a less tender carcass, there are ways of preparing the meat to make it tender and appetizing. The methods of cooking venison are the same as those for cooking other lean meats. Use dry heat for tender cuts and moist heat for less tender cuts.

Cuts of Venison and Suggested Uses:

The **hind** and **fore shank** are used in soups and stews and are ground for sausage, meat loaf and patties.

Round of the carcass is usually tender enough for steaks. If less tender, use it for Swiss steaks or grind it for sausage, patties or meat loaf.

Legs, if small, may be roasted in an uncovered pan without adding liquid.

Loin of venison is used for sirloin and porterhouse

steaks or choice roasts.

Shoulder or chuck should be cut into roasts for pot

roasting, or ground.

Rump roast is used for pot roast. From a tender, young buck it may be roasted in an uncovered pan with no added liquid.

Flank and **breast** cuts contain considerable meat. Use them for soups, stews or grind for patties, meat loaf or sausage.

Neck of the carcass should have the tendons removed. It can then be roasted, used as stew or ground.

VENISON SAUSAGE

30 po<mark>unds venison, cut</mark> 20 pounds fat pork,

about 50 to 60 per cent lean, cut

1 pound salt

3 ounces black pepper 2 ounces sage, optional

1 ounce red pepper, optional

Sprinkle seasonings over meat. Grind through coarse chili plate. Regrind through sausage plate. If sausage is to be frozen, season only half the total amount. Wrap sausage, in sizes needed for a meal, in moisture-vapor-proof paper. Thaw and cook seasoned sausage. Thaw and season unseasoned sausage just before using. Unseasoned sausage will keep fresh 5 or 6 months, while seasoned sausage will turn flat and rancid after 3 months.

—Courtesy Texas A&M University,
Agricultural Extension Service