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# TEXAS

PARKS & WILDLIFE

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Dedicated to the conservation and enjoyment of Texas fish, game, parks, waters, and all outdoors.

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 JOAN PEARSALL ..... Copy Editor  
 LEROY WILLIAMSON ..... Photographer  
 RICHARD MOREE ..... Photographer  
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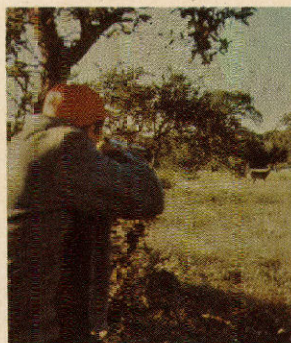
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November, 1966

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**Cover:** Few outdoor activities can match the thrill of hunting bobs behind a well-trained dog. Photo by Leroy Williamson.

**Inside Cover:** Taunting sneer of aoudad sheep may be a challenge to hunters for coming season. Photo by Leroy Williamson.

**Back Cover:** Fall of the year in Texas is noted for its brilliant sunsets. Photo by Leroy Williamson.



## *Progress and Wildlife*

Modern agricultural progress adds new emphasis to man's responsibility to manage wildlife resources. As civilization changes the face of the world, it is increasingly difficult to find areas untouched by human influence. This touch of man may be anything from cultivation to severe industrial pollution.

One of the most difficult things to comprehend is the far-reaching effect of many of man's "improvements." When one farmer jokingly chides another about his weedy turnrows, quail may suffer. The swift strike of a match and two coveys of quail may head for another range. Similarly, doves may not be found in quite the same concentration this year after the purchase of a more efficient combine.

Every year the increasing number of net fences further hinders wide-ranging pronghorns from building up a greater population, and the destruction of overall habitat has all but exterminated South Texas prairie chickens.

On the other hand, some of man's developments have benefited wildlife. Predator control programs and the eradication of the screwworm have decreased two of Nature's controlling factors on game species. But a blessing in a small dose often turns into a detriment when carried too far. Limiting the deer losses caused by predation and screwworms only means that animals must be removed from the range by some other means. If not, range deterioration will certainly be the final result.

Since man has made alterations in Nature's plan, he must accept his land stewardship responsibilities. Wild game is a renewable resource that produces an annual crop. It requires a seeding of proper cover, fertilization of a food supply, irrigation to provide usable water, and an annual harvest of the surplus. Just as man feels obligated to keep a herd of livestock in balance with the productivity of a pasture, so must he remember that wildlife is also a product of the existing environment.

—Editor



by T.D. Carroll

INFORMATION-EDUCATION COORDINATOR



# The Unspookables

**S**OME say it all started when a Colorado County housewife hung the family wash one November morning and spent the entire day shooing away (for obvious reasons) the circling flocks of snow geese. Evidently the gentle breeze made the waving white sheets, pillow cases, and assorted laundry resemble a feeding flock of web-footed free loaders, and the hungry flyers wanted to crash the party.

Camouflage clothing was passe for the opening day gunners in the Lissie Prairie country near Eagle Lake, the self-styled "Goose Hunting Capital of the World." Cashing in on the housewife's dilemma, hunters decked out in white parkas, white coveralls, white jeans—anything white—and took their places in the midst of assorted white rag decoys and other bleached litter scattered on the rice fields, prairies, and plowed ground in prime Texas goose country.

By 4:30 a.m. on our eventful open-

ing day, hunters and guides were gathered in Marvin Tyler's Steak House at Altair for an assembly line breakfast, final instructions, and issuance of white clothing. Tom Diltz, Paul Hope, and I were guests of the Blue Goose Hunting Club and big honkers were our quarry.

In our assemblage were hunters from Houston, Austin, San Antonio—just about any place in Texas; people of all shapes and sizes and from all walks of life. Three doctors from Houston had brought along their attractive spouses. Wearing the latest hunting styles for ladies, they helped to clear muddled brains and shake cobwebs from sleep-starved eyes.

With everybody fed, caravans of guides and hunters were on their way to the shooting grounds by 5:15.

Our "spread" was in the corner of a plowed field. To the north, east, and west were rice fields, most of them combined, but a few contained un-cut rice. South of us was fallow

land—typical coastal prairie, with a lighted oil rig in operation about a quarter of a mile from our field. We were less than 200 yards from two well traveled roads. The fence line along our southern border was hedged with clumps of wild rose.

Rains had smoothed the surface of our plowed hunting station except for a few low rounded levees. It was bare of vegetation. I felt rather foolish as we walked around poking small sticks in the ground and draping squares of white cloth over them.

Fortunately, the persistent sun had yet to climb the eastern horizon and the friendly darkness concealed us from prying headlights of the last stragglers hurrying to their blinds.

Decoys in place, surplus clothing and white rags were formed into pillows. We sprawled on our backs, covered our guns with white cloth, and maneuvered for comfort on the cool, moist earth to watch the eastern blackness gradually change from





a soft gray to bright crimson.

"We've got company," said Alvin Paschall, our guide and hunting partner. I twisted around, expecting to see a half dozen or so guest gunners coming to join us.

"Six Canadas almost lit on me," whispered Alvin. Sure enough, there they were, right at the edge of our decoys. One of them, which we dubbed "Big Daddy," appeared to be three times the size of any of the others.

It was 6:15, about twenty minutes before legal shooting time. We felt sure that our disguise would be discovered and our unsuspecting guests long gone by then.

"We sure want to kill that big one," croaked Alvin. "He'll be the biggest goose bagged on this prairie

today." Or "Big Daddy" looked our way and added a low "ka-ronk" to the conversation.

We were watching the Canadas and checking our watches when a rolling boom crashed out to the northeast. It was a carbide cannon, timed to discharge periodically and frighten feeding ducks and geese from standing rice. A flock of pintails came out of the sun, wheeled over our spread then headed south. A string of glossy ibis slid over, headed for the sun, which was showing well above the eastern earth rim.

The legal shooting time, according to the local warden of the Texas Parks and Wildlife Department, was 6:33. But, according to Alvin, Uncle Marvin had said 6:36—so we waited.

Another blast from the carbide gun and an itchy trigger finger touched off a distant barrage. It was 6:30 as flight after flight of frightened geese clouded the sun and a cacophony of goose music wafted in from the east. Still we waited.

As a vanguard flight of speckled-bellies crossed our field, Alvin gave a couple of low calls and received a cackled greeting but no takers to his invitation. "Big Daddy" graciously added a honk or two with the same results.

It seemed, by now, that all the hunters had found a target. Another resting flock of snows and blues swelled skyward northwest of us. Sporadic firing was coming from all sides.





Our six feathered friends were still with us and it was 6:36. "Let's take 'em," Alvin announced, unceremoniously. In unison, four gunners came to a sitting position as six geese took to the air. Twelve shots later, "Big Daddy" and three of his midget companions had paid the penalty for being foolish—or perhaps just unwar-y. Briefly I recalled the expression "silly goose," but promptly dismissed it from my mind. After all a grown man lying rolled up in a bed sheet in a damp plowed field—by his own choosing—is in no position to comment!

My conscience twinged a little at the thought of "Big Daddy's" demise, but this was the season of wildlife harvest and waterfowl hunting is part of our natural heritage

The fittest would survive if man regulated the annual take and continued to provide breeding and wintering accommodations for the migrant hordes.

Four small Canadas were investigating our guide's call. As they came in, about thirty yards up, Alvin yelled, "Take 'em," and we did—at least two of them.

Geese were in the air everywhere you looked. Straggler snows and blues would see our spread and skid in to a hail of lead. Once, while Alvin was retrieving a cripple and we were stretching our legs, a single came in and sat down just out of gun range.

Of course, there were those who slipped by in range without a shot being fired and there were those who

came by too high and drew a volley of fire from gunners who should have known better. By 10:30 we had 13 geese—well under our legal bag of 20—but we did have eight Canada geese. It had become a beautiful day—bluebird weather—so we decided to call it quits.

As we were collecting our limp decoys, and the sticks designed to give them some semblance of life and form, two lonesome speckled bellies came in with landing gear down. They were taboo, since we had our limit of "dark" geese, so all we could do was look and tell them how lucky they were. Luck it was, for "bluebird" weather is notoriously poor for goose shooting.

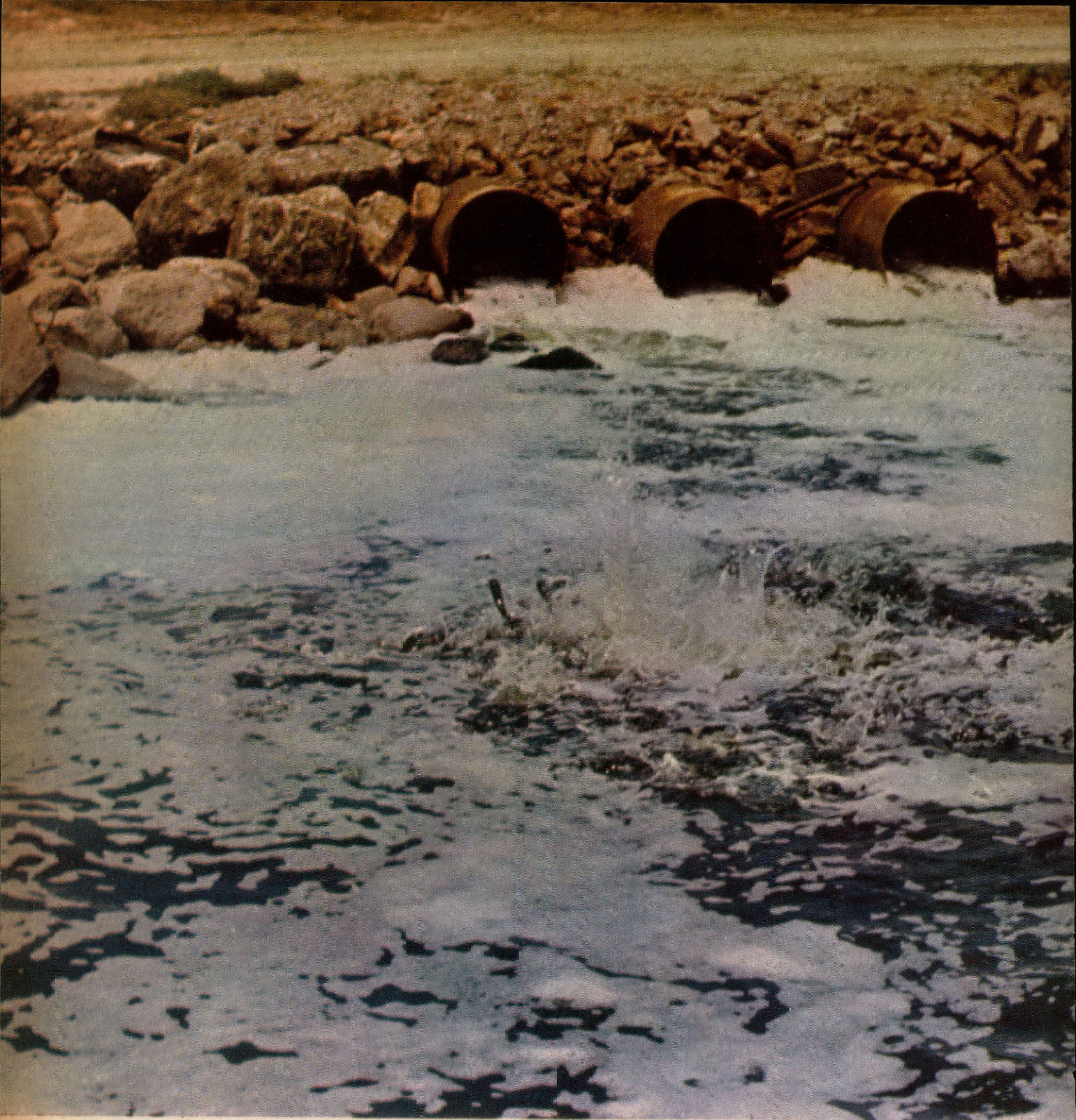
Back at the steak house we weighed "Big Daddy." No record, but a bit over nine pounds, he made the mallard-sized Richardson's form of Canadas look puny by comparison.

The scores of other hunting parties also checked into headquarters. Some had their limits, but there were some who were almost "skunked." The doctors and their ladies didn't have much game but, according to one of them, "there wasn't a dull moment—there were plenty of geese." All agreed it had been quite an experience.

Our game field-dressed, we said adios to our fine host and hunting companion and departed for home. Before our aching bones succumbed to the pleasing drowsiness induced by our tires' traveling music, we reviewed portions of the hunt. There was the beauty of the sunrise to be recalled; the almost unbelievable number of young geese we had seen; a good shot here, excuses for misses there; but our conversation always came back to the episode of the first six geese—the "unspookables."

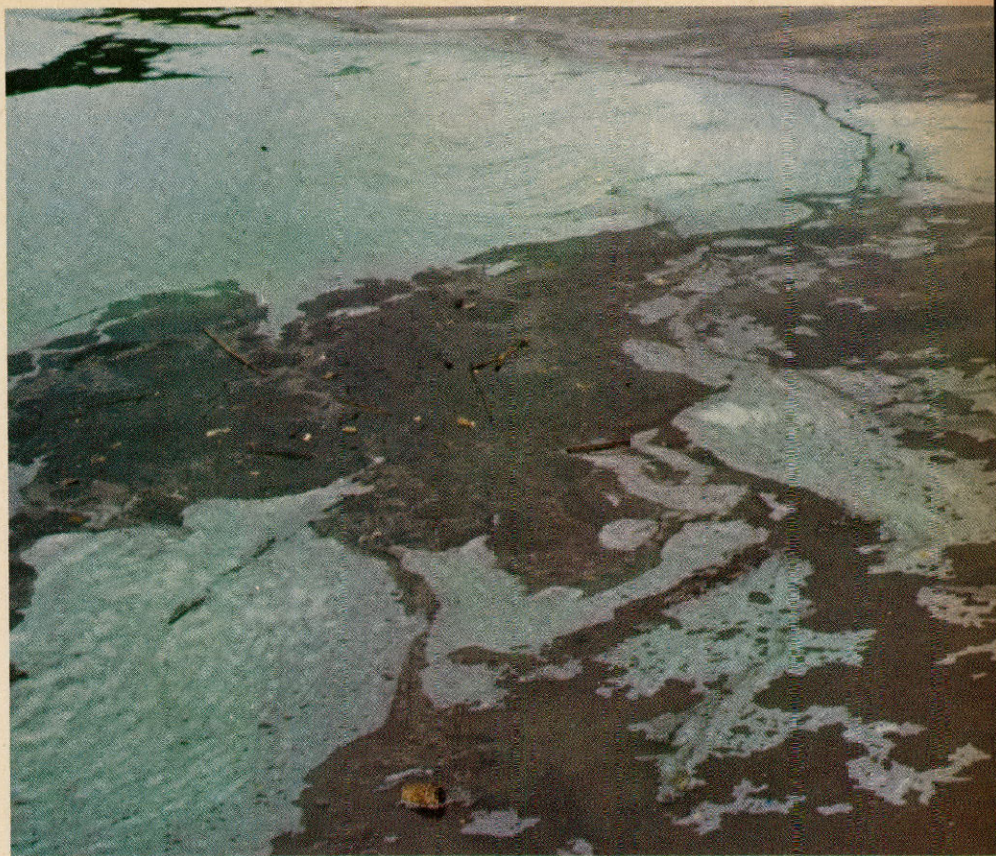
We had to agree—no matter how ridiculous the use of white clothing and bedsheets for goose hunting might seem, you can't argue with the results they produced. I still could hear the thunder of frightened geese and the gabbled symphony of a wing-filled sky. Yet, amid all the confusion, the most prominent memory of all was the friendly honk of unsuspecting "Big Daddy." \*\*





# A RIVER DIES





**C**LEAR, sparkling, and of pristine purity, a small stream of water emerges from the ground at the base of a hill or in a valley. This water has traveled through subterranean passages until forced to find an opening through the earth's surface. With the aid of rainfall, melting snow, and possibly other springs, a small stream grows into the beginning of a beautiful river. Large willow, pecan, and cottonwood trees line the bank, intensifying the beauty found here. The river, teeming with aquatic life, forms many natural swimming holes.

As the river flows downstream it passes through a small town. An outlet leading to the river discharges some pretreated sewage waste. The water quality is reduced somewhat, but through aeration, agitation, and natural purification the stream struggles to recover and regains its purity.

Barely recovered from this pollution load, the stream next must accept the waste from a larger town.

This town's sewage plant was constructed several years ago, but the population has increased tremendously. The plant, when new, successfully treated sewage, but now waste undergoes only primary treatment. The river becomes polluted again. Before any natural purification and recovery can take place, the stream collects the load of another waste outfall. Downstream so many other waste lines lead to the river that water quality deteriorates to a point where fishing and swimming become things of the past.

Most rivers can take care of a little pollution, but the load is so heavy now that this river takes on the look of a slimy, green stream of smelly water. Fish that are able to escape this unbearable waste stay upstream where the water is pure. Other game fish downstream begin to die and the stream becomes populated only with turtles, gar, carp and other more resistant life.

The pollution load has now come

by Roy W. Spears

REGIONAL CHEMIST ROCKPORT



## *The stream that starts out to provide*

*aquatic life soon becomes a cesspool.*

to the point of saturation. It's impossible for the stream to recover before it runs past another town with similar waste disposal problems. As if this weren't enough load to carry, it picks up the waste from a cattle feed lot along the way. So it continues downstream, a stinking, spoiled stream of water, until it empties into the Gulf of Mexico.

This stream that started out to provide us with aquatic life, natural beauty, and enjoyable weekends of fishing and camping now has become a cesspool for growing cities.

Sewage waste has a dual effect on reducing the fishing potential of a stream. First of all, the water becomes so foul-smelling and repulsive-looking that the invitation to fish is gone. And, if there were fish present, a person would be afraid to eat them for fear of contacting dysentery or typhoid.

Probably the most damaging thing which occurs from municipal waste pollutions is the destruction of dissolved oxygen in the water. Oxygen deficiency probably causes more fish kills in our streams and rivers than does any other factor. Without a sufficient oxygen supply, fish growth, reproduction, and even survival is impossible.

The introduction of this organic matter into the water starts the chain reaction of oxygen depletion for miles downstream. The organic material begins to decompose and immediately starts to consume oxygen. The river continually tries to recover from this menace by absorbing oxygen from the air. The sewage acts as a fertilizer and supports a good growth of algae and, in sunlight, photosynthesis carried on by the

algae liberates oxygen. The change in some environmental condition, such as prolonged rainfall or cloud cover, can reverse this condition. The algae dies, decomposes, and oxygen is absorbed. When the rate of oxygen consumption exceeds the rate that it is absorbed from the air and produced by photosynthesis, the oxygen content of the water soon becomes too low to support desirable fish life.

Not only does mass die-off of algae blooms decrease oxygen supply, but the acidity of the water is increased by production of carbon dioxide. This may not be sufficient to produce a fish kill directly, but a slight alteration of this type can cause the death of smaller forms of aquatic life. Thus, the food chain is broken, and with no food available the game fish move out.

So it goes; day after day a continual supply of pollution enters our public streams, rendering them unfit for anything other than cesspools.

Municipal waste pollution in our streams and rivers has been studied, discussed, analyzed, and debated for years. The usual findings from these studies are that pollution does exist and that harm is being done. The question then is what can we do about it? This problem can only be solved by public pressure within a community. Insist that your city have a unit capable of successfully reducing waste to a fit state. Chances are that most treatment plants were constructed many years ago. With an increase in population the plant quickly becomes overloaded and does not treat waste properly.

A running stream can usually purify itself within ten miles pro-

viding the organic load isn't too heavy. Nature provides microorganisms that break down organic waste material. This is the same process employed in a modern waste treatment plant. In a treatment plant the environment is made more suitable for the microorganisms, and this speeds up the breakdown. Practically any degree of purity can be achieved through modern waste treatment practices.

There are two methods of treating waste. In primary treatment, water passes through a screen to remove sticks and other large obstacles. The water then flows through a grit chamber which filters out still smaller objects. It next flows into a settling chamber where a retention time is necessary for solids to drop out and lighter particles to rise to the surface. The water between these two layers is drawn off. An overloaded plant does not have this retention time and most of the solids flow out of the unit. This semi-primary treated sewage is what causes most of the damage to our streams.

In secondary treatment, the middle layer of water is drawn off from the settling tanks into filters and activated sludge beds where bacteria work on dissolved materials in the water. This water is aerated, chlorinated, and converted into a pure condition. In some arid regions of the State where there is a water shortage, lakes are being formed for recreational purposes from this type of treated water.

Municipal waste pollution in a stream, brook, or river is an ugly, distasteful sight that robs you of the pleasures that nature provided. The heavy organic load changes the biological conditions of the stream and reduces the aquatic population tremendously. Once a river acquires the characteristics of a cesspool, it takes years to recover. This is an ever-present problem requiring the continuous and vigorous attention of the public, especially as populations increase. In attaining this goal of preserving our fish and other water resources for recreational purposes, it is absolutely necessary that all cities, towns, and villages take care of their sewage problems. \* \*



# IN DEFENSE OF THE COYOTE

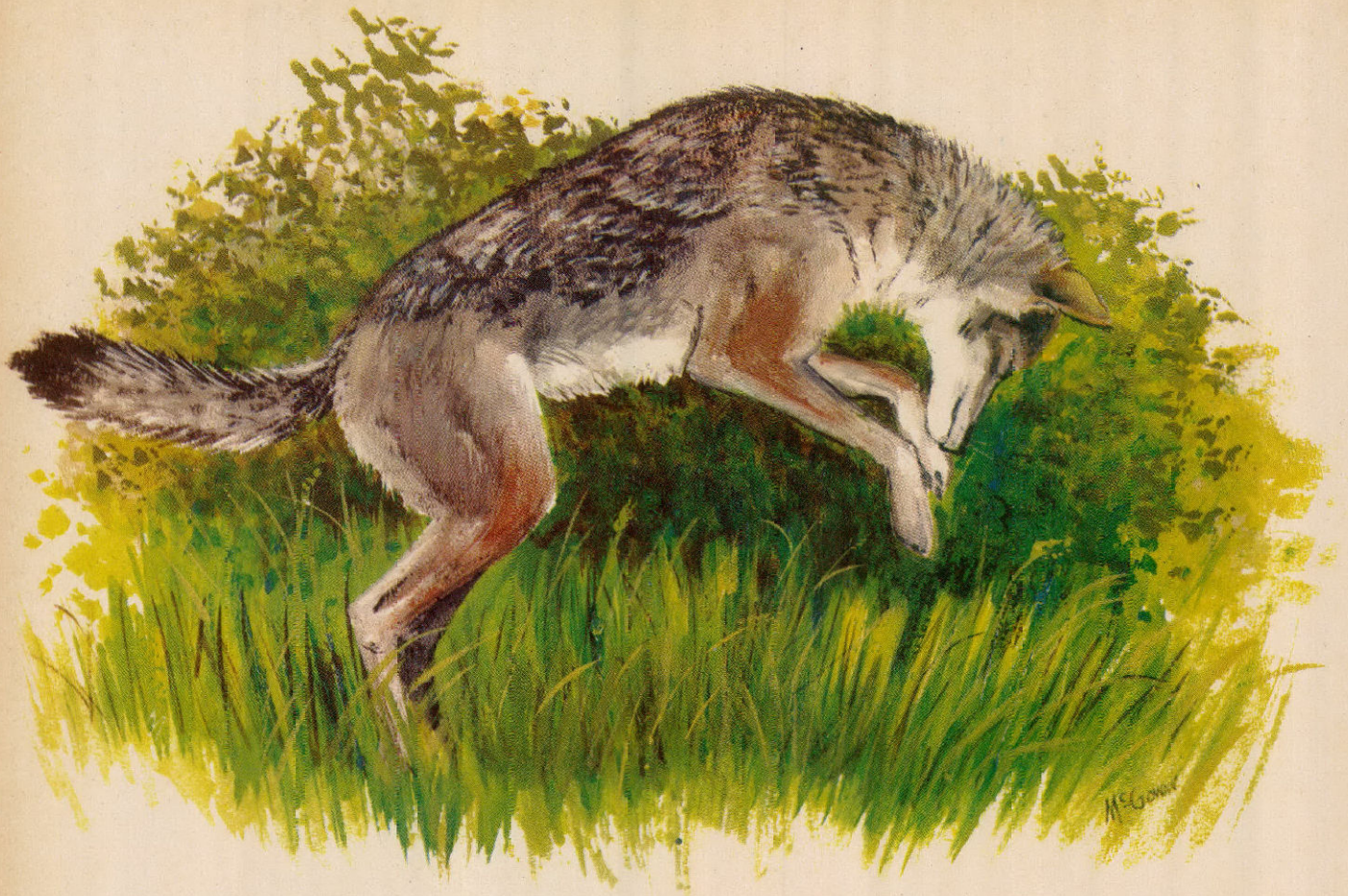
by Norrel Wallace  
REGIONAL INFORMATION OFFICER  
SAN ANGELO

**T**RADITIONALLY cast as the villain in everything from nursery rhymes to sophisticated publications, Don Coyote fights an uphill battle for a suitable spot in the animal kingdom. He stands condemned of killing cattle, sheep, goats, chickens and desirable wildlife, although, according to his own ethics, no wrong has been committed. Begrudgingly, man admits the coyote is an effective rodent and rabbit control; outside of this, little credit is tossed his way. In Nature's plan the coyote plays the important role of predator and scavenger, but by doing his job perhaps a little too enthusiastically, his public image remains slightly tainted.

Steel traps, cyanide guns, deadfalls, arrows, poisons, and dogs have harassed his breed for many years, yet not solely to his loss. While man's constant efforts to eradicate the coyote have removed the old,







weak, and foolish from his ranks, the swift and cunningly intelligent have survived and are continuing to rear more and more of their own kind and expand their range. Today's coyote is a hardier breed because of the simple rule, "survival of the fittest."

The coyote is singularly condemned for robbing a quail nest or feeding on the carcass of a dead calf, while a crow, a raccoon, or a bluejay can do exactly the same deed without serious reprimand. Any sporting dog that will not chase a chicken is hardly worth his feed bill; a coyote, however, receives eternal condemnation for a similar deed. Many people feel the mere presence of a coyote on the open range is prima facie evidence of guilt. The loss of anything is automatically charged to the unfortunate

coyote who quite probably has been feeding on rats or grasshoppers.

My argument is that the coyote is often falsely accused and too severely judged for simply attempting to stay alive. Man occupied the coyote's traditional range, largely destroyed his natural food supply and replaced it with domestic stock. Now man is wrathful because the coyote attempts to survive on what remains.

Numerous food habit studies show that coyotes ARE beneficial to man. They destroy brown rats that gnaw rafters, cotton rats that eat desirable grass on large areas, and rabbits and insects by the thousands every year.

Range destruction by rodents and rabbits is much more severe than many realize. One range management study in 1943 showed rabbits consumed as much forage on a sec-

tion of land as could one cow or six sheep. During the same study, kangaroo rats were found to remove 2.37 tons of grass seed per section. In another study, ground squirrels consumed enough forage on 15 acres to support one cow. In yet another report, "One hundred field mice consumed 12-13 percent as much forage as ten growing lambs." Another quotation from the same publication stated, "In an alfalfa field 100 mice per acre can destroy about four percent of the annual production."

Since the destructive habits of rodents are quite evident, a natural control is highly desirable. Food habit studies show how the coyote fills this important job in Nature's scheme. One detailed food habit study, based on a collection of 8,263 coyote stomachs, revealed the



following breakdown: rabbits, 32 percent; rodents, 17.5 percent; carrion, 26 percent; sheep and goats, 13 percent; calf, colt, and pig, 1 percent; deer, 3.5 percent; and miscellaneous, 1 percent. Poultry, game birds, and non-game birds each contributed one percent, and there was a trace of reptiles, amphibians, fish, and invertebrates. Of the remaining two percent, wild fruits made up one percent while cultivated fruits and other vegetable matter contributed half of one percent each.

Another food habit study, based on a collection of 770 coyote stomachs in Missouri in 1957, found that rabbits made up 53.7 percent of the diet; rodents, 8.9 percent; carrion 5.8 percent; livestock 8.9 percent; wild mammals, 7.5 percent; poultry 11.3 percent; wild birds, .5 percent; invertebrates, .8 percent; and miscellaneous items, 2.4 percent.

The list of evidence showing the coyote's diet preference could go on and on, but additional data would be repetitious. Livestock losses traced hurriedly to the coyote's doorstep invariably lead to widespread control programs. Such programs are aimed indiscriminately at *all* coyotes and are intentionally designed to destroy the innocent as well as the guilty. If law enforcement officers used similar reasoning when dealing with local citizens, *all* the people in a community would have to be executed if *one* person committed murder! Such "shotgun" cures are equally absurd when applied to wildlife problems. Individual offenders that raid livestock can be caught when they return to steal again and the innocent creatures feeding on mice and grasshoppers in some distant pasture can live for another day. Understandably, the abundance or

scarcity of rabbits, rodents, and other natural coyote prey determines how frequently a coyote will visit a chicken house or raid a sheep pen. When times are hard, visits may be often, but during times of high rabbit or rat populations, the coyote pays his way.

The romance of sound the coyote freely offers society, his diligent control of destructive rabbits, rats, and insects and the sport he affords the high-powered rifle fan help compensate for the damage he does. Aside from being useful, the coyote is one of the few remaining symbols of a wild, free, self-reliant breed that is not here on earth BECAUSE of man, but IN SPITE of him. We need to preserve such a symbol and, if history is indicative of the future, the coyote will preserve his own breed despite the controlling efforts of man. \* \*







## BUCK COLLECTING

**SUCCESS** in whitetail buck hunting involves many factors, but high on the list are pre-hunt scouting of the area and readiness on opening day. Obviously, the hunter needs an adequate rifle and bullet, tested in pre-season practice, and he needs to know the habits of his whitetail quarry. With these qualifications in hand, the hunter must determine in advance the concentration of buck sign and be on the spot on opening day.

The widespread range of deer in Texas, and the opening of the season on a weekend, enable most hunt-

ers to scout the hunt area and to be present on opening day. Annual leasing — or day hunting — of the same land year after year makes it easier for the hunter to study the habitat and schedule his hunt for opening day. Such familiarity is conducive to good success.

One or two trips to study the habitat will supply the hunter with essential information about buck movements, bedding grounds, waterholes, and browse areas. Fortunately, the whitetail buck is not a far-ranging animal. Areas pinpointed in the summer will remain relatively

unchanged between scouting trip and season opening.

A high percentage of deer hunters in Texas hunt on year-lease lands or day-hunt at prevailing rates. More than 26 million acres in Texas are hunted on a "pay-hunting" basis. Consequently, the hunter shopping for a hunt area can combine his prospecting with scouting and obtain a working knowledge of the habitat prior to the season.

The pre-season scouting hunter should look for buck rubs and hooked brush. These infallible signs of buck presence are readily identi-



The hunter needs an adequate rifle and bullet, tested in pre-season practice, and he needs to know the habits of his whitetail quarry in order to have success in whitetail buck hunting.



The pre-season scouting hunter should look for buck rubs, hooked brush, and trail tracks. These infallible signs of buck presence are readily identified, even by the beginner.

by David Beatie

fied, even by the beginner. Such signs show up in late summer when the buck begins to rub the itching velvet from its antlers. The hunter has almost a three-month interval in which to scout the area and make plans for the November hunt.

Favorite rubbing trees in most areas are cedar, mesquite, and oak. Wherever one, or all, of these trees flourish, the buck will use them to rub or polish his antlers. The polishing procedure will continue until after the rut. Thus, there's no time limit on the reliability of this evidence.



Most rubs are found in the cover near the buck's private bedding ground. Usually they're on, or adjacent to, feeder trails or the main trail. Thus the rub indicates buck presence, area of bedding, and

routes of travel. When the hunter can correlate this evidence, the scales already are tipped in his favor.

Ground height of the rub and size of the tree also provide an estimate of a buck's size and antler





*Traffic indications at fence crossings provide the hunter with evidence of deer movement.*

spread. This is particularly important to the trophy hunter because no other buck sign is equally reliable. A big doe will leave a big track, frequently confused with a buck's, but a big tree rub indicates a big rack.

Last season, among our own group of five hunters the first three bucks, on the first two days, were downed in the immediate vicinity of rubs. One of the bucks was bagged after he approached the rub for a workout.

Hooked brush is another infallible sign of buck presence and movement. Favorite brush in a wide area of Texas is the mesquite. Hooked brush usually is found farther from the bedding area than a rub. But it, too, is located alongside, or near, main trails. Concentration of hooked brush identifies a buck run, and these areas are productive consistently.

Sometimes cattle will rub or scratch their heads on brush, particularly cedar, mesquite, and willow, leaving signs similar to buck-hooked brush. But ground tracks

readily establish the source.

Although rubs can be found long before the season opens, buck scrapes are tied in with the rutting period and may, or may not, be prevalent prior to opening day. Sometimes, but not often, peak of the rut may be reached prior to opening day. Usually, however, deer season coincides with the rut, and scrapes may be found before the hunt begins.

Normally, in Texas, the rut seems to start about the same time a crisp norther drastically drops temperatures in late October or early November. However, biologists' examination of doe organs infrequently have dated conception long before season opening. The scouting hunter, whenever possible, should check his hunt area a few days after the first norther hits about early November. And he should look for buck scrapes.

These scrapes, peculiar to the whitetail buck, are hoof-cleared areas on the ground near the buck's bedding ground, private trail, or main trail—or a combination of

all three. A fresh scrape is readily identified, and sometimes marks of the pointed hoof, pawed across the spot, are clearly defined. These scrapes are somewhat circular in shape and usually are surrounded by small rocks, leaves, or debris which the buck has hoof-moved to expose the bare ground.

Frequently tracks are seen in the scrape. If the spot is moist, with surrounding area dry, a doe—or possibly a buck—has urinated in the scrape. Such a scrape, of course, is highly active and justifies patient watching.

The scrape is used by the buck to attract a doe in heat. In order not to miss a responsive customer, the buck lies up near the scrape. And he'll return to his scrape after each successive doe is bred. If a doe leaves her urine odor in the scrape during the buck's absence, the returning buck then hits the trail to overtake the doe in heat. This accounts for much of the buck's daytime movements during the rut.

The scouting hunter who finds a concentration of rubs and scrapes definitely should hunt this area on opening day. No other area will be equally productive.

Other general deer signs should be sought by the scouting hunter. Prevalence of trail tracks, traffic indications at fence crossings, and tracks at waterholes, provide the hunter with concrete evidence of deer movement through the habitat. Although most of the signs may have been left by does, during the rut the doe is the object of the buck's pursuit. Throughout the season, with coinciding rut, any doe *could be* followed by a trailing buck.

After the scouting hunter has selected two or three potential hunt areas—use of which will be determined by weather conditions and the moon—he should plan to be in that particular area as early as possible, at least by sunup, on opening day.

Statistics from all areas of Texas indicate the highest number of kills on opening day. Percentage subsequently drops as the season progresses. The first-morning hunter, therefore, has the law of averages on his side.



# Long Shots Short Casts

Compiled by Joan Pearsall

First, the deer are not as cautious on the first day as they are when hunting pressure develops. They've been undisturbed by man throughout the long interval between seasons. They browse later in the morning and earlier in the afternoon than they do when hunters begin to overrun the covert. With increased hunting pressure, deer retreat to the heaviest cover, where hunting is hardest.

Second, there are more bucks around on opening day than there will be on any one day during the remainder of the season. Each buck taken by another hunter narrows the margin for any one individual antler seeker. In some heavily hunted areas, the numerical percentage of bucks is a vital factor in hunter success.

Third, the first day of the season usually is closer to peak of the rut than any one day later in the season. And every hunter knows that outside of the rut the whitetail buck is an elusive target. A rutting buck will move more, sleep less, rest less, and expose himself more during this period than he will at any subsequent time.

Here's one pertinent illustration of the need for an early start on opening day. My partner and I had to detour for gasoline en route to the hunt area. Only a light glow indicated the east. The station attendant asked: "You just coming in?" "No," I replied, "we're just going out." "You're kinda late, aintcha?" And we were: deer already had moved in to their beds—and still-hunting the bedding grounds was not productive.

There's only one deterrent to this practice of pre-hunt scouting and sunup first day hunting, and that's the distinct possibility of putting yourself out of business on opening day. There's a bit of letdown, a bit of regret, when the hunter takes a buck early in the morning of opening day.

But if the hunter is restricted to minimum time, and wants his buck at the earliest possible moment, he should follow these suggested methods. Odds are he'll successfully terminate that particular hunt, in all too short a time. \* \*

**CONTROL SWITCH:** The U. S. Forest Service is not using DDT in any of its insect control programs this year. Continuing a policy started two years ago, Forest Service scientists and managers have steadily been substituting alternate and less persistent chemicals in these operations. Instead of the highly toxic, chlorinated hydrocarbon, malathion, at the rate of 13 fluid ounces per acre, is being used in spruce budworm control programs in New Mexico, Idaho, and Montana. Zectran, a recently developed carbamate of low toxicity to fish and wildlife, has also been pilot-tested in Montana and Idaho for the first time on a large scale to control spruce budworm.

**CAMP CURE:** "I never thought a doctor would cook for me; they only gave me pills before, but this is the best medicine I've ever had." So said a chronically ill psychiatric patient from Houston V. A. Hospital, who, along with 25 fellow patients was taken to a Texas Hill Country ranch on a week-long camping trip with his doctors. The campers indulged in outdoor sports and chores, and on the whole the trip was "a marked success" which may lead to further study of camping as a therapeutic technique. The changes in attitudes of the patients who were exposed to the healing forces of outdoor life are outlined in a new booklet, "The Best Medicine," available at 25 cents a copy from Hogg Foundation for Mental Health, University of Texas, Austin, Texas, 78712.

**NUISANCE NEWS:** Chemical repellants for control of nuisance birds have now been tested successfully in several states. The idea, rather than killing the birds wholesale, is to use just enough of the chemicals mixed in bait foods to give a few birds an unpleasant taste or other discomfiture. Their distress calls then cause the entire flock to beat a hasty retreat. So far, sparrows have reportedly been frightened from a number of Oklahoma airports; pigeons from parts of Oklahoma City and Tulsa; blackbirds from selected Texas rice fields, and starlings from an Illinois farm. The chemicals are federally registered, but not licensed for indiscriminate use by the general public. They will be sold to government agencies and to professional pest control operators of good repute.

**TRAILS TO TRANQUILITY:** A series of grants, totalling \$367,436, from the U. S. Land and Water Conservation Fund, will be used to develop a variety of urban trails across the country. The states will match these grants with equal amounts of money. The trails differ in length—from several thousand feet to many miles; in purpose—bicycling, hiking or walking, horseback riding; and in basic attractions—scenic, recreational, educational; but all are planned for areas where large numbers of people live. They will help fill the growing need for outdoor recreation and natural beauty within our cities.





## ***Eisenhower Birthplace***

**C**LATTER of passing trains heralded the birth of Dwight D. Eisenhower in a small, white frame house in Denison, on October 14, 1890. The house, at the corner of Lamar Avenue and Day Street, lay within a few yards of the railroad tracks. It had been rented by Eisenhower's father, David J. Eisenhower, who was employed as an engine wiper for the Missouri, Kansas, and Texas Railroad.

It was a modest beginning for America's first Texas-born President, and one that the former President did not realize for some time. The Eisenhower family moved to Abilene, Kansas, in 1891, while Dwight was still an infant. While a cadet at West Point in 1910, Dwight gave his birthplace as Tyler, Texas, where he believed he had been born. Ac-

tually, his family had lived in Tyler for a number of years prior to 1889, when the family moved to Denison. In 1891, Dwight's father obtained a new job in a Kansas creamery, and the family moved to Abilene.

The error was discovered in 1946 when Fred Conn, publisher of the Denison Herald, began checking on a rumor that Eisenhower was born in Denison. At that time Dwight Eisenhower was a hero in the United States; he had just served as Supreme Allied Commander in Europe in World War II. An 1891 city directory revealed this information: "Eisenhower, David J., wiper M. K. & T shops, r. ne cor. S. Lamar ave, Day." Conn then located Eisenhower's mother, Mrs. Ida Elizabeth Eisenhower, in Abilene, Kansas, and asked her where Dwight had been

born. She verified that it was Denison.

A group of Denison citizens purchased the Eisenhower birthplace and deeded it to the city. A committee presented a photograph of the house to the General and invited him to speak at his birthplace. Eisenhower returned to the site for the first time on April 20, 1946. By the time he was elected President in 1952, a number of committees had organized to make the birthplace a park.

The Eisenhower Birthplace Foundation, Inc., chartered in 1953, undertook the job of restoring the house and acquiring adjacent lots. Extensive research and interviews with former residents revealed that the house was built about 1880 and had a railed upstairs porch. Joseph



*Furnishings representative of the 1890's have been donated from many parts of the nation.*



by Steve Korenek  
and Barbara Jaska

## ce State Park

R. Pelich, architect who designed the Amon Carter Airport in Fort Worth, supervised the restoration. Mrs. Mamie Eisenhower, the former President's wife, selected the wallpaper.

Furnishings representative of the 1890's have been donated from many parts of the nation. The only Eisenhower possession was a quilt donated by the former President's mother. The quilt is displayed in the bedroom where Eisenhower was born, along with a picture of Dr. D. H. Bailey, city health officer and Katy physician, who delivered Ike. The park was deeded to the State in 1958.

A park attendant guides visitors through the house and explains its history. In the living room are pictures of Eisenhower's parents, other

members of the family, and Dwight and Mamie. In the kitchen are old cooking utensils, including a coffee grinder and a sausage grinder. Upstairs are two bedrooms and a porch. These are closed to the public, however, because the only access to them is a narrow staircase which is considered unsafe.

A highlight of the tour is a crank-type telephone on the wall of the downstairs hallway. When the receiver is lifted, the former President's voice is heard, saying: "Hello there! This is Dwight Eisenhower, born in this house, greeting you. While you are visiting here in Denison, I hope you will pause to contemplate for a moment the history of this great State of Texas and its importance to our great country."

It is not difficult to heed Ike's





# What Others Are Doing

by Joan Pearsall

**LOST AND FOUND HOUNDS:** The New Hampshire Fish and Game Department recently accepted the transfer of two State Police bloodhounds. The two dogs, each 3½ years old, are well-known throughout New Hampshire for their work in locating lost children. They will continue their training, and be available for work anywhere in the state when the need arises. The N. H. Fish and Game Department is charged with the responsibility of search and rescue work in the state. The acquisition of bloodhounds should be particularly helpful in locating small children and others who are not capable of helping searchers in any way.

**PRANKSTERS DOCKED:** "Responsible Nebraskans are fed up with this kind of nonsense and will no longer tolerate such acts as schoolboy pranks." The director of the Nebraska Game Commission made these remarks when six college students were convicted of destroying a boat and fishing dock by fire. The young men each paid \$200 fines plus court costs for a total of \$1,260. They also rebuilt the dock at their own expense, in addition to the fines.

**FARM HOMEWORK:** Spare time farmers make up a large segment of the country's agricultural economy. They're in it for fun, because they like outdoor activity, and for the products they grow. Many were raised on farms. Now Pennsylvania State University has developed a series of inexpensive correspondence courses on "how-to-do-it" for these spare time farmers. How to select and feed a horse, the feeding and care of goats for milk production, beekeeping, home vegetable gardening, edible nut production, small fruits, management of farm woodlots—

these and other subjects are described in a bulletin outlining the courses. Fees range from \$1.25 to \$4.25. To get the bulletin, write: Box 5000, University Park, Pennsylvania, 16802.

**KILL OR CURE:** Just outside Johannesburg, at the massive Transvaal Serpentarium, snake venom is being turned into a boon for mankind. Thousands of highly poisonous Asian and African snakes a year are "milked" for their venom. Apart from being used for antivenin to treat snakebite victims, venom is crystallized and flown to the United States to be used in important medical research projects.

**SALMON REPRIEVE:** Salmon growth rates in Maine's Sebago Lake have improved greatly since the spraying of DDT for insect control was discontinued. It was announced in 1964 that high concentrations of the chemical pesticide had been found in the fish.

**UNMO(W)LESTED NESTS:** Nesting pheasants in southern and western Minnesota got an assist last spring from their state government. Highway maintenance engineers delayed roadside mowing operations until mid-summer, when the peak of the pheasant nesting period had passed. This is the eighth consecutive year that the Highway Department has cooperated with the Game and Fish Division to save hen pheasants and their nests. Roadside ditches presently provide the only remaining permanent nesting cover in some intensively farmed areas. Although they represent only one to two percent of the land area, the ditches are heavily used by nesting hens, and about 20 to 25 percent of the total number of young ringnecks produced in that state are hatched there each season.

suggestion. Denison itself has a number of interesting historical points. It was first established as a stop on the Butterfield Overland Mail Route in 1858. From that time until Texas seceded from the Union in 1861, stagecoaches brought mail, at the rate of ten cents per half ounce, and passengers to Denison. The Missouri, Kansas, and Texas Railroad which later employed Eisenhower's father built a line to Denison in 1872. That was the year the town acquired its name — in honor of George Denison, director of the railroad. Tents, shacks, and cracker-box houses sprouted on the new townsite. In ten years, Denison was thriving.

Because of its location a few miles south of the Red River, Denison probably played a significant role in interstate commerce at the turn of the century. Other railroads, including the Kansas, Oklahoma, and Gulf and the St. Louis, San Francisco, and Texas railroads, built lines to Denison. The first electric railway in the State was built from Denison to Sherman in 1896. It was later extended to Dallas and Waco.

To the north of Denison is Eisenhower State Recreation Park, built on the shores of Lake Texoma. The waters of this reservoir, impounded by Denison Dam, which was completed in 1944, covered the old historic town of Preston, a few miles northwest of Denison. Preston was the site of Fort Preston, a military supply post built during the period of the Republic of Texas. Near the fort was an important trading post, operated by Holland Coffee, a successful Indian trader and Congressman of the Republic of Texas.

Little, however, could dim the glamour that Eisenhower's birthplace brings to Denison. Aside from Lyndon B. Johnson, Eisenhower is the only Texan, native or adopted, to become President of the United States. Another Texan who came close to the highest office in the land was John Nance Garner, vice president under Franklin D. Roosevelt. Unlike Johnson and Garner, however, Eisenhower was a Republican. For this native son, Texans broke staunch Democratic tradition two times straight by giving him the majority of Texas votes in 1952 and 1956. \*\*



## Pre-season Rifle Training

Most good deer hunters by now have their rifles "trained." But there is still time to spend a few shells and be ready when the season opens in just a few short weeks.

If your rifle was on target last season and it hasn't been knocked around, or you don't change ammunition, it should still be about right. The only way to know for sure, however, is to take it to the range. Put a half-dozen bullets through it and you'll know where it is hitting and get its feel back, which can improve your kill possibilities considerably.

Shooting in a rifle isn't too much of a chore if you go about it right. First, if it has not been shot in before, it should be bore sighted. This will save quite a bit of ammunition.

Then don't start out shooting at tin cans or rocks on the side of the hill. It is best to go to a range where there is a bench rest. If you don't have that, get some targets and tack them to a piece of plywood, or to an oversize cardboard carton. Be sure there is a good backstop, so the bullets won't go wild.

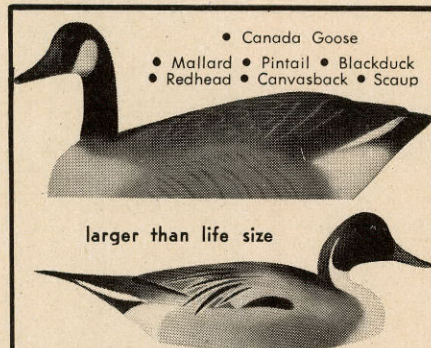
Step off 25 yards and use the hood of your car for a bench rest. It is a good idea to build up under the gun with a boat cushion or two. This way you can hold the gun steady.

There is a good reason for shooting in at 25 yards. With most calibers, if you are on the money at 25, you are on at 200 yards, or any point between.

Take, for instance, the 180 grain bullet in the .308. If it is 0 at 25 yards, it will be 1 inch high at 50 yards; 1 1/4 at 100 yards and 1/2 inch low at 200 yards. Thus it can be seen that if you zero at 25 yards, and aim point blank at the chest cavity of a deer at any point up to 200 yards, it will be a kill shot, unless,

of course, you pull off or get shaky. At 250 yards you'll be 4 inches low, and at 300 yards 8 1/4 inches low. This means if your estimated distance is 300 yards, you can aim at the backbone or top of the shoulder, and you still have a killing shot.

If you are shooting a .243 or a 6mm with 100 grain bullets, the ballistics are very similar, except that they are slightly flatter. With either of these calibers you'll be hitting a little more than an inch high at 100 yards, 2 inches high at 200 yards, or zero at 250.



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Scope adjustments also are easy, especially if you use the Weaver chart. If, for instance, you are using a K2.5 with click adjustment, it will require 8 clicks to change the point of impact 1 inch at 25 yards. This is for either windage or elevation.

It must be remembered, however, that after your gun is shot in, it must be handled with some degree of care. If you toss it around, it is possible for the delicate optics to get knocked out of line.

Incidentally, it also is good when you are sighting in your rifles to check all the screws in the mount and see that they are tight. Use a good metal screwdriver that fits any screwhead and put enough pressure to really tighten the screw, but not enough to break out the head. It's quite a chore to get a broken screw out of a scope mount.

So take plenty of time to get your gun in shape. You'll be spending several dollars and several hours going hunting. Don't throw it all away by having a gun that is not properly "trained." \*



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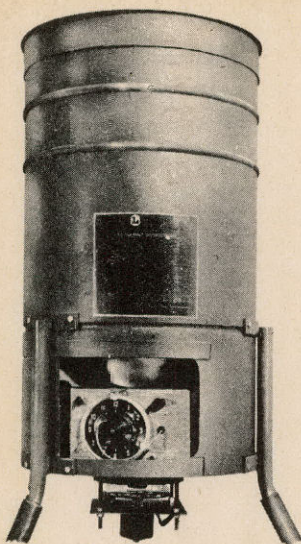
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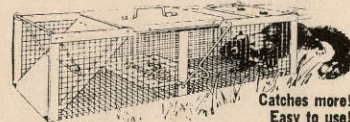
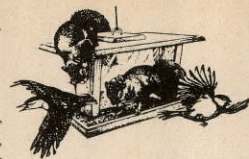
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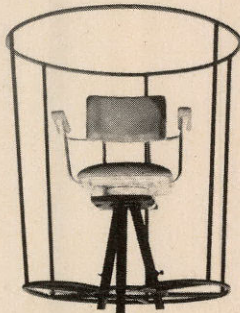
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# A Tale of Teeth

by Rodney G. Marburger  
Jack Ward Thomas

WILDLIFE BIOLOGISTS

B. D. Loving

BIOLOGY TECHNICIAN

**C**URIOSITY got the better of one of a group of hunters, as the biologist slipped a well-constructed piece of steel inside the mouth of the biggest deer that had been bagged that day. To his question: "What are you doing?" he got the reply: "I'm aging the deer by checking its teeth."

The biologist was making a routine check of deer camps, gathering deer weights and measurements. This is a yearly procedure, to furnish trend information and lend insight into the potential of deer herds.

The verdict on this particular deer—that it was three and a half years old—brought a bombardment of excited protests. It was a magnificent animal that dressed 136 pounds, and had 12 points with an 18-inch spread. Stories of this "old mossback" had flowed freely, with the consensus being that such an animal as this must have been fighting for 10 years at least.

When the biologist could at last make himself

heard, he explained how and why a deer is aged, and why he judged this prized "old grandaddy" to be a mere three and a half years old.

As deer herds over the State began to increase and the range was depleted, it became obvious that more knowledge was needed about the deer herd in general. Is it better to kill old deer or young deer? At what age do deer breed better? What is the life expectancy of a deer? All these questions and many more needed to be answered, and a criterion for aging deer had to be established before the questions could be answered effectively.

The method of aging deer employed by biologists in Texas is taken from work done on white-tailed deer in Wisconsin (Dahlberg and Guettinger, 1956), which in turn was abridged from complete description given by Severinghaus in 1949.





1 1/2



2 1/2

DENTINE



the Edwards Plateau of Texas in order to establish a home range for white-tailed deer (Thomas, Teer and Walker, 1964). As these deer were trapped and tagged, many fawns were captured and released carrying numbered ear tags. When these fawn deer were collected in later years, they represented known aged deer. Their jawbones were collected, preserved, and compared to the ones described in Wisconsin. All identifying characteristics were the same as those of the white-tailed deer in Wisconsin, which enabled Texas biologists to employ the Wisconsin methods.

Age of a deer is not determined by tooth replacement as it is in sheep and goats, but by wear on the jaw teeth. As a deer grows older, certain portions of its teeth are worn enough to show definite differences from the teeth of other age classes.

The following explanations are made only as an attempt to inform hunters of possibilities of determining approximate age categories of deer killed. The criteria for determining ages are simplified to be easily used by hunters in the field. Since there are so many other factors not covered here, for determining age classes, this text should not be used for technical purposes.

A deer has only six jaw teeth, although they appear to have many more. The teeth are broken into two distinct categories: the premolars, which are numbered 1, 2, and 3, and the molars, which are numbered 4, 5, and 6.

Deer are aged in fractions because they are born around July and are killed during the hunting season.

**1 1/2 year old: (long yearling):** The long yearling deer is the most easily recognized of all age classes. The first three jaw teeth are milk teeth, which will be replaced around two years of age. These are worn smooth as a long yearling, while the last three teeth remain sharp. The number 3 tooth has three cusps in the milk tooth stage, but only two cusps appear on the replaced tooth. Fawns in their first season will show little evidence of wear on their milk teeth.

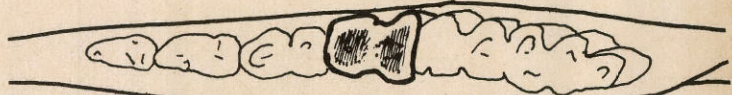
**2 1/2 year old:** The first three jaw teeth have been replaced by permanent teeth and all molars are sharp. The dentine of the first molar (tooth 4) is not as wide as the enamel which surrounds it.

**3 1/2 year old:** The dentine in the first molar (tooth 4) is now as wide or wider than the enamel which surrounds it, and this is not true of the second molar or tooth 5.

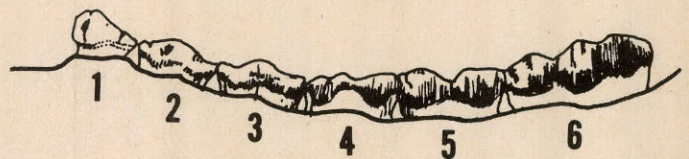


5 1/2

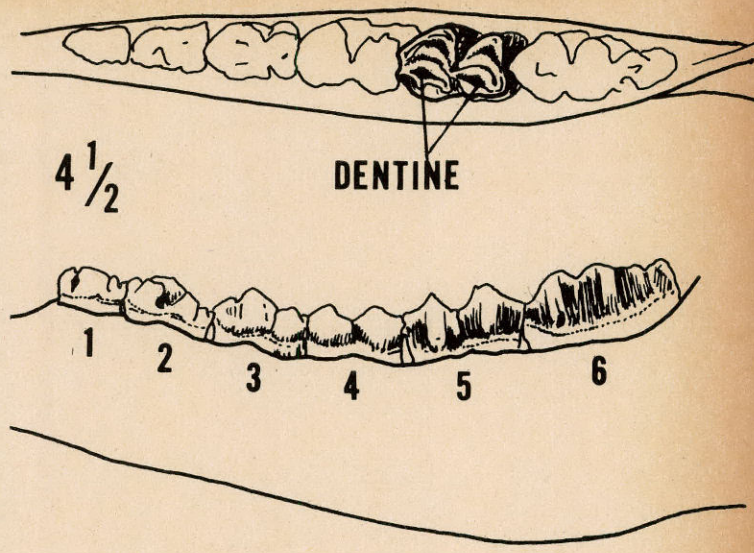
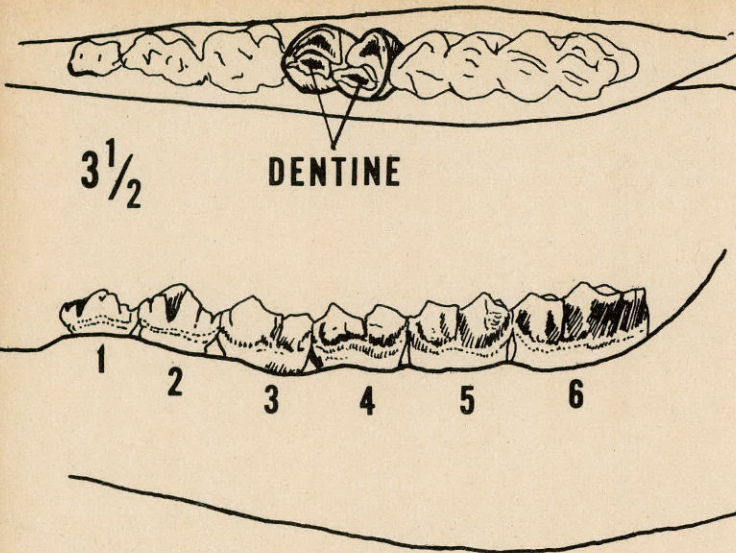
DENTINE



6 1/2







**3½ year old:** The dentine of the first and second molars (teeth 4 and 5) is as wide or wider on both teeth, but not in tooth 6.

**5½ year old:** The dentine of all molars (teeth 4, 5, and 6) is now as wide or wider than the enamel surrounding it.

**6½ year old:** The first molar (tooth 4) is worn smooth, but teeth 5 and 6 are not smooth.

**7½ year old:** The first and second molars (teeth 4 and 5) are worn smooth, or tooth 5 may still have a small ridge left.

**8½ year old:** All molar teeth are worn smooth (teeth 4, 5, and 6), but tooth 6 may still have a small ridge left.

**Older than 8½ years:** Unable to determine, because characteristic formations have all been worn smooth.

Trying to adapt this method to deer in the field probably will bring some surprises. Deer that seem young will be old, and deer that seem old will be young. At any rate, using such aging method will make for a better understanding of some of the problems of deer. For example, if all hunters and landowners were to age each deer killed on their ranches, they

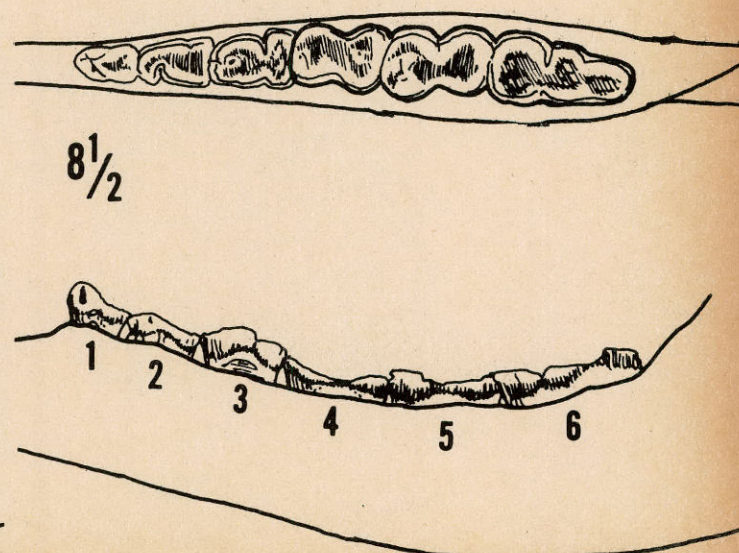
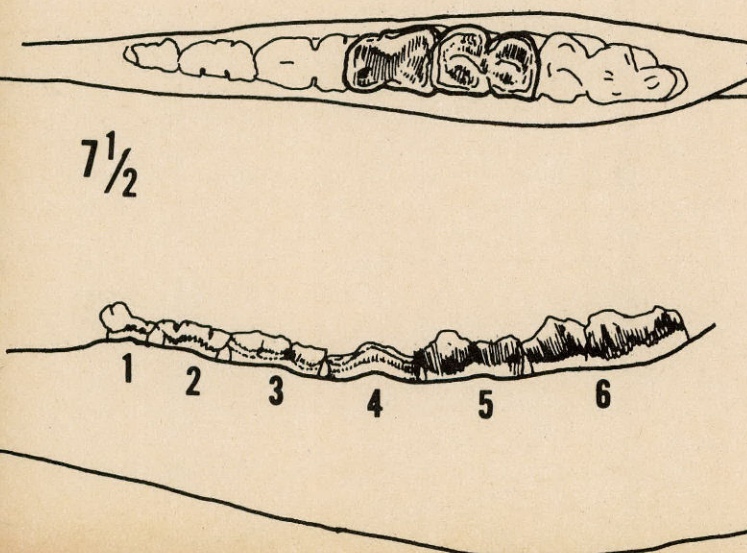
would find that the "good" bucks killed some years are approximately the same age as the "bad" bucks killed in other years.

Age is not determined by antler formations or development. The primary factor governing antler formation is food supply and not age. As deer grow older and their teeth wear flatter, food becomes harder and harder to chew. Body condition will drop and, simultaneously, so will antler development.

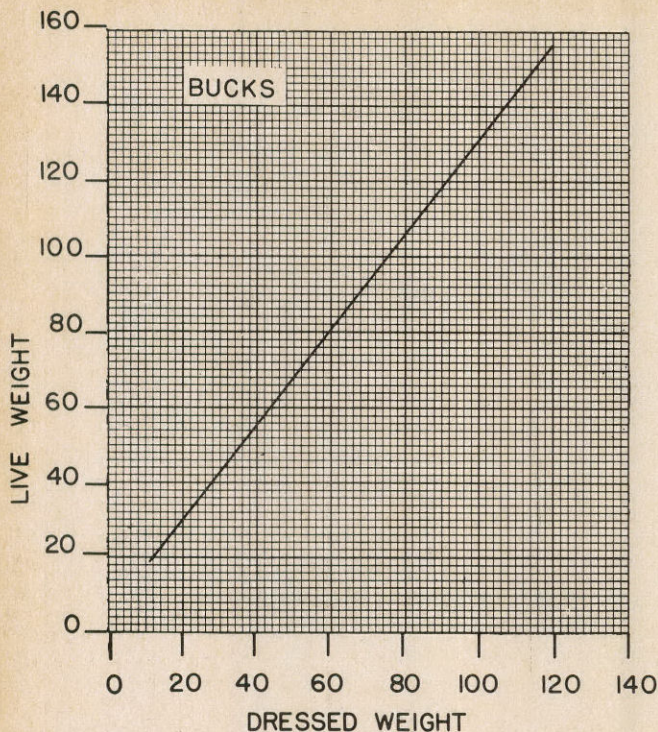
The procedure of aging deer by the teeth is just one of many in wildlife management that can prove revealing. As science steps up its quest for knowledge, popular beliefs sometimes become upset in the process. To get at the truth requires careful evaluation of the evidence—and an open mind.

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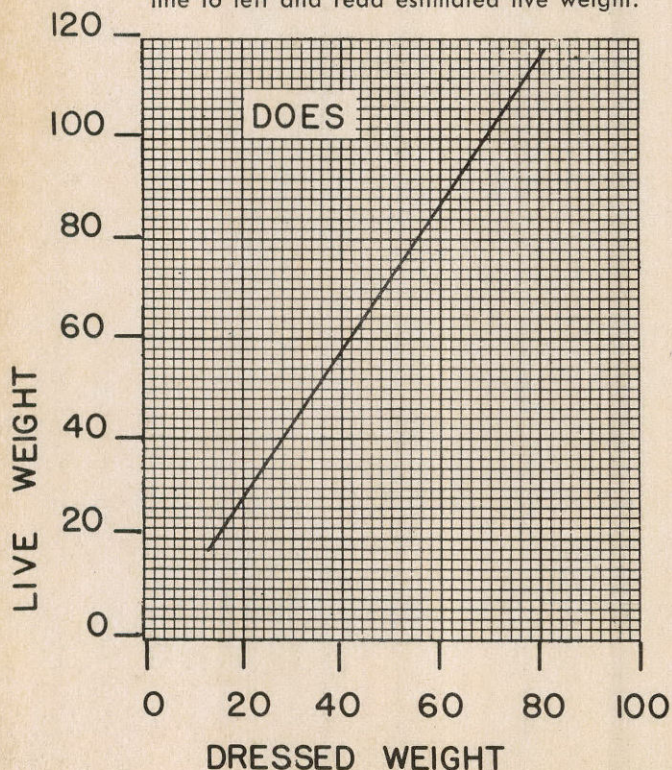




Find dressed weight of buck in figures at bottom of chart and trace line up to diagonal.

From intersection, trace line to scale at left and read live weight. Reverse this procedure to determine dressed weight of live animal.

Does are lighter than bucks so a different chart must be used. As above, find dressed weight of doe in scale at bottom, trace up to diagonal, then from intersection trace line to left and read estimated live weight.



# The Way to Weigh

by CHARLES RAMSEY  
Wildlife Biologist  
and  
MELVIN J. ANDEREGG  
Biology Technician

**A** PICKUP with two hunters drove up to the deer check station on the Kerr Wildlife Management Area. Both hunters climbed out, and walked around to the back of the truck and began unloading a couple of deer.

The first deer, a small doe, was tossed upon the table in the check station. Area personnel field dressed the deer and recorded descriptive measurements and weights. Then the doe was loaded back into the truck.

The second deer, a large buck, was lifted onto the table and the process of measuring and recording was repeated. Since the buck was already field dressed, only a dressed weight was taken—106 pounds field dressed. How big was that deer on the hoof?

This question has been repeated so many times at the check station that two graphs were prepared to help with the answer. These graphs represent the weights taken from approximately 200 deer in good body condition killed on the Kerr Wildlife Management Area. Since these deer were typical of the Edwards Plateau, the graphs will be applicable for deer taken within the "hill country." Although not as accurate, they are also good guides for deer taken from other areas of the State.

Dressed weight means "field dressed" with head, hide, and feet left on the carcass. \*\*



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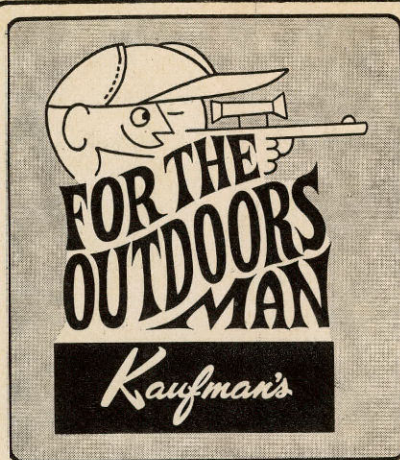
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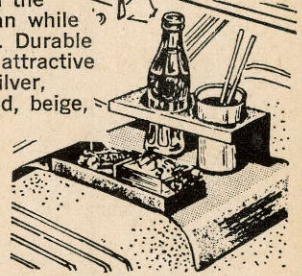
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# Lake L. B. J.



by Steve Korenek

**H**UNGRILY waiting in a hole in a moss bed, ten feet deep in the clear water of Lake Lyndon B. Johnson, a big bass cautiously watches a purple worm slide into the hole and slowly inch its way across the bottom. As the worm starts to crawl up the opposite wall of moss the bass' hunger overcomes its caution; it swiftly strikes the prey and turns back to its bed but a strong pull holds it. Failing to spit

the worm out, the bass violently fights the force steadily pulling it to the surface.

Fishing the moss beds of Lake Lyndon B. Johnson is the most productive way of taking black bass from this 6,200 acre lake. Baits work best in this lake when they are fished very slowly. A black jig and spring lizard combination, a lead headed purple worm, a Pico Perch, or a minnow fished over the beds from

six to ten feet deep will probably end in a good catch of black bass for anyone fishing in this, the best bass waters of the Highland Lakes chain.

Bass aren't the only fish to be caught, however, for crappie, white bass, and channel catfish are also objects of interest for fishermen. Fishing for these species will probably be done from a boat; your own can be put in at one of the many





The scenic landscape, clear waters, bass fishing, and skiing on Lake Lyndon B. Johnson offer some of the best outdoor activities of the Highland Lakes chain.

fishing and boating resorts on the lake. Rental boats and motors can be obtained at many of these same areas.

During the winter, one of the best catfish spots in the lake is around the base of a large, white, dead tree across the lake from the mouth of Big Sandy Creek. The catfish are attracted to the tree only during the winter because of the water turkeys roosting there. If this area is approached very quietly, a chunk of shrimp will be met by a hungry catfish. The least noise will frighten the fish away, so be quiet and watch boat noise. Deep water around the flats in the middle of the lake across from the mouth of Big Sandy are good for trotlines.

Although best known for fishing, Lake Lyndon B. Johnson is a beautiful spot for photography, with pink granite slopes and cliffs bordering its banks. Fields of bluebonnets surround the lake almost every spring. The scenic landscape, clear water, fishermen, and water skiers on the lake offer interesting composition for memorable photographs of this enjoyable recreation lake. \*\*





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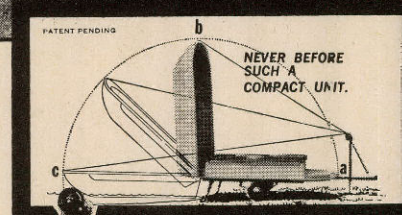
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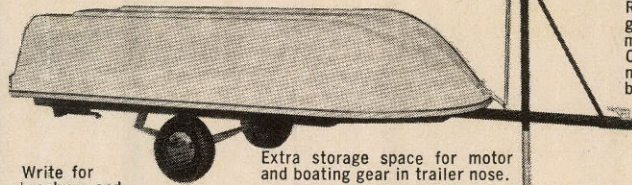


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**THE TREASURY OF HUNTING** by Larry Koller. Published by Odyssey Press, New York. 251 pages. Illustrated. \$14.95

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Whether your interest lies in stalking bighorn sheep in remote Canadian provinces or in varmint hunting for jack-rabbits right here in Texas, there's a section on your specialty.

Fine color photographs and artwork, in addition to reproductions of paintings by Audubon and Remington and woodcuts showing early hunting scenes, make this a very handsome volume.

Non-hunters, attracted by the illustrations, may find themselves delving into the well-written text with pleasure. Each section is presented in narrative form and incorporates vivid descriptions along with specific hunting information.

Filled with 13 chapters on every phase of hunting, the book covers such areas as American hunting history, hunting dogs, hunting camps, stalking and still hunting,

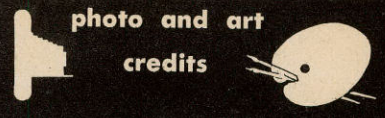
and handling game in the field.

Special sections are devoted to the best hunting techniques and guns to use for antlered game, horned game, bears, small furred game, varmints, game birds, and wildfowl. A master gun list provides keyed references to appropriate calibers, gauges, and loads for all North American game animals and birds. The selection is designed to match effective ballistic performance with the game being hunted.

The author, an editor of *Guns and Hunting* magazine and a former gun-maker, has written several other highly-regarded books on shooting.

In a foreword to this, his latest book, Koller sets forth a hunting philosophy which too often is praised but not practiced. "A proper hunter has respect, and even affection, for the game he seeks. If he does not accord it dignity in life, as a trophy it becomes meaningless."

This applies not only to trophy seekers but to all hunters. In another passage, Koller expresses the essence of the sport. "The chase is the thing. The game in hand is not much more than a reminder of the pleasurable effort expended on its taking."



**Cover** — Leroy Williamson; Mamiya C-33, 80mm; Kodacolor-X; 1/125 @ f/11; near Wichita Falls, Nov. 1965; printed from Ektacolor enlargement.

**Inside Front Cover** — Williamson; Pentax Spotmatic, Soligor 350mm; Kodachrome-II; 1/125 @ f/8; San Antonio Zoo, Aug. 1966; printed from Ektacolor enlargement made from 4x5 internegative.

**Page 3** — Jim Thomas; Ektachrome original; taken near Amarillo, Fall 1965; printed from Ektacolor enlargement made from Kodak internegative.

**Page 4** — Nancy McGowan; Grumbacher tempera on Crescent 300 board.

**Page 6-7** — Paul Hope; Nikon; Ektachrome; Houston area; printed from Ektacolor enlargement made from 4x5 internegative.

**Page 8-10** — McGowan; Shiva casein colors on Crescent 300 board.

**Page 12** — Williamson; Mamiya C-33, 80mm; Ektachrome-X; 1/125 @ f/8; near Cherokee, August 1966; printed from Ektacolor enlargement made from 4x5 internegative.

**Page 13 top** — Williamson; Mamiya C-33, 80mm; Kodacolor-X; 1/125 @ f/8; near Cherokee, August, 1966; printed from Ektacolor enlargement.

**Page 13 lower** — Williamson; Mamiya C-33, 80mm; Kodacolor-X; 1/125 @ f/8; near Cherokee, August, 1966; printed from Ektacolor enlargement.

**Page 14** — Williamson; Pentax Spotmatic, Soligor 350mm; Kodacolor-X; 1/125 @ f/5.6; near Cherokee, August, 1966; printed from Ektacolor enlargement.

**Page 16-17 top** — Richard Moree; Bronica, 75mm; Ektacolor-S; (16) 1/125 @ f/16; (17 top) 1/125 @ f/8; Eisenhower State Park, Denison, July, 1966; printed from Ektacolor enlargements.

**Page 17 lower** — Moree; Bronica, 75mm; Ektacolor-S; 1 sec. @ f/11; Eisenhower State Park, July, 1966; printed from Ektacolor enlargement.

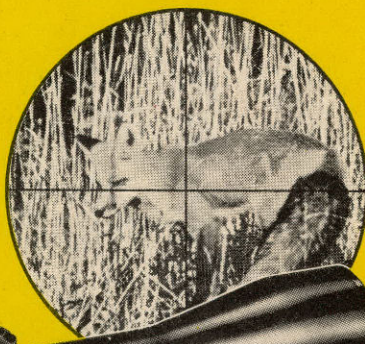
**Page 21** — Williamson; Pentax Spotmatic, Soligor 350mm; Kodacolor-X; 1/125 @ f/8; near Glenrose, August, 1966; printed from Ektacolor enlargement.

**Page 27 (both)** — Moree; Hasselblad 500C, 80mm; Ektacolor-S; 1/125 @ f/11; Lake LBJ, June, 1966; printed from Ektacolor enlargement.

**Back Cover** — Williamson; Bronica, 50 mm; Ektacolor-S; 1/160 @ f/8; Lake Lavon, May, 1966; printed from Ektacolor enlargement.

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With Christmas just around the corner, many families and friends of angling Texans will be in the market for new and different tackle to give as gifts. Although fishing is still productive with a cane pole and a bobber, more enjoyment is often possible with some of the new products on the market.

Many people believe that just any old rod and reel will get you by when you go fishing, but the selection of the proper tackle often means the difference between enjoyment of

a fishing trip and a vow to swear off the sport. In purchasing gift items it is often good to be sure of the type of fishing preferred by the recipient, then be sure the item can be exchanged after it is given.

For connoisseurs of good bass fishing gear, Berkley and Company has recently introduced their new line of para/metric rods. Basically the design is a curved taper from the butt cap to tip top. This taper is mathematically perfect through application of the formula  $x2=KY+C$ ,

which seems simple but is actually complicated, especially to the average angler.

The result of this innovation is that the rod receives equal stress and equal loading at every point. There are no weak spots, no dead spots, and no metal in the glass-to-glass ferrule or in the handle. The final effect is a power cast offering a lack of rod vibrations or "back talk," longer casts, greater accuracy, less line "slap," and less wear on the line and guides.

Para/metric rods are available in models for spin casting, bait casting, spinning, and fly rod users. Of special note are the ultra-light spinning rod weighing only 2½ oz., the 2⅝ oz. fly rod, and the four-piece back-packer special fly rod.

Another new product on the shelves of sporting goods stores for this season is blond monofilament line by Eagle Claw's Wright & McGill Company. Avoiding all puns about blonds, the Eagle Claw engineers point out that this color has high reflectivity in the air to enable the angler to see his line, yet it becomes almost invisible under water.

Not only has Eagle Claw offered a new color, they are also helping the angler by packaging this blond in a convenient reel-load pack. No more double spools that are difficult to load and easy to tangle, no more waste, no more guessing how much line you need. Found in various pound test sizes, three pack categories are available to fill any freshwater spinning, spin casting, or ultralight spinning reel.

Perhaps the most practical feature of the reel load pack is that the line is hermetically sealed. In this way it comes to the angler factory fresh, sealed against the natural enemies of monofilament line: air, moisture, and light. Since it will be fresh and will last longer on the reel, perhaps blond will mean more fun for the angler. \* \* \*

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TEXAS PARKS & WILDLIFE is published monthly by the Texas Parks and Wildlife Dept. at the Reagan State Office Bldg., Congress at 14th St., Austin, Travis Co., Tex. 78701, Wayne K. Tiller, editor. During the past 12 months the average net press run has been 53,958 copies, paid circ. 47,666, free distribution 5,260, and 1,032 for files, spoilage, etc. September issue ran 57,500 press run, 50,127 paid circ., 5,869 free dist., and 1,504 for files, spoilage, etc.

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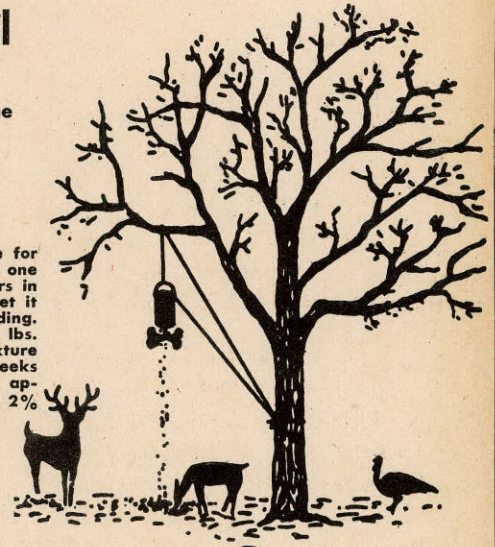
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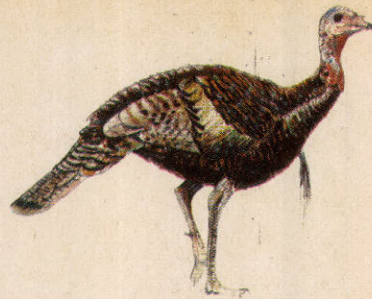
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# Letters



# to the Editor

## Dear Gabby

One of your subscribers, my son, R. H. Snyder, gives me your magazine when he has finished reading it. One issue had the letter from Gabby Mockingbird. I did not like the name GABBY applied to the mockingbird, but I think that the letter is excellent.

The August issue has a letter from W. C. Burnett of Corpus Christi. He does not like mockingbirds and accuses them of the crime of kicking out eggs from other birds' nests. He says that he has seen a mockingbird do this. He does not say whether he saw this thing done once or many times. I do not BELIEVE this story.

From 1901 to 1918 I did part of my growing up in Riesel, Texas. My father kept planting hackberry trees in our yard, until there were 16 to 20 trees. Mockingbirds nested in these trees every year. Martins nested in the martin house, bluebirds in the orchard, and everywhere there were nests of the English sparrow. The mockingbirds never bothered any of the other birds, but the male mockingbird would challenge cats that came to try to catch our pigeons, which were free and nested in pigeon boxes on the horse shed.

Every year we grew two tomato patches. The mockingbirds did not bother the tomatoes, but the chickens did. I know, because it was one of my jobs to keep the chickens out of the garden. We had

plenty of peaches, from early to late, plums and pears, too, but the birds did not peck them. A pair of woodpeckers nested every year in a living, hollow pear tree, but they did not peck the fruit.

What is wrong with the mockingbird's imitating the song of other birds? He is using the ability that Mother Nature gave him. Has Mr. Burnett invented a language that is all HIS own? Contrary to what Mr. Burnett has heard, the mockingbird DOES have a song of his own. Listen during the spring nesting season and you will hear it.

Mr. Burnett makes me remember a quotation from Shakespeare:

"That man that hath no music in his soul,  
Who is not moved in concord with sweet sound,  
Is fit for treason, strategems, and spoils."

Mr. Burnett should read THE BIRDS OF KILLINGWORTH by Henry W. Longfellow. It was in the fifth reader that I studied sixty years ago.

Best wishes to you all.

(Mrs.) Varina Elder Snyder  
Tomball

I read with shock Mr. W. C. Burnett's letter, "To Gabby." All I can say is that I don't hate Mr. Burnett — I pity him.

Obviously, he ignores the fact that many people don't share his feelings. He has no regard at all for people who, like

my family and myself, love mockingbirds. All he thinks of is his hatred for them, and expresses his desire that the bird be wiped out of existence — by little boys with air rifles. Yes, he even attempts, in his letter, to encourage these youngsters to destroy the mockingbirds of our beautiful State.

My family and I love mockingbirds. Their songs have brightened many of our days, making life more worthwhile for us. Occasionally, they fly to our bird bath to drink, and we have the additional thrill of seeing the birds as well as hearing them. They are beautiful birds in their smooth brown feathers, and are a pleasure to watch.

As for their eating fruit and vegetables, we have a vegetable garden, with tomatoes. We also have a moderate sized fig tree, and some grapevines. We've yet to see a mockingbird bother fruit and vegetables.

Several species of birds have been wiped off the face of this earth by senseless killing. I hope this won't be the fate of the mockingbird.

Linda Dill  
Baird

## Big Beesness

I am an apiarist, and have most of my bees on the Ramirena watershed in Live Oak County. I call my bee business "The Ramirena Apiaries." Having the apiaries located on a number of large ranches gives me an opportunity to observe quite a bit of wildlife. One of the most amazing things I have seen while working an apiary was a quail run from under a colony. The colony was placed on treated 4" x 4" blocks. On tipping the colony, I found a quail nest with 18 eggs. The next time I visited this apiary, I checked again and found 17 eggs had hatched, and the one bad egg was still in the nest with the other egg shells.

I have often been working an apiary, especially in the fall, and looked up to see a deer watching. It seems one can almost read the deer's thoughts: "What is he up to?"

I have noticed a number of clutches of young Mexico tree ducks this summer, on the farm ponds. Each time I have observed the ponds are in open fields with plenty of cover, with maize nearby. These ducks must have nested on the ground. One nice clutch is in a field about two miles south of Oakville.

Jim Harrod  
Oakville

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## Junior Sportsmen

by Joan Pearsall

# Conservation Quiz

*"Conservation can be defined as the wise use of our natural environment: it is, in the final analysis, the highest form of national thrift—the prevention of waste and despoilment while preserving, improving and renewing the quality and usefulness of all our resources."*

These are the words of our late President, John F. Kennedy, in a message to Congress in 1962. This "highest form of national thrift" that he referred to—appreciating and taking care of the country's vast natural wealth—is something that deeply concerns all junior sportsmen, as well as their elders. What is done today has a tremendous effect on the heritage of the future.

Alert young conservationists can do much for this cause. Many get involved in helpful projects through Boy Scouts, 4H Clubs, and so on. Also, there are a lot of things just one person, on his own, can do, such as being on the lookout for litter, feeding birds, obeying game laws. Perhaps the most important thing is to *learn* as much as possible, about nature and how to conserve it.

You young outdoorsmen already have a fine head start. To show yourselves just how much you do know—and to get an idea of all there is yet to learn—give this conservation quiz a try.

Place a check beside the answer that is most nearly correct for each question:

1. Conservation is the responsibility of:
  - a) The state government

- b) The Federal government
  - c) The 4H, Boy Scout, and Audubon societies
  - d) Everyone
  - e) The United Nations
2. Soil, water, forests, and wildlife conservation means to:
    - a) Store up resources so they will not be used at all
    - b) Make laws about our natural resources
    - c) Keep these resources and use them only in an emergency
    - d) Study nature at home and in the country
    - e) Use these resources wisely so the most people benefit for the longest time
  3. Most forest fires in the U. S. are caused by:
    - a) Campfires
    - b) Brush burning
    - c) Lightning
    - d) Logging operations
    - e) Careless smokers
  4. Woodlands are often good places for deer and bear because they provide:
    - a) Protection from disease
    - b) Shelter from lightning
    - c) Food and shelter
    - d) Protection from snakes
    - e) Sleeping places
  5. Forests help to control floods by:
    - a) Slowing down water run-off
    - b) Reducing rainfall
    - c) Lowering air temperatures
    - d) Increasing snowfall
    - e) Increasing water run-off
  6. The first step in conserving our salt-water resources is to:
    - a) Stock fish in the ocean
    - b) Decrease saltwater sport fishing
    - c) Kill sharks, whales, and other fish eaters
    - d) Stop using fish for fertilizer
    - e) Find out more about saltwater life and its needs
  7. Conservation of water must be practiced:
    - a) Only during floods

- b) Only during dry periods
  - c) Only by professional workers
  - d) Only during the summer months
  - e) All the time
8. Lands around reservoirs are often kept in trees because forests:
    - a) Keep soil from washing into the water
    - b) Supply good picnic areas
    - c) Improve the climate
    - d) Stir up the air
    - e) Grow big trees
  9. Soil erosion is:
    - a) A movement of soil by wind and water
    - b) A type of soil
    - c) A measure of the water in soil
    - d) A conservation practice
    - e) A way of improving soil
  10. Top soil is a very important part of the soil because:
    - a) It is very dark in color
    - b) It washes less easily
    - c) It washes more easily
    - d) It protects insects and small animals
    - e) It contains most of the foods needed by plants
  11. Overgrazing is poor practice because:
    - a) It is hard to control
    - b) Ruins the scenery
    - c) Leads to soil erosion
    - d) Increases fire danger
    - e) Loosens the soil
  12. Knowing how much rain usually falls is important to the farmer because it tells him:
    - a) How fast his trees will grow
    - b) What kind of machinery to use
    - c) When to expect floods
    - d) If ducks will use his farm pond
    - e) How to get the best use of his land
  13. The fact that birds eat weeds and insects shows us that birds:
    - a) Are of no value
    - b) Are valuable to man
    - c) Need bird feeders
    - d) Do not have enough to eat
    - e) Do not eat crops or helpful insects
  14. Hawks and owls are usually helpful because they:
    - a) Kill rats and mice
    - b) Scare away harmful birds
    - c) Eat weeds and unwanted plants
    - d) Help spread plant and tree seeds
    - e) Eat waste grain and seeds
  15. The stocking of fish in lakes and streams should mainly depend on:
    - a) Number of fish and amount of food present in the water
    - b) The kind of farming done in the area
    - c) The number of wildlife around the water
    - d) The number of fish-eating snakes and birds around the water
    - e) The distance from the hatchery

ANSWERS: 1-d; 2-e; 3-e; 4-c; 5-a; 6-e; 7-e; 8-a; 9-a; 10-e; 11-c; 12-e; 13-b; 14-a; 15-a.



