

# TEXAS

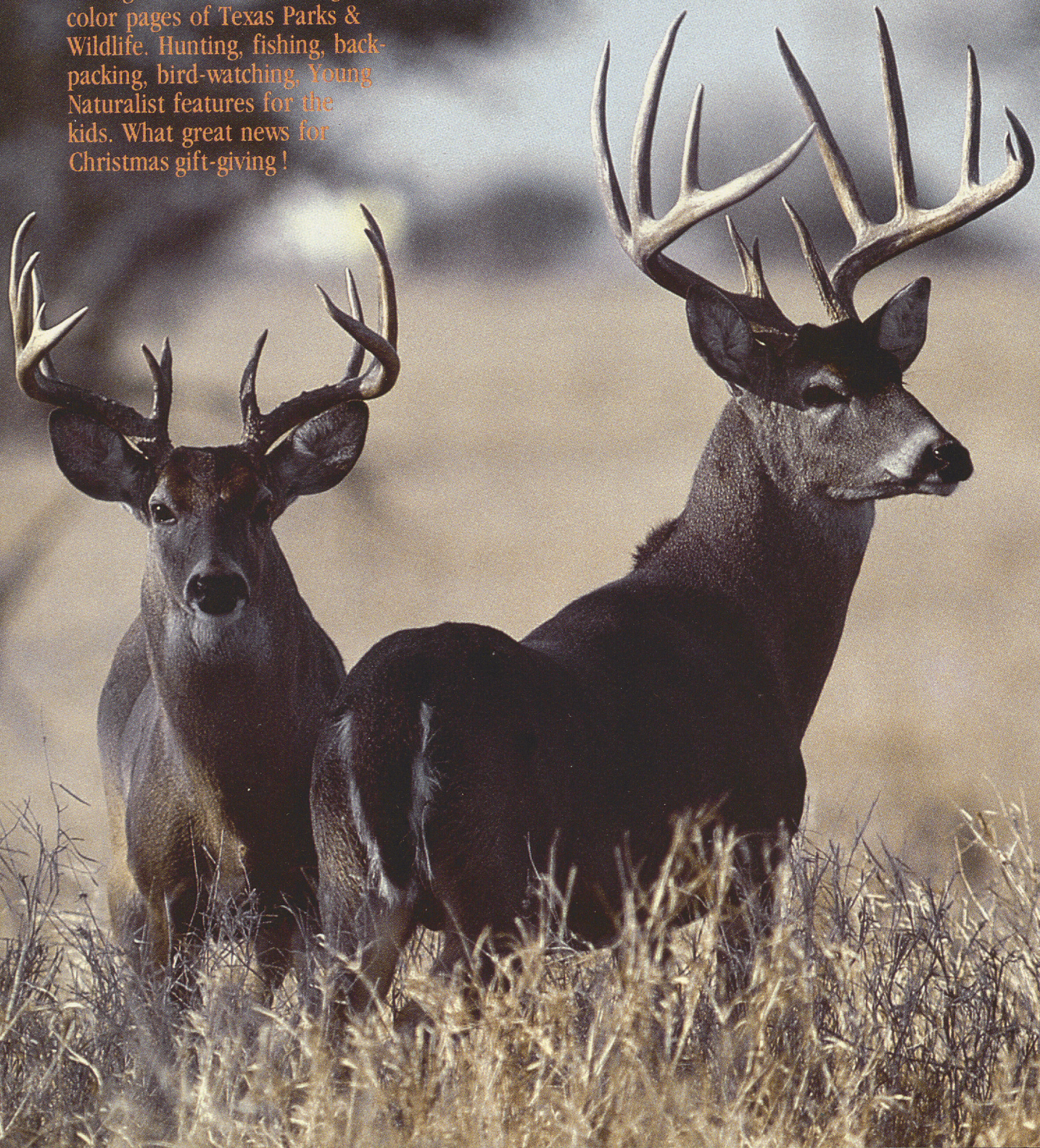
PARKS & WILDLIFE



December 1985

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# TEXAS PARKS & WILDLIFE

December 1985, Vol. 43, No. 12

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**Inside Front:** South Texas trophy whitetail hunting reaches a peak during December. Photo by Ed Dutch.

# Panhandle Bird Hunting by Jim Cox

# A WELL-KEPT S



# T SECRET



Glen Mills



Glen Mills

**T**here's a Texas Panhandle few ever see. It's not the usual plow-scraped farm monoculture, or the rail-head/feedlot/gas well clutter which punctuates much of this flat tableau.

This secret Panhandle is not even known to some Panhandle natives. It's difficult for a casual visitor to see it and you won't get a glimpse of it on your way to Colorado. You might, however, see it in the eyes of your ruddy-faced hunting partners as they josh each other over coffee, glancing

out a fogged-up cafe window as the sign outside sways in the pre-dawn wind.

To taste its delights you might have to ride in the cramped back end of a Blazer, with musty bedrolls and an over-friendly Labrador for company; you might have to lose all feeling in your fingers while a norther tries to rip apart your stacked-tumbleweed goose blind on an ice-clear dawn. Whatever discomforts and inconveniences have accrued during your journey to this secret land fade away when the cries of 20,000 geese rising with

the sun from a wheat stubble field give you a goosebump attack; or when a gaudy cock pheasant's thunderous takeoff underfoot redlines your adrenal glands. On a more contemplative level, watching hundreds of ducks and geese form a living, cackling raft on the surface of a playa lake on a sunny December morning is worth a long journey in itself.

Once the stronghold of the bison, prairie wolf and antelope, the High Plains of Texas have in large measure been tamed by man. They now provide some of the most productive farmland





Glen Mills

in the world, and a high percentage of its surface has been altered to the detriment of the original, native wildlife species.

However, not every acre has fallen to the plow and cultivator. Tucked away in the Panhandle's outback are small creek drainages and weed-infested gullies where a remarkable diversity of vegetation harbors an equally remarkable array of wildlife; low swales on the prairie's face catch rainwater, forming shallow lakes that draw migrating waterfowl like magnets.

Even fields planted in sunflowers, wheat, oats or maize provide food for pheasants and waterfowl at times, and wind-break treelines and brushy fence-rows offer cover for quail and other small birds and animals.

The waterfowl have known about this region for centuries, sharing the

ponds and creekbeds with wallowing bison. Sandhill cranes are another species which has taken human intrusion in stride, feeding in grainfields and watering with ducks and geese during their migration stops.

Pheasants, on the other hand, arrived in the Panhandle in a more artificial manner, but their contribution to the region's wildlife resource was no less dynamic. About 25 years ago, a group of Deaf Smith County farmers grew tired of having to drive to Nebraska or the Dakotas to hunt pheasants, so they purchased Chinese ringnecks from Nebraskans and released them on their Panhandle farms.

This less-than-scientific method somehow succeeded, and now the multicolored game birds are evident in dozens of Panhandle Counties. Although the initial stockings were a private enterprise operation, the Parks and Wildlife Department through the years has translocated thousands of birds to help them extend their range throughout available habitat. Changes in agricultural practices, including increased plantings of small grains and sugar beets, probably were the main reason for expanding pheasant populations during the past 20 years.

The impact of pheasant hunting can be gauged by looking at the economic impact of the 16-day season in Deaf Smith County, arguably the pheasant-hunting capital of Texas. The Hereford Chamber of Commerce estimates approximately 10,000 hunters visit the county area each year and bring \$1.2 million into the local economy in the process, exclusive of hunting lease fees.

Chamber manager Mike Carr said pheasant and waterfowl hunting are still growing, especially in the area of leasing. "Just a few years ago, pheasant hunting was mainly operated on a permission basis with very little leasing," he said. "Now we have a couple of hundred landowners leasing their land for hunting both waterfowl and pheasants."

Two main areas of the Panhandle have huntable populations of pheasants. The larger of the two is west and south of Amarillo, and the second is in the north-northwest portion of the Panhandle, along the Texas-Oklahoma border. All or portions of 13 counties are considered by the department to have good pheasant populations, and



Wyman P. Meinzer

another 10 counties have lesser areas of preferred pheasant habitat.

Pheasant hunting in the Panhandle follows the general pattern of the sport throughout the midwest, which is to say it's a social event as much as a hunt. Teamwork usually is required to hem in the wary birds, so hunting parties range from two or three hunters to as many as a dozen or more.

The object of the game, especially after the opening weekend when the birds have been stirred up, is to deploy hunters at opposite ends of fields or draws where pheasants are suspected to be. As the pincers come together, bedlam often ensues.

The unpredictable birds may flush in any direction, attempt to run between the hunters or lie still. A chorus of "hen!" goes up when the drab brown females flush. A fusillade of shots indicates a cock has made a break for freedom.

The 1984 pheasant hunting season in the Panhandle was subpar. Rainfall produced better nesting conditions during early 1985, however, and department officials are hearing reports of good production.

The harvest last year was only 21,000 birds, which was the lowest since 1975, and hunter success averaged only .66 birds per hunter. This is contrasted to 1982, the most successful year, when 38,000 birds were taken for a 1.67 per hunter average.

While pheasants are year-round residents of the Panhandle, ducks and geese either winter in the region or

# Panhandle Seasons, Bag Limits

Hunting seasons for some game birds in the Panhandle differ from those in other parts of the state. In the case of geese, the bag limit also is different.

The following is an outline of the major bird-hunting seasons and bag limits for the region:

## Pheasant

December 14-29

Bag limit two cocks per day; possession limit four; one foot must remain attached to the carcass.

## Quail

November 2-February 23  
(Statewide)

## Geese

October 29-January 19

Bag limit five geese, not to include more than two Canada geese or black brant or white-fronted geese in the aggregate; possession limit is twice the daily bag limit.

## Ducks and Coots

November 9-January 12

Bag limit is the statewide 100-point system.

## Sandhill Crane

Zone A—Western Panhandle

November 9-February 9

Zone B—Eastern Panhandle

November 30-February 9

Bag limit three, possession limit six.

pass through it on the way to more southerly wintering grounds. It would be difficult if not impossible to estimate the total number of ducks and geese passing through the Panhandle each fall and winter, but January counts indicate that about 100,000 geese and 200,000 to 300,000 ducks are normally in the region during the month each year.

While a variety of goose species visits the Panhandle, the vast flocks are dominated by the shortgrass prairie Canada goose. This group of geese is classified as a "subpopulation" of lesser Canada geese, and they migrate each year from their Canadian nesting areas to the northern Panhandle, southeastern Colorado and northeastern New Mexico. They gather in great concentrations on Western Panhandle playa lakes and grainfields, often numbering as many as 20,000 in a single flock.

The most numerous ducks observed during the January counts are mallards, followed by teal, wigeon, gadwall and pintails.

Waterfowl hunting in the Panhandle can be an exercise in physical punishment, and the best action usually occurs during the most inclement weather. Both ducks and geese are hunted around playa lakes by hunters who either construct makeshift blinds or huddle under sheet-like pieces of cloth.

Pass-shooting is another method, where hunters station themselves


along a fencerow or high point of ground between a feeding area and a playa lake. The classic form of goose hunting, however, is to set out a decoy spread in a grainfield before dawn and try to call the birds in as they rise from their roosting places.

If you miss out on the opportunity to hunt geese or pheasant in the Panhandle, there's another sporty bird which is getting an increasing amount of attention from Texas scattergunners. Sandhill cranes winter in many areas of Texas, but the largest concentrations of both cranes and hunters are found in the counties to the south and west of Lubbock. The top counties, according to federal harvest estimates, are Bailey, Howard, Lamb, Lubbock, Lynn and Terry.

Although the large gray cranes are generally held in less esteem than geese or pheasants, they sometimes can offer just as big a challenge. They can be hunted by pass shooting between roosting and feeding areas, but the sharp-eyed birds often evade hunters by climbing to high altitudes on relatively short flights.

The most successful hunters simply locate fields where cranes are feeding, flush the birds and set out homemade silhouette or gray rag decoys. It's usually only a short wait before more cranes try for a return visit.

Some hunters dig shallow pit blinds, but lying down and using camouflage colors often is sufficient to trick the



incoming cranes. Hunters usually station themselves downwind of the decoy spread in order to intercept the birds on their upwind approach.

Sandhills are impressive birds, standing three feet tall and with a wingspread of more than six feet. They weigh eight to 11 pounds, of which three to five pounds is solid breast meat for the table.

The relative abundance of ducks and geese in the Panhandle during the hunting season depends upon the weather. The Canada geese which arrive in the Panhandle normally spend the duration of the winter there, and will venture farther south only in the event of extremely cold weather. Several species of ducks also winter in the area, and they are more inclined to move southward as the playa lakes begin to freeze over, concentrating on large West Texas reservoirs farther south. \* \*





Wyman P. Meinzer



Wyman P. Meinzer

# THE NEW TEXAS



## WILD GAME COOKBOOK

Excerpted from "The New Texas Wild Game Cookbook" by Judith and Richard Morehead, published by Eakin Press, Austin, Texas. Woodcuts by Barbara Mathews Whitehead.

**W**ild game hunting and cooking are among mankind's oldest skills, and both are popular today, even in our urban society. Game cooking probably came about by accident after early man discovered fire and dropped a bird onto the hot coals or set a haunch of venison too near the flames. Probably to his surprise, our early day ancestor found the cooked meat to be tender and juicy.

Today, game cooking is no haphazard matter. In homes with hunters, cooks have found creative ways to prepare delicious wild game dishes. People who enjoy good game cooking have long praised its merits. The uninitiated may still turn up their noses, but they don't know what they're missing. It is so much more than camp cooking.

One reason for the increased interest in harvesting and eating wild game is growing evidence that game meat is often more nutritious and has fewer calories than its domestic counterpart. Alaskans are modern leaders in using wild game for human consumption, since the climate in that state makes it difficult to raise livestock. Research done in Alaska indicates that lean venison contains less than half the calories of a similar portion of trimmed beef or pork, and venison also has a higher protein and vitamin content. Research from Great Britain, New Zealand and elsewhere has produced similar findings.

Even medical journals have been proclaiming lately that cavemen ate healthier diets than modern Americans. Those primitives ate game, birds, fish and plants. This was a low fat, high protein, low salt and high fiber diet that was free of chemicals and additives. If this sounds like today's health foods, remember that cave people learned it first.

Deer have become so abundant in the Southwest, particularly in the Texas Hill Country, that experts

strongly recommend killing more does. Until a quarter-century ago, killing female deer or spike bucks was against the law. Now harvesting that segment of the deer population is recognized as important to control overpopulation, undernourishment and die-offs. Although a trace of cavalier prejudice persists among some hunters, if you want the best eating, take does and spikes. Hunters are discovering that old bucks and even turkey toms are hardly in the class with younger specimens and females when served at the dining table. Big-antlered bucks and old toms look better in photographs or mounted as decorations.

Properly dressed and cooked wild game is a soul-satisfying product of hunting skill and culinary art. The first step is for the hunter to learn to take care of his kill. Next, forget everything you've learned about cooking domestic meat. Never tell a game cook, "This tastes like beef." Wild game has fine eating qualities and a flavor all its own, and any comparison with domestic meat insults the skilled game cook. Many recipes can be adjusted for either wild or domestic meat.

Care of the carcass is one of the most important steps to delicious game cooking. Field-dressing usually is done in the area where the deer was killed. As soon as possible, hang the deer in a cool, shady place, screened from flies. If possible, hang the carcass outside overnight to cool. We prefer to skin the carcass early, allowing it to cure better. We also hang it head-down, which improves meat quality by allowing blood to drain downward.

Experts disagree on whether to wash freshly killed game. We favor washing the carcass, particularly if it's shot up badly. Unless the weather is cool to cold, refrigerate your game at the first opportunity. Deer can be quartered and packed into ice chests easily if a refrigerator isn't handy. Take large plastic bags or

wrapping on your hunting trip.

Although dressed game can be preserved in home freezers, a locker plant will cut up the carcass and package it according to the hunter's instructions. Give some thought to what you will do with a deer if you get one. It helps to give the locker plant written instructions. With just the two of us at home, we order venison put into small packages, one or two pounds of sausage or chili. The usual packaging at commercial places is a four-person quantity.

Many people use the hind quarters of deer and other animals as if it were backstrap, the two prime strips of meat which run along either side of the spine. Use a knife and the fingers to remove the long muscles whole, and throw away the fat, bone and connecting tissue. The remaining red meat is more tender and delicious than the usual cut and makes good cutlets, if cut across the grain.

A variety of cuts are available. Hams can be left whole for baking, barbecuing or smoking. They can

be sliced into round steak or divided into roasts. Backstraps and tenderloins (there are two of each) can be packaged whole or cut into chops. Shoulders (less meaty than hams) can be made into steaks or roasts or ground into sausage, hamburger or chili meat. Some cooks barbecue or bake the ribs of game animals. They are delicious, although not very meaty. Rib and flank meat is great for fajitas.

We are not barbecue enthusiasts and find that method usually too dry for cooking lean meat such as venison. We have eaten good barbecued game, but that may have been due to the tasty sauce rather than the cooking.

One learns continuously about hunting and game cooking, which adds fascination. Every good cook improves. We believe the art of good game cooking is just beginning for most Americans, and we hope it will instill an appreciation of our heritage and our wildlife.

Here are a few of the authors' favorite recipes, from "The New Texas Wild Game Cookbook."

## RECIPES



### Venison Roast

A smoked pork ham or shoulder imparts a wonderful flavor to the venison when the two are cooked together.

Venison ham or roast

Smoked pork ham or shoulder

Salt, pepper

Garlic-seasoned bacon strips

Season the venison with salt and pepper. Use a knife to cut slits in the meat and insert bacon strips that have been seasoned either with slivers of garlic or garlic salt. Place the smoked ham and venison together in a roaster. (Do not use cooked, boned ham.) A small, smoked pork shoulder is sufficient. Bake the pork shoulder and venison roast at 350 degrees for 20 minutes per pound for the total weight. Slice and serve.

### Venison Sausage

Elgin Burrer, an Austin man of Fredericksburg-German ancestry, makes sausage as follows:

Take two parts sausage-ground venison and mix with one part ground beef brisket. Salt and pepper and add freshly ground garlic. Avoid sage.

Smoke for two weeks and put up in casings. This will keep almost indefinitely. The flavor and keeping quality both can be improved by hanging the smoked sausage awhile in a protected cool dry place, such as a carport or porch.

Another Burrer recipe is for preparing ground venison without making it into sausage, as follows:

Mix one-half ground venison with one-quarter beef brisket and celery salt. Boil until tender, then press through a sieve. Add enough brandy to moisten.

At serving time, combine this mixture with melted butter or mayonnaise to spread on crackers or thin dry toast.

### Sauteed Venison Backstrap

Slice tenderloin into 3/4-inch strips and pound flat. Dredge in flour and saute in hot butter. Remove meat from pan.

Add to juices in the pan:

2 diced shallots

1 cup dry white wine

Cook until volume is reduced by one-half and add:

4 oz. beef stock

2 Tbsp. Dijon mustard

1 Tbsp. horseradish

Simmer and serve over venison slices.



### Marinated Dove

Season cleaned doves with red pepper. Cover with sliced onion and bay leaf. Marinate in red wine and Worcestershire sauce at least 12 hours, preferably overnight. Remove doves from marinade and pat dry. Brown in butter. Add marinade and bake, covered, for about an hour.

### Sachtleben Wild Dove Casserole

Pressure cook six wild doves until tender. Remove meat from bone. Chop meat into small pieces and set aside.

- 3 tablespoons of butter
- 3 tablespoons of flour in a skillet and brown. Add:
- 3 cups of water and one small minced onion
- 1 small can of mushrooms (optional)
- 1 or 2 cloves of garlic (optional)
- Season to taste with salt and pepper

Add chopped dove meat to the above mixture and stir into a baking dish. Cook at a low temperature in the oven for 1 to 1½ hours.

Serve over steamed rice or noodles—also good over corn bread. This serves six.

### Quail With Green Grapes

- 4 quail
- Salt, pepper, flour
- 1 stick butter
- ½ cup water
- ½ cup seedless green grapes
- 2 Tbsp. chopped pecans
- 1 Tbsp. lemon juice
- 4 buttered toast slices



Sprinkle quails inside and out with salt, pepper and flour. Melt butter in skillet; add quail and brown on all sides. Add water, cover and cook until tender. Stir in nuts, lemon juice and grapes. Serve quail on buttered toast slices with sauce in pan, wild rice and whole baked tomatoes stuffed with peas.

### Baked Wild Turkey

The best wild turkey is one that has been shot in the head. Trim any bruised or bloody places in the meat. Soak turkey in water and ½ cup vinegar.

Dry the bird and season inside and out with salt and pepper. Stuff with dressing, if desired, or fill the cavity with chopped onion, celery and tart apple. Butter the bird generously and wrap in foil.

Cook at least 3 to 4 hours at 325 degrees. When you open the foil to check for doneness add more butter. If you wish to brown the bird, leave the foil open and turn the oven to broil.

### Wild Turkey Curry

- 2 cups of coarsely chopped and boned wild turkey
- 1 cup of chopped celery
- 1 cup of chopped apple
- ¾ cup of mayonnaise
- ½ teaspoon of curry powder
- ⅓ teaspoon of ginger



Mold in one package of unflavored gelatin. Serve on lettuce leaf with mayonnaise and any other salad garnishes as sliced tomato, cucumber, avocado, asparagus, sliced hard-boiled egg and potato chips.

### Wild Duck Spanish

- For each duck:
- 1 clove garlic
- chopped onion and celery
- ½ bottle Worcestershire sauce
- ½ bottle catsup
- ¼ cup water

For the entire batch, add one chopped green pepper and all giblets. Place garlic, onion and celery in the cavity of each duck. Cover breast with salt and black pepper. Place ducks in roaster, cover with sauce and bake, covered, at 375 degrees until tender. More water might need to be added from time to time. For gravy, thicken the sauce left in the roaster with flour. Serve with rice.

### Ducks and Geese in Casserole

- 4 geese or 8 ducks or a combination
- 6 or 8 slices of bacon
- Salt
- Cayenne pepper
- 1 can of orange juice concentrate—1 can of water
- ½ cup of Madeira wine
- Chopped white onions, chopped carrots and celery
- Chopped garlic to taste—up to three cloves

Use only the skinned breast of the geese and skinned ducks cut into serving pieces.

In a heavy iron skillet cook the bacon slices until almost done. Remove the bacon and set aside. Dust the meat with cayenne pepper and saute in the bacon fat until lightly browned.

Remove meat from the skillet and place breast down in a deep casserole. Cover with orange juice, water, wine and the chopped vegetables. Cook at 250 degrees F for two and a half hours. Remove the pot vegetables and discard. Taste for salt and pepper. Remove meat from the bones and serve over white or brown rice. Broiled tomatoes and red wine make good compliments for a game dinner.



## Cornbread

This recipe may be doubled or tripled depending on your crowd. The one cup basic makes about six muffins or a small tin of cornbread.

- ¾ cup of yellow corn meal
- ¼ cup of flour
- 2 teaspoons baking powder
- ½ teaspoon salt
- ½ teaspoon sugar
- 1 egg, slightly beaten
- ¾ cup of buttermilk to which
- ¼ teaspoon of baking soda has been added or
- ¾ cup of sweet milk

Mix all together and pour into heated muffin pans or skillet to which 2 tablespoons of cooking oil or shortening has been added. Bake at 425 degrees for 25 minutes.



## Wild Rice Dressing

Cook 1½ cups of wild rice according to directions. Bake one recipe of cornbread in advance. Dressing: Lightly saute in ¼ pound of butter:

- 1 large onion, finely minced
- 1 cup of celery, chopped

Add 2 large cans of stems and pieces of mushrooms (drained). Salt, pepper and savory salt to taste.

Crumble cornbread, add wild rice, any giblets and about 2/3 cup of broth and sauteed vegetables. Mix well. Taste for need of additional salt and pepper.

Add:

- 1 large crumbled bay leaf
- 1 tablespoon chili powder
- Savory salt

Mix well and if a bird is to be stuffed, use a small amount for that purpose. The remainder goes in a buttered casserole, and if possible, chill a few hours in the refrigerator. Let dressing be very moist. Add a tablespoon of Vermouth just before starting to bake. (Optional)

Cook covered the first 45 minutes, then uncovered 15 minutes in a 350 degree oven.

Note: Half wild rice and half white rice may be substituted in this recipe. (Cooked separately, of course.) Just the rice, vegetables, mushrooms, plus salt, pepper and savory salt make a delicious dish served with game if you don't want to go all the way to dressing.

## Gumbo

- 3 tablespoons butter or margarine
- 3 tablespoons of flour
- 1 large onion, chopped
- 1 green pepper, chopped
- 1 cup of celery, chopped
- 1 small pod of garlic
- 2 wild ducks, cut in frying pieces
- Green onion tops, chopped
- About 10 ounces of chopped okra
- File
- Dash of Worcestershire
- Dash or two of Tabasco



In a large iron pot or skillet, melt the butter or margarine at a low temperature, stir in the flour, stirring constantly, until a rich brown color. (You have a roux.) Add the chopped vegetables, then four quarts of water and salt and pepper to taste.

Meanwhile skin the ducks, boil briefly in water or beef bouillon. Remove from the water, salt, pepper, flour and brown in hot fat. When browned add the ducks to the vegetable liquid and cook until tender. Cook the liquid down by one third. This may take two or three hours. Just before serving add the onion tops and file. If desired add two cans of crab meat.

Do not boil after file has been added. Let rest for 48 hours or more and serve hot over rice.

If you precook the ducks, the water or bouillon may be used to make up the 4 quarts of liquid.

Any leftover rice may be added to the gumbo pot.

Serves ten.



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## PART ONE

# A History of Texas Stripers

by Jim Cox

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*The striped bass is no longer a newcomer to Texas. Almost 15 years have elapsed since the first stripers were flown from their South Carolina home and stocked experimentally in Navarro Mills Reservoir near Corsicana and Spence near San Angelo.*

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The year was 1967, and no one could predict whether the silvery fish from the Eastern Seaboard could survive in Texas reservoirs, let alone create a brand-new freshwater sport fishery.

That striped bass have had a major impact on Texas' fishing scene since those early days now is a matter of record. But has the species fulfilled expectations?

"Success at stocking stripers depends on many factors, and not all of the stocked lakes developed strong fisheries," said Roger McCabe of Waco, the Parks and Wildlife Department's striper program leader, "but they have exceeded our most enthusiastic expectations in most of the lakes where they have been stocked."

McCabe and his fellow biologists believe the striped bass program propelled the department into a new era of fisheries management. It was one of the first, and by far the most successful, non-native fish introduction for Texas.

Stripers have created a multi-million-dollar boon to the fishing tackle industry in Texas and offered thousands of anglers the opportunity to catch a big, sporty fish.

"They also have revived interest in fishing on many reservoirs where fishing for native species had been on the decline," McCabe said. "Stripers are providing a much-needed large predator fish which can take advantage

of populations of gizzard shad which are normally underutilized by native predators such as largemouth bass and crappie."

Stripers' rapacious appetites, in fact, may have caused some anglers to suspect that the fish are eating more than just shad.

"I can understand why some fishermen might worry that striped bass compete with largemouth bass or crappie in some lakes, but I believe the opposite is true," McCabe said. "In many lakes, fishing for other species actually has improved after striper introductions."

A case in point is Lake Texoma, the huge reservoir on the Red River between Texas and Oklahoma. McCabe said Texoma is probably the state's premier striper fishing lake, and the only one in which stripers have spawned consistently. "Even with a tremendous population of stripers, our surveys and comments from local fishermen indicate fishing for largemouth bass is better now than it has been in decades," McCabe asserted.

Some of the apprehensions about stripers perhaps resulted from an early misunderstanding of the fish's seasonal movements. During the 1960s, stripers were generally labeled as an "open-water predator," meaning the fish supposedly schooled in the open water away from the shoreline habitat



Grady Allen



Leroy Williamson

occupied by bass and other native fish. This proved to be true only part of the time. "Striped bass go where the shad go, and this sometimes means they will chase the bait fish into just a few inches of water in the backs of coves," McCabe said.

One legendary angler who agrees with McCabe's views on the striper/largemouth relationship is Floyd Mabry, who at 72 probably has caught more of both species of fish than anyone in the state.

"I absolutely do not believe that stripers hurt bass fishing," said Mabry, who still works as a lure company representative and fishes Lake Texoma almost every day. "Everyone knows that Texoma is one of the best striper lakes around, but some might be surprised to know that it has good bass fishing for a reservoir as old as it is."

Mabry said any lack of largemouth bass in Texoma, or any other Texas reservoir, can be traced back to one factor—lack of habitat. "Texoma is basically a slick-banked lake, and it lacks the kind of cover young black bass need to grow into catching size," he explained. "You can look at the top bass lakes in Texas, and they all will have one thing in common—good cover in the form of brush, timber, aquatic weeds or a combination."

Mabry also takes a dim view of the claim that stripers displace or con-



### LAKE CASA BLANCA HYBRID STRIPER FISHERY (Pounds of fish per acre)

Year	Largemouth Bass	Gizzard Shad	Sunfish	Crappie
1975	20	74	19	8
1976	32	68	39	13
1977	— Stocked with Hybrid Striped Bass —			
1981	37	119	52	14
1984	13	53	3	6

### LAKE WHITNEY STRIPED BASS FISHERY (Pounds of fish per acre)

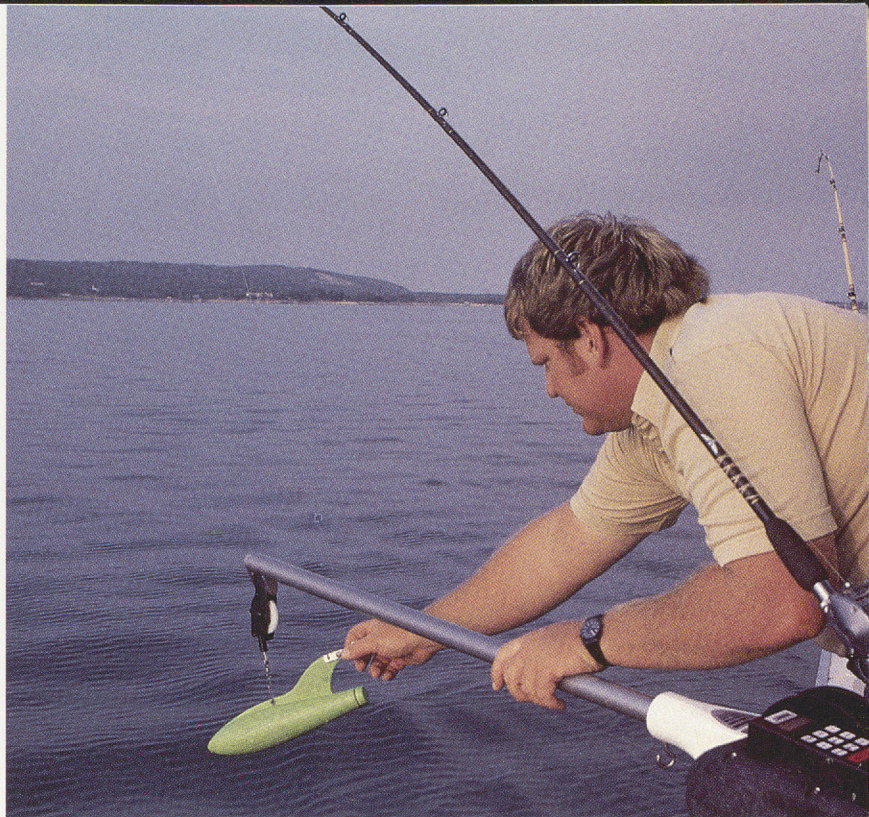
Year	Largemouth Bass	Striped Bass	Crappie	Sunfish	Gizzard Shad	White Bass
1974	13.2	Trace	17.7	55.2	146.5	1.4
1976	13.4	1.4	10.0	85.5	72.4	3.3
1979	28.0	Trace	6.8	93.1	125.6	5.5
1980	16.5	1.5	2.6	80.6	53.8	3.5
1982	50.4	Trace	18.7	95.2	167.9	1.3

Whitney was first stocked with stripers in 1973; therefore, 1974 probably represents a year of minimal impact.





Leroy Williamson



Grady Allen

sume largemouth bass. "I have actually caught a striper and a black bass on the same lure on the same cast," he said, explaining that the two fish bit the opposite ends of a long three-hook crankbait. "The fishing parties I take out on Texoma usually catch three or four largemouth bass during a day, even though they are specifically fishing for stripers."

As for stripers eating largemouth bass or white bass, Mabry said "I guess I've cleaned as many stripers as any man alive, and I have yet to find a single black or white bass in a striper stomach. About 99 percent of the stomach contents have been shad, and the rest have been a few drum and sunfish.

"I guess I love largemouth bass fishing better than anything," Mabry mused, "and I hate to see bass fishing decline on some lakes. But I sure don't think stripers are to blame for it."

Mabry believes there should be a statewide 14-inch minimum length limit on largemouth bass, and slot limits on lakes where bass have good growth rates.

Another reservoir that offers excellent striper and bass fishing is the lake where the striper story began—the Santee-Cooper in South Carolina. Mabry said he spent four years striper fishing there during the 1970s in his role as a lure company representative.

Afterward he switched to black bass fishing for a year. "I caught nine 10-pound bass that year, along with hundreds of bass in smaller age classes," Mabry noted. "This was on a reservoir over 30 years old at the time, and one which was known internationally as a striped bass fishery."

He added that in addition to stripers and bass, the Santee-Cooper has produced world records in channel catfish and crappie, and offers a good fishery for those species to the present.

Lake Amistad fishing guide John Ruben and his clients have boated many hundreds of stripers during the past four years at the big Texas-Mexico border reservoir. His observations about the striper-largemouth relationship basically agree with Mabry's. "I have no scientific evidence, but my experience on the lake tells me that stripers and blacks will compete for territory at times," said Ruben. "But on many occasions I have seen stripers and blacks caught literally from the same submerged bush. Besides that, I've seen blacks following a hooked striper, trying to get the bait away, and the opposite, with a striper following a black."

McCabe said department studies also document the eating habits of striped bass, and the findings were consistent. "We have analyzed the contents of literally thousands of striper

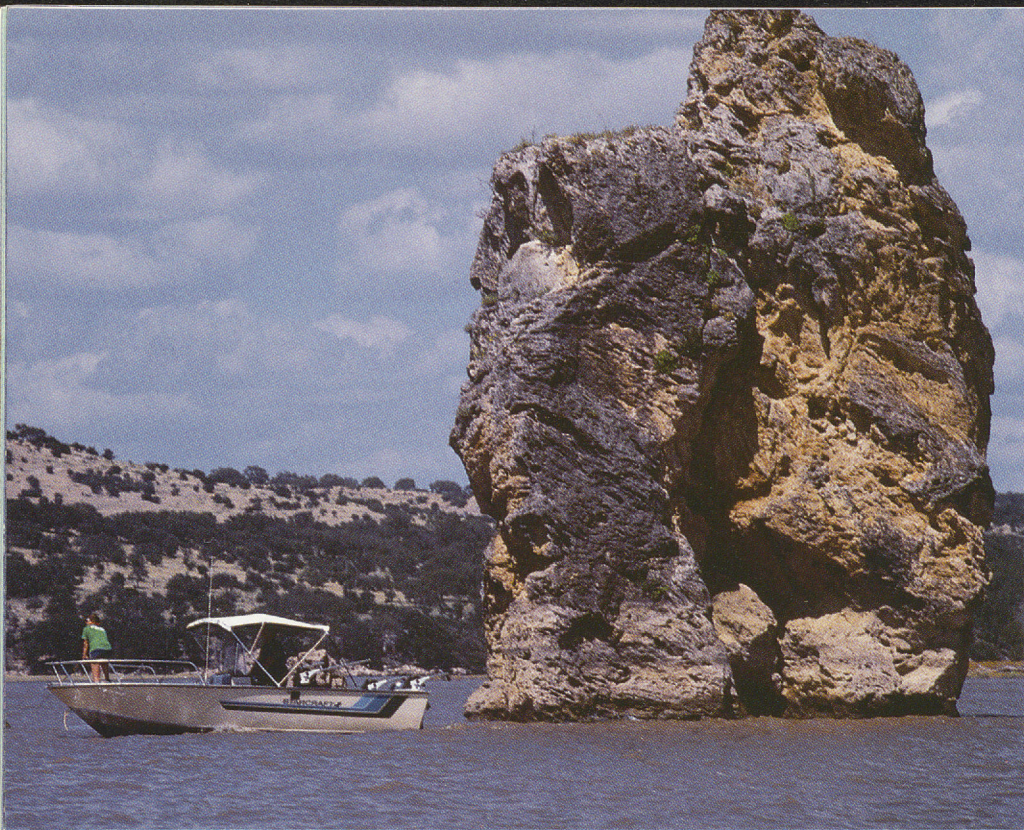
*Many guides have learned to operate down-riggers to troll for deep-running stripers. Large, streamlined weights (right) take the lure down to the correct depth. Guide James McCorkle (center) keeps an eye on his chart recorder to track schools of Buchanan stripers.*

stomachs, and found that approximately 98 percent was shad," McCabe said. "Evidence of any game fish being eaten was so small as to be statistically insignificant."

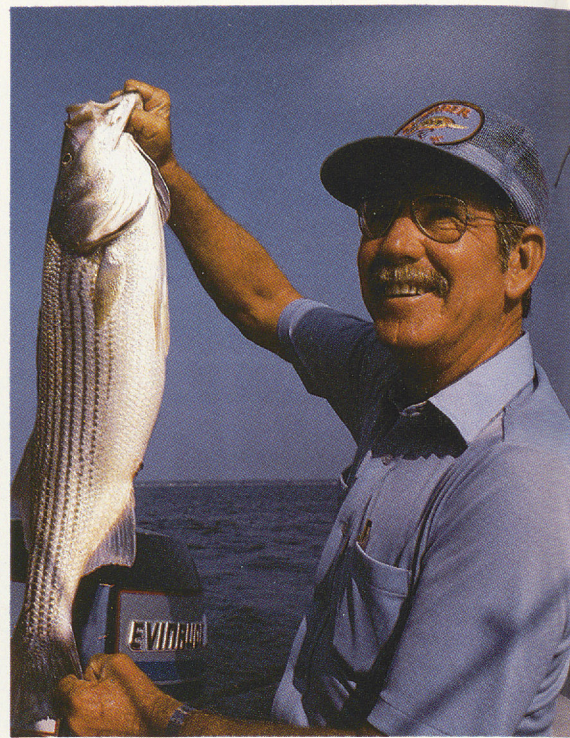
Ruben also concurs with this theory, saying he has found only two small largemouth bass in striper stomachs, out of hundreds cleaned and examined.

Native game fish such as largemouth bass have a more varied diet and can utilize minnows, sunfish, crayfish and other aquatic and terrestrial organisms for food. "I have never seen any documented evidence that stripers compete with largemouth bass for food to any significant degree in any reservoir," McCabe said. "Rather, I think you can trace almost any decline in native game fish populations to factors such as deteriorated habitat, poor water quality or overharvest, or a combination of the three."

Another frequent concern among anglers is that large populations of stripers can actually eliminate shad. "This has happened in other parts of the nation, but it never has in Texas



Grady Allen



Grady Allen

and I don't expect it to," McCabe indicated. "The only serious crashes among shad populations resulted from cold weather instead of predation, and this usually affects threadfin shad more than gizzard shad," he said. He pointed out that restocking of threadfin shad has proven to be extremely cost-effective, and can be employed to re-establish a good forage base in a lake very quickly.

If there is a fish that may suffer from head-to-head competition with striped bass, it is the white bass, but McCabe feels that even white bass often are affected by other factors that contribute to their boom-or-bust population cycles. "Whites are bound to be affected by stripers, since they tend to go after the same forage," McCabe said, "so on some lakes we have to consider the presence of stripers a compromise situation. However, I think most anglers would rather go after stripers since the potential for catching a really big fish is usually there."

Striper success is unalterably tied to the availability of year-round food, so fertile lakes that grow an abundance of shad and other forage species naturally are the best steeper lakes. The best currently are Amistad, Buchanan, Canyon, Ray Hubbard, Spence, Texoma, Toledo Bend and Whitney. The department's philosophy on steeper

stocking has evolved into one of concentrating stocking efforts in only nine or 10 lakes which have the potential for developing outstanding fisheries, rather spreading the finite number of available fingerlings over a large number of lakes.

One thing biologists have learned is that stripers don't always stay where you put them. In fact, their proclivity for migrating may create several "sea run" fisheries in Texas rivers and bays. A recent study by Louisiana biologists revealed that a large percentage of stripers tagged in Toledo Bend Reservoir eventually went through the dam and were recovered later downstream, some in the Gulf of Mexico.

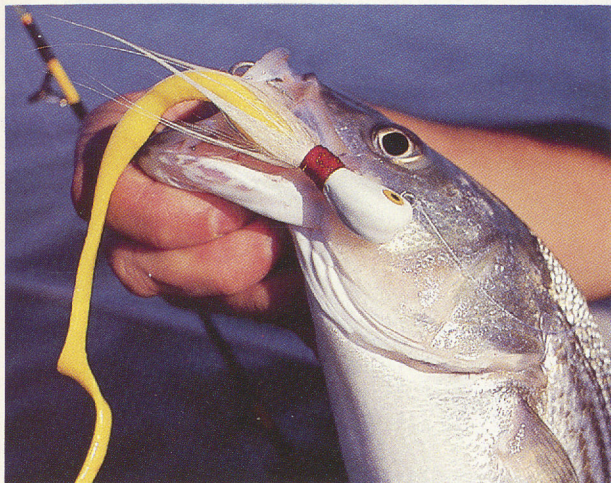
While most steeper fishing is done in reservoirs, many other large fish have been caught in unlikely locations such as the Guadalupe River below Canyon Reservoir Dam, Lakes Dunlap and McQueeney farther below on the Guadalupe River and in Town Lake and Lake Austin practically within sight of the State Capitol.

Although experiments with stripers began in the late 1960s, the first hybrid crosses between stripers and white bass did not make the Texas scene until 1973. While perhaps less spectacular than the steeper program, hybrids are considered just as big a success in terms of putting good fish on the angler's line. While stripers are

basically tabbed for large reservoir and river introductions, hybrids normally are released in smaller lakes. They are especially good for warm-water power plant lakes, since they do not normally reproduce and can tolerate higher water temperatures than can stripers.

Lake Bastrop near Bastrop and Pat Mayse Reservoir near Paris were the first to get hybrids in 1973, but the list of lakes expanded to five others in 1974, including Lake Nasworthy at San Angelo where a state record hybrid was caught in 1979. That fish, which weighed 17 pounds, eight ounces, endured as the record until early 1984, when a 19-pound, 10-ounce hybrid was taken from Lake Ray Hubbard near Dallas. That fish was only about a pound shy of the all-tackle world record hybrid steeper caught in Georgia in 1982. The department currently is stocking hybrids in 26 reservoirs.

Department officials are happy with the way both striped bass and hybrid stripers have turned out for the fishing public. "I think both fish have been valuable additions to the state's fishing picture," McCabe said. "Stripers provide a lot of opportunity because they can be caught by so many different methods. Hybrid stripers also are a good addition in small lakes, especially power plant cooling reservoirs, where there is an abundance of forage fish but in some cases very little habitat for



Leroy Williamson



Grady Allen

native game fish such as black bass.”

Striper fishing indeed takes many forms, from trolling to bank fishing, flyfishing, live bait fishing, daytime or night. They are caught in the middle of summer and the dead of winter.

The department's creel surveys provide some insight into the relative value of a striped bass fishery. During a three-month period in spring 1984, the number of man-hours spent by anglers fishing specifically for stripers on Lakes Whitney and E.V. Spence was multiplied by the \$28-per-day figure established by the 1980 "National Survey of Hunting, Fishing and Wildlife-Associated Recreation" by the U.S. Fish & Wildlife Service as the average value of a fishing day. The value was estimated at \$402,934 for Whitney and \$72,699 for Spence. The Whitney total for three months exceeds the \$229,856 spent for the entire statewide striped bass program in fiscal year 1984, including procurement, production and delivery of fish.

Likewise, a similar three-month creel survey conducted in 1984 at three lakes indicated hybrid striper stocking is a cost-effective program. The recreational benefits were: Lake Brownwood, \$21,895; Lake Palestine, \$45,368; and Lake Stamford, \$4,334. The department spent only \$137,270 on the statewide hybrid striper program in FY 1984.

In terms of man-days, most striper fishing is done on lakes, where the better striper anglers and guides use boats equipped with sophisticated depthfinders to locate schools of feeding stripers, or follow flocks of gulls that team up with stripers to catch shad near the surface. When the fish are deep, trolling with downriggers is becoming an increasingly popular method of fishing. Downriggers utilize heavy weights to pinpoint the exact trolling depth desired. They allow several lines to be trolled, and when a fish strikes, the line pops free from the weight and the angler plays the fish to the boat in the traditional manner.

This method accounts for much of the year-round striper fishing sport, but during the spring months large numbers of stripers are caught by bank fishermen below dams.

Hybrids follow many of the same patterns as stripers, basically traveling in schools to attack shad. They provide especially fast fishing action during winter months on many power plant reservoirs when they follow bait fish into warm-water discharge areas. During these periods they can be caught on a variety of artificial and natural baits. In past years there was no bag limit on hybrids on most Texas reservoirs, but their vulnerability and resulting heavy harvest prompted the Parks and Wildlife Commission to establish

*Impressive rock formations are an added attraction for anglers at Lake Buchanan, where striped bass often exceed 20 pounds. These stripers struck a ½-ounce "banana head" jig with a plastic twist-trailer trolled with a downrigger.*

a five-per-day bag limit, and possession limit of 10, except on Lakes Arlington in Tarrant County and Graham in Young County. Those two lakes have no limit on hybrids, as part of an experiment on the effects of the statewide limit.

The statewide limit on pure stripers also is five daily, 10 in possession. There are, however, two exceptions. On Lake Texoma, the daily limit is 15 stripers, possession limit 30, but anglers may retain no more than five stripers per day over 20 inches long. At Toledo Bend Reservoir, the bag limit is five per day, possession limit 10, but no more than two stripers over 30 inches in length may be retained per day.

In short, biologists believe the striped bass is an additional bonus fish for Texas anglers—not a replacement for bass, crappie or any of the popular native sport fish. With ever-improving hatchery technology, biologists believe stripers and hybrid stripers will be a vital part of a fishery program aimed at utilizing all available waters. Next month we'll look at how these fish are produced and distributed. \* \*





# GOOSE ISLAND STATE PARK

Article by David Baxter and Photos by Leroy Williamson

**T**here's a sign on the road leading from Rockport to Goose Island State Park that says "Welcome Home, Winter Texans." It greets the hundreds of predominately retired folks who come south from the mid-west and other less-hospitable climes to spend the winter, travelers who once were called "snow birds" by local residents.

Although the sign is meant as a welcome to these human migrators, it could just as easily serve as a welcome to the thousands of other birds that come to the Texas coast for the winter—birds that arrive by feathers rather than RVs.

Goose Island is near the terminus for migratory waterfowl moving down the central flyway from Canada and the Dakotas. It is a jump-

ing-off point for song birds as they prepare to fly out over the Gulf of Mexico for Yucatan and Central America, and it lies in the arc of migration for birds of prey such as the peregrine falcon as they move down the coast. But most significantly, Goose Island is next-door to the whooping crane's winter residence, the Aransas National Wildlife Refuge.

The famous whooping crane excursion boat makes regular trips between the Sea Gun Resort next door to the



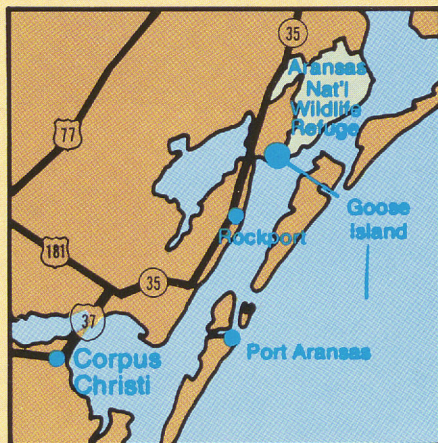


park up to the refuge, and there's no better way to see this symbol of the world's concern for endangered species.

The park is an island in the literal sense—Goose Island makes up some 140 acres of the 307-acre park—and in the figurative sense—it's surrounded by homes, future developments and water. But this has been the history of the Lamar

Peninsula. No less a figure than Sam Colt of revolver fame and his brother bought the peninsula and Goose Island in 1856 with plans for a real estate development. Sam died in 1862 and that put an end to these first development attempts.

One thing that came long before the developers, and hopefully will remain after we are all gone, is the Big Tree



### Goose Island State Recreation Area

**Location:** Twelve miles north of Rockport, off State Highway 35 on Park Road 13.

**Facilities:** A total of 127 campsites: 45 on the island and 57 in the wooded area, all with water, electrical hookups, picnic table and barbecue grill; another 25 campsites in the wooded area offer tent camping. Lighted, 1,620-foot fishing pier; restrooms, showers, recreational hall, boat ramp and 23 day-use picnic sites. The Fulton Mansion is open for guided tours Wednesday through Sunday.

**For Reservations and Information:** Call 512-729-2858, or write Goose Island State Recreation Area, Star Route 1, Box 105, Rockport 78382.



(top photo, page 19), an oak of massive proportions estimated to be more than 1,000 years old. Various known as the Bishop's Tree because of the nearby, former headquarters of a Catholic bishop, and the hanging tree for obvious reasons, the majestic oak is some 44 feet tall with a 35-foot circumference and crown spread of 89 feet.

The impression you get of the oaks and other vegetation at Goose Island and the Rockport-Fulton area is that they have been combed by the southeasterly wind which blows on-shore most of the year. All but the largest trees bend to the northwest rather than fight the winds from the Gulf.

With Aransas Bay on one side and St. Charles Bay on the other, it's a good bet that you could catch a trout or two if you put your mind to it. There's a lighted fishing pier running off the island. It has cleaning sinks along its length and two handy staircases leading down to the shallow bay.

After your limit is on ice and before the mosquitoes find you, put on a clean pair of jeans and drive to Fulton. There you can visit the restored Fulton Mansion, and then stroll down the street and treat yourself to a slice of cheese cake or key lime pie at Charlotte Plummer's cafe. It's not a bad way to spend the day.      \* \*



# John James Audubon



## 1985 marks the 200th anniversary of the artist's birth



by Mary-Love Bigony

**I**n April 1837, when the Republic of Texas was barely one year old, an artist and naturalist who had achieved some degree of fame on both sides of the Atlantic made his first and only trip to Texas to study the avian community in this part of North America. He explored Galveston Island, visited the Texas capital at Houston and met President Sam Houston. Little fanfare accompanied the artist's Texas visit; Indian problems, colonization, settlement and continuing disputes with Mexico were more pressing matters in the fledgling republic.

While Texans have spent 1985 planning celebrations for the state's sesquicentennial next year, conservation organizations across the country have noted the bicentennial of John James Audubon's 1785 birth. Today, almost 135 years after his death, Audubon remains a controversial and sometimes enigmatic figure. But his dedication to his work cannot be disputed, and the fact that his name and paintings continue to be widely recognized are evi-

dence of his contributions to this country's conservation movement. His single Texas visit coincided with the founding of the Republic of Texas, so John James Audubon's bicentennial is an appropriate footnote to the volumes that will be written about Texas' sesquicentennial in the coming year.

There is little doubt that Audubon planned to be famous, since he prepared copious notes and journals detailing his life and travels. Much of this material was lost or destroyed and other was proven to be false. Audubon's spoken and written assertions often were contradictory, and some material apparently was misinterpreted by early biographers. Research by countless individuals has resulted in what appear to be accurate facts about the artist's life, although certain contradictions remain and there is undoubtedly more material to be discovered.

*Audubon* magazine, published by the society which took the artist's name when it was established in the 1880s, called John James Audubon's life "a curious journey from riches to rags to fame" in a May 1985 article written in recognition of the 200th an-

niversary of his birth. Born in Santo Domingo on April 26, 1785, John James was the son of French naval officer Jean Audubon and a Mademoiselle Rabin. When the young Audubon was four his natural mother died, and he and a half-sister were taken to France where they were adopted by Jean Audubon's wife and reared with affection. There is evidence that the young Audubon displayed an interest in nature even then, making frequent trips into the field instead of going to school.

In 1803 Audubon moved from France to America to avoid military service and to oversee family property. He enjoyed a good life at the Audubon's 200-acre estate in Mill Gove, Pennsylvania, learning English, dressing in fine clothes and pursuing proper hobbies for a young man of means—marksmanship, swimming and riding. Nature continued to be a consuming interest, and Audubon spent countless hours observing and sketching the birds of western Pennsylvania. When he saw a

*Right: Rattlesnake attacking mockingbirds.  
Overleaf: Bobwhites and red-shouldered hawk.*











Courtesy National Audubon Society

bird he wanted to draw he shot it, took it home and wired it into position to use as a model, a practice he continued throughout his life.



In 1808, Audubon married Lucy Bakewell, daughter of his Pennsylvania neighbors. The couple soon departed via carriage for Kentucky, where Audubon and a partner operated a general store. The venture was unsuccessful, as was the later construction of a steam grist and sawmill in Henderson, Kentucky. By 1812, when Audubon became an American citizen, the family included two sons, Victor Gifford and John Woodhouse. Two daughters, born in 1815 and 1819, died in infancy. A decade of business failures depleted the family's assets; even Lucy's dowry—furniture, china and silver—was sold to pay debts. In 1819, Audubon was jailed in Louisville for debt.

Many writers, and even Audubon himself, attributed his business failures to his interest in art and nature. In later years, especially, the artist enjoyed portraying himself as being single-minded in his passion for art. "I could not bear to give the attention required by my business," he wrote, "and, therefore, my business abandoned me."

Audubon began earning money by drawing and selling portraits, although he never let up on his bird studies. He moved to Cincinnati, where he worked as a taxidermist and artist at the Western Museum. He also taught drawing. An idea had been germinating for at least a decade—to publish his growing portfolio of bird paintings. When the museum job became one more undertaking that failed to work out, it must have seemed to the 35-year-old artist that the time was right to act on his ambition.

In 1820, Audubon left Cincinnati on a flatboat bound for New Orleans. Although he had spent most of his life observing and drawing birds, this was the first time he had purposefully set out on an expedition for the sole purpose of birding. He continued to earn money by drawing portraits, but for the first time he devoted himself wholeheartedly to his bird paintings. During the next few years he traveled to Arkansas, Mississippi, the Great Lakes re-

gion and upstate New York.

Lucy and the boys joined Audubon in New Orleans after a year. The degree of support Lucy gave her husband is debatable. Some reports portray her as dutiful and encouraging, others as whining and petulant. At any rate, Lucy Audubon contributed to the family's finances by working as a governess and teacher in Louisiana.

In 1824, Audubon was ready to find a publisher for his paintings. He traveled to Philadelphia, the unofficial capital of natural history in America. Alexander Wilson's "American Ornithology" had recently been published there, and some naturalists considered Audubon a second-rate newcomer. Others reportedly were put off by his arrogance. Unable to find a publisher anywhere in the United States, Audubon sailed for England in May, 1826, with his portfolio of life-sized bird paintings. It was a voyage that was to change his life.

Audubon's timing couldn't have been better. The English people were keenly interested in the American wilderness, viewing it as romantic and exotic. Within seven days after his arrival, Audubon's work was on exhibit at the Royal Institution of Liverpool. Calling himself the "American Woodsman," the artist wove tales of the American wild and intrigued listeners with wolf howls and bird calls. He met with similar success in Scotland, where he reached an agreement with engraver William Home Lizars to publish his work. Robert Havell Jr. of London later took over the project.

During the next ten years, Audubon divided his time between Great Britain, where his work was being published, and America, where he added new species to his portfolio. Things were now different in his adopted homeland; the U.S. government provided assistance for some of his expeditions.

It was during one of these visits to America that Audubon traveled to Texas. Samuel Wood Geiser, writing for Southern Methodist University's *Southwest Review* in 1930, used letters, notes and other material to reconstruct the lost journal of Audubon's Texas trip. After spending the winter of 1836 in Charleston, South Carolina, Audubon, his son John Woodhouse and Edward Harris set out overland for New Orleans. A government ship would take the party along the coasts

of Western Florida, Louisiana and Texas as far as Galveston Island.

Audubon's group arrived in Galveston Bay on April 24, 1837, the last leg of the journey. The artist noted blue-winged teal, snowy and blue herons, various species of sandpipers and black-necked stilts. S. Rhoads Fisher, secretary of the Texas navy, greeted the ship and talked at length with Audubon about nesting habits of birds in the region. The party went ashore at Galveston on April 26, where they saw "Mexican prisoners . . . used as slaves." The group went deer hunting on Galveston Island: "These animals are abundant; we saw about twenty-five and killed four." But the bird life was the artist's chief concern: "Hundreds of pairs of the Least Tern are breeding on the islands of Galveston Bay. Also, on one of these islands I found eight or ten nests of the Roseate Spoonbill, placed in low cactuses, amid some hundreds of nests belonging to Herons of different species."



The group left for Houston on May 8. "About noon, we entered Buffalo Bayou, at the mouth of the San Jacinto River, and opposite the famous battleground of the same name . . . It was here today that I found the Ivory-Billed Woodpecker in abundance, and secured several specimens." They came ashore at Houston on May 15. "We approached the President's mansion wading in water above our ankles. The abode of President Houston is a small log house, consisting of two rooms and a passage through, after the southern fashion . . . The ground floor was muddy and filthy . . . The president was engaged in the opposite room on national business, and we could not see him for some time. Meanwhile we amused ourselves by walking to the capitol, which was yet without a roof."

Audubon apparently was impressed with President Sam Houston: "He was dressed in a fancy velvet coat, and trousers trimmed with broad gold lace; around his neck was tied a cravat somewhat in the style of seventy-six. He received us kindly, was desirous of retaining us for a while, and offered us every facility within his power. We were severally introduced by him to the different members of his cabinet and staff, and at once asked to drink

Left: Ivory-billed woodpeckers.



Courtesy National Audubon Society

Above: Roseate spoonbill, painted in 1836. Facing page: Whooping crane, painted in 1834.

grog with him, which we did, wishing success to his new republic.”

Before leaving Texas on May 18, Audubon noted “. . . a liberty pole erected on the anniversary of the battle of San Jacinto, on the twenty-first of last April.” The group arrived back in New Orleans on May 27. Although Audubon collected no new bird species during the Texas trip, he later wrote that “the mass of observations that we gathered connected with the ornithology of our country has, I think, never been surpassed.”



In 1838, publication of “Birds of America” was completed. The 425 prints were enormous—29½ by 39½ inches.

The price for a four-volume bound set also was enormous—\$1,000. Audubon was, in effect, his own publisher. He supervised the printing, sold subscriptions, collected over due accounts and saw to it that subscribers received their prints. Taking care of the project’s many details was tedious and time consuming, but for the first time in many years the Audubon family was financially comfortable. “Birds of America” was Audubon’s

most successful work, but it was not his only one. He and William MacGillivray of the University of Edinburgh wrote “Ornithological Biographies,” five volumes providing information about the birds portrayed in “Birds of America.” A study of mammals, “The Viviparous Quadrupeds of North America,” was begun by Audubon and completed by his son and the Reverend John Bachman. He also prepared a smaller, less expensive edition of “Birds of America.”

Audubon spent the end of his life at Minnie’s Land, a 25-acre estate in New York City overlooking the Hudson River. Suffering from failing eyesight and senile dementia, he died January 27, 1851, at age 65.

John James Audubon had no formal training in either art or ornithology. But he was a keen observer, and in his lifetime identified one new genus, 23 new species and 12 new subspecies of birds. He was possibly the first person in America to tag birds to see if they would return the following year.

Audubon’s paintings have been criticized for being anthropomorphic, and his birds in flight have been called awkward and unrealistic. But the artist

relied strictly on his memory when sketching such scenes, as there were no photographs to serve as guides. Often his observations that were believed to be inaccurate later were found to be correct. An 1827 painting, for example, showed a rattlesnake attacking a mockingbird nest. Critics maintained for years that rattlesnakes don’t climb trees, but subsequent studies revealed that the scene could have happened as Audubon depicted it.

One of the most controversial aspects of Audubon’s life is the fact that he shot birds, probably thousands of them in his lifetime and not necessarily for food or subjects to draw. But the world was different in Audubon’s time than it is today. There was no Endangered Species List, flocks of passenger pigeons darkened the sky like thunderclouds and practice shooting on live targets was common.

Despite criticism and skepticism that began even before his death, Audubon’s work remains widely recognized and admired. His emotional involvement with his avian subjects is evident. Audubon’s paintings are vivid and dramatic, much as the man himself was. \* \*



## BIRD FEEDERS

Article by Ilo Hiller and Illustrations by Patrick Stark

**M**any people place feeders in their yards in the spring to attract birds. They enjoy having the birds around and may spend hours sitting outside watching them. However, when winter arrives and it gets too cold to sit outdoors, such feeding programs may stop.

Birds need a steady supply of food to generate the energy needed to keep their bodies warm in winter. Unfortunately, those attracted to the now-abandoned feeders discover their easy food supply is cut off just when natural foods are harder to find. If feeding programs are not going to be continued all year, the birds would be better off if the handouts were saved for the winter months.

To make life a little easier for the birds in your neighborhood this winter, you might consider setting up a feeding station. It will provide a supply

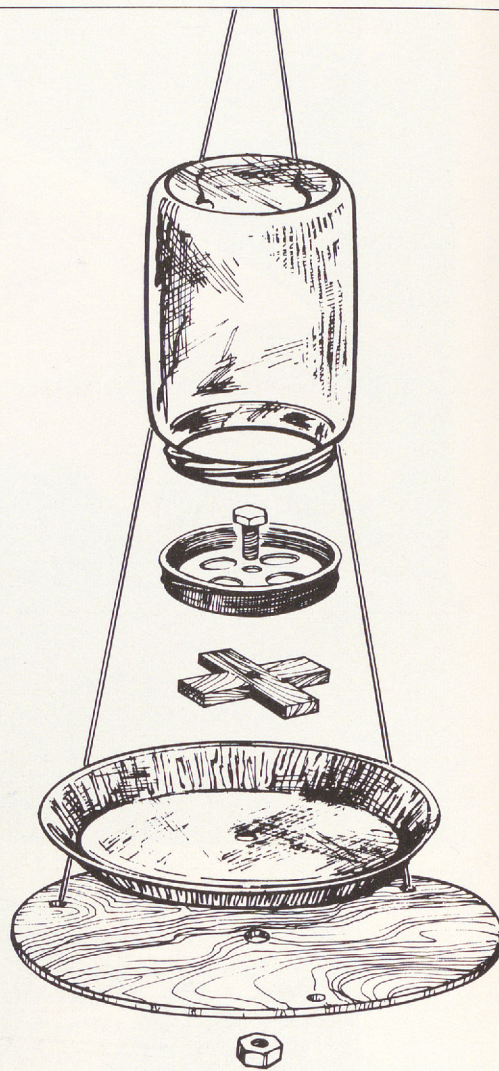
of food for them until spring when natural foods such as seeds, berries and insects are easier to find. Once you start a feeding program, try to continue it all winter. The birds you attract may be depending on your handouts.

A well-equipped winter feeding station should have a feeder of some type for seeds, a container for suet or bird-seed cake mixtures and a water source. Wild bird seed and commercial feeders can be purchased, but if you want to be more personally involved, you might build your own feeder.

A square, gallon-sized, plastic milk jug can be converted into a simple feeder quite easily. It may not be as attractive as a commercial feeder, but the birds won't mind. Cut openings about three inches wide and four inches high, in the two sides opposite the handle. They should be about 2½ inches from the bottom of the jug. Arching the tops of these openings will make them more decorative. (A hobby knife is a good tool for this job, but because these knives usually are very sharp, it would be wise to have adult help or supervision. In fact, most of the activities connected with building an outdoor feeding station may need some adult assistance.)

Add perches to the milk-jug feeder by drilling a set of holes through the jug about one-fourth inch below one of the openings. Insert a wooden dowel through these holes. Drill another set of holes through the jug one-half inch below the other opening and insert a second dowel. The ends should extend about two inches on the sides with the openings to form the perches. Drilling one set of holes lower than the other set allows the dowels to cross inside the jug.

Attach the milk jug feeder to a piece

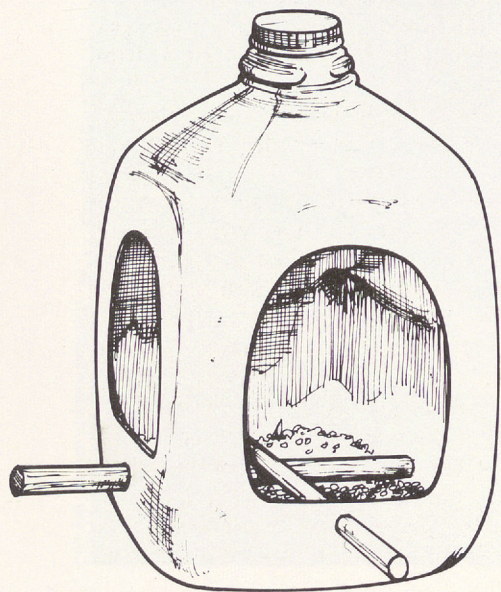


### Pie Pan Feeder

of wood with a couple of wood screws through the handle. Mount the piece of wood on a post, tree or the house and your feeder is ready to use.

Another simple feeder can be made out of a wide-mouth quart jar, an aluminum foil pie pan, a few scraps of wood or Masonite three-fourths inch wide, one-fourth inch thick and 6¾ inches long. Divide the strip into three pieces—one 3½ inches long and two 1⅜ inches long. Attach them to the outside of the lid in the shape of a cross. Use short U-shaped nails and drive them into the wood from the inside of the lid. Drill a one-half inch hole in each of the four spaces on the lid not covered by wood strips.

Place the lid, wood-strip side down, in the center of the pie pan. Set the pan on a nine-inch square or round





piece of wood or Masonite. Drill a one-fourth inch hole through the center of the lid, pan and wood. Put a bolt through the hole and attach a nut to the bottom to hold all the pieces together. Drill three evenly spaced holes through the bottom of the pan and the wood. Insert the 30-inch pieces of rope or cord in the holes. Tie the ends of the cords together under the feeder and at the top. Fill the jar with birdseed, screw on the lid assembly and quickly turn the unit over. The seed

will flow into the pan through the holes in the lid and, as the birds eat the available seed, more will flow out to replace it. Hang the feeder from a tree limb or post.

A platform feeder also is easy to make, but you have to clean it often to keep the food from becoming contaminated with bird droppings that might cause disease. To build it, just attach a raised edge to a two- or three-foot square piece of wood. This edging, which keeps the seeds from blowing

off, should have an open space on one side so water can drain off. Adding a roof and placing glass or Plexiglass on three sides will protect the birds and food from wind and weather. Wooden sides also offer protection, but you can't watch the feeding birds through them. The platform feeder usually is attached to a post or windowsill, but it also can be hung from a tree limb.

The hopper-type feeder resembles a flip-top mailbox except the front is glass or Plexiglass and slants inward at the bottom. A space between the bottom of the glass and the feeding tray allows the seeds to flow out as needed. The food is protected, the clear front lets you see how much food it contains and the flip top makes it easy to fill. The hopper-type feeder can be attached to a tree, post or the house.

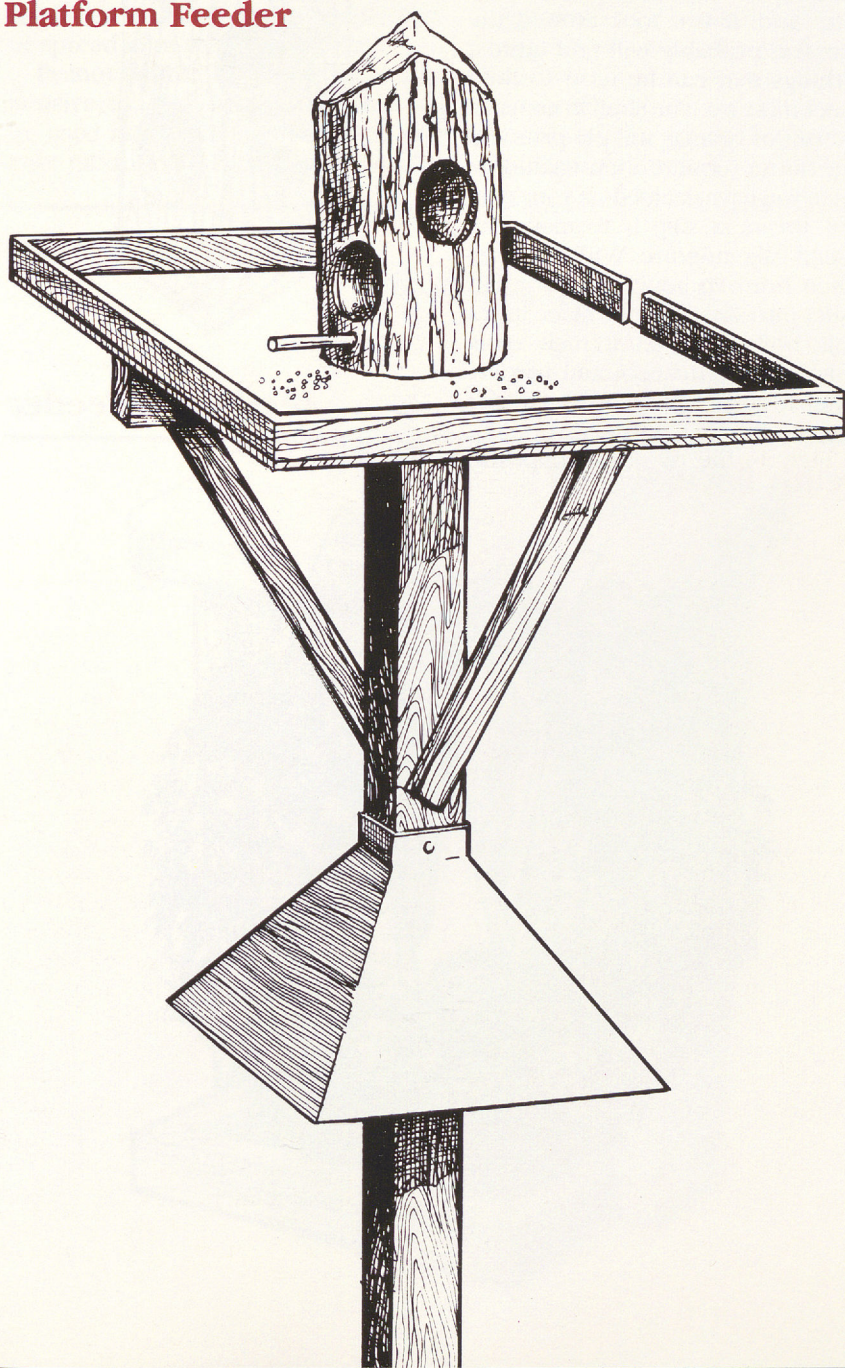
After you have made or brought a feeder, you must decide where to put it. The south side of the house offers protection from the cold north wind and the east side is exposed to the warming rays of the morning sun. Both locations are suitable.

Cats and squirrels also must be taken into consideration when you are choosing a location for your feeder. Cats, of course, want to eat the birds, and squirrels want the birds' food. Be sure to hang the feeder far enough off the ground to be out of jumping range, and check for nearby limbs that could serve as launching pads. A cone-shaped metal shield can be added to a post-mounted feeder to stop animals from climbing it.

The basic food for your feeder is a combination of seeds. And hungry birds can consume a lot of it. Even insect-eating birds eat seeds in winter when insects are not available. Commercial wild bird seed mixtures may include all or a few of the following ingredients: millet, milo, cracked corn, buckwheat, canary grass seed, sorghum, sunflower seeds, barley, hempseed, oats, safflower and peanut hearts. These commercial mixtures are excellent, but they can be expensive over a long period.

More economic homemade seed mixtures may be prepared by buying a

## Platform Feeder



# Young Naturalist

few basic ingredients in large quantities from feed stores or seed wholesalers. Sunflower seeds, hempseed, millet, buckwheat and cracked corn combine to make a balanced homemade mixture. Rice, coarse oatmeal, dried bread crumbs, shelled nuts (not the roasted or salted type) and cereals can be added to your homemade mixture for variety.

When birds feed naturally on the ground they obtain a certain amount of grit that is needed to digest their food. If the mixture you use in your feeder does not contain grit, you will need to add it. A teaspoon of fine sand, crushed eggshells or crushed charcoal added to each quart of seed will meet the birds' digestive needs.

Although it won't fit in some of your seed feeders, fruit can be placed on a platform feeder for hungry birds. Small pieces of apples, oranges, bananas, tomatoes and grapes are welcome hand-outs. Fruit that may be too ripe for most people to eat is just right for the birds. Check with the produce man at your local grocery store for special prices on overripe fruits.

Since birds need high energy foods in winter, suet is another good thing to provide. Suet is the hard fat or tallow found around the kidneys and loins of beef and sheep. It can be purchased at the grocery store meat counter. Tie chunks of raw suet to a tree or place it in small bags made from fiber-type onion sacks or netting. Attach these bags to trees or posts. Melted suet also can be used as a base for birdseed cakes. The recipes and serving containers for these mixtures can be as varied as your imagination.

Making a log feeder for suet seedcake mixtures requires some woodworking skills, but the feeder will be an attractive addition to your feeding station. Drill a few quarter-sized holes about an inch deep in a small log. Leave the bark on it to provide footholds for clinging birds, and insert small wooden dowels or sticks below a few of the holes to form perches for other bird species. Attach an eye bolt at one end and the feeder is ready to

hang from a nearby branch. Or, level off one end and attach the log to a platform feeder.

A foot-square, two-inch block of wood with a pattern of holes drilled an inch deep into its flat surface will make a tray-type seedcake feeder. It can be mounted on a post, set on the ground or hung from a tree limb. To hang it, just drill holes in the corners (or use screw eyes) and attach cords.

If you don't have the materials or tools to make this tray-type feeder, an old muffin tin can be used as a substitute. And, if you look around the house, you probably will find quite a few things that can be used to hold the suet mixture. The shell from half a grapefruit or orange, foil pie pans and plastic butter tubs are a few examples.

Once you have decided on your container, the next step is to make the birdseed cake mixture. With some assistance from an adult, grind or cut the suet into small pieces, place it in a double boiler and let it melt completely. Allow it to cool and harden. Melting it again will give it a firmer



**Seed Cake Feeder**

## Wreath Feeder



texture when it hardens the second time and it will hold the ingredients better.

The ingredients can be a combination of almost anything animal or vegetable. Some suggested items are: dried ground meat, cooked and chopped bacon rind, millet, sunflower seeds, rice, oatmeal, dried bread crumbs, cereal, corn meal, cracked corn, raw nuts and raisins. Stir the selected ingredients into the melted suet just before it hardens. Mold it in the containers you have gathered, stuff it in the holes in your log or wood feeders or spread it on the bark of a tree.

Peanut butter, although more expensive, is a high-energy food that can be used instead of suet in a birdseed cake mixture. To save money, buy the

generic type instead of a name brand. Straight from the jar, peanut butter can cause birds a bit of a problem (you know how it sticks to the roof of your mouth), but adding cornmeal and seeds will create a tasty mixture to spread on tree bark or stuff into your special feeders.

Around Christmas, a decorative wreath feeder can be made for the birds. To a basic wreath add sprays or seed clusters of milo maize, wheat, millet, barley or wild oats. Include dried seed pods, acorn caps and pine cones that can be stuffed with your birdseed cake mixtures (either suet or peanut butter). For color and variety include berries, such as the red pyracantha. The finished wreath will add a festive touch to your winter feed-

ing station as well as provide food for the birds.

A water source is the last item needed for a winter feeding station, and something as simple as a garbage can lid can be used to provide it. The lid can be attached to a stump, laid on a couple cement blocks or placed on the ground. However, if cats are a problem, it should be hung from a tree limb or clothesline. Drill three equally spaced holes just under the rim of the lid. Attach three ropes or cords and hang it high enough off the ground to protect the birds.

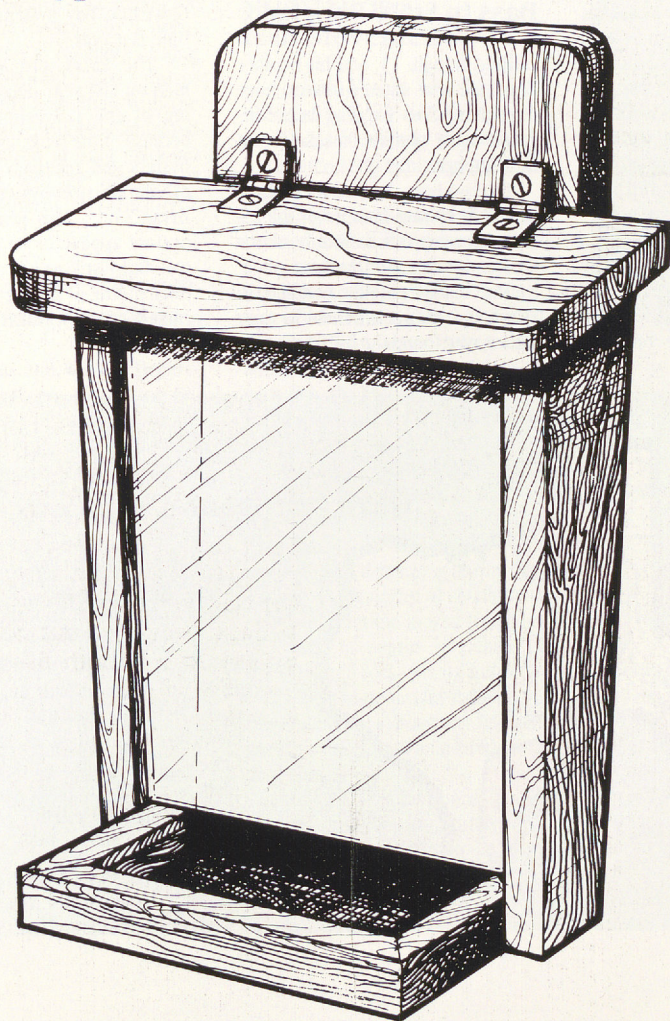
A well-maintained winter feeding station should meet the needs of your backyard birds until spring and give you many hours of bird watching pleasure. If you want to continue to provide for the birds year around, you might consider helping your parents plant bushes, flowers and trees that will provide not only seeds, berries and insects for them to eat, but also nesting cover and shelter.

Some trees with edible berries that might be suitable for your area of the state are mulberry, dogwood, hawthorn, chokecherry, basswood, hackberry and cedar. Shrubs and vines include yaupon, holly, pyracantha, Japanese privet, bayberry, members of the honeysuckle family, bittersweet and Virginia creeper. You can plant any kind of flower since all of them have some kind of seed that may appeal to visiting birds. However, if possible, include the sunflower as it is a special favorite.

When you have provided a feeding station for the birds' winter needs and planted growing things for their year-round use, sit back and enjoy watching the different species that visit your backyard sanctuary. \* \*

**Editor's Note:** We realize that setting up a winter feeding station for birds is not a new subject for the "Young Naturalist" (see February 1973 and December 1976), but since we continue to receive requests for information on this subject we have featured it again.

## Hopper-Type Feeder



# Outdoor Roundup



*Do fire ants affect nesting quail?*

## Fire Ant Damage Study Planned By TP&WD

Texas Parks and Wildlife Department biologists this spring will conduct a study of the effects of fire ant infestations on ground-nesting birds such as quail.

Don Wilson, upland game program leader, said the study will be designed to determine quail nesting and hatching success in an area which is heavily infested with Brazilian fire ants.

"There is a great deal of concern among sportsmen about the effects of fire ants on quail populations," Wilson said. "We have chosen to investigate nesting success because we feel this is the period when quail are most vulnerable to ant predation."

There are three main species of fire ants in Texas, according to Phil Hamman, extension entomologist with Texas A&M University's Entomology Department. They are the native fire ant and two imports—the southern and Brazilian fire ants.

Hamman said the latter species is the most predominant both in terms of visibility and damage-causing. "There are a lot of unanswered questions about fire ants, especially in terms of their effects on wildlife and domestic livestock," Hamman said. "However, I have not yet seen any documented evidence that they cause any direct harm to either."

Hamman said the Brazilian fire ant apparently entered the U.S. through Mobile, Alabama, in the 1930s and proceeded to march methodically through the South.

They first entered Texas through the Beaumont area, then fanned out

to cover most of the state's eastern half. "Much of the migration has been natural," he pointed out, "but evidently this migration was helped along by accidentally transporting them on shipments of nursery stock, sod and hay."

## Florida, Texas Teaming Up For Snook Research

The coastal waters of Florida and Texas are within the ancestral range of the snook, a prized game fish found mainly in more southerly parts of the Gulf of Mexico.

However, both states have witnessed declines in snook populations, and in the case of Texas the fish has practically disappeared. A cooperative effort between Texas and Florida offers some hope that hatchery-reared snook will be available for future stocking programs.

Dr. Tony Maciorowski, director of the Texas Parks and Wildlife Department's Fisheries Research Station at Palacios, said Texas and Florida faced different obstacles in getting a snook restoration program underway. "In Texas, our experience with red drum and spotted seatrout convinced us we could successfully rear snook," said Maciorowski, "but efforts to spawn them in captivity have not yet been successful. Also, snook in spawning condition are not easily caught along the Texas coast."

On the other hand, Maciorowski noted, Florida had the opposite

problem, with adequate supplies of brood fish but no saltwater ponds in which to rear the offspring.

Biologists of the Florida Department of Natural Resources recently strip-spawned wild snook from Tampa Bay, packaged the fertilized eggs and shipped them by air freight to Texas. The eggs were taken to the research station, incubated in the laboratory and then stocked into saltwater ponds.

Of the two shipments, Maciorowski said the first yielded 4,000 fingerlings approximately 1½ inches long. These fish were restocked into ponds and currently measure approximately four inches. They eventually will be tagged and released into Aransas Bay.

The second group of eggs yielded 5,000 fingerlings during September, and these fish were returned to Florida for additional study and stocking.

## Kids Catch Trophy Bass In State Park Lake

Brad Hough, 11, and his brother Craig, 10, were amazed to see a huge largemouth bass flapping its tail fitfully on the surface of Lake Raven last October.

The two boys paddled their canoe to within casting distance of the big fish and were able to foul hook the bass and pull it into the boat.

The boys excitedly paddled to shore and showed the bass to their father, who found the fish apparently

had choked on a large sunfish still lodged in its throat.

The big bass weighed 13 pounds, one ounce, and was 28 inches long.

The fish was by far the largest ever caught from Lake Raven, a 210-acre pond in Huntsville State Park. Brad and Craig, who are from nearby Spring, said they will have the bass mounted.

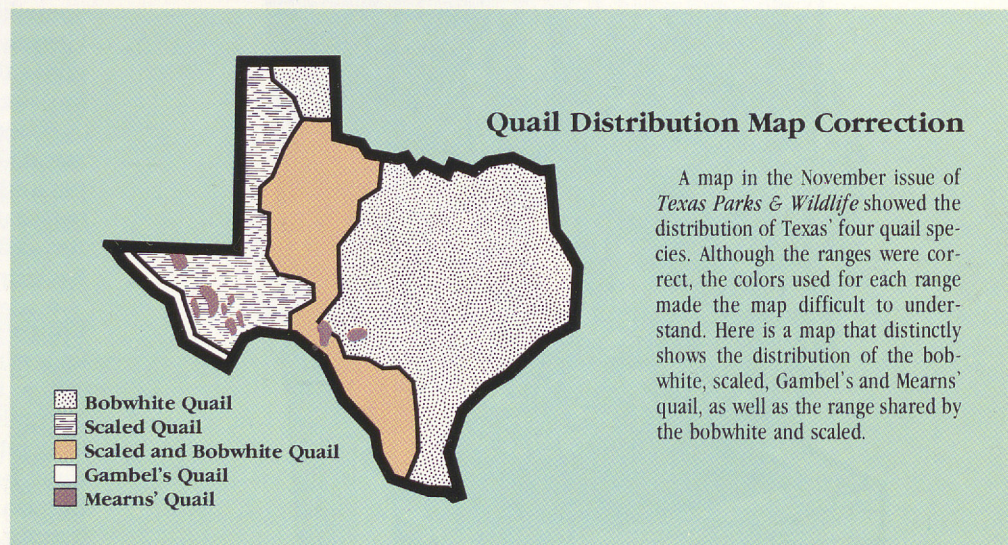
Ernest Simmons, inland fisheries chief for the Texas Parks and Wildlife Department, said the lake has been stocked with Florida-strain largemouth bass.

## Oyster Season Opens On Texas Coast

Prospects are rated about average for the oyster season which opened coastwide November 1 and will continue through April 30.

C. E. Bryan, fisheries resource program director for the Texas Parks and Wildlife Department, said biological samples indicate there are more marketable-sized oysters in the Galveston Bay system than at this time last year.

"The Parks and Wildlife Commission last year delayed the opening of the Galveston Bay season because of the large number of small oysters and relatively low numbers of market-size oysters available," Bryan said. "This year the market oysters appear to be more numerous, but I still would not predict an outstanding oyster season as occurred in 1983, which was a record year."



## New King Mackerel Limit Approved For State Waters

Effective October 29, a new bag limit of two king mackerel per person per trip is in effect in Gulf of Mexico waters out to nine nautical miles.

The Texas Parks and Wildlife Commission set the emergency regulation to bring state waters in line with regulations already in place in the federal Fisheries Conservation Zone (FCZ), from nine to 200 miles out.

The limit is two king mackerel per person, including the captain and crew, on private fishing boats. The limit is three per person, excluding the captain and crew, on charter boats, or two per person including everyone on the boat, whichever is greater.

Gary Matlock, chief of coastal fisheries, told the commission that the Gulf of Mexico Fishery Management Council established the limits for federal waters because of a documented decline in numbers of king mackerel in the Gulf. "Law enforcement problems associated with the origin of catch will be eliminated and conservation of king mackerel populations will be maximized through adoption of this regulation," he said.

## TPWD Gets Red Drum From South Carolina

Texas Parks and Wildlife Department biologists are conducting genetic studies of six red drum (redfish) recently obtained from South Carolina, to determine if they differ from Texas' native fish.

Bill Rutledge, hatcheries chief, said if the South Carolina fish prove to be genetically different they could offer several potential advancements for future red drum culturing in Texas.

"First, if they are different, we can use them to produce genetically marked fingerlings for stocking," Rutledge said. "This means we would be able to gauge the success of stocking programs by identifying the stocked fish months or years after release."

A process called electrophoresis is used to analyze tissue samples, he explained, pinpointing the fishes'

genetic background.

Another possibility is that the Eastern Seaboard red drum might be found to have more tolerance for low temperatures than Texas fish. "This would certainly be an advantage, in view of the fish kills which occur occasionally on the Texas coast," Rutledge said.

Rutledge said growth rates are another factor which will be studied with the Carolina fish. "There may be no difference at all between the fish, but as we have seen in recent studies of largemouth bass it is possible that a population of fish from another part of the country could possess genes that provide faster growth when hybridized with Texas fish," he said.

The department currently is studying largemouth bass from California and Cuba, both of which grow faster and reach larger maximum sizes than native bass, he added.

## Lake Meredith Study Shows Fish Movements

A tracking study of smallmouth bass and walleyes in Lake Meredith near Canyon already is producing some interesting tidbits for Meredith anglers.

Biologist Joe Kraai of the Texas Parks and Wildlife Department said eight smallmouths and one walleye were fitted with ultrasonic transmitters which tell the fishes' preferred depth, habitat, water temperature and movements. Exact locations of each fish are plotted weekly on detailed maps and posted in local bait stores to aid anglers in locating fish.

"During July and August, smallmouths were commonly in 20 to 40 feet of water near rocky points and dropoffs," Kraai said. "With water temperatures decreasing during September, the majority of smallmouth bass being tracked moved shallower and were in depths less than 16 feet." He said rocky points and dropoffs still were important habitats for the smallmouths, but many fish also were associated with inundated brush near shore.

Kraai said six additional smallmouths will be implanted with transmitters this fall and 12 more walleyes will be rigged next spring. Tracking will continue weekly through spring 1987.

## Art Selected For State's First Saltwater Stamp

The classic scene of a red drum cruising the flats in a Texas bay will be depicted on the inaugural edition of the state's saltwater fishing stamp. The Texas Parks and Wildlife Commission has accepted the bid of Collectors Covey of Dallas to produce the stamp and print.

Effective January 1, 1986, the saltwater stamp will be required of all persons (except those exempt from fishing license requirements) who fish in the salt waters of Texas for non-commercial purposes.

Noted wildlife artist John P. Cowan, whose paintings have

adorned many conservation stamps and prints including the 1985 Texas Waterfowl Stamp and Print, produced the artwork.

The three-year contract approved by the commission specifies that Collectors Covey guarantees the department a minimum income of \$25,000 from the print and related stamp sales. The department is to receive a \$37 royalty on each of the \$125 prints sold.

Funds collected from the sale of stamps and prints will be used for coastal fisheries enforcement and management.



January in . . .

## TEXAS PARKS & WILDLIFE

South and Central Texas residents will long remember the beginning of 1985. That area of normally temperate winter weather experienced not one, but three snowfalls during January and February. It was a rare treat for people in that region, and the January issue will feature an eight-page photo story showing just how beautiful Texas can be when it dresses up for the winter. Winter

also finds southern bald eagles nesting in East Texas and along the Gulf Coast. Last spring, biologists for the first time banded six young bald eagles from Texas nests with the hope of learning about their migration after they leave the nest. A story in the January issue will describe the banding program and request help from our readers in reporting these tagged eagles. Also next month are stories on Tyler State Park in East Texas; Project WILD, a new outdoor education program in the state; the freshwater trout stamp; the importance of habitat to wildlife; and the second installment of the history of the striped bass in Texas.



## Kerr Area, Walter Buck Area

# A Tale of Two Deer Herds

by Fielding Harwell, Donnie Harmel and Jim Perkins

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*How would you like to  
hunt on an area with a substantial  
deer population that has not been hunted  
for the past five years?*

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If you were lucky enough to find such a place, you probably would have visions of old moss-horned bucks everywhere and would anticipate killing a real trophy deer. This probably was what a lot of folks were expecting when they hunted the Walter Buck Wildlife Management Area in Kimble County during the 1982-83 season. The 2,123-acre area had not been hunted since 1976, had no livestock in recent years and supported a substantial deer population.

During the 1982-83 season, wildlife biologists collected and compared deer numbers and harvests on the Buck Area with those of the nearby Kerr Wildlife Management Area. Both are located in typical Hill Country habitat, with the Kerr Area in western Kerr County. But results showed a remarkable difference between the Kerr's managed whitetail herd and the unmanaged population at the Buck.

The 6,493-acre Kerr Area has been in an intensive deer management program since 1968 when a deerproof

fence was built around it. The deer herd has had moderate to heavy hunting pressure and deer numbers have been maintained at or below the range's carrying capacity since the fence was built. A smaller herd means more food for the remaining deer. Cattle also are grazed on the Kerr Area in moderate numbers and rotated through the pastures. In recent years, regrowth cedar has been controlled.

The objective of the Kerr Wildlife Management Area's deer management program has been to keep deer numbers reduced through a public hunting program so the habitat and food supply will improve. This management program also has had a positive effect on the area's deer quality. Deer weight, antler development and fawn production and survival have increased through proper management.

By comparing results of censuses and hunts on the two areas, biologists were able to show some interesting comparisons between managed and unmanaged deer herds.

### What did the annual deer census of the managed area versus the unmanaged area indicate?

The census conducted on the Kerr Area revealed one deer per 8.4 acres or 119 deer per 1,000 acres. The Buck Area had a much higher density of one deer per six acres or 167 deer per 1,000 acres. A sex ratio of one buck to 2.21 does was observed on the Kerr Area versus a much wider sex ratio of one buck to 4.24 does on the unmanaged Buck Area. Fawn production was high on the managed area and low on the other area. The Kerr Area produced 108 fawns per 100 does as compared to 41 fawns per 100 does on the Buck Area.

The high deer density on the unmanaged area resulted in insufficient food for the herd; consequently, fawn production and survival was low. In the long run, poor fawn production means a limited number of bucks available for harvest in later years.

### How many old bucks were harvested on the two areas?

The unmanaged area had a higher percentage of harvested bucks 4½ years old and older. Of the 61 adult male deer bagged on the Buck Area, 33 percent were 4½ years old or older. On the Kerr Area, 16 percent of the bucks were that old. The greater percentage of mature bucks in the harvest at the Buck Area was the result of no hunting prior to 1982 (Table 1).

### Was there a difference in antler development between areas?

Deer had substantially better antlers on the Kerr. This held true for inside antler spread, main beam length, basal circumference and antler points (Table 2). The abundance, quality and variety of food on the intensively managed native rangeland produced bucks with larger racks.

### How did field-dressed weights of harvested bucks compare?

Field-dressed weights of Kerr Area bucks exceeded those from the Buck Area for all ages. The 1½-year-old bucks from the Kerr Area averaged 68 pounds versus 47 pounds for the Buck Area. The yearling bucks harvested on the intensively managed area exceeded the unmanaged area weights in the same age class by 45 percent or 21

**Table 1**  
**Age of Bucks Harvested**  
**In 1982-83 Season**

Age	Kerr Area	Buck Area
1½	(26) 44.8%	(19) 31.1%
2½	(11) 19.0%	(13) 21.3%
3½	(12) 20.7%	(9) 14.8%
4½	(4) 6.9%	(11) 18.0%
5½	(3) 5.2%	(4) 6.6%
6½	(2) 3.4%	(4) 6.6%
7½		(1) 1.6%
<b>Total</b>	<b>(58) 100%</b>	<b>(61) 100.0%</b>

( ) Number Harvested

pounds. Bucks 3½ years old field-dressed an average of 96 pounds from the Kerr Area as compared to 64 pounds for the same age animals from the Buck Area. In this case, buck weights from the managed area exceeded the average of the unmanaged area by 50 percent or 32 pounds. Additionally, the average field-dressed weight of 96 pounds for the 3½ year old age class of bucks harvested from the Kerr Area exceeded the averages for the 4½, 5½, 6½ and 7½ year old age classes for the Buck Area (Table 3).

Buck fawns harvested on the Kerr Area field-dressed an average 35 pounds versus 29 pounds for the Buck Area. This has long-term implications since deer reach their maximum body growth only when there is ample food available.

Abundance of preferred foods is a key factor contributing to the larger bucks on the managed area. This can be largely attributed to the lower deer density on the managed area, as a result of harvesting antlerless deer as well as antlered bucks.

### How about field-dressed weights of harvested does?

Kerr Area does of all ages outweighed does of corresponding ages from the Buck Area. In fact, the 1½-year-old does harvested on the Kerr Area exceeded the average weights for all ages of females harvested on the Buck Area (Table 3).

### Were there more spike-antlered yearling bucks harvested on the unmanaged area?

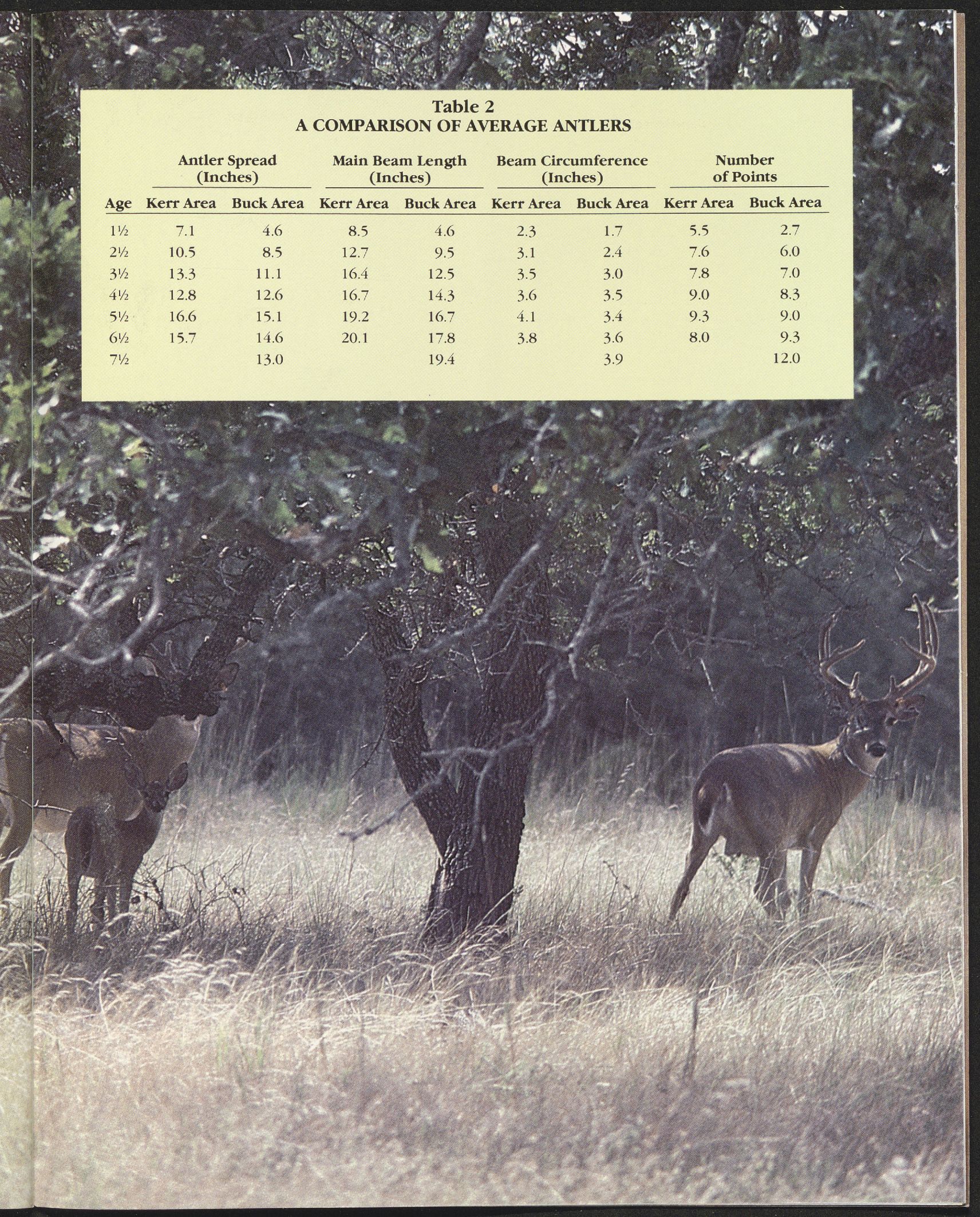


Kerr Area by Glen Mills



**Table 2  
A COMPARISON OF AVERAGE ANTLERS**

Age	Antler Spread (Inches)		Main Beam Length (Inches)		Beam Circumference (Inches)		Number of Points	
	Kerr Area	Buck Area	Kerr Area	Buck Area	Kerr Area	Buck Area	Kerr Area	Buck Area
1½	7.1	4.6	8.5	4.6	2.3	1.7	5.5	2.7
2½	10.5	8.5	12.7	9.5	3.1	2.4	7.6	6.0
3½	13.3	11.1	16.4	12.5	3.5	3.0	7.8	7.0
4½	12.8	12.6	16.7	14.3	3.6	3.5	9.0	8.3
5½	16.6	15.1	19.2	16.7	4.1	3.4	9.3	9.0
6½	15.7	14.6	20.1	17.8	3.8	3.6	8.0	9.3
7½		13.0		19.4		3.9		12.0





Glen Mills

Kerr Area managers use a freeze-branding technique to identify individual deer involved in ongoing research projects.

Sixty-three percent of the yearlings taken on the Buck Area were spikes as compared to only 19 percent from the Kerr Area.

The Kerr Wildlife Management Area maintains both quantity and quality hunting with a productive, healthy deer herd by doing the following:

- Antlerless or doe deer are harvested annually to maintain a winter broodstock of approximately one deer per 10 acres with a sex ratio of about 1.5 does per buck.
- Sheep and goats were removed since both animals compete with deer for food.
- The area is moderately stocked with cattle at a rate of one animal per 38 acres.
- Cattle are rotated from pasture to pasture to prevent overgrazing.
- Native rangeland is burned in January to kill regrowth cedar (Ashe juniper) which is poor-quality deer food.
- Exotic big game such as fallow, axis and sika deer are harvested in an attempt to reduce or eliminate these introduced species that compete with white-tailed deer for food.

All this has increased plants which deer like to eat, such as Spanish oak,

**Table 3**  
**AVERAGE FIELD DRESSED WEIGHTS OF DEER (Pounds)**

Age	Bucks		Does	
	Kerr Area	Buck Area	Kerr Area	Buck Area
Fawns	( 9 ) 35	( 3 ) 29	(11) 33	( 2 ) 26
1½	(26) 68	(19) 47	(10) 59	( 8 ) 42
2½	(11) 84	(13) 62	( 5 ) 60	( 2 ) 56
3½	(12) 96	( 9 ) 64	( 1 ) 65	( 9 ) 48
4½	( 4 ) 92	(11) 71		( 9 ) 52
5½	( 3 ) 104	( 4 ) 83	( 3 ) 60	( 3 ) 54
6½	( 2 ) 101	( 4 ) 80	( 3 ) 64	( 3 ) 52
7½		( 1 ) 75	( 1 ) 56	( 2 ) 48

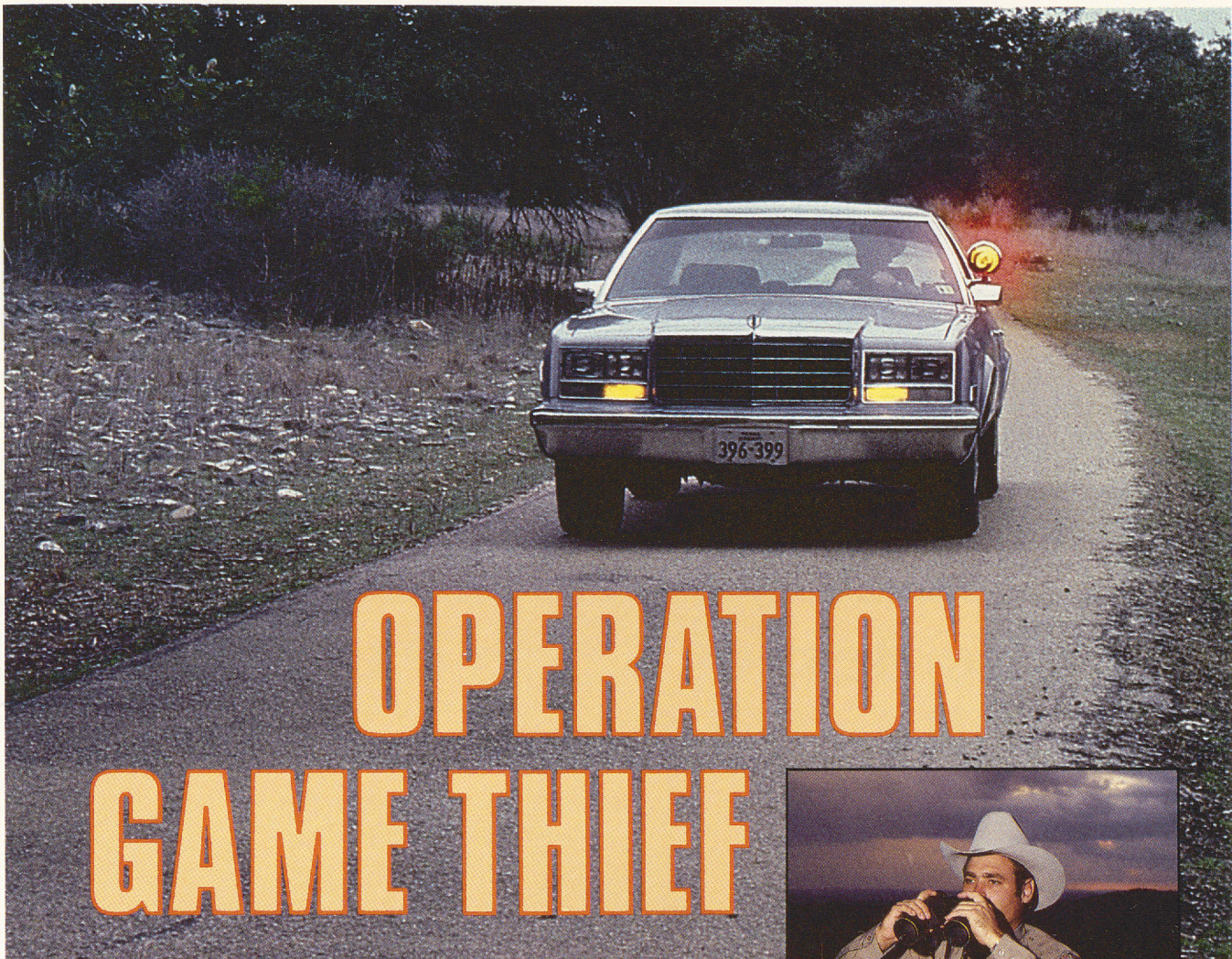
( ) Number Harvested

shin oak, live oak, hackberry, flameleaf sumac, redbud, greenbriar, honeysuckle, woolleybucket bumelia, wild plum and sweet mountain grape. Of equal importance is the increase in the variety and quantity of high-protein forbs (broad-leaf weeds) which deer prefer.

Although the Walter Buck Wildlife Management Area was not stocked with domestic animals, the white-tailed deer population exceeded the carrying capacity of the native range. The result was poor production and

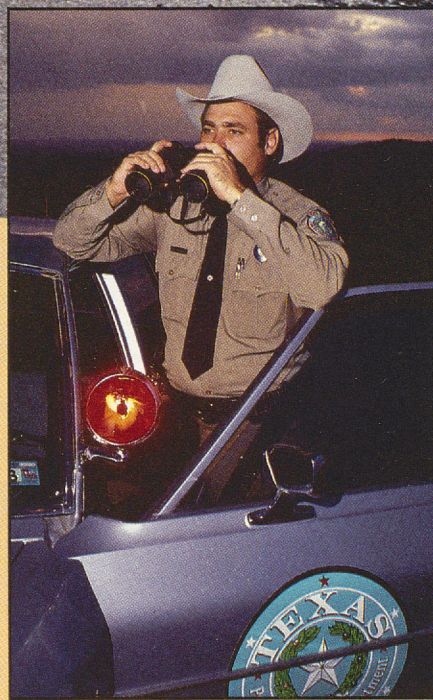
survival of fawns, poor antler development of bucks and low field dressed weights.

The 1982 hunting season was the first year an attempt was made to reduce the deer population on the Walter Buck Wildlife Management Area. Practices similar to those on the Kerr Area are planned to improve deer quality. Improving deer habitat and food supply through reduced deer should do this just as it did on the Kerr Area. It will just take time. \* \*



# OPERATION GAME THIEF

Game poachers are crooks. You can stop them by calling Texas Parks and Wildlife's Operation Game Thief toll-free to report violations, or make a tax deductible contribution to the Operation Game Thief Reward Fund today. Thousands of pounds of illegally taken game and fish, several thousand feet of nets and trotlines and many illegal traps have been confiscated. Callers are given monetary rewards and anonymity. Violators are fined or sent to prison. Operation Game Thief depends on your support.



Leroy Williamson

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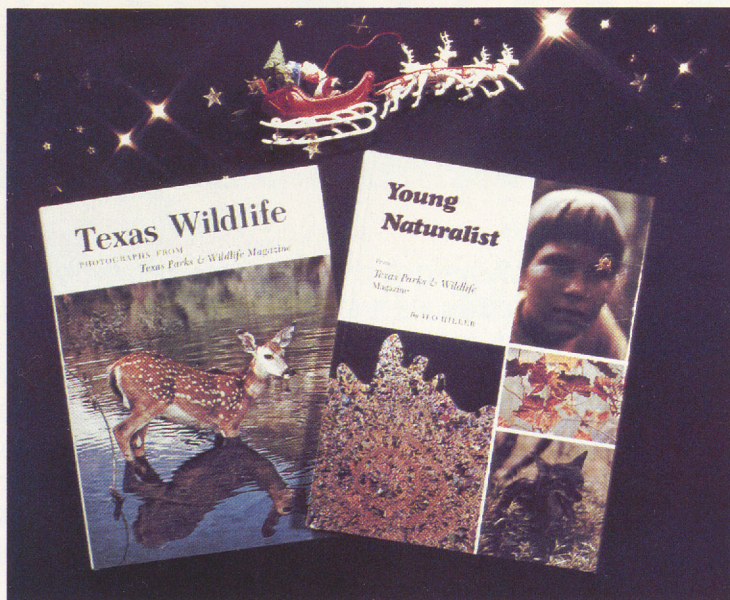
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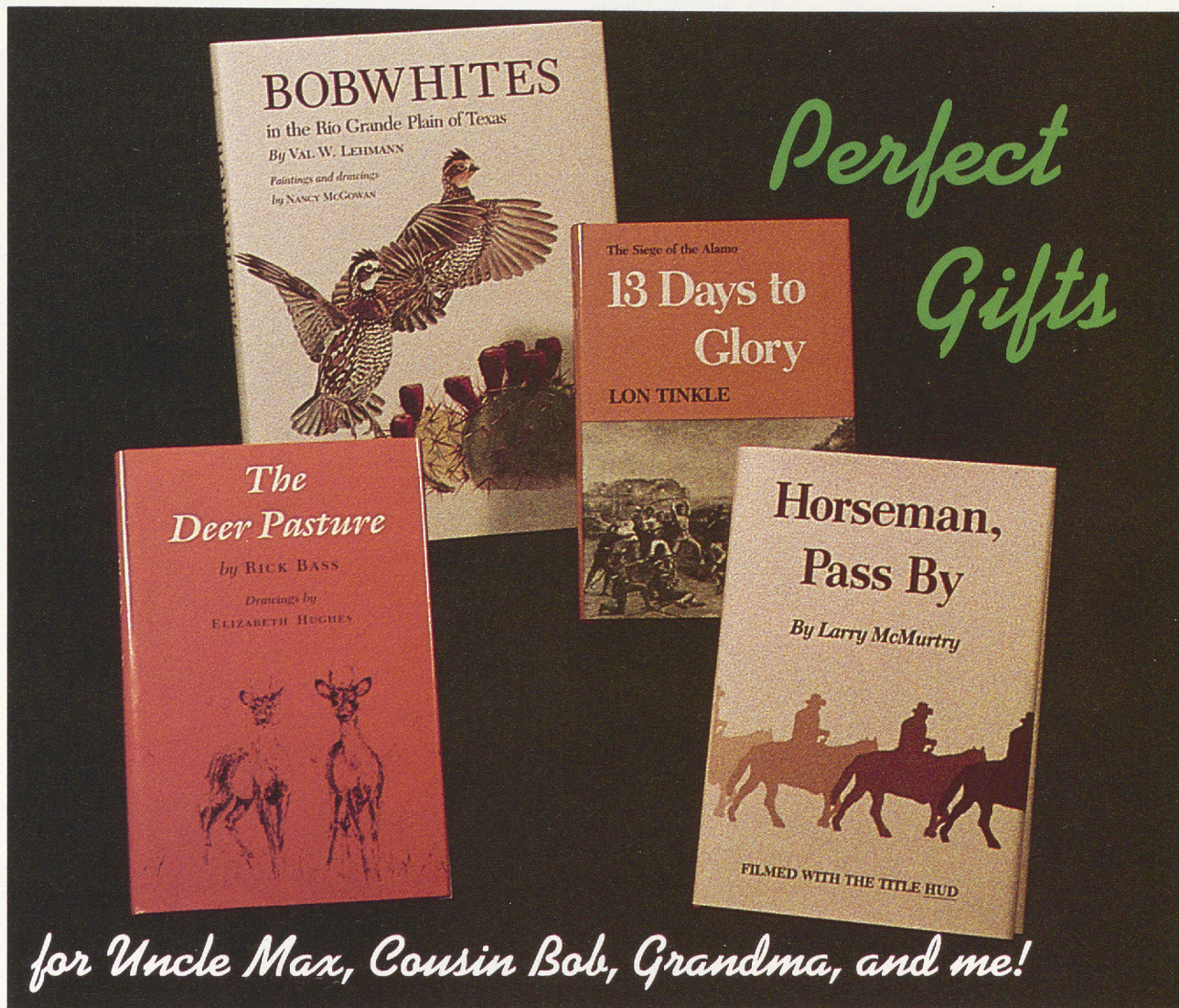
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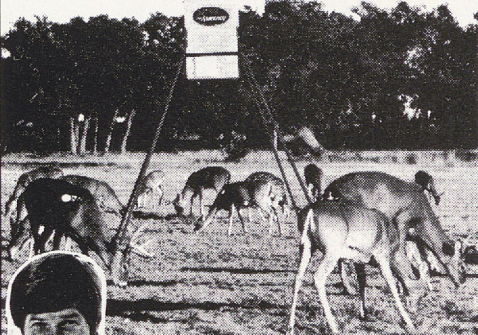


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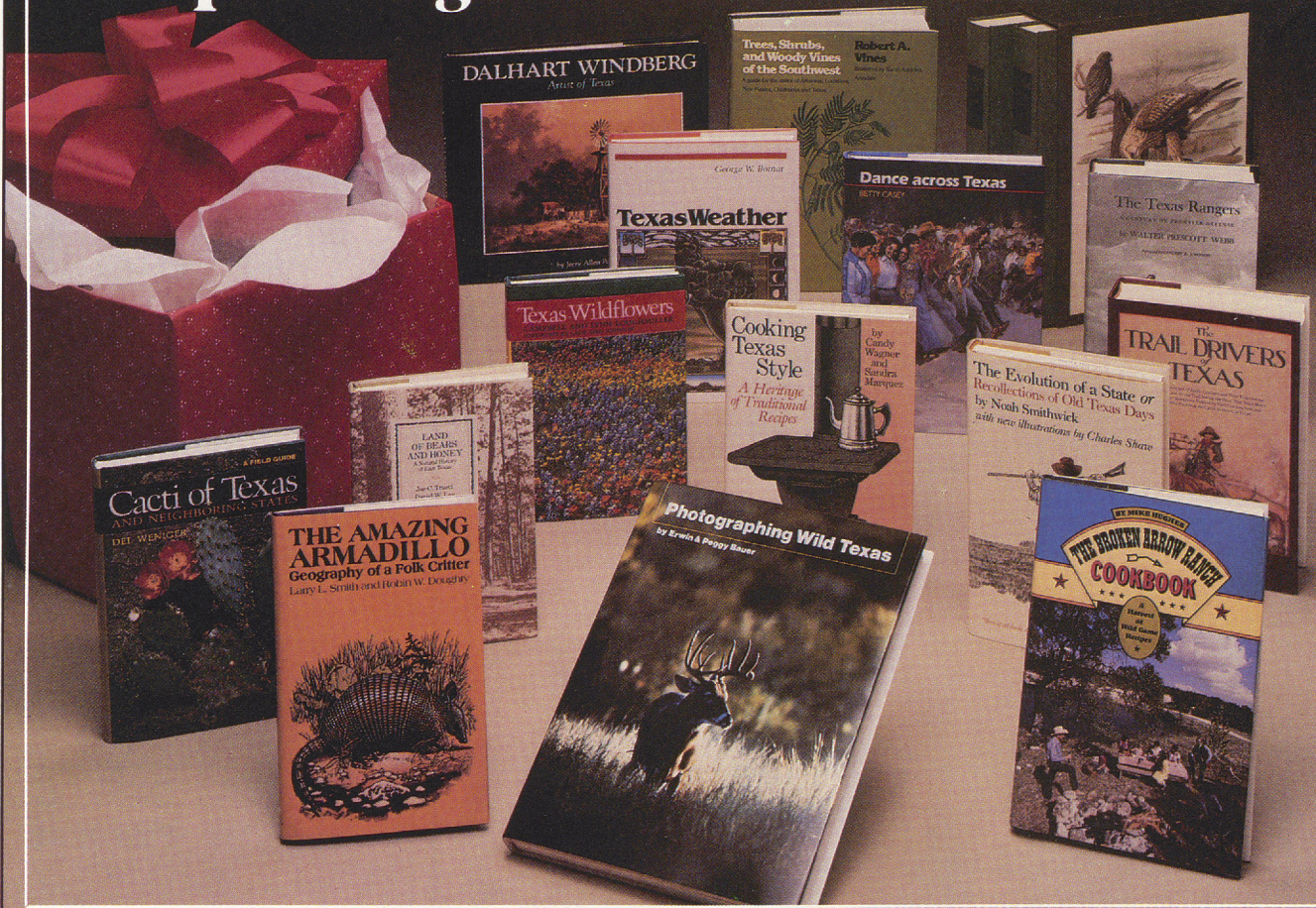
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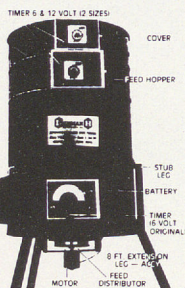
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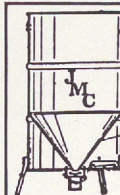
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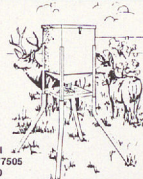
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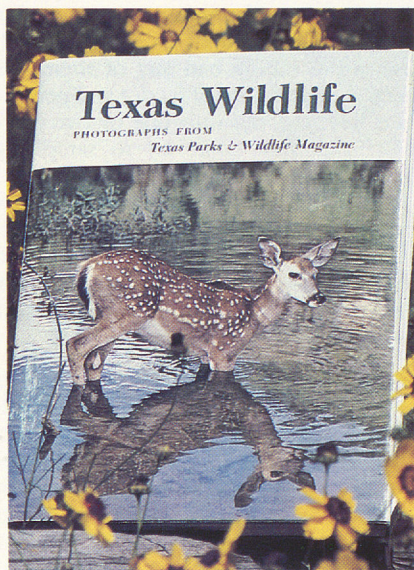
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# Letters

## King of the Woods

I enjoyed the article on mesquite in the September issue. I am glad mesquite has finally become the king of the woods.

It brings back memories of when I was a little shaver, back in Whitney, Texas, in the teens and twenties. We always had a big citywide barbecue on March 2 and July 4. The elders would dig a big pit in the ground and lay iron rods across it to barbecue on. They would barbecue a cow, hog or goat, anything the folks would bring. The whole town was invited. We always used mesquite; there was more mesquite than there was hickory. My grandpa also made all his wagon parts out of mesquite.

Thanks for the article.

J.W. Johnson  
Shreveport, Louisiana

## Gator Hunting

I am appalled by the article "Hunting Gators Again" in the August issue. The biology of the American alligator is complex and poorly understood.

While there are more sightings of alligators, man is also encroaching upon their habitat in ever increasing numbers. Also, if the average size taken was 7½ feet long, specimens in their prime breeding state are being wiped out. This kind of loss can easily result in local population crashes which would be followed by an overall decline of the species.

Furthermore, let us not characterize this type of slaughter as sport or thrilling. Shooting an animal that is exhausted from hours or maybe even days of struggle, dangling a hook cruelly and painfully secured in the roof of its mouth, is not sportsman-like, it is barbaric. Surely no hunter would consider it good sport to hunt and shoot a hobbled and tethered deer.

J.S. Dobbs  
Morrow, Georgia

■ Alligator program leader Bruce Thompson replies, "The annual alligator harvest program is based on a sustained-yield principle, which sets the allowable take at a conservative level below the natural mortality rate where the harvested animals are replaced through normal reproduction and growth each year. This principle has been demonstrated by effective hunting programs involving a variety of species, and depends on appropriate regulatory controls. Breeding age alligators undoubtedly are taken, but the harvest occurs after the young of the year are hatched so annual

production is not compromised. The conservative quotas and tendency of harvest methods to take about 70 percent males further protects the breeding females. Legal alligator hunting methods have been established to promote retrievability of the animal once captured and killed; the line attached to each taking device ensures this. Also, it is a legal requirement that lines be examined daily. Although human values and perceptions regarding alligator hunting are undoubtedly varied, the department's alligator management program attempts to address all interests and the annual harvest is considered to be a consistent use of a renewable natural resource."

## Adopted Texans

My wife and I were extremely fortunate to live in El Paso for a couple of years. Ever since, we consider ourselves adopted Texans. Our friends Julie and Barry Robinson of Greenville have subscribed to *Texas Parks & Wildlife* for us. Each issue takes us "home" to a place not matched by anywhere.

A great big "thank you" for your article on the Davis Mountains in the August issue. We sure love and miss the West.

Eckart Maier  
Asperg, West Germany

## Inappropriate Photo

I appreciated the article on hunting safety in the August issue, with which I agree wholeheartedly. But unfortunately, the picture in the article is an abomination. It shows children shooting shotguns at targets with other people standing in front of the shooter. If this is an example of teaching hunting safety, it is beyond me. Most certainly, a better picture could have been obtained and published in this type of article.

W. John Arringdale, M.D.  
Corpus Christi

■ The young shooter in the photo was positioned to shoot directly ahead by the instructor before the target was released. The shooter did not swing on the target, and at no time was the single-shot shotgun aimed in the direction of the people observing the action from the shade of the tree some 50 yards to the left of the shooter. Since the camera lens tends to compress photo depth, the people seem to be much closer than they actually are. The art director chose this photo from more than 20 such photos submitted with the article.

## Where Are the Birds?

My husband and I have a place in the country and we love birds. We keep feeders out all year. The hummingbirds used to feed from March until October, but this year we've hardly had any of them. I'm using the same kind of feeder and nectar I used last year, but only one or two hummingbirds have come by to sample it. Could you give me some reason for this?

Also, we don't have any mockingbirds. Since I lived here when I was a child, I know mockingbirds have been here before. I work in town and see them there. Could you tell me what I might do to get them back out here?

Mattie Flanagan  
Laneville

■ According to our Wildlife Division, distinct changes in the occurrence of wildlife in a small area, but continued presence in surrounding areas, suggests a subtle change in the habitat or human/animal activities on the small area. Has there been any vegetative alteration recently on your property or adjacent to it? Are there more children or pets in the vicinity of your property? Any number of minor changes can cause different use patterns of wildlife. Also, people sometimes change their habits in a manner that affects the species of wildlife that are seen. Review your daily schedule to determine if you are looking for birds at different times than usual. Also, 1985 has been relatively wet in many areas and some of the common birds have more abundant native food sources and rely less on artificial feeding.

## BACK COVERS

**Inside:** First introduced into the Texas Panhandle 25 years ago, pheasants add color and variety to bird hunting in that part of the state. (See story on page 2.) Photo by Grady Allen.

**Outside:** Surrounded by a garland of ice crystals, these honey mushrooms embellish the winter landscape at Guadalupe Mountains National Park. Widely distributed in North America, honey mushrooms can be found on the decaying wood of a variety of trees, in woods and on cleared land. Size of this broad, fleshy mushrooms ranges from one to six inches across, and its color can vary from yellowish to reddish-brown. Photo by Paul Montgomery.



