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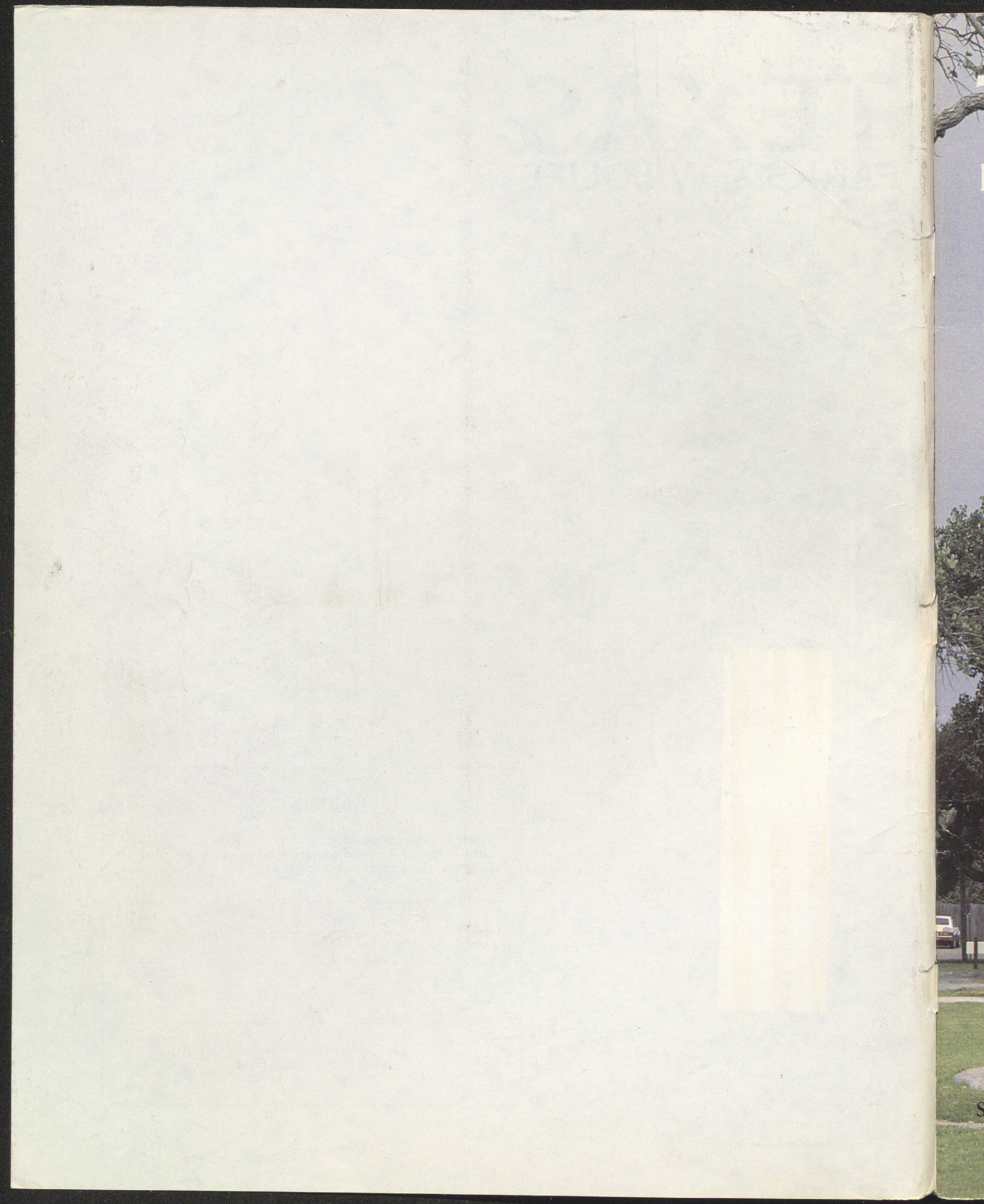
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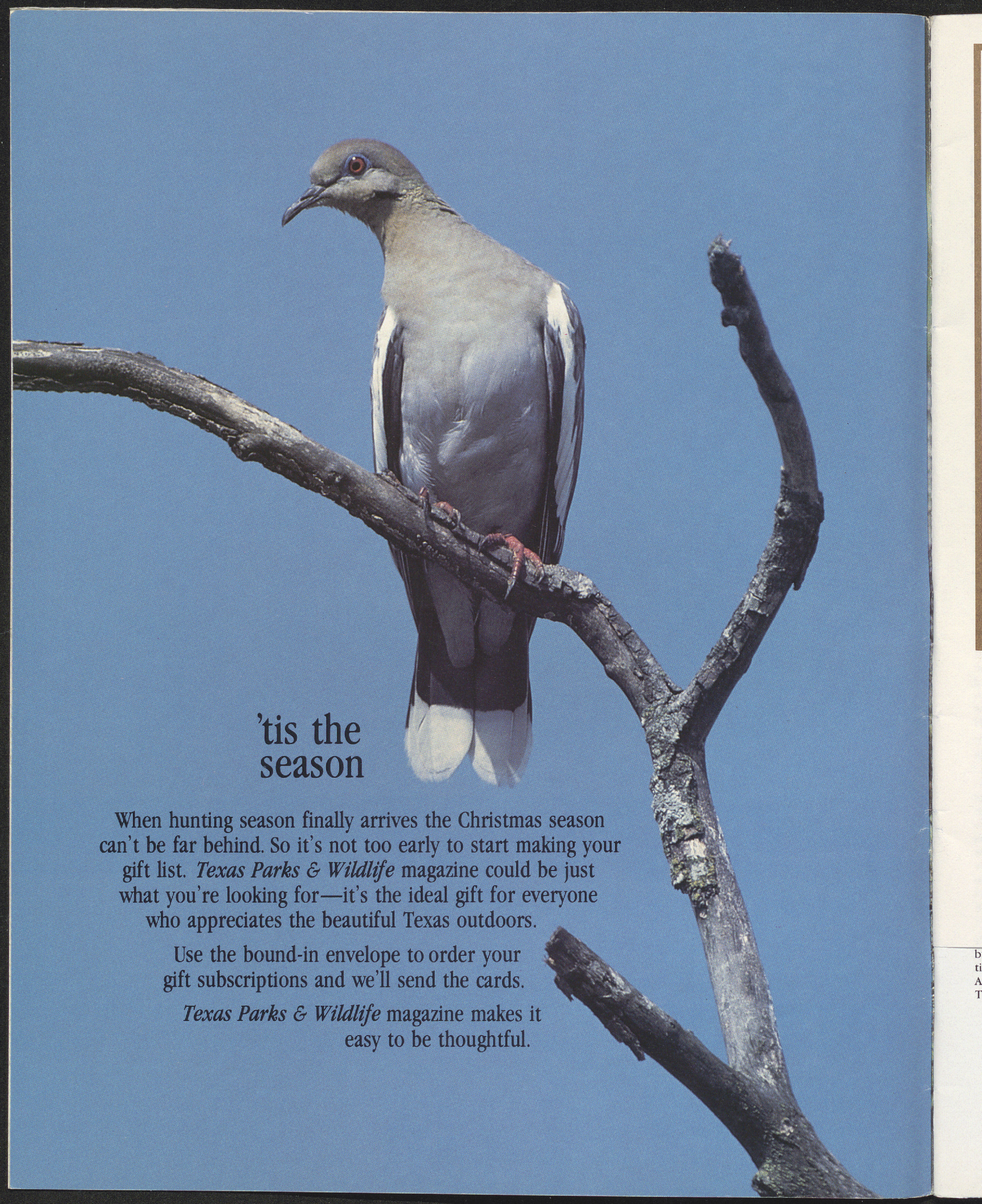


TEXAS

PARKS & WILDLIFE



September 1984

A photograph of a dove perched on a dark, gnarled branch against a clear blue sky. The dove is facing left, with its head turned slightly towards the viewer. It has a light-colored body with darker wings and tail. The branch extends from the left side of the frame towards the bottom right.

'tis the
season

When hunting season finally arrives the Christmas season can't be far behind. So it's not too early to start making your gift list. *Texas Parks & Wildlife* magazine could be just what you're looking for—it's the ideal gift for everyone who appreciates the beautiful Texas outdoors.

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MAGAZINE
(ISSN 0040-4586)

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

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Front and Back Covers: Built in the 1870s by George Ware Fulton, this four-story mansion on Aransas Bay is now a state historic site. (See story on page 34.) Photo by Glen Mills.

Inside Front: Even though white-winged dove nesting was down this year due to last winter's freeze, sufficient numbers of mature doves are present in the Rio Grande Valley for a four-day season, September 1-2 and 8-9. Photo by Richard Haverlah.

Published monthly by the Texas Parks and Wildlife Department, 4200 Smith School Road, Austin, Texas 78744. Circulation: 512-479-4830; Editorial Office: 512-479-4992. Republication of materials is not permitted except by special written permission. The inclusion of advertising is considered a service to subscribers and is not an endorsement of products nor concurrence with advertising claims. Rate schedule available upon request. Subscription rates: \$8 for one year and \$15 for two years. Single copies and all back issues \$1. Foreign subscription rates: \$10 for one year and \$18 for two years.

Postmaster: If undeliverable, please send notices by form 3579 to 4200 Smith School Road, Austin, Texas 78744. Second class postage paid at Austin, Texas, with additional entry at Dallas, Texas.

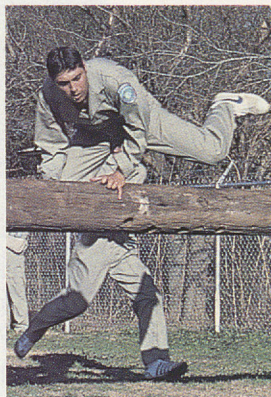


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The Greatest Storm on Earth

by Mary-Love Bigony

In November 1938, *The New Yorker* ran a story about a Long Island man who satisfied a lifelong ambition by ordering an expensive barometer from Abercrombie & Fitch. When the package arrived on September 21, the man's initial excitement was dampened when he found the needle stuck on "Hurricane." He shook it, but to no avail, then wrote an angry letter to Abercrombie & Fitch and went right out to mail it. When he returned his house was gone and the barometer with it.

The odds of this happening today are infinitesimal, as it is virtually impossible for a hurricane to sneak up on a community. Hurricane death tolls in recent years have been much lower than they were earlier in this century. Some 600 people were killed in that hurricane that struck the East Coast in 1938; more than 6,000 died in the Galveston hurricane of 1900, the single worst weather disaster in United States history. But smaller death tolls don't mean hurricanes have gotten less severe; it means weather forecasting technology has gotten better.

However, don't let these numbers lull you into a false sense of security. According to the National Weather Service, the decline in hurricane deaths could mislead many people into believing that no more large losses of life will occur because of advanced technology. It just isn't so. Officials of the National Hurricane Center repeatedly emphasize the great danger of a catastrophic loss of life in future hurricanes if people aren't prepared, so it is crucial that the state's booming coastal population, as well as the thousands of people who visit the area,

understand and respect what the NWS calls "the greatest storm on earth."

It's not that hurricanes are the largest of storms—some of the huge cyclonic storm systems in the temperate zone are much bigger. Nor do hurricane winds approach the velocity of many tornadoes. But the hurricane's size, duration and violence combine to make it unmatched in destructive potential. Hurricane season in the United States officially runs from June 1 to November 30, but two-thirds of them hit during August and September when water temperatures are warmest. Most tropical cyclones will not form over water cooler than 78 to 80 degrees. (Meteorologists use the term tropical cyclone for any disturbance with rotating winds that forms over tropical waters; it does not designate intensity.) Like the tropical children they are, they depend on heat to nurture them as they mature from a tropical wave to a tropical depression, tropical storm and ultimately a hurricane. George W. Bomar in "Texas Weather" points out that the relatively infrequent occurrence of hurricanes suggests that many peculiar conditions must be met to generate the huge storm.





PHOTO: HOUSTON CHRONICLE

At infancy, a developing hurricane moves almost tentatively and may even stall temporarily before resuming its trek. During its average life-span of nine days the hurricane may travel 1,800 miles. For a storm to be designated a hurricane, its winds must reach 74 miles per hour. However, wind speeds in excess of 100 miles per hour are common and speeds up to 200 miles per hour have been recorded. Most hurricanes are at least 100 miles in diameter and they can dominate the surface of the ocean or Gulf for tens of thousands of square miles.

At maturity, the hurricane is an astounding creature—an enormous whirlwind rotating around a center of extremely low pressure, the eye. Inflowing air laden with heat and moisture drive the great storm. Rising air cools to form raindrops and clouds while releasing a huge amount of heat energy. It has been said that if the energy a hurricane produces in one day could be converted to electricity, it would supply the electrical needs of the United States for six months.

The hurricane bears no structural resemblance to any other storm. Spiral bands of cumulus and cumulonimbus clouds from which heavy rains fall alternate with bands of little or no rain.

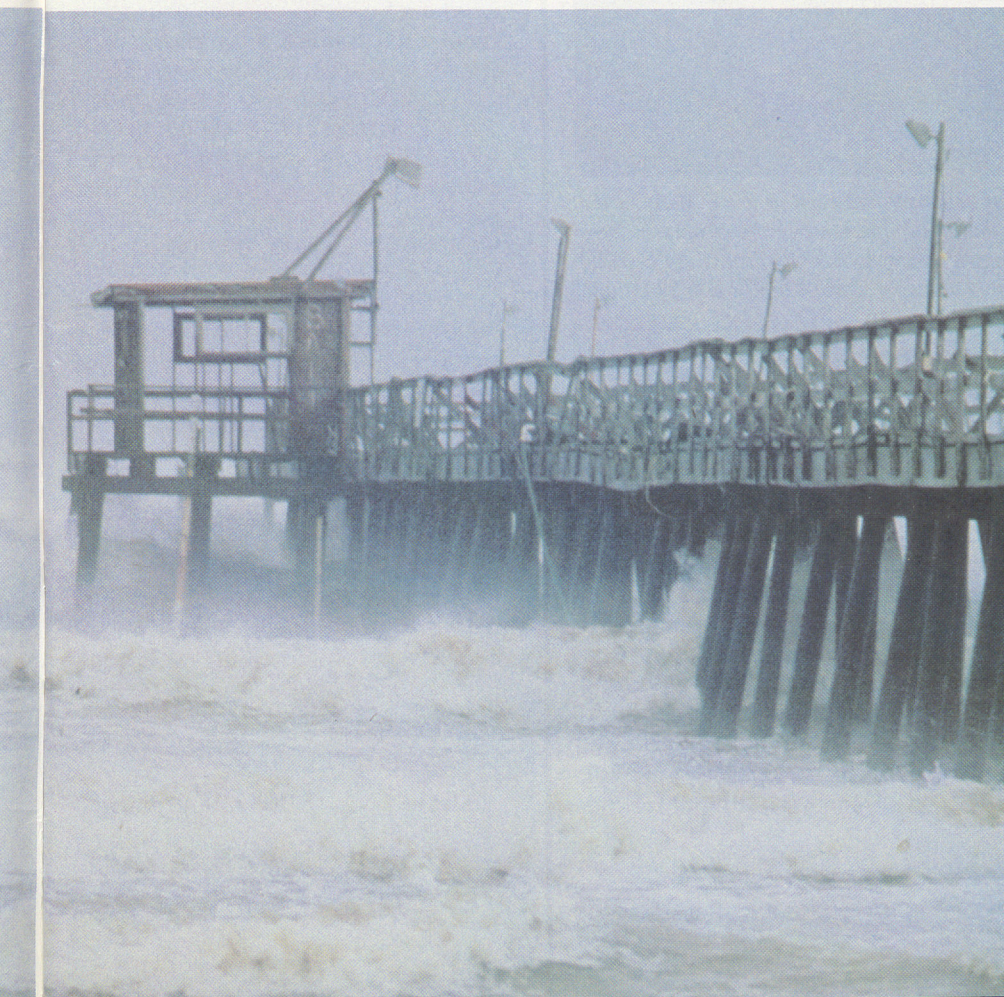


PHOTO: HOUSTON CHRONICLE

Hurricane Alicia charged ashore on August 18, 1983, packing winds of more than 115 miles per hour, sending 12-foot tides crashing upon Galveston and drenching the area with torrential rains. Eighteen people died and thousands were driven from their homes.

Winds range from relatively light around the perimeter to violent near the eye. The eye, ranging in diameter from 14 to 25 miles, also is unique to the hurricane. Winds in the eye usually are no more than 15 miles per hour and the sky there is relatively free of clouds. Birds that became trapped in the center of the storm as it was forming often are seen flying overhead as the eye passes. Conditions seem to be returning to normal when the eye arrives, and people have made the fatal mistake of believing the worst was over only to be slammed with winds from the opposite direction after a respite of half an hour or so.

Hurricanes charge ashore brandishing three weapons: storm surge, heavy rain and wind. Although violent wind is the hallmark of the hurricane, the storm surge is the most lethal. Often compared to a giant bulldozer, the storm surge is a towering dome of water that crashes ashore as the main force of the hurricane makes landfall. Low atmospheric pressure literally raises the water level while strong winds pile the waves on

areas it crosses. The rain can linger for days and can lead to flash flooding, a sudden and dangerous rise in the water level of creeks, streams and low-lying areas. Hurricane Beulah brought major floods to South Texas in 1967, killing 10 people. Tropical storm Amelia caused very little commotion on the coast but caused flash flooding that killed 25 people and injured 150 others in the Hill Country. But even though hurricane rains can be deadly, they



In Alicia's aftermath, it looked as though a giant bulldozer had been at work. Many of the homes in the area had been placed on pilings that did not hold when the structures were undermined by the storm surge or toppled over by heavy winds. Alicia was the costliest hurricane in Texas history, causing damages worth \$2 billion to \$3 billion.

top of each other. Very strong hurricanes can create a wall of water 25 feet tall and 50 miles wide and, since water weighs 1,700 pounds per cubic yard, the effect on people and property is devastating. According to the National Weather Service, nine out of 10 deaths from hurricanes are caused by the storm surge.

Heavy rain is the storm surge's partner in destruction. As the hurricane moves inland its winds begin to diminish since it no longer has warm Gulf water to fuel it. But its spiraling rain clouds are still at work, dumping six to 12 inches of rain or more on the

also can be the storm's one silver lining. Many a drought has been brought to a welcome end when hurricane rains moved inland over areas parched by the summer heat. According to a National Weather Service estimate, one-fourth of the southeastern United States' rainfall comes from hurricanes.

Although wind is the least destructive of the hurricane's weapons it should not be underestimated. Few buildings are constructed to withstand winds in excess of 100 miles per hour: downtown Houston looked like a war zone when Hurricane Alicia demolished its glass skyscrapers in 1983.



Hurricane Safety Rules

1. ENTER EACH HURRICANE SEASON PREPARED. Every June through November, recheck your supply of boards, tools, batteries, nonperishable foods and other equipment you will need if a hurricane strikes your town. Items such as these get in short supply ahead of an approaching hurricane.
2. WHEN YOU HEAR THE FIRST TROPICAL CYCLONE ADVISORY, listen for future messages and keep track of the developing storm. This will prepare you for a hurricane emergency well in advance of the issuance of watches and warnings.
3. WHEN YOUR AREA COMES UNDER A HURRICANE WATCH, stay tuned to radio or television for National Weather Service advisories. Remember, a hurricane watch means possible danger within 24 hours. If the danger materializes a hurricane warning will be issued. Keep alert and ignore rumors.
4. WHEN YOUR AREA COMES UNDER A HURRICANE WARNING, plan your time before the storm arrives and avoid the last-minute hurry that might leave you marooned or unprepared.

STAY CALM until the emergency has ended.

LEAVE LOW-LYING AREAS that may

PHOTO: HOUSTON CHRONICLE



PHOTO: HOUSTON CHRONICLE

Alicia was the costliest hurricane in Texas history, causing damage in the \$2 billion to \$3 billion range. Many homes in the Galveston and Houston areas were on pilings that were undermined by the storm surge or toppled by fierce winds. One mobile home, anchored with tie-down straps, was twisted out from under the straps and deposited in a gnarled heap downwind from its foundation. While it is devastating to lose a home or a business during a hurricane, it is tragic to lose a life. If city officials recommend evacuation, do it—don't be inside a structure when it collapses. Don't be outside, either, since hurricane winds can turn objects such as lawn furniture and signs into lethal missiles.

The hurricane continues its assault even during its last gasp across land by spewing tornadoes. Beulah generated

155 tornadoes in 1967; Alicia spawned 20 last year, some as far as 300 miles inland. Most tornadoes occur 50 to 250 miles outside the center of the hurricane, and nine out of 10 develop to the right of direction in which the big storm is moving. Hurricane-generated tornadoes usually are less severe than the springtime variety.

It's tempting to think of hurricanes as having personalities, since each has its own peculiar characteristics, and is christened with a name when it reaches the tropical storm stage. No two follow the same course, and some of them seem to tease by changing course at the last minute. Others gain tremendous strength as they approach the coastline, as if preparing for a siege. Hurricane Allen, on the other hand, stalled and weakened

be swept by high tides or storm waves.

LEAVE MOBILE HOMES for more substantial shelter. They are particularly vulnerable to overturning during very strong winds. Damage can be minimized by securing mobile homes with heavy cables anchored in concrete footing.

STAY AT HOME IF IT IS STURDY AND ON HIGH GROUND; if it is not, move to a designated shelter and stay until the storm is over.

BOARD UP WINDOWS or protect them with storm shutters or tape.

SECURE OUTDOOR OBJECTS that might be blown away or uprooted, such as garbage cans, garden tools, toys, signs and porch furniture. Anchor them or store them inside.

KEEP YOUR CAR FUELED. Service stations may be inoperable for several days after the storm strikes.

CHECK YOUR BATTERY-POWERED EQUIPMENT such as radios, emergency cooking facilities and flashlights.

STORE DRINKING WATER in clean bathtubs, jugs, bottles and cooking utensils. Flooding can contaminate normal water supplies.

TURN UP REFRIGERATOR to maximum cold and don't open unless necessary.

USE PHONE ONLY FOR EMERGENCIES.

MOOR YOUR BOAT SECURELY before the storm arrives, or evacuate it to a designated safety area. When your boat is moored leave it, and don't return once the waves and wind are up.

IF THE HURRICANE (OR TRAFFIC) CUTS OFF YOUR EVACUATION ROUTE and traps you on low ground, seek shelter in third or fourth-floor hallways of high-rise buildings.

REMAIN INDOORS DURING THE HURRICANE. Travel is extremely dangerous when winds and tides are whipping through your area.

MONITOR THE STORM'S POSITION through National Weather Service advisories.

Beware the Eye Of the Hurricane

If the calm storm center passes directly overhead, there will be a lull in the wind lasting from a few minutes to half an hour or more. Stay in a safe place unless emergency repairs are absolutely necessary. But remember, at the other side of the eye the winds rise very rapidly to hurricane force and come from the opposite direction.

5. WHEN THE HURRICANE HAS PASSED:

SEEK NECESSARY MEDICAL CARE at Red Cross disaster stations or hospitals.

STAY OUT OF DISASTER AREAS. Unless you are qualified to help, your presence might hamper first-aid and rescue work.

DRIVE CAREFULLY along debris-filled streets. Roads may be undermined and may collapse.

AVOID LOOSE OR DANGLING WIRES and report them immediately to your power company or the nearest law enforcement officer.

REPORT BROKEN SEWER OR WATER MAINS to the water department.

DON'T SIGHT-SEE.

USE CAUTION WHEN REENTERING HOME. Check for gas leaks and check food and water for spoilage.

PREVENT FIRES. Lowered water pressure may make firefighting difficult.

Remember that hurricanes traveling inland can cause severe flooding. Stay away from riverbanks and streams.

If your area is threatened by hurricane-spawned tornadoes, take shelter inside, in small interior areas such as hallways, closets and bathrooms.

before it came ashore in 1980. Forecasters had been predicting a major storm, as Allen was the second-strongest hurricane in history during its trip through the Caribbean and the Gulf of Mexico. Beulah's distinguishing characteristic, as mentioned earlier, was torrential rain. Hurricane's Celia's 1970 legacy was wind damage—rain and storm surge were minimal.

The practice of giving hurricanes feminine names probably began during World War II, and became the official policy in 1953. One of the earliest systems identified them by latitude and

longitude, which was confusing when more than one storm was in progress. Next came the practice of using letters of the alphabet along with the year (A-1943). This was followed by use of the World War II phonetic alphabet (Able, Baker, Charlie). The use of names has persisted for 30 years. They are easy to understand and remember, and it's appropriate for something as seemingly temperamental as a hurricane to be called by a name. In 1979 the National Weather Service began to alternate masculine and feminine names. The NWS maintains six lists of

names that will be reused. For example, the 1982 list will be used again in 1988. However, names of especially destructive storms will be retired. The names have an international sound—the 1984 list includes Edouard, Gustav and Klaus—since hurricanes affect other nations as well as the United States and are tracked by the weather services of other countries.

Since record keeping began in 1871, 40 hurricanes have made landfall in Texas. That's an average of about once every three years, but averages mean nothing to weather phenomena. The

Weather Sentinel for the Texas Coast

by Larry Peabody,
National Weather Service

"What's that contraption?" asked the winter Texan, peering skyward while shielding his eyes from the bright glare of the midday sun.

"C-MAN," I answered, not bothering to look up or elaborate further to his question since I was preoccupied with trying to match a bolt, washer and nut from a toolbox full of bolts, washers and nuts that didn't match.

"What's that?" asked the winter Texan again, cautiously semicircling the shiny new tower that had suddenly materialized on the T-head at the end of the Horace Caldwell Pier—a tower topped with strange-looking gadgets that appeared to be straight off a "Star Wars" movie set.

"C-MAN," I answered again, glancing up from my chore. "It stands for Coastal-Marine Automated Network. What you're looking at is an automatic weather station, one of 40 that will be installed along the shores of the continental United States, Alaska and the Great Lakes this year."

"What? A weather station? Why that's great! Just what this town needs!" exclaimed the northern transplant. "Our weather here in Port Aransas is a lot different from what they report over at the airport in Corpus. Will this thing help in forecasting hurricanes?"

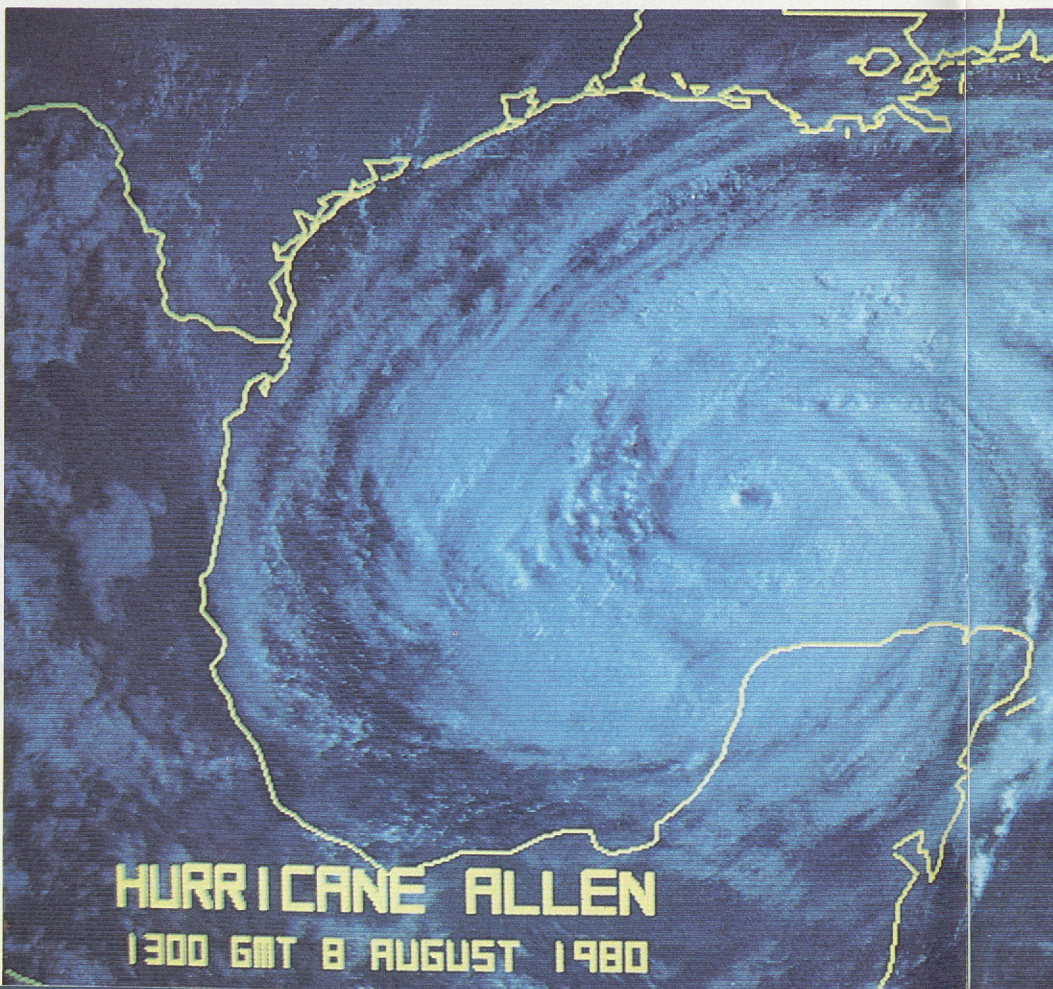
Realizing I could probably accomplish more with an enthusiastic audience than with a reluctant toolbox, I stood up and began to explain the C-MAN program to the cold-season migrant, mentioning the eventual benefits of the station to the citizens of Port Aransas and Texas.

On March 9th, Jim Mitchell and Ernie Ford from the National Oceanic and Atmospheric Administration (NOAA) Data Buoy Center, National Space Technology Laboratories (NSTL) in Mississippi, and I completed installation and calibration of the C-MAN automatic weather observing and re-

porting station on the recently finished Horace Caldwell Pier in Port Aransas.

C-MAN, acronym for "Coastal-Marine Automated Network," is a self-contained, solar-powered, satellite-interrogated, solid-state computer system, able to operate independently of commercial power for an extended period of time during extremely adverse weather conditions.

The Port Aransas location, besides being one of 40 installations programmed for completion in 1984 in the United States, is the second site earmarked for the Texas Gulf Coast. The first C-MAN station was installed



only way to predict when and where a hurricane will strike is with scientific weather forecasting.

Weather forecasting technology is being refined continuously. (See accompanying story for information about the Coastal-Marine Automated Network recently installed at two locations on the Texas coast.) Even though hurricanes remain unpredictable to some extent, timely warning has saved many hundreds of lives. But warning alone won't do it; people must take the initiative to protect themselves. National Weather Service figures show

that some 80 percent of coastal residents have never experienced a direct hit by a major hurricane. These people may not take the great storm's devastating potential seriously enough. If you're on the coast between June and November, always heed hurricane watches (a threat of hurricane conditions within 24 to 36 hours) and hurricane warnings (hurricane conditions expected in a specified coastal area in 24 hours or less) as they are issued by the National Weather Service. "The greatest storm on earth" can't sneak up on you—unless you let it. * *

Editor's Note: City and county officials from coastal communities in South Texas may request hurricane preparedness information from their local National Weather Service office or by writing to William R. Hare, Warning and Preparedness Meteorologist, National Weather Service Forecast Office, North Crown Building, 830 N.E. Loop 410, Suite 300, San Antonio, Texas 78209.

at Sea Rim State Park in Sabine Pass the first week in February. Ultimately, additional coastal and offshore installations may be equipped to form a network of weather-reporting stations along the Texas coast.

Initially, C-MAN observations will consist of air temperature, air pressure, wind direction, wind speed and peak wind gusts. Later, additional parameters, such as sea-water temperature, dewpoint, visibility, precipitation, tide and wave height, may be added.

Horace Caldwell Pier was chosen because of its proximity to the jetties entrance to the Port Aransas Ship Chan-

nel, which leads to the Intracoastal Waterway, Laguna Madre, Aransas Pass, Corpus Christi and Aransas Bay and the Port of Corpus Christi. An April 1983 survey of Mustang Island by a team from the National Weather Service and the NOAA Data Buoy Center determined that the pier would be the most representative location for the C-MAN weather station, and would provide an unobstructed exposure to near-shore marine weather.

An earlier survey of the Sabine Pass area confirmed that the Sea Rim State Park location would provide the most secure and most representative exposure, and would allow a hole in the weather-observing grid to be plugged. The proximity of Sea Rim State Park to the entrance to Sabine Lake, which eventually leads to Port Arthur and the Sabine River, was a major factor in its selection for a C-MAN station.

Horace Caldwell Pier, which extends 1,240 feet offshore into the Gulf of Mexico, provides an excellent platform on which to sample the marine weather environment. The C-MAN equipment is far enough away from undesired influences that may be caused by the land, and should be far enough offshore to be relatively free of possible contaminating effects that may be produced by wave or breaker action.

Although the Sabine Pass C-MAN is onshore, as opposed to the over-water Port Aransas C-MAN, both exposures should be reasonably representative of the weather conditions that may be encountered farther offshore by commercial and sport fishermen, ocean-

going vessels and other marine interests.

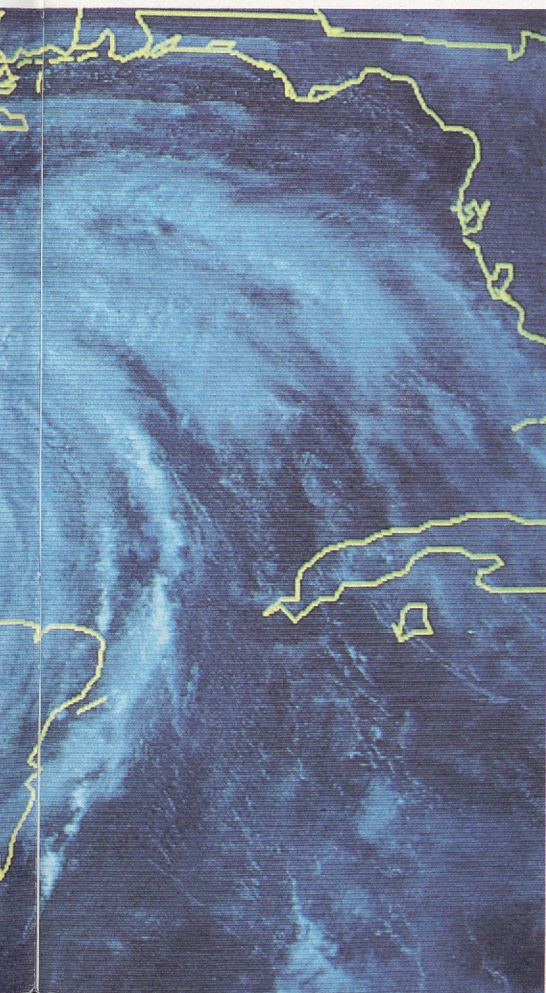
The Sea Rim State Park C-MAN weather station is solar-powered. The Horace Caldwell Pier C-MAN is powered by electricity from shore. Both are satellite-interrogated and both have a dedicated telephone line, which enables those with the proper computer terminal equipment, such as research scientists, to dial-up and interrogate the systems directly, without waiting for the data to be relayed first to the satellite then back through the communications network.

In addition, weather observations from the C-MAN sites will be broadcast over NOAA Weather Radio stations in Corpus Christi (162.55MHz) and Beaumont-Port Arthur (162.475 MHz) on an hourly basis, or more frequently if weather conditions dictate.

During a tropical storm or hurricane threat, up-to-the-minute weather and sea information will be transmitted routinely via the NOAA Weather Wire teletype circuit to all news media, state and local officials in Texas, and through the National Weather Service AFOS computer system to other Weather Service offices throughout the country, as well as to forecasters at the National Hurricane Center in Miami, Florida.

Probably the most notable feature of the C-MAN station is the fact that it is designed to withstand winds up to 120 miles per hour and the equipment will operate on batteries for 20 days in the event of power failure. These design specifications make C-MAN a system for all seasons, just the thing to monitor the ever-changing, sometimes turbulent, oftentimes tranquil, Texas weather. * *

During a hurricane, up-to-the-minute information will be transmitted from C-MAN.



H. ALLEN/NATIONAL HURRICANE CENTER

White-tipped Dove

Texas' Newest Game Birds

by Gary Homerstad,
Wildlife Biologist

The 1984-85 dove season marks the first time that the white-tipped or white-fronted dove, *Leptotila verreauxi*, has been hunted as a game bird in Texas, although it has been hunted in Mexico for many years. Data from studies by the Texas Parks and Wildlife Department and Texas A&I University indicate that a limited harvest of white-tipped doves will not adversely affect the breeding population. A maximum of two whitetips per day will be permitted as part of the aggregate daily bag during both the special white-winged dove season and the regular mourning dove season.

The white-tipped dove occurs south of a line from Laredo to Corpus Christi in Texas, throughout much of Mexico and Central America and as far south as Argentina. It inhabits native brush thickets where it feeds on the ground in openings or trails. These doves have adapted well to citrus orchards and urban areas, causing a dramatic population increase in South Texas in the last decade.

The whitetip is similar in appearance to the white-winged dove, *Zenaida asiatica*, and mourning dove, *Z. macroura*. Its back and wings are gray-brown above, and the underside of the wings are chestnut or cinnamon-colored. It has a rounded, white-tipped tail, a white belly and a white forehead.

The female is slightly smaller and a little less colorful. The call consists of three low, soft notes, with the last note drawn out and sounding much like someone blowing into a jug or bottle.

Hunters will be able to add the white-tipped or white-fronted dove (right) to their game bag this season for the first time. Whitetips feed alone or in pairs, but never in flocks.



MOURNING DOVE BY BILL REAVES

Although considered to be a migratory species under the Migratory Bird Treaty Act, the Texas population of white-tipped doves is migratory only in that some occasionally fly back and forth across the Rio Grande. They spend most of their life within approximately a three-mile radius and prefer to walk instead of fly. When they do fly, their course is low, direct and usually covers only a short distance.

These adaptable doves nest in native brush and citrus, and even have been seen nesting on patios in urban areas. Their long breeding season lasts from late February through mid-August. Two pale white eggs are laid in a nest of twigs and vines and incubated by both parents for two weeks. The young stay in the nest for two weeks before

fledging, and both parents take turns feeding and caring for them. Like all doves and pigeons, adult whitetips feed their young a secretion from their crops known as "pigeon milk."

The whitetip may be seen feeding alone or in pairs but never in flocks. Native berries and seeds, citrus seeds and several agricultural crops such as corn, sorghum and sunflowers comprise its diet. During the spring, some whitetips eat citrus seeds as the main part of their diet.

It is anticipated that most whitetips will be taken while pass shooting for whitewings or mourning doves around native brush tracts and citrus orchards. Since the whitetip does not feed in flocks, it probably will be difficult to obtain in large numbers.



WHITE-TIPPED DOVE BY CHARLES F. SPIEKERMAN JR.



WHITE-WINGED DOVE BY RICHARD HAVERLAH



BILL REAVES

Since whitetips inhabit native brush thickets and citrus orchards, most probably will be taken by hunters pass shooting for whitewings or mourning doves around this type of habitat. Whitetips feed on the ground in openings and trails and would rather walk than fly. Flight is low, direct and usually covers a short distance.



WHITE-TIPPED DOVE BY BILL REAVES



MOURNING DOVES BY RAY SASSER



INCA DOVE BY FRANK AGUILAR



MOURNING DOVE BY RICHARD HAVERLAH

Production studies and incidental observations so far this year indicate the whitetip is doing very well despite—or perhaps because of—the freeze that devastated the citrus orchards in the Lower Rio Grande Valley. Nesting continues to take place in the dead branches of citrus and an abundance of citrus seeds from freeze-damaged fruit remain in the orchards. Since spring food supply is often an important limiting factor, this is one year that white-tips most assuredly will have more than they can eat. The native brush in the Valley also is producing good cover and food supplies.



MOURNING DOVE BY RAY SASSER

Mourning doves, whitewings and whitetips are classed as migratory birds; however, the whitewing is the only true migrant. Mourning doves reside throughout the state and whitetips only make occasional flights back and forth across the Rio Grande.

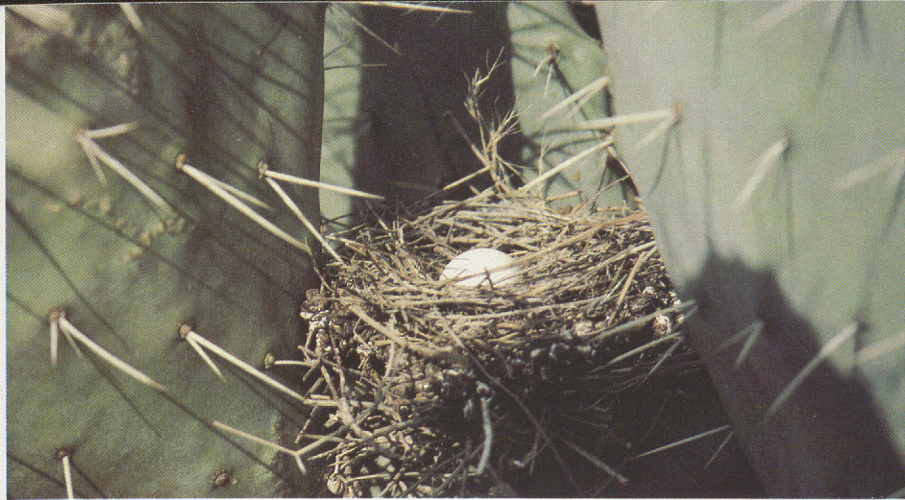
In this day of vanishing species, the white-tipped dove is a refreshing success story. This adaptable dove will be around for generations to enjoy, if given the habitat to exist. It's the least we can do. To this end 12 native brush tracts purchased by the department since 1957 primarily for white-winged dove habitat have also provided important habitat for whitetips and a variety of other tropical and temperate wildlife. Persons wishing to contribute to the department's brush acquisition program may do so by purchasing the \$6.00 white-winged dove stamps at department offices and most license outlets. * *



WHITE-WINGED DOVE BY ED DUTCH



WHITE-WINGED DOVE BY RICHARD HAVERLAH



BILL REAVES



WHITE-TIPPED DOVE NEST BY RON GEORGE

1984-85 DOVE SEASONS

Texas again will have three dove hunting zones, with provision for a special white-winged dove hunting season in a portion of the South Zone during the first two weekends of September.

The names of the zones were changed: the Panhandle Zone is now the North Zone; the Central Zone retains that name, and the Rio Grande Zone now will be referred to as the South Zone.

Season dates, bag limits and shooting hours for the various zones are as follows:

NORTH ZONE

Mourning dove season is September 1-November 9, 1984; shooting hours one half hour before sunrise to sunset; daily bag limit 12 mourning, white-winged and white-tipped (white-fronted) doves in the aggregate including no more than two white-winged and two white-tipped doves per day; possession limit 24 mourning, white-winged and white-tipped doves, including no more than four whitewings and four whitetips in possession.

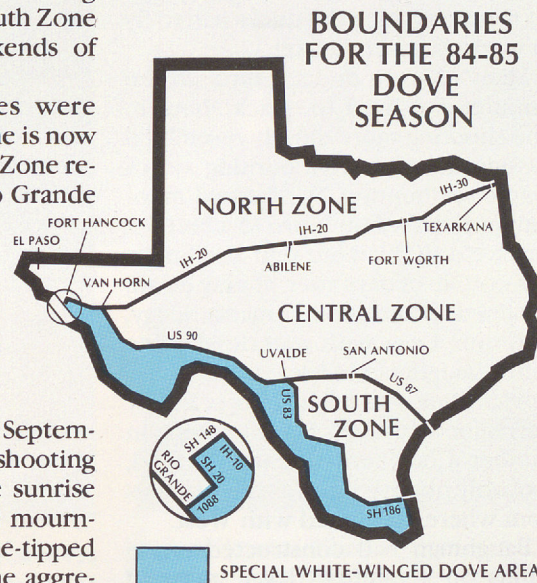
CENTRAL ZONE

Mourning dove season is September 1-October 30, 1984, and January 5-14, 1985; shooting hours one half hour before sunrise to sunset; bag and possession limits same as the North Zone.

SOUTH ZONE

Mourning dove season is September 2-November 8, 1984, and January

5-20, 1985; shooting hours, bag and possession limits same as Central and North Zones. In the Special White-winged Dove Area of the South Zone, the fall mourning dove season closes November 8, 1984.



SPECIAL WHITE-WINGED DOVE AREA

White-winged dove season is September 1-2 and 8-9; shooting hours noon to sunset; bag limit 10 white-winged, mourning and white-tipped doves in the aggregate, including no more than two mourning doves and two white-tipped doves per day; possession limit 20 doves in the aggregate, including no more than four mourning doves and four white-tipped doves. One fully-feathered wing must remain on all dressed doves at all times in the South Zone and the Special White-winged Dove Area.

Doves prefer to nest in native brush or in citrus trees, but occasionally one chooses a more unusual place, such as the mourning dove nest, above left, built on top of another bird's nest among the cactus spines. Whitetip and whitewing nests usually contain two pale buff-colored eggs. Mourning dove eggs are white.



MOURNING DOVE NEST BY BILL REAVES

September Teal

Article and Photos by Ray Sasser

It was a lazy sort of duck hunt. We'd been burning daylight for nearly an hour when we climbed aboard the gargantuan marsh buggy near High Island and started chug-chug-chugging down the muddy road that wound its way through thousands of acres of second-growth rice.

Forrest West, the Los Patos Guide Service honcho, seemed unconcerned by the tight pods of opening-day teal weaving their unpredictable flight patterns above the September rice. As he dropped his first party of hunters off beside a flooded field that was heavy with rice and midget ducks, I noticed another unusual thing about this duck hunt—there weren't any decoys.



"Aw, you don't need decoys to hunt teal on opening day," said West when I pointed out the apparent breach in waterfowling etiquette.

The guide, David Quiton and I piled off the marsh buggy long after the other hunters had gotten off. It was a pleasantly cool morning for mid-September on the upper Texas coast. We were dressed in jeans, camo T-shirts and tennis shoes. The muddy ricefield water felt lukewarm when we waded through a boggy spot and clambered out onto a levee.

Bluewings were working the field in singles, pairs and small flocks. They homed in on open pockets of water spread through the standing rice and seemed enamored of long slashes of open water. We set up—if you can call hunkering down on a muddy levee setting up—on such a slash, fanning out to form a three-man shotgun gauntlet through which the ducks had to fly to work the open pocket.

Many of them dodged through the gauntlet and lived to quack about it. The shooting more closely resembled passing chances at mourning doves than duck hunting. We burned more shotgun shells than I care to admit before we'd all filled our four-teal limits.

A couple of days later, at gray dawn, I hopped aboard another marsh buggy. This time I was with waterfowl guide Sonny Baughman of Los Ganzos Guide Service fame, and fellow hunter Buddy Harris for a taste of classic gunning in another Chambers County ricefield, probably not five miles as the teal flies from where I'd hunted with West.

Baughman had constructed crude blinds on a ricefield levee and had thrown out three or four dozen decoys, including some snow goose floaters that would make the spread more obvious in the rice stubble. Baughman's marsh buggy flushed literally thousands of bluewings from the field and the ducks began to trickle back shortly after shooting time.

It was one of those rare mornings that every serious waterfowler should experience at least once in his lifetime. Without exaggeration, we figured that perhaps 2,000 ducks flew within shotgun range that morning. The hunt was over almost as soon as it began.

We sat in the blinds for an hour after we'd finished our limits, photographing wave after wave of dapper blue-winged teal and marvelling at their



aerial ability. "They're really something to watch, aren't they," said Baughman, who's witnessed the same spectacle hundreds of times.

They were, indeed, something to watch! Squadrons of the little ducks, roughly half the size of mallards, zipped low across the ricefield, spied the decoys and buzzed in. Some splashed down, looked at the plastic ducks and then took off to seek more amiable company. Others merely blitzed past, putting on a precision show with that low, weaving, erratic flight style, dipping low over the decoys, then zooming straight up in a maneuver that seemed to pull enough G-force to sag their tiny face muscles.

I haven't missed a teal season in more than a decade now, a fact that makes me something of a rarity among



the Texas waterfowling community. Only about 10 percent of Texas duck hunters consider the early September teal-only hunt worth the bother. For me, teal represent a sort of preseason workout, like spring training in baseball—a time to shake off cobwebs from

Placing decoys where the teal can see them is the secret to success since the curious little ducks usually fly over for a look when something interests them.

a dusty shooting style, put fresh lines on decoys anchors and give a bored, out-of-shape retriever a refresher course on ducks before the serious hunting begins in November.

“Teal in general don’t get enough

respect,” notes Charles Stutzenbaker, program leader for Texas Parks and Wildlife’s Statewide Waterfowl Program. “They really ought to get a medal for being such good ducks. During the regular duck season, many a slow hunt has been saved by green-winged teal. In September, there’s an entire nine-day season scheduled just for teal, primarily bluewings.”

Any teal (bluewing, greenwing or cinnamon) is legal game during the September season. Bluewings make up about 85 percent of the teal harvested during the special hunt, which began back in the mid-1960s.

The Central Flyway Technical Committee was looking for a way to increase duck hunting recreation without harming the resource. When they studied the harvest records, blue-winged teal

jumped off the pages at them. Here was a duck that migrated south long before other ducks and did not feel content to spend winter months in the southern United States. The bulk of the bluewings migrated into Central and South America before November waterfowl seasons even began. Bluewings constituted a resource that was not being utilized by American hunters.

The upshot of this discovery was a three-year experimental teal season that developed into a permanent program in several states. Northern production states dropped September teal hunting because of the abundance of other ducks in the field that time of the year and the high rate of hunter violations as other ducks were mistaken for teal.

Of the states that have retained an

early teal season, the most successful in terms of game bagged have been Louisiana and Texas. The fact that only about one Texas duck hunter in 10 participates in the September season is due to several factors, explains Stutzenbaker. "Many hunters can't get excited about hunting ducks in September. They're bothered by heat, snakes and mosquitoes. Others aren't happy with the four-bird bag limit."

During the regular duck season, teal are classified as 10-point birds within the 100-point system. A hunter conceivably could kill 10 teal during the regular duck season. During teal season, the bag limit is four teal per day.

Texas representatives to the Central Flyway meetings have lobbied unsuccessfully for additional birds in the September daily bag allowance. Since the average kill is fewer than two teal per hunt in September, increasing the bag limit would not have an impact on the overall resource. Opposition to a six-teal-per-day limit has come from the northern production states that are not allowed a September hunting season and have virtually no bluewings around when their regular duck hunting season begins.

Good teal hunting is dependent on water and the upper coast provides the best shooting. Teal are about half the size of mallards and they have very fast wingbeats, a good key to identification. They appear to fly faster than big ducks, but they're quicker, not faster.

In a good spot, a four-bird limit often is filled in a matter of minutes. Like the character "Quick Carl" in the candy bar commercial, teal do everything in a hurry.

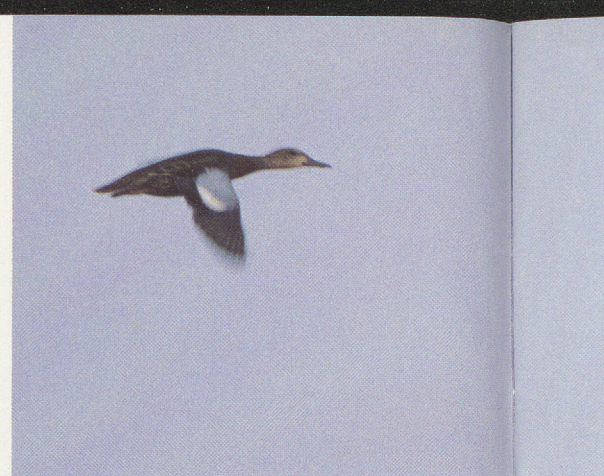
The blue-winged teal's early migration tendency is apparently an evolutionary adaptation that has worked well for the little duck, a species that seems to be holding its own in terms of overall population. Bluewings are not only the first ducks to head south in the fall, they migrate farther than do most of their fellow waterfowl. They're also the last birds to fly north in the spring, often arriving on nesting grounds three weeks behind ducks sticking to a more traditional schedule.

"The late nesting means the prairies

have a little more grassy growth on them, providing just a little edge in hiding nests and young from predators," Stutzenbaker points out. "Bluewings have the ability to nest quickly and, despite arriving late, they actually take their young south well before ducks that began nesting while bluewings were still migrating north."

The fact that bluewings are merely using Texas as a brief pit stop in their Grand Prix-like migratory circuit has a distinct impact on hunting success.

"Bluewings have a tendency to be here today, gone tomorrow," Stutzenbaker says. "If you hunt them pretty hard, they'll just pick up and leave. The history of September teal hunting has been excellent shooting the first couple of days, with success falling off as the season progresses.



"That can vary, of course, if you locate some birds that haven't been hunted or if a cold front comes along in the middle of the season and pushes a fresh batch of birds on down."

In Texas, the best teal hunting is dependent upon water. The upper Texas coast provides the top shooting,





particularly in conjunction with rice production areas. Flooded, second-growth rice provides the migrants with a ready food supply and the water they need for rest stops.

Stutzenbaker adds that the lower coast produces good hunting if enough water is available. The third choice for Texas bluewing hotspots are the playa lakes of the Panhandle. Finally, teal hunting in September can be unpredictably good on any inland reservoir with plenty of shallow flats. Reservoir hunting is generally best on the upper end of a lake where shallow water is most appealing to the ducks.

Wherever you hunt them, with the possible exception of opening day in a redhot ricefield, decoys are the key to teal hunting success. These little ducks respond poorly, if at all, to standard duck callers but, the advice of Forrest West notwithstanding, they're absolute suckers for decoys.

"Teal, like most ducks, are very gregarious to start with," Stutzenbaker explains. "They do a lot of low-level flying. When they see something that interests them, they buzz over for a look. Sometimes they're intent on landing with the decoys, but often they're just flying over to look. They're apparently very curious ducks, which makes them even more susceptible to decoys. Remember, also, that September teal are ducks that have not been hunted before. The majority of the birds are juveniles, young of the year. They're apt to be gullible under just about any circumstances."

So placing decoys where they can be seen by passing teal is the secret to hunting success. The other important thing to remember is that ducks other than teal are strictly off-limits. There may be quite a few other early migrants present during the September season so a hunter must be sure he

shoots only teal.

Fortunately, these early migrants are easy to identify. As we said before, they're small ducks, about half the size of a pintail or mallard. Their stubby little wings must flap very fast to displace the same proportion of air displaced by the wings of a full-sized duck. Teal, therefore, have very fast wingbeats, a good key to identification. They also display an erratic flight pattern with a tendency to fly low to the water in tight flocks.

Once the birds approach within shotgun range, the pale blue wing patches are readily visible on bluewing drakes and hens. The drakes this time of the year lack those striking cheek patches that are so obvious later in the fall. Cinnamon teal, which are rare in Texas, share the bluewing's pale patches on the forewings.

such as high-velocity 6's or even 7½'s.

For hunters accustomed to shooting pintails or mallards hovering over decoys, the dipping, diving antics of high-speed teal can be disconcerting. Because of the fast wingbeats, quick movements and small size, these ducks appear to be moving faster than big ducks but that's not really the case. They are quicker, but not faster.

Best bet is to use an open-bored shotgun, like improved cylinder, which is tops for steel shot in most waterfowl situations anyhow. The teal's affinity for decoys means close shots are the norm. Treat the teal more like doves than ducks and the shooting won't present any special problems. Just be sure to pack more shells that you think you'll need to fill a four-duck limit.

And remember that a quick teal hunt works just fine in combination with



Green-winged teal, which are common during September, are the smallest of common ducks. They're named for their green wing speculums. Hens are very drab little ducks, but drakes sport distinctive green eye patches on rust-colored heads.

Although teal are small ducks, they're nonetheless tough little waterfowl, requiring high-velocity shotshells for clean kills. No. 4 shot is the best choice for hunters in zones that require non-toxic steel pellets. Hunters who shoot lead may prefer a smaller shot size,

other hunting and fishing opportunities to fill a hot September day. Coastal speckled trout fishing is often good this time of the year and inland sportsmen can combine teal hunting with freshwater fishing. Dove season is open in some parts of the state.

Not that bluewings need any help. They're fascinating game in their own right, truly waterfowl after a Texan's own heart. You see, like most of us, teal don't particularly care for that nasty northern weather. That's what the September season is all about. * *

1984-85 Hunting, Fishing Licenses Available

All 1984-85 Texas hunting and fishing licenses and special stamps have been delivered to Texas Parks and Wildlife Department offices and retail license outlets across the state and are available for sale.

Department officials remind sportsmen that all 1983-84 licenses expired on August 31. The 1984-85 licenses are valid from September 1, 1984, until August 31, 1985.

Resident hunting and resident fishing licenses are priced at \$8, and resident combination hunting and fishing licenses are \$12.

Texas' state waterfowl stamps are \$5, and are required in addition to the federal duck stamp and a valid hunting license for hunting waterfowl, including the September 15-23 teal duck season.

White-winged dove hunters also are reminded that a \$6 White-Winged Dove Stamp is required in addition to a valid hunting license for hunting that species during the whitewing season September 1-2 and 8-9 in the white-winged dove hunting area of the South Zone.

The department's 1984-85 hunting and fishing regulations guides, containing complete information on regulations and license requirements, also are available at TP&WD offices and retail license outlets.

Hill Country Deer Harvest Far Below Maximum Potential

If the entire deer herd in the Edwards Plateau of Central Texas was managed for hunting like the herd on the Kerr Wildlife Management Area, the region's deer harvest would be higher than the entire statewide total each year.

The Kerr WMA, operated by the Texas Parks and Wildlife Department, is a 5,500-acre tract where public hunting is part of the overall deer management program.

Horace Gore, deer program leader for the TP&WD, said he examined the annual deer harvest figures from the Kerr and projected them hypothetically to cover all of Kerr County. He then expanded the model to include adjoining counties, then the entire Edwards Plateau.

"While these projections are hypothetical, I think they can illustrate that the deer range in the Edwards Plateau is being utilized by too few hunters, and the annual harvest of

Texas Wild Turkey Federation Donates Scanner to TP&WD

The Texas Wild Turkey Federation has donated \$780 to the Texas Parks and Wildlife Department for purchase of an electronic scanner to be used in wild turkey research. Don Wilson, upland game bird program leader, said the new instrument will enable biologists to track the movements of larger numbers of Rio Grande turkeys with greater precision than in the past.

"We (the department) appreciate this donation, and feel it's representative of the increasing support our agency is receiving from conservation and sportsmen's organizations in the state who want to help wildlife with direct financial contributions," Wilson said.

Wilson said the scanner is used with a portable telemetry receiver which can be operated on foot or from a vehicle. The new device scans all channels automatically, and offers the potential for tracking up to 200 transmitter units. The unit already is in use monitoring the movements of transplanted turkeys in South Texas, Wilson said.

OUTDOOR ROUNDUP

COMPILED BY
THE PARKS AND WILDLIFE
DEPARTMENT'S NEWS SERVICE

Commission Sets Teal Season

The Texas Parks and Wildlife Commission has set the special early teal duck season for September 15-23 statewide.

The commission also retained the same bag and possession limits as last year, four teal ducks (blue-winged, green-winged and cinnamon) in the aggregate per day, eight in possession.

Shooting hours are sunrise to sunset.

antlerless deer is much lower than it should be," Gore said.

Gore believes this conservative harvest has resulted in serious deterioration of the habitat, which already has affected deer body size and antler development. If allowed to continue, the deterioration will ultimately affect deer numbers.

As an example, Gore pointed out that during the 1983-84 hunting season, a total of 260 hunters at the Kerr WMA took 160 deer, of which 67 were bucks and 93 were antlerless. The county-wide totals were 9,424 hunters harvesting 6,832 deer. "If all of the county were managed like the Kerr area, the totals would have been 32,770 hunters harvesting 19,657 deer," Gore said. "This would be an increase of 247 percent in numbers of hunters and 188 percent in the harvest."

Gore believes that these figures are conservative in calculating what the county-wide harvest could be, since the deer-per-acre ratio on the

Kerr area actually is lower than on most of the county's deer range.

When counties adjoining Kerr County were figured in the formula, Gore found that the projected deer harvest would be 136,583 deer taken by 227,638 hunters. These figures convert to a 188 percent increase in harvest, and a 283 percent rise in hunter numbers.

"When we look at the entire Edwards Plateau, the Kerr area formula would result in an annual harvest of 435,327 deer," Gore continued. "Compare this to the normal statewide harvest of 300,000 and you see how dramatic the difference is."

If this 400,000-plus annual harvest were achieved, it would represent 25 to 30 percent of the deer herd, which is the harvest level biologists consider as ideal for maintaining a quality deer herd in Texas.

"The point is that we still have more deer than the range can support in the Edwards Plateau and other regions as well," Gore said. "And an

insufficient annual harvest of antlerless deer is the main reason."

Gore said the solution to the problem lies primarily with the landowner but hunters are also involved. "We need to get more hunter access to the antlerless segment of the herd," Gore said, adding that each year more than half the department-issued antlerless deer hunting permits go unused. "Landowners need to accommodate more hunters, and hunters need to take more antlerless deer," Gore asserted.

Statistics show that a typical 5,000-acre Kerr County ranch each hunting season accommodates about 45 hunters who harvest 44 deer, of which 29 are bucks and only 15 are does. "The Kerr area antlerless harvest of 93 is much closer to the number needed for a ranch that size," Gore said.

Reservoir Controls Raise Questions

Who owns Texas' reservoirs? How about the fish and fishing regulations? Who controls water levels?

These questions, often asked by fishermen and other recreationists, have few simple answers.

Even though a reservoir may be classified as "public" in terms of access, actual control of the reservoir and the lands around it may be under the aegis of multiple interests, both public and private.

Ernest Simmons, inland fisheries section chief for the Texas Parks and Wildlife Department (TP&WD), said the Parks and Wildlife Commission has authority to establish fishing regulations in all public waters. The fish are considered by law to belong to the people of Texas.

Beyond that, the situation is more complicated. "Confusion is understandable, because in some instances one public agency builds a lake and another public agency owns all the water," Simmons said. "The shoreline may be owned by either or both the agencies, by some other agency or by private interests."

"The managing authority of a reservoir generally is the one which controls certain primary functions such as flood control, power generation or water supply," said Simmons. "Thus, the managing authority may be the U.S. Army Corps of Engineers, a city, a water district, river authority, energy company or a state or federal agency."

How can a citizen voice his opinion about the way a lake is managed?

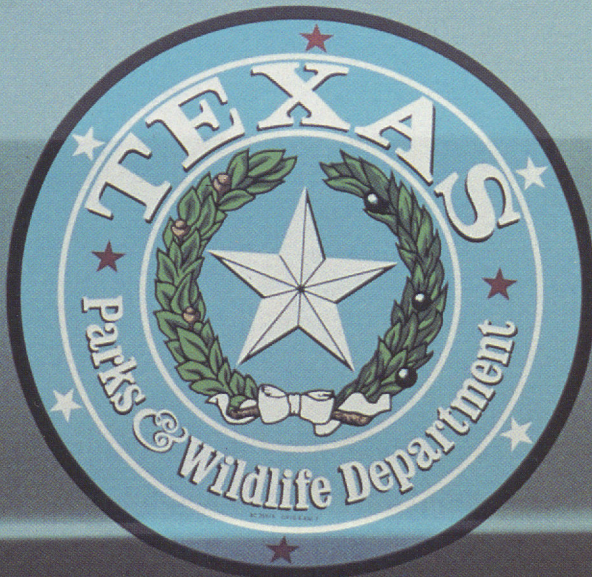
Fishery management is the responsibility of the TP&WD. Most other

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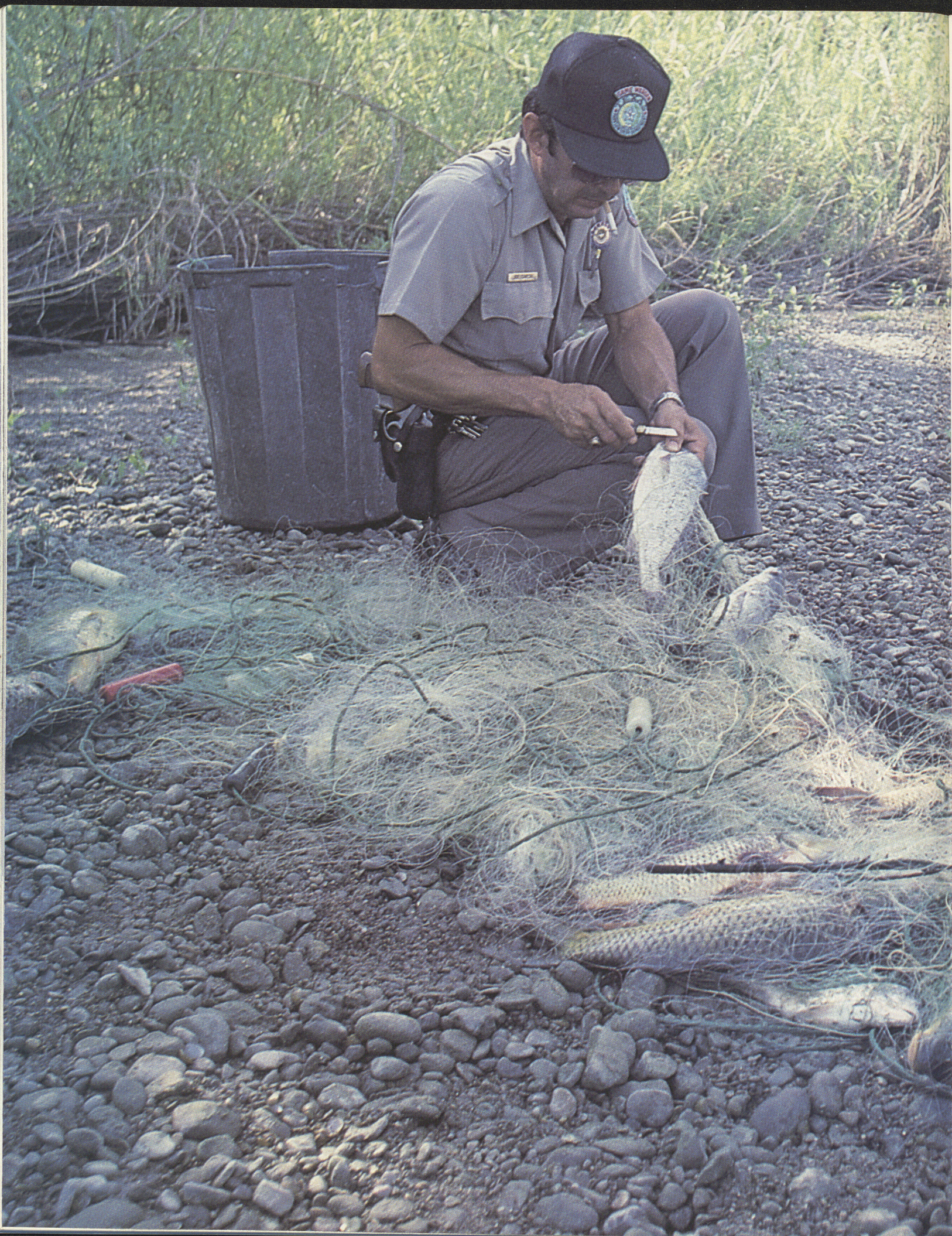


Texas Game Wardens

Guardians of our
Natural Resources




NEWPORT



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Many people are responsible for Texas' abundant natural resources, and no group deserves more credit than the state's game wardens. Laws and regulations passed by the Texas Legislature and the Texas Parks and Wildlife Commission would be nothing more than words on paper without enforcement. Game wardens' sense of duty and commitment to their jobs make them some of the state's most dedicated conservationists.

The science of wildlife management has developed to the point that we now enjoy some of the best hunting and fishing in the nation, and with such advances the game warden's job becomes more complicated and demanding. We hope this special section of *Texas Parks & Wildlife* magazine will help the public better understand the responsibilities of the Texas Parks and Wildlife Department game wardens and the role they play in protecting our natural resources.

Statutory responsibilities assigned to the state's game wardens include daily investigation of or patrol for game law violations; sport fishing violations in inland and coastal waters; commercial fishing violations in inland and coastal waters; violations of the Texas Water Safety Act; water pollution; illegal taking or dredging of state-owned sand, shell or gravel; the Penal statutes prohibiting criminal trespass and the discharging of a firearm from a public road; the Public Beaches and Antiquities Sections of the Natural Resources Code; the Endangered Species Act; the Protected Nongame Species Act; the

Endangered, Threatened or Protected Native Plant Act and the Potentially Harmful Fish and Fish Egg Importation Act. They also assist state park peace officers in the enforcement of state statutes and park regulations.

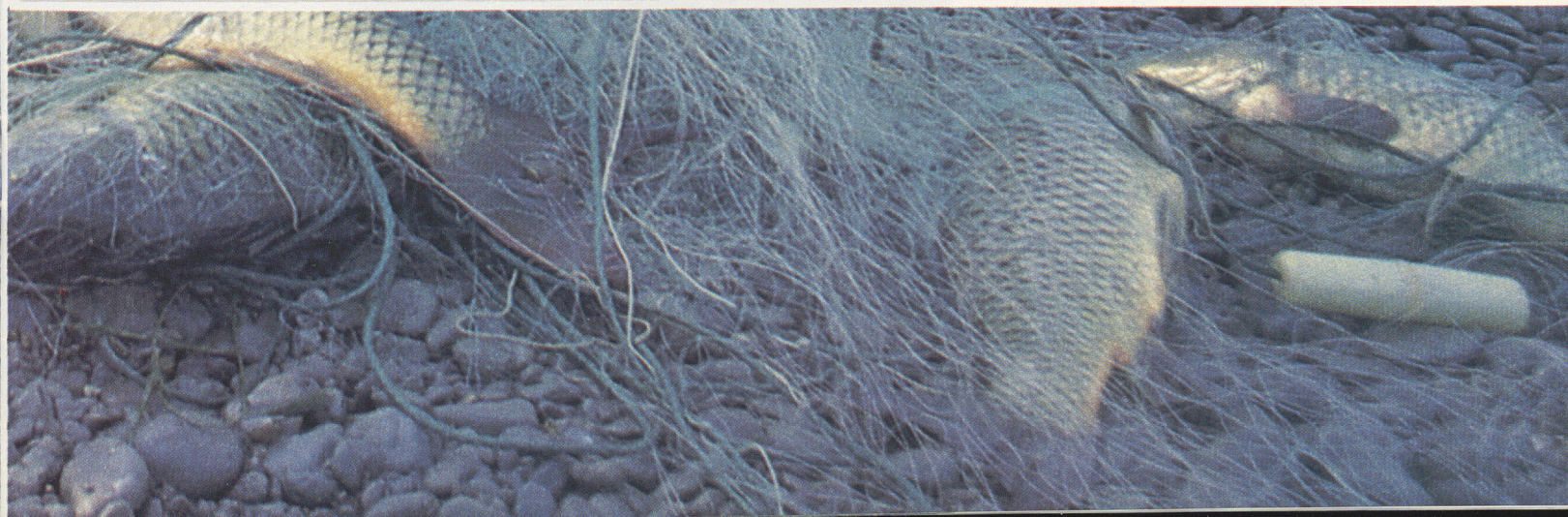
The increasing popularity of recreational boating, both along the coast and on the state's many reservoirs, has added to the game warden's responsibilities. Texas has more than one-half million registered boats, each of which is required by law to operate under safe conditions and with equipment designed to protect the boat's occupants. It is the game wardens' job to see that these requirements are met, and enforcement of water safety laws has become a major part of their responsibilities, consuming many hours of their time.

Game wardens on the Texas Coast found their responsibilities increased with passage of House Bill 1000 by the Texas Legislature in 1981. The bill prohibited the commercial sale of redfish and trout caught from Texas waters and authorized the department to establish rules and regulations governing the importation of these species from other states. Enforcement of these regulations is a time-consuming and complicated part of the coastal game warden's job. In addition to verifying that incoming redfish and trout are properly documented, the 100 wardens assigned to the Texas coast spend many hours patrolling the Gulf to apprehend violators, monitoring the taking of shrimp and oysters and enforcing numerous other laws.

Wardens issued more than 47,000

citations in 1983. But apprehending violators is only one of their responsibilities. They spend many hours on preventive patrol in rural areas and on public waters and their conspicuously marked patrol vehicles and boats serve as a crime deterrent. In some of the more sparsely populated counties in the western half of the state, the game warden often is the only law enforcement officer on duty during the late night and early morning hours. And as you will read on the following pages, they also are authorized and directed by executive order to implement or assist in search and rescue during tornadoes, hurricanes, floods or other natural disasters. Wardens are on call 24 hours a day and in areas with heavy hunting and fishing activity it is not unusual for them to leave home before sunrise and not return for 48 to 72 hours. A game warden's job is filled with many aesthetic rewards, but as with any branch of law enforcement danger is always present. However, unlike some other branches of law enforcement, game wardens have the opportunity for many positive contacts with the public and consider such contacts a major part of their jobs.

Texas game wardens have increased in number from the first six hired in 1919 to almost 400 today. Although their specific duties vary according to the area of this huge state in which they work, guarding our natural resources will always be their primary responsibility. They have earned the gratitude and support of all of us who enjoy and appreciate our outdoor heritage. * *



Warden Boot Camp

Article by Ilo Hiller and Photos by Leroy Williamson

Describing the Texas Parks and Wildlife Department's Game Warden Academy as the best training facility for conservation officers in the nation may sound like a Texas brag to those who are not familiar with it, but a visit to the academy quickly confirms its well-deserved reputation.

Just being accepted for training there is a major achievement. The 25

within the borders of our state. Hours are spent studying the department law book, attending classes in fish and wildlife science and doing homework.

One of the responsibilities of the Parks and Wildlife Department is the enforcement of the water safety act, so the cadets must be schooled in that phase of their duties as well. This means more laws to learn in addition to the basics, such as how to back a

boat trailer; launch, operate and maintain a boat; and perform basic repairs to the motor. Swimming, rescue procedures, first aid and CPR also are included in their curriculum. And although it isn't pleasant to think about, they must be taught how to recover a drowning victim.

Firearm training classes are supplemented with instructions in hunter safety procedures. This qualifies the cadets to be volunteer hunter safety instructors once they have graduated. The Department of Public Safety also teaches the cadets a course in firearms ballistics and evidence.

Since the cadets will be commissioned peace officers as well as game wardens when they leave the academy, they must receive a certain amount of law enforcement training in their program. Classes in civil defense, crowd control, narcotics, community relations, courtroom procedures, police stress, defensive driving, patrol tech-



to 30 men and women selected for training have been through extensive screening interviews. The 1984 class of cadets was chosen from among 1,788 applicants, and the time lapse between application and acceptance for many was more than a year.

Talking with some of the cadets about their 22-week training session reveals the scope of the program.

As you would expect, they must learn all of the state and federal game laws and be able to identify the many different species of animals that reside



niques and the proper way to issue citations help prepare them for their many responsibilities. They even have a class that teaches them how to fill out reports, records and other paper work related to the job.

When several of the cadets were asked if they realized just what they had signed up for when they applied for game warden training, most of them admitted they knew the basics involved, but had no idea how tough the program was going to be. The physical and mental training they receive is intense, and the pace never lets up during the entire session.

Most of the cadets thought they were in pretty good physical condition when they applied, and those who were doubtful had time to work out and get in shape before reporting to the academy. However, they quickly learned what real physical training (often referred to as physical torture) meant. One cadet said it seemed three times harder than he remembered military boot camp to be. Another cadet was sure he had moved the obstacle course's eight-foot wall back a few inches on at least two occasions when he hit it head-on while trying to get over it. The physical training never gets easy, but the cadets do become conditioned to it. They get so used to hearing their PT instructor say, "Hit

the deck," that they drop automatically and start doing push-ups. One cadet said he has nightmares that at graduation someone will say, "Hit the deck," and in unison they will drop to the floor and start doing push-ups in their new uniforms.

The purpose of physical education and the obstacle course is not necessarily to build the cadets' strength and body condition, but more importantly, to teach the cadets how to use their strength, weight and leverage to accomplish the many tasks that game wardens must perform. To do this at the academy will provide the cadet the

training was just as rough for them as it was for everyone else.

A typical day at the academy starts around 5:30 a.m. and ends between midnight and 2:00 a.m., depending on how much time the individual cadet needs for studying the material received in class that day.

When asked why he had chosen a game warden career, one cadet said he could remember the one who lived in his home town when he was a child. He had always admired that warden who managed to do his job well, and earn the respect of his community. The warden became a kind of hero;



Game warden cadets agree that physical training is a demanding part of the 22-week session. Such training teaches the cadets how to use their strength, weight and leverage and by mastering these techniques at the academy, they will be able to perform their jobs safely and effectively in the field.

ability to perform the task under field conditions more effectively and with a greater degree of safety.

When a few of the cadets were asked which part of the training they were receiving seemed the easiest, one replied, "None of it. Even the sleeping doesn't come easy. There aren't too many hours left for that luxury by the time the homework is finished." Those cadets who came to the academy from a career in law enforcement admitted they had an advantage in those classes, but had to agree that the rest of the

someone he could look up to. As a boy he had always enjoyed going to the woods with his grandfather, and he thought if he became a game warden, he would be able to do his part to make sure there were still animals around when he was ready to take his own grandchild to the woods.

These sentiments may sound a bit corny, but they were echoed in one form or another by every cadet interviewed. And if we stop to think about it, they should be the sentiments of every outdoorsman. * *



They Go Where They're Needed

by Mary-Love Bigony

There's no such thing as a typical day for a game warden. They never know when they get up in the morning what they're going to be doing that day. They may think they do, but it can change.

Each of the state's almost 400 game wardens can attest to the truth of this statement. While a warden's primary duties are enforcing Texas game, fish

trouble during an outing, you might see them in a different light.

"The weather doesn't ever get too bad for them to go out if they are needed," said outdoor writer Elwood Lebaron of Conroe. "I have seen them red-eyed from loss of sleep, gathered around a coffee pot for a minute, then back to look for a lost hunter, boatsman or trying to locate the victim of a hunting or boating accident."

The communities of Hitchcock, Santa Fe, Galveston Island, La Marque and Jamaica Beach received similar help after Hurricane Alicia tore into southeast Texas last summer. "At any time of the day or night, early or late, if a call went out over intercity radio for a game warden, one answered," said a warden who helped during that emergency. "We all performed tasks not related to our game warden duties, but they were necessary."

Flash flooding can create a state of emergency in a matter of minutes. On October 13, 1981, extremely heavy rains caused the worst flooding ever experienced in Gainesville. At 3:00 a.m., North Texas wardens began rescuing people from their flooded homes. Using boats and fighting currents in the flooded streets, wardens had to evacuate people through windows in their houses.

In May 1983, 12 boys and four counselors from the Hope School of Apple Springs saw their camping trip come to a nightmarish end when heavy rains fell on the watershed of the Pedernales River and floodwaters rose rapidly. Campers and equipment were swept downstream as the river swelled to 20 feet above normal. When the group was able to assess the situation, three boys and one counselor were missing. Game wardens from five Central Texas counties worked long hours under grueling conditions to recover the bodies of the drowning victims. It was an unpleasant task. "This was not the first tragedy worked by game wardens," said one warden. "It's heart-breaking to know it won't be the last."

As part of the Texas Civil Defense and Disaster Relief Team, game wardens have helped out in hundreds of situations similar to the ones described here. Often they are the only law enforcement officers with access to boats and other equipment necessary for rescue efforts. As certified peace officers, they also are legally obligated to enforce all state laws, and sheriff's offices and police departments fre-



Game wardens provide assistance during and after natural disasters such as the tornado that struck the North-Central Texas town of Hubbard in 1973.

and water safety laws, sometimes their days and nights are filled with rescue operations, assisting other law enforcement agencies, maintaining order and providing aid during natural disasters, presenting programs to civic groups and serving their communities in countless other ways. Maybe the only time you've ever seen a game warden is when one of them asked to see your fishing license. But if your city is ever struck by a tornado, flood or hurricane, or if you ever find yourself in

Game wardens were among the first on the scene when a devastating tornado struck Lamar County on April 2, 1982. Eleven wardens and seven patrol vehicles responded immediately to the urgent request for help that went out at 4:30 p.m. that day. Within 24 hours, 23 wardens, two district chiefs and the regional director were on the job working 12-hour shifts. They provided 60 hours of continuous service to the stricken area, including search, rescue and curfew patrol.

quently call upon them for help in apprehending or dealing with criminals.

Wardens sometimes encounter emergencies during routine lake patrols. While checking the fishing licenses of a family boating on a lake, one warden watched in horror as an infant toppled out of the boat and sank from sight. Without taking time to remove his hat, gun or boots and before anyone else had time to react, the warden dived into the lake. After some anxious moments he resurfaced and grabbed the side of the boat with his left hand while holding the safe but terrified infant in his right. Other times wardens have been required to use their first-aid and CPR skills in similar situations.

But not all of a game warden's extra duties are grim. Training they receive in public speaking at the game warden academy is put to use time and time again in their communities. They present more than 4,000 programs each year in the belief that a well-informed public commits fewer game and fish law violations and promotes conservation. Wardens also teach hunter safety and water safety classes, in an attempt to prevent many of the types of accidents they have seen.

Many wardens have had the pleasure of introducing youngsters to the outdoors. When organizations plan a day of outdoor activities for underprivileged children, game wardens are there fitting life jackets onto squirming kids, helping them bait their hooks, removing their fish for them and teaching them about angling. Youngsters from the Masonic Home, Lena Pope Home and many other childrens' homes have experienced their first deer hunt at a warden's side. A warden who accompanied a 13-year-old boy on his first hunt related the following story:

"Ten minutes after we were in the blind five does walked into the field. It's hard to describe his face, but I believe that if his eyes had gotten any bigger they would have fallen out. I don't believe he took a breath for five minutes. Finally he nudged me and whispered, 'Sir, are you shaking?' Doing my best to keep my composure I answered, 'I don't think I am.' With that he looked back across the field at the five does and said in a fairly calm voice, 'Oh, I was afraid it was me.'"

Game wardens sum up their duties in three words: apprehension, prevention and education. Those three words

cover a lot of ground. "One may find the warden a guest speaker at various civic meetings or teaching hunter safety or boating safety to tomorrow's outdoorsmen," said a veteran warden. "One day finds him assisting a Scout seeking a merit badge and the following may see him aiding in the search for an escaped felon. He possesses an



As part of the Texas Civil Defense and Disaster Relief Team, game wardens have helped out in hundreds of emergencies.

unequaled knowledge of remote areas and many times is the first on the scene of some rural tragedy."

He pointed out that game wardens perform their jobs without seeking recognition. "The warden isn't the state or local officer in front of the camera or behind the microphone at the scene of a drowning. Rather, he's the wet, silent one in the background, maintaining the recovery vessel, searching for the victim. The personal, perhaps secluded gratitude shown him by those suffering the loss seems more important to him than media recognition."

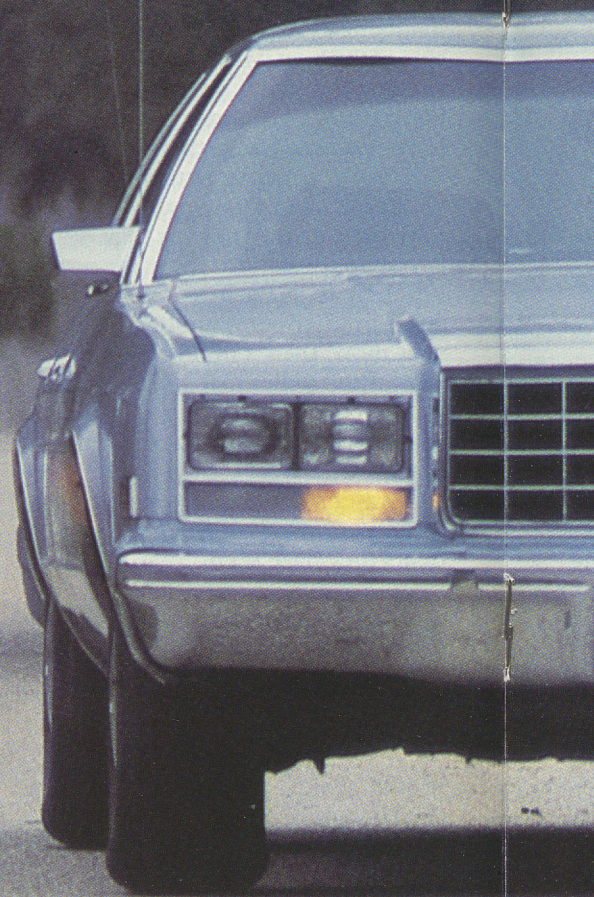
If game wardens' jobs were summed up in one sentence it would have to be, "They go where they're needed." **



Operation Game Thief

A Chance for the Public to Help Stop Poaching

by Jim Cox



The carcasses of three pronghorn antelope lay rotting in the sun on the outskirts of a Texas Panhandle town. When discovered by police and examined by a Texas Parks and Wildlife Department game warden, the carcasses represented what law enforcement officers would call a cold trail. Virtually no clues were left

at the scene, and it appeared the three animals had been killed elsewhere and dumped at this isolated spot near a municipal airport. All the meat had been taken from one of the animals, and the hindquarters were missing from a second. The third antelope was not even gutted.

A few years ago this type of poach-





LEROY WILLIAMSON

ing case might have gone unsolved for want of evidence. Instead, a thread of information provided by an anonymous caller to the Operation Game Thief (OGT) program eventually led to the arrest and conviction of two men who paid more than \$2,000 in fines for their misdeeds. The caller earned a \$400 reward from OGT for his efforts.

Texas' Operation Game Thief Program, which is patterned after the highly successful "Crimestoppers" programs used by many urban police departments, has generated some impressive statistics in a relatively short time. Since its inception in 1981, OGT has received more than 2,200 calls, and as of April 1984 the program had made possible the apprehension of 486 violators who paid more than \$103,800 in fines for 830 convictions.

organizations concerned about the poaching problem in Texas. A modest amount of the donated money is allocated for promotional materials such as decals and bumper stickers, with the lion's share earmarked for actual rewards. The department's share of the project is funding the 24-hour, toll-free OGT telephone line (1-800-792-GAME) plus the normal costs of investigating reported violations.

Officials stress that much of the



LEROY WILLIAMSON

During that period, OGT has paid \$22,150 in rewards to 121 callers.

OGT officials point out that many of the callers exhibited the true spirit of conservation by declining to accept the monetary rewards they had earned.

The rewards, which range from \$50 to \$500 or more, are paid by the Operation Game Thief Committee from the OGT fund. The six-member committee, which serves without pay, considers all cases in which convictions were obtained and disburses the rewards, paying the higher amounts for the cases judged the most flagrant. The panel meets in Austin every six months to review cases completed during the past six-month period.

Money for the reward program is provided entirely by individuals and

When a call comes in to the Operation Game Thief number a warden is sent to investigate the suspected violation.

LEROY WILLIAMSON





JIM WHITCOMB



young program's success is a result of the assurance of the callers' anonymity. Each person providing information is given an identification number, and all transactions from that point, including reward payments, are accomplished under that arrangement.

Convictions made possible by OGT run the gamut of poaching, and include commercial and sportfishing violations as well as hunting violations.

One recent case illustrated that OGT tips don't necessarily have to originate from far afield. The Austin office received a call from an individual in Dallas. The caller alleged that a particular retail fish dealer had been buying illegally marketed red drum (redfish) for retail sale.

A local game warden was contacted immediately. He checked the dealer and found two ice chests containing 75 pounds of redfish and no documentation as to their point of origin. The dealer said the fish were part of a truck delivery of seafood, and that the truck operators were scheduled to return the following Friday.

The truck arrived on time two days later, and it contained three ice chests full of redfish, or about 130 pounds. The operators had no invoices or other documentation for the fish, which were not packaged or labeled according to regulations. The truck also was not marked as required.

The original OGT call finally resulted in recovery of 256 pounds of redfish at several other markets. The three individuals delivering the fish pleaded guilty to 42 cases, but under a plea bargain arrangement were convicted of four counts each of possessing redfish for sale. They were fined \$200 plus costs on each count, totaling \$2,400 plus \$222 in court costs.

Sixteen cases were filed against store operators who bought fish from the trio, for not having a retail fish dealer's license and possessing redfish for purpose of sale. Another case involved selling for resale under a retail license. Fines assessed in these 17 cases totaled \$1,790 plus costs.

Current members of the OGT Committee are Chairman Harry Tennison of Fort Worth, Ed Spencer of Dallas, Walter Fondren III of Houston, Mrs. Clayton Williams Jr. of Midland, Howard Watson of Killeen and William LeBlanc of Fulton. * *

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4455 South Padre Island Drive
Corpus Christi, Texas 78411
512-854-4303

For 24-hour information:
512-479-4848 (Austin)
713-471-3202 (La Porte)

You can help support Operation Game Thief by sending your tax-deductible donation. Make checks payable to Operation Game Thief and mail to 4200 Smith School Road, Austin, Texas 78744. Report violations by calling 1-800-792-GAME, day or night.

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Recollections of a Game Warden's Wife

Article and Photos by Leroy Williamson

"What's it like being a game warden's wife?" Pauline Pond of Carrizo Springs repeated my question.

Her husband of more than 30 years grinned and said, "This ought to be good."

Pauline ignored him and continued. "Well, I don't suppose it's a lot different from having a normal husband." She caught her husband's look and said, "Let me rephrase that. I mean it's probably not a lot different than for a woman whose husband has a normal job, like working from 8:00 to 5:00 and having weekends and holidays off."

As Pauline Pond began to reminisce about her long marriage and Warden Jim Pond's equally long career it became obvious that being a game warden's wife is indeed different. Wardens' wives and families give up a lot because the warden is always on call, working nights, weekends and most holidays.

"Often, just when you've made plans to do something together, an emergency call comes and away he goes," said Pauline. "There are disappointments but you have to learn not to be hurt by them. That goes with the job."

Pauline pointed out that there are rewards, too, for the wife who is interested in her husband's job. But when she and Jim first were married things were very different from the way they are today.

"When Jim and I were newlyweds I used to ride with him at night and help him catch game violators," said Pauline. At that time game wardens patrolled in their personal cars. "One time it was nearly 3 a.m. when Jim and I saw a spotlight working across an oatfield. Jim eased the car through the gate and into the field and parked behind some brush. We didn't have to wait long before the violators' vehicle headed for

the gate. When it got even with us, Jim stepped out of the brush and motioned it to stop. There were four men in the pickup and they had a yearling doe.

"As Jim discussed the immediate problem with the four violators, I saw another spotlight in the lower end of the field about three-quarters of a mile away. When I called Jim's attention to the new light, he headed toward his car saying, 'You stay here and guard these people until I get back.' There I stood, flashlight in hand, facing four outlaw hunters. It took Jim about 30

minutes to apprehend the other night hunters and get back to me. As he jumped from the car he said 'Dang, Mama, I forgot to leave you a gun!'"

Patrol vehicles now are furnished by the state, and wives no longer ride with their husbands on patrol, but Pauline Pond enjoyed sharing her husband's job. "That happened a long time ago," she said. "You might say, back in the good old days. We really had some good times together."

Pauline continued her recollections. "Another time when I was riding with



Four telephones keep Pauline Pond busy taking messages for her game warden husband and a radio helps the Ponds stay in touch when Jim is away from home.

Jim, we got after a pickup spotlighting in a field. We got close enough to see two men in the pickup before they saw us and tried to get away. They were driving much too fast for the conditions; weeds were nearly as high as our car. Jim just slowly followed their trail through the weeds and came up on the pickup, which had been driven into a stock tank. The whole front end of the truck was underwater and there were two big bucks in the pickup bed, but no men in sight.

"Jim recognized the pickup and knew the owner because he had caught the man hunting illegally several times before. Jim gave me his coat and pistol and told me to get in the back of the pickup and guard the deer until he got back. It was 2:45 a.m.

"At 8:00 Jim came back with the violators. 'You have any trouble, Mama?' he asked. 'Nope,' I replied. 'Two ranch hands came over the tank dam about daylight but they ran off when they saw me sitting here with a pistol.' Jim told me the poachers had wanted to bet him \$50 there would be no deer in their truck when they got there. Knowing I was guarding the pickup, Jim offered to accept their bet, but they changed their minds."

Pauline said a game warden's job is more sophisticated today. But even though she no longer rides with Jim, she still is a partner in his work. "We have had a two-way radio in the house for 32 years and that kept me and my two daughters, when they got old enough, busy taking and relaying messages. My oldest daughter, Paulette, was issued her radio operator's license when she was 10."

Wives of newly commissioned officers, as well as veterans such as Pauline, often fear for their husbands' safety when they are on the job. Pauline had a scare many years ago, and other wives can tell similar stories.

"Before we got a radio, Jim got a call from a rancher who said that two men he knew were going to a turkey roost and kill some turkeys for Thanksgiving," said Pauline. "Jim left for the turkey roost, which was in the adjoining county. I wouldn't have worried so much, except there had been several threats made against Jim. There I was, at home with two small daughters, a husband off chasing outlaw hunters in the next county and I knew there

were some people around who said they wanted to do him bodily harm.

"My worries grew when Jim didn't come home the next day. Two days, and I was becoming frantic. On the third day I couldn't stand it any more so I called Jim's supervisor, Captain Ward, and told him where Jim had gone and how worried I was. He called the Dimmit County sheriff, who set out to find Jim. He met Jim on the way

"Being a game warden's wife has been exciting," she said. "I wouldn't trade it for anything."

Pauline stopped for moment and reflected on the stories she had just told. "Now that I recall all these good times and the things we've done together," she said, "I believe I've decided that being a game warden's wife is a lot different than being married to someone normal."



The Ponds have shared many experiences during Jim's career. "Being a game warden's wife has been exciting," said Pauline. "I wouldn't trade it for anything."

home and everything was okay. I don't know what Captain Ward said to Jim, but to this day he always lets me know where he is and how long he'll be gone. Not long after that we got our radio and staying in touch was much easier."

Not only has the radio helped the Ponds keep in touch, it keeps Pauline busy. "We also have four phones, three in the house and one in our little guest house, and two outside bells in the yard, so we don't miss any calls when Jim is needed," she said.

Despite the worries, the long nights and the husband who works long hours, Pauline has few complaints.

She looked at Jim and said, "Oh, you know what I mean. I don't know many women who have done all the things I have. But mostly, it's just life. You live it to get the most out of it and to do all the good you can for others. Jim and I have always tried to do that and I think most other people try the same thing."

As I was leaving the Ponds' home, Pauline stopped me.

"Now I have a question for you," she said. "Since we now have female game wardens in the field, are you also going to do a story about what it's like to be a game warden's husband?"

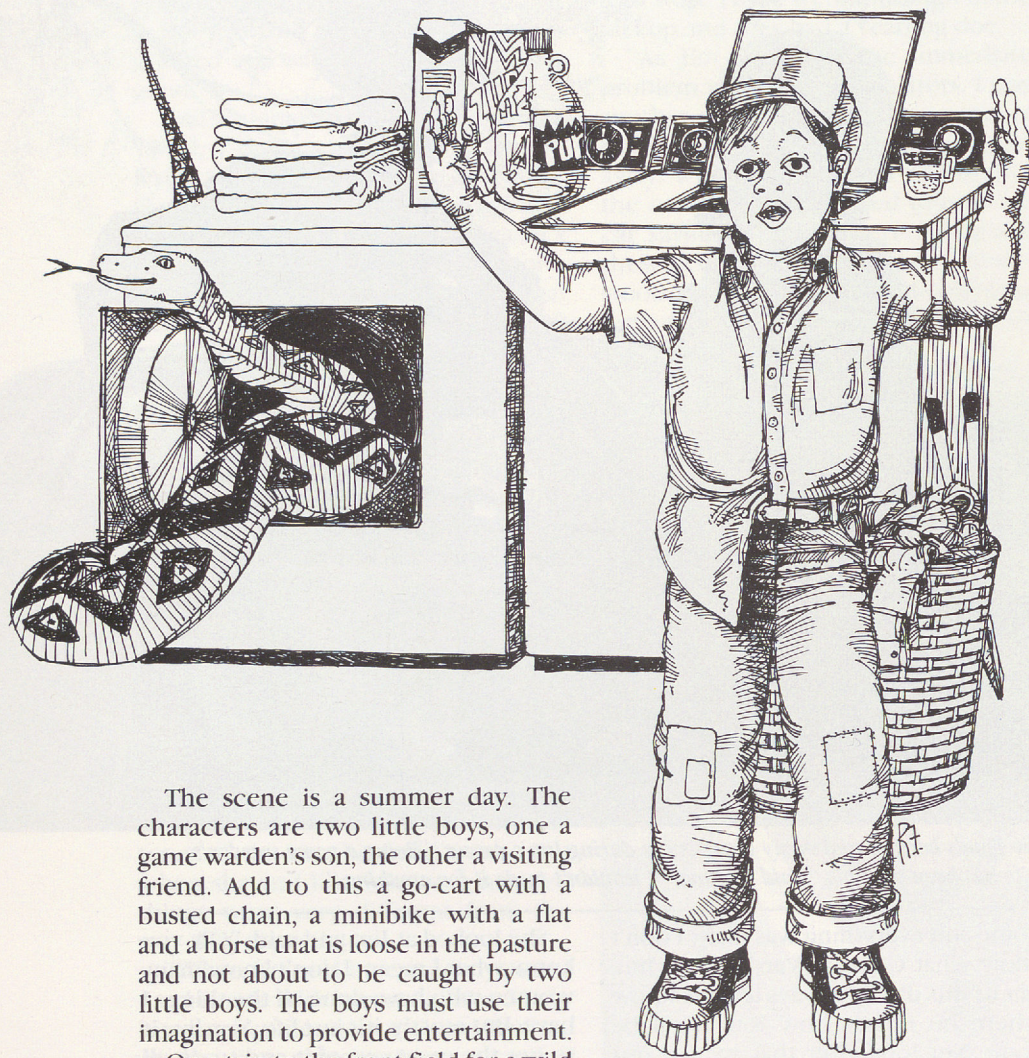
That's another story for another time.

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The Snake That Got Away ...Or So We Hope

by J.C. Romines, Game Warden, Jacksboro

Reprinted from
The Texas Game Warden



The scene is a summer day. The characters are two little boys, one a game warden's son, the other a visiting friend. Add to this a go-cart with a busted chain, a minibike with a flat and a horse that is loose in the pasture and not about to be caught by two little boys. The boys must use their imagination to provide entertainment.

On a trip to the front field for a wild tomato fight, the two are sidetracked by the discovery of a bull snake in the front yard. Instant entertainment! Now the average American boy would grab the nearest hoe and chop, chop, no more bull snake. Just the story to tell. But remember, one of these boys is a game warden's son. He has been taught that there are good snakes and bad snakes, and the bull snake is a good snake. Nobody in this household kills a bull snake—except Momma, that is.

To Momma a snake is a snake, and woe to the snake that gets in her way.

But just because you don't kill bull snakes doesn't mean you can't have fun with them. Any boy who has ever messed with a bull snake knows that if you can hem it up and poke it with a forked stick it will coil up, hiss and strike at you. In general it looks much more ornery than any old rattlesnake. So if two little boys can get the snake hemmed up with its back against the

wall on the front porch, all kinds of fun can be had. Except you hadn't ought to hem up a snake under the vent that goes to Momma's clothes dryer.

"Momma, there's a snake in your clothes dryer," yelled the two excited little boys a moment later.

"What?"

"There's a snake in your clothes dryer!" they repeated.

"How do you know?" asked Momma.

"We saw it go in there."

"And what caused it to go in there?"

"We dunno," answered the innocent-looking boys.

After thinking a moment Momma said, "Okay, I'll turn on the dryer and maybe the heat will drive it out." She headed for the washroom and the two boys headed for the front porch. The old dryer came on with a roar as the boys waited in ambush. Sure enough, the snake stuck its head out.

"Okay, Momma, it's coming out!" shouted the boys. Momma turned off the clothes dryer and the boys were poised for the strike. The snake stuck its head out a little farther, took a look around and, then disappeared back up the vent pipe in a hurry.

"Momma, it went back in."

"Okay, I'm going to turn the dryer on again and you boys get away from there and let it come out."

The machine roared into action, and the boys stood pressed against the wall, hopefully out of sight of the snake and Momma. Once again the snake stuck its head out and looked around, but this time it plopped out on the front porch.

"Okay, Momma, it's out now."

Momma turned off the dryer as the boys pounced on the snake. This was followed by struggling, hissing, thrashing and then—zip—the snake went back up the vent pipe. For a moment there was stunned silence, then, "Uh, Momma, it went back in."

The front door opened and, in that slow, low voice that the son had long ago learned to pay attention to, Momma said, "I told you boys to get away from there and let that snake come out."

"Yes, Momma." The boys abandoned all thoughts of ambush but were still determined to watch. Once again, Momma turned on the old machine. It roared for a moment and then—whomp—it stopped. Momma unplugged the dryer and vacated the

washroom, placing towels along the floor at the bottom of the door.

A tired game warden Daddy came home, plopped into an easy chair, kicked off his boots and stuck his nose in a newspaper.

"We've got a problem," said Momma.

"What?" asked Daddy, his nose still in the newspaper.

"There's a snake trapped in the clothes dryer."

"Well turn it on and maybe the snake will come out," said Daddy, his nose still in the newspaper.

"I tried that," said Momma in that low, slow voice Daddy also had learned to respect.

Daddy put down the newspaper. "Well, what happened?"

Momma looked at the two little boys across the room. "Ask them."

The boys, nervously shuffling their feet, finally told the whole story. Daddy evaluated the situation, then stuck his nose back in the newspaper and said, "Okay, I'll get it out in the morning."

Momma was indignant now. "You mean you are going to leave a snake in my dryer all night?"

"Yeah, it's probably dead by now anyway," answered Daddy, nose back in the newspaper.

Now Momma was very indignant. "You mean you are going to leave a dead snake in my dryer all night?"

Daddy realized he had said the wrong thing and removed his nose from the newspaper. "Honey, I'm tired and besides it's too dark in there to see how to get it out." Momma stomped from the room. The two little boys had already disappeared. Daddy finally got back to his newspaper.

Next morning Daddy was reminded of the snake before he got his coffee. Now as a game warden his ability is unquestionable, but as an appliance repairman it is nonexistent. Nevertheless, he got his tool box and set about the chore at hand. To get to the back of the dryer he moved it from the wall, and when he looked behind it he discovered the vent pipe was off the back of the dryer. He didn't know if he pulled it off when he moved it or if it was already off. The answer to this question becomes more important as the story unfolds.

Any screw that would unscrew, he unscrewed. Any bolt that would come off, he took off. Finally the machine was reduced to a pile of bolts, nuts, screws, panels and compartments. Some of the compartments could not be dismantled, and he had to feel inside those. Ever try to feel in a place you can't see for a snake you know is there? Not an agreeable task.

Eventually every part of the dryer was dismantled, felt or looked in. No snake. Momma wasn't at all happy.

"Well, where is it?" she asked.

"I don't know," said Daddy. "It probably crawled out during the night."

"Yes, but you don't know it crawled out, do you?"

"No, but it probably did."

"Yes, but you don't know for sure, do you? It could be under the freezer, or the washing machine, or maybe even inside the wall."

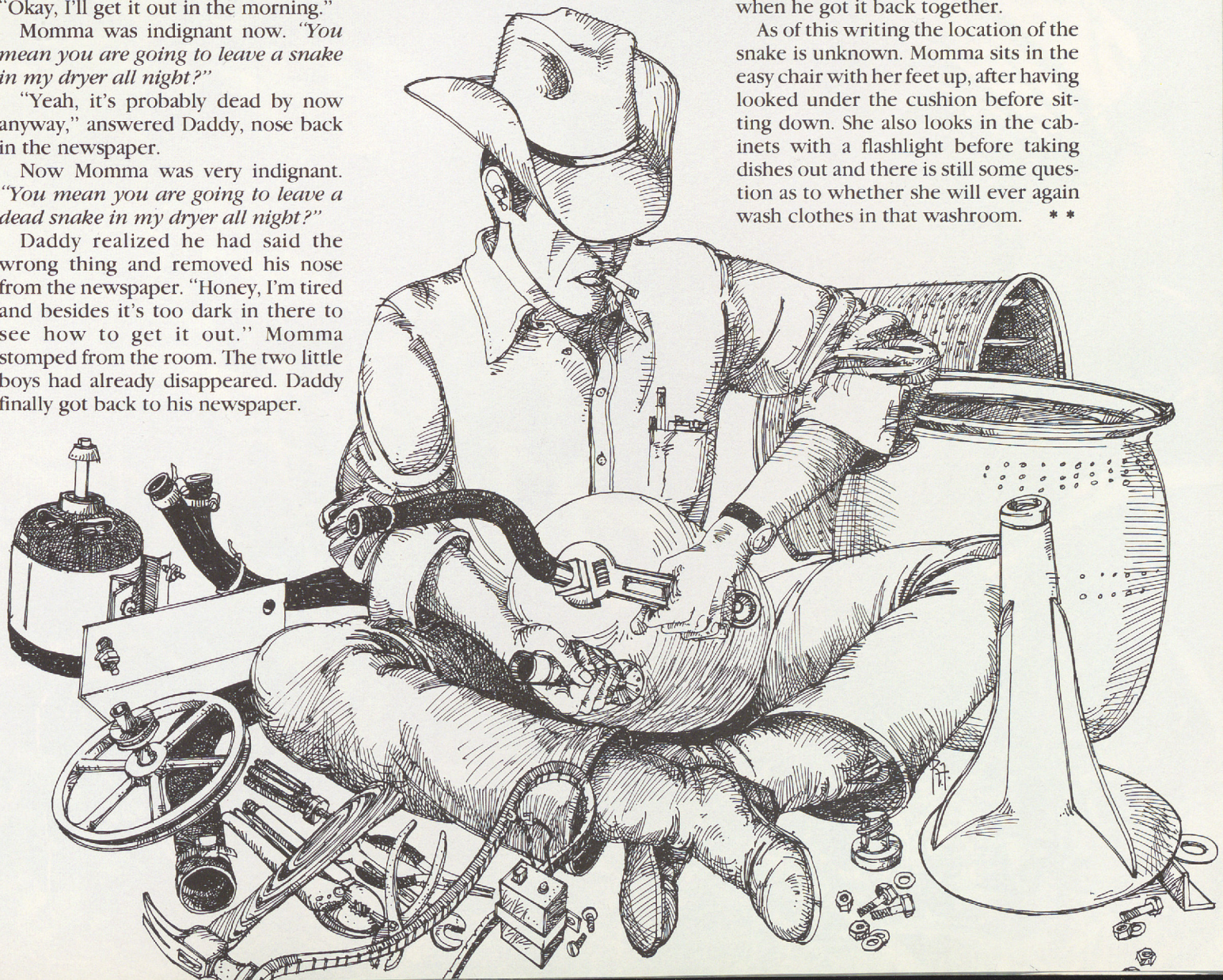
"I don't know where it is, but it probably got outside during the night."

"Yes, it might have, but it also could be loose somewhere in the house, couldn't it?"

"Honey I don't know where it is."

Momma, not satisfied with the explanation but left with no alternative, stomped out of the washroom. Daddy was left with no problem solved, and the monumental task of reassembling the dryer. Miraculously it worked again when he got it back together.

As of this writing the location of the snake is unknown. Momma sits in the easy chair with her feet up, after having looked under the cushion before sitting down. She also looks in the cabinets with a flashlight before taking dishes out and there is still some question as to whether she will ever again wash clothes in that washroom. * *





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management considerations, such as access, water level control and shoreline recreational facilities generally are under the control of the lake's managing authority.

In some cases, state and national parks and forests share the authority and responsibility for providing access and recreational facilities.

Who furnishes maps? As a rule, according to Simmons, no agency is required to produce them but some do because it is in their interest to do so. Private map companies are producing an increasing number of high-quality lake maps, and copies usually are available at tackle shops and marinas around the lakes.

For lodging, restaurants, marinas, fishing guides and the like, it may be advisable to contact the Chamber of Commerce in a town near the lake you wish to visit. The TP&WD can provide information on species and numbers of fish stocked in the reservoir, and also the location of state parks in the vicinity.

Matagorda Island Misconceptions Cited

Texas Parks and Wildlife Department officials said several misconceptions about Matagorda Island should be cleared up concerning the five-year management plan for the island.

The TP&WD now has management authority over the barrier island, and has announced plans to manage it as two functional but integrated units; a 36,568-acre wildlife management area and a 7,325-acre state park.

Bobby Alexander, chief of all the TP&WD's wildlife management areas, said one of the major concerns among environmental groups is the island's proximity to the wintering area of endangered whooping cranes at the Aransas National Wildlife Refuge. Alexander said, "Public hunting programs on the island will be controlled to protect the whooping cranes," and he added that waterfowl hunting has historically occurred on the bay side marshes without adverse impacts on whoopers.

A misconception which appeared in a wire service report said the island was a nesting spot for "endangered birds such as the peregrine falcon and bald eagle."

Alexander said the only peregrine falcons found on Matagorda Island are migrating arctic peregrines which nest in the tundra region of the Arctic. "They migrate along Matagorda Island and other barrier islands such as Padre Island each fall and spring," he said. Arctic peregrines,

unlike eastern peregrines, are classified by federal officials as threatened but not endangered.

Bald eagles are only rare visitors to Matagorda Island, Alexander added, and the area offers no nesting habitat for the birds. There are no historic records of any bald eagle nesting activity there, he added.

Three Saltwater Records Certified By TP&WD

The State Fish Records Committee of the Texas Parks and Wildlife Department has certified three new state record fish.

John Robert Jensen of Port Aransas was fishing offshore on June 13 when he caught a 95.25-pound amberjack for a new state record. The former record amberjack, caught off Freeport in 1979, weighed 94 pounds.

The record amberjack was 68 inches long and 40 inches in girth, and hit live bait.

Edie Porter of Spring earned a spot in the record book by landing a 33-pound, eight-ounce tripletail at West Matagorda Bay on June 29. The fish was 34 inches long and 30.5 inches in girth. She caught the fish on a live shrimp. The former record fish was a 29-pounder also caught at West Matagorda Bay in 1982.

A new category was established in the unrestricted division of the state fish records when David Fotorny of Houston caught a 151-pound cubera snapper on a handline on June 23. He hooked the fish near the V.A. Fogg wreck out of Freeport. There was no previous entry for that species in the unrestricted division, which includes fish caught by legal means other than rod and reel. The current rod and reel record cubera snapper weighed 131 pounds.

Fotorny's fish was 60¾ inches long and 46½ inches in girth.

San Antonio Family Excels at Fishing

Fishing is a family affair for the McNeils of San Antonio.

William McNeil caught a 27-pound red drum (redfish) at Lake Braunig in July for a new state record for freshwater-stocked redfish. The fish, one of thousands stocked in the city-owned lake by the Texas Parks and Wildlife Department, was 40½ inches long.

The previous freshwater state record redfish, caught from Chub Lake in 1971, weighed 26 pounds.

McNeil's brother Ed held the Braunig redfish lake record during

1982 with a 19-pounder he caught that year. His father James McNeil held the lake record for largemouth bass for about a month during 1983 with an 11-pound, three-ouncer.

McNeil's seven-year-old son also is an accomplished angler who has scored on Lake Braunig's bountiful supply of game fish.

Redfish were first stocked at Braunig in 1976, and McNeil's fish may have been among that first group, TP&WD officials said.

Fishermen need to be aware that regulations governing redfish in freshwater impoundments differ somewhat from salt water. In fresh water, redfish must be at least 16 inches long to be retained, but there is no maximum length limit for Braunig Lake. On all other freshwater lakes, the minimum length also is 16 inches, but no redfish over 35 inches may be retained. Effective September 1, 1984, there will be no maximum length on redfish taken from fresh water. The daily bag limit is 10, possession limit 20, for redfish taken from fresh water.

In salt water, only redfish between 18 and 30 inches may be retained and the daily bag limit is five, possession limit 10.

Braunig, Calaveras Lakes Get Exotic Game Fish

Texas Parks and Wildlife Department officials have announced stockings of a new orangemouth corvina/spotted seatrout hybrid at Lake Calaveras and Nile perch at Lake Victor Braunig. Both reservoirs are owned by the City of San Antonio and are located on the city's southeastern outskirts.

Nick Carter, inland fisheries research coordinator, said the 12,050 hybrid corvinas are the first hybridization of the two species ever attempted. The fish, which were in excellent condition when transported from the department's research station at Palacios last week, are about one-half-inch long, Carter said.

Carter noted that the corvina/seatrout cross offers several interesting possibilities. "Spotted seatrout (speckled trout) of the type found in Texas' bay waters can grow larger than 10 pounds, with the current state record being 13 pounds, nine ounces. Corvinas have been documented reaching the 40-pound class at the Salton Sea in California," Carter said. "Since this is the first known hybridization of the two species we simply cannot predict how fast or how large the fish will grow."

Biologists are confident that if the fish survive at Calaveras they will not pose a threat to existing fish or other Texas waters. "Calaveras is a closed system lake, with no outflow into rivers or creeks," Carter said. "Also, it's fairly certain that these hybrids will not reproduce, so that is an additional control."

The corvina hybrids should add an exciting sport fish to Calaveras' current offerings of largemouth bass, hybrid striped bass and catfish. "The lake is similar to Lake Braunig, as it supports an excellent forage base of tilapia, gizzard shad and threadfish shad," said Carter.

Another cause for optimism about the corvina hybrid is that the pure orangemouth corvina can tolerate virtually the entire salinity spectrum, from extremely salty to totally fresh.

Crews from the department's Heart O' the Hills Research Station at Ingram released 73 Nile perch ranging in size from seven to eight inches long in Lake Braunig.

Carter said previous stocking experiments with the exotic African species at Lake Braunig and elsewhere have shown the fish can survive in Texas lakes, but only in those where generating plant discharges keep water temperatures warm.

"Under normal conditions, the water at Braunig stays within the Nile perch's tolerances the year 'round," Carter said. "If this remains the case, we feel these fish may reproduce and create a sustaining population of sport fish."

The subspecies of Nile perch released reaches 18 to 24 pounds in its native African river waters.

October in . . .

TEXAS PARKS & WILDLIFE

Get out your guns and other gear—it's almost hunting season. If white-tailed deer hunting is on your agenda, you might be interested in next month's story that examines the question of harvesting spike bucks. We'll also have some tips for squirrel hunters and take a look at the comeback of the lesser prairie chicken, which provides a two-day hunting season in the Panhandle and South Plains. Dog Canyon in the Guadalupe Mountains is bathed in beauty in autumn, and we'll explore that scenic area in the October issue. Other stories include the new state non-game stamp, an outdoor education field day held at Fort Parker State Recreation Area last spring and a Young Naturalist feature on the asp.

Colonel Fulton's Mansion

by Joan Pearsall

A little more than 100 years ago, one of Texas' most remarkable settlers gazed with enthusiasm at the sparkling Southern bay. In his mind's eye, he could see a deep-water channel creating a great port and the fishing village along the curving shoreline blossoming into a city of world importance.

A man of genius and resourcefulness, George Ware Fulton had achieved success in a variety of professions. When destiny brought him and his family back to the Coastal Bend after some 20 years, he turned his energies to developing family properties on the coast and to the cattle business. Now

in the manner that Fulton envisioned—Corpus Christi was to get the giant port—that mansion was to become a regional landmark and source of community pride. In our day, having been painstakingly restored by the Texas Parks and Wildlife Department, the mansion now is a state historical and architectural treasure.

As soon as the doors opened for tours, it was obvious this would be one of the more popular state historic sites.

The eager visitors who line up to see the inside of this handsome building dominating Fulton Beach may be drawn out of historical interest, pride in Texan heritage or perhaps just curiosity. Across that threshold most of them will be charmed by the authentic re-creation of a bygone era and feel a personal involvement in the life and times of the family who lived there.

The construction of Oakhurst—as it first was called—began about 1874 and was completed for the family to move into in early 1877. Its cost was some \$100,000, a princely sum in those days. The four-story house, just 100 yards from the bay, was built to withstand the most powerful hurricanes. The style chosen was ornate French Second Empire, with an equally elegant interior finished with items from Cincinnati, Philadelphia, New York and New Orleans.

Even more wondrous for that age were the mechanical system innovations. Forced air for heating came from the basement through a series of ducts in all the rooms. In that era there was growing concern about stale air in houses and the need for ventilation, so exhaust vents were located near the ceiling and floor. Fresh air came from the tall windows in each room. Drinking water was pumped from a base-

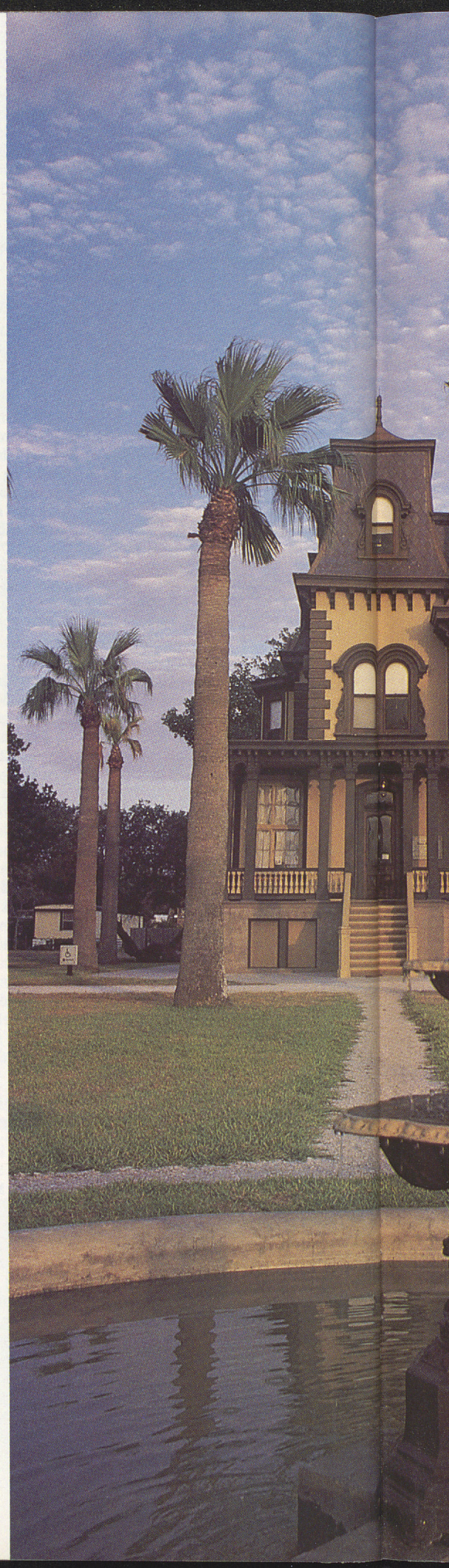


Beds of the era featured bolsters and pillow covers. Note the slipper holder on wall.

the area was beginning to boom.

It was time for another dream to take shape. A mansion would be built that would symbolize the family's prosperity and status, a place where they could live the remainder of their days in style. Although the cities of Rockport and Fulton did not develop

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BILL REAVES

ment cistern containing filtered rain-water. A second concrete cistern in the basement supplied water for troughs to chill perishable food. A tank above the tower room, holding water pumped from the basement, supplied pressure for the "newfangled" indoor water closets, one on each floor. Each of the upper two floors had a bathroom accessible from the stairwell and adjoining bedrooms. In addition, each bedroom (or bedchamber) on the south side of the house was provided with a corner lavatory with running water. The home also featured both hot and cold running water, the hot water made possible by a 50-gallon copper boiler. A gas plant provided fuel for the chandeliers and sconces used to light the house.

The Second Empire style of architecture originating in France had become popular in Victorian England and then in America. In Europe this type of home was much larger and built of stone. Fulton's is a scaled-down, cozier version and he wisely chose materials suitable for the hot, humid climate, such as cypress which

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Among the items on display is a stereopticon (left), a popular parlor pastime.

is strong, solid and resists moisture, and ash, a naturally oily, non-squeaky wood, for the stair risers. Verandas were added to take advantage of the cooling breezes. Instead of wallpaper, which would rapidly deteriorate here, he used hard plaster throughout and the decorative plaster cornices are works of art. The plasterer he hired,

with skills very difficult to find today, was paid \$3 a day plus room and board. The beautiful mantels are not marble but decorated slate. The bathroom floors are sensibly of plain concrete.

Throughout, the home was designed with the best blend possible of comfort, luxury and practicality. All the furnishings, the china, glass, carpets, fittings, etc., were the finest available.

While George Fulton poured his inventive know-how into the design and building of the house, the furnishing was his wife Harriet's forte. At this time, women were beginning to have many more choices of furnishings. Since the Industrial Revolution, there were large supplies of factory-made furniture that more people could afford. In the Fulton home, 90 percent of the furnishings were factory-made, of high quality. Such things as lace-making patterns or strips of lace for home

years of moving around. They enjoyed 16 prosperous and happy years there, their home a center of family activity and hospitality. The third-floor guest-rooms were always occupied with visiting friends or business contacts, and there were numerous parties. The most outstanding social gathering was the 50th wedding anniversary of Fulton and his lady in 1890. Gifts and greetings were showered on them, the mansion was resplendently decorated, the refreshments were lavish and guests danced until dawn.

The Grand Old Man of the Coastal Bend was active for the remaining three years of his life, still keenly interested in inventions, studying oceanography to back up his continued advocacy of a deepwater channel, writing articles and numerous letters, even painting. These activities most likely would have been in his favorite retreat,



assembly could be ordered, and Harriet may have made some of the lace panels for the windows. Carpets came in strips and were handsewn in place.

The Victorians were fond of colors and nature. These tendencies, and Harriet's love of flowers, are evident in the home's decor. Colonel Fulton indulged her wish in this regard by including a conservatory in the design, such as she had seen in Philadelphia in 1876 at the U.S. centennial celebration.

It must have been a joyful day when the Fultons moved into their completed dream house, after so many

the Growlery, a sanctum in the top-floor tower that afforded an unsurpassed view of the bay.

After his death, loneliness and declining family fortunes caused Harriet to leave the mansion, and most of the furnishings were auctioned off. Without maintenance, deterioration soon set in and she wistfully remarked how sorry she was to have the old house so neglected, but it could not be helped without the means to live on. A few years later, she sadly wished "some millionaire who is fond of hunting and fishing would come and buy it."





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That benefactor, in the form of the State of Texas itself, was not to appear for several more decades. Off and on between 1907 and 1943 the principal residents were members of the Davidson family, mostly occupying the first and second floors. Coincidentally, Joseph William Davidson and his wife had been married in 1890, the year of the Fultons' golden wedding anniversary, and the Davidsons celebrated their own 50th anniversary in 1940, the year which would have been the Fultons' centennial observance.

In the Davidson years, there was some modernization of the plumbing, addition of electricity, and interior painting, but only minimal maintenance of the exterior. Most of the acreage surrounding the house was sold.

Passing through several hands in later years, the structure eventually housed a restaurant in the basement and the grounds were developed as a trailer park. This was when palm trees were planted in front of the house; they were not part of the original landscaping. From time to time, civic groups and individuals were interested in saving it, but the costly and massive job of restoration was too much to tackle. The Texas Parks and Wildlife Department acquired the property in 1976 and undertook the challenge.

June Secrist, the present park superintendent, has a master's degree in museum science and is a mine of information about the mansion, the Fultons, regional history and Victorian lifestyles. She clearly explains the painstaking research and craftsmanship that went into this outstanding restoration project, hailed as one of the most authentic on record. Invaluable help came from the discovery in the University of Texas Barker Texas History Center of original invoices for materials used in building, decorating and furnishing the house. Invoices also were found for plants Mrs. Fulton ordered, and the department is hoping to duplicate the exact species. Screw-holes found in the wood in the conservatory indicated the number of plant hangers that used to be there.

All restoration of the structural materials was done as closely as possible to the original. Some replacement floor tiles were need for the entrance vestibule and the restorers were amazed to find that the British firm that had sup-

plied them in the 1870s is still in business. Finding a plasterer in this day and age with the ability to duplicate the work of the Victorian period was not so easy, but a retired craftsman was eventually located.

Furnishing the house was also a challenge. The library bookcase, family china and silver were among the few original furnishings available. Items typical of the era and family preferences were purchased or donated to fill out the collection.

In 1982, the department was presented with the Texas Award for Historic Preservation by the Texas Historical Commission, recognizing the restoration work at the Fulton Mansion as being "in the highest tradition of historical preservation."

Work continues as to acquisition of furnishings, development of new areas of interpretation, and in general



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Clockwise from far left: Parlor sofa features upholstery typical of the period. Parlor chandelier is similar to the original one in the house. False fireplaces covered vents that dispersed heated air. Master bedchamber includes lady's desk similar to Mrs. Fulton's.



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The Fultons had containers for everything. Shown here, a hair receiver and powder box.

upkeep. The climate dictates frequent paint touch-ups and varied types of maintenance. The crowds of visitors make constant use of the vacuum cleaner necessary, so that beach tar and shell do not get trodden into the floors. In the parlor, visitors are courteously asked not to use cameras with flash cubes, to avoid damage to the delicate drapery and upholstery materials.

Groups of visitors are kept fairly small so that they can be more easily conducted through the mansion and get more out of the tour. On the ground floor they are shown the hallway, parlor and conservatory, then the dining room and library in the rear of the house. The rooms are ornate, yet have a lived-in look. It's easy to imagine the callers being received, ushered formally into the parlor, being wined and dined in the elegant dining room, or playing a game of cards in the library with the Colonel.

Ascending the impressive, extra-steep stairways, one can marvel at the stamina of those Victorians who negotiated them frequently in the course of the day, especially considering Fulton already was 67 when the family first moved in. Guests housed on the third floor had to be prepared for some extra exertion, but no doubt this was more than made up for by the comfort and hospitality offered by their hosts. Park employees and tour guides today also cope with this as part of their daily physical conditioning.

The second-floor bedrooms and sitting room reveal much about prosperous family life 100 years ago. Both

Colonel Fulton

SOME HISTORICAL DATA

Born in Philadelphia in 1810, George Ware Fulton was trained in his early teens to make watches and mathematical instruments. At the age of 18 he went to seek his fortune in Indiana, working as a watchmaker, bookkeeper, sign painter and schoolteacher. In 1836, fired with the events in far-off Texas, he raised a company of 60 volunteers to join in the fight for independence there. The company arrived at Matagorda Bay on March 4, 1837, long after the actual fighting was over, but he received a captain's commission and served in the Texas Army until it disbanded that June. He then became a draftsman for the new Republic's General Land Office in Houston.

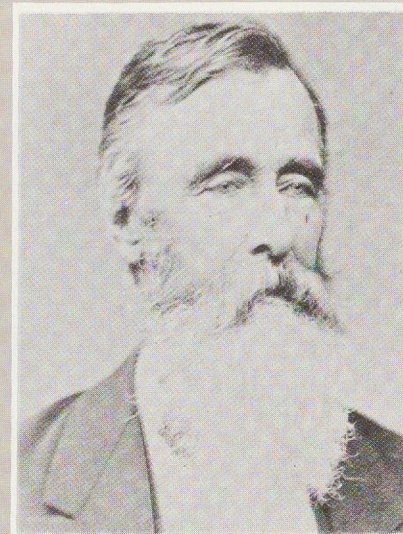


Harriet Smith Fulton

Since his sparse assets were in government warrants, which were none too easy to negotiate, Fulton appealed directly to Henry Smith, Secretary of the Treasury, who helped out with a personal loan. It was a decisive turning point. Smith had come to Texas from Tennessee in 1833, was wounded at the Battle of Velasco and became strongly involved in the new nation's politics. During the tumultuous period until the 1836 Declaration of Independence he was Provisional Governor of Texas, then held the post of Secretary of the Treasury throughout

President Sam Houston's first administration. He later represented Brazoria for a term in the Republic's House of Representatives.

Smith and Fulton became fast friends and business associates, with Fulton working as surveyor and locator of land claims. The ex-Governor was strongly interested in acquisition of land and development of the coast, particularly the Live Oak Peninsula. Both men obtained grants and planned a town,



George Ware Fulton was a man of many interests and talents.

which was incorporated as Aransas City in 1839. For a while there there was something of a boom and Fulton became district collector of customs, but decline set in compounded by land claim litigation.

Around 1840 Fulton moved to the Brazoria area and became a school teacher. One of his pupils was soon to be his bride—Harriet Gillett Smith, 17-year-old daughter of his associate Henry Smith. For the next few years, he and his father-in-law joined in many business ventures, until in 1846 Fulton decided to pull up stakes again and take his wife and three children to Washington, D.C. There he patented an invention "for the improvement in propelling vessels," and was described by a contemporary as "a talented artist and an ingenious and very correct man."

Taking up residence in Baltimore, Fulton for a while became a reporter for the *Baltimore Sun*, where his

brother Charles also was employed, then worked as a machinist and engineer. There are no records of his being trained in engineering, but he was listed as one in the 1850 census in Baltimore. Another talent came to the fore in 1851, when he moved his family to York, Pennsylvania, and became General Superintendent of the York and Cumberland Railroad. During the next decade or so there were many moves and several key jobs with railroads, with a diversion into coal oil refining and railroad journalism. Most of his railroad experience required both administrative and engineering skills. The latter expertise emerged as his most successful.

In 1863 Fulton became involved with John A. Roebling in building the Covington-Cincinnati suspension bridge, a magnificent structure that still is in use today and was described in 1867 as "unquestionably the finest as well as the largest bridge of its kind." Roebling is reputed to be the greatest American bridge builder. Occupied also with planning his masterpiece, the famed Brooklyn Bridge, Roebling gave Fulton a major role in building the one in Cincinnati. Other bridge-building opportunities abounded after the Civil War and a great career lay ahead for Fulton, whose letterhead



Fulton's work on the Covington-Cincinnati bridge led to a promising career.

announced: "Office of G.W. Fulton, Civil Engineer, Contractor and Builder of Wire Suspension Bridges, Covington, Kentucky."

Charles Fulton, praising his multi-talented brother, described him as "a universal genius, capable of building a locomotive, running one or comprehending anything in the range of science, mechanics or anything that requires hard work and management."

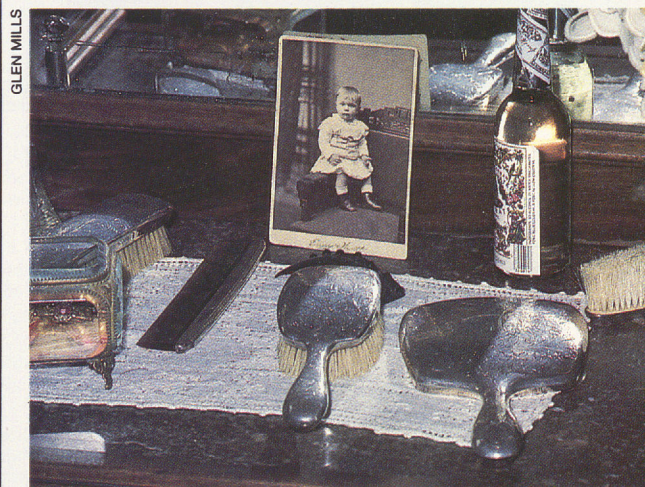
However, there was to be another significant change in direction for the George Fulton family. Harriet had long been homesick for Texas and circumstances underscored her plea to return. Her father had left a substantial estate in Texas, which included vast coastal acreage. For years there had been title disputes, but Mrs. Fulton's claim had finally been acknowledged and the inheritance needed proper management. There was also the promise of lucrative business opportunities in that region and time.

So in late 1867 they returned. Colonel Fulton, as he now was known, soon organized the Fulton Town Company and the Caruthers-Fulton Packing Company. After the Civil War there were herds of cattle roaming the Texas ranges and facilities for processing the beef at source were seen as preferable to marketing the animals via long trail drives. So Fulton plunged into a wharf and meatpacking business. When salt curing proved unprofitable he experimented with mechanical refrigeration and obtained a patent for an improved process in 1869. Eventually in the 1890s, various factors led to a decline in the meatpacking industry, mainly because it became more economical to ship live animals by railroad.

Fulton had had no background or interest in actual cattle ranching, but with so much land to control he became involved in this business for the rest of his life. He went into partnership with two men who had the experience he lacked, who also owned land in the vicinity. The Coleman, Mathis and Fulton Company became the first corporate ranch, initially covering some 115,000 acres. When small ranches failed they were able to buy up the land and eventually managed 273 brands. Fulton's chief role was promotional, providing ideas and dealing with potential stockholders.

Although the Colonel made significant impact on nineteenth-century Texas with his early service to the Republic, his business ventures and development of the Coastal Bend, his best known claim to posterity is the magnificent home he constructed on Aransas Bay. * *

the Fulton daughters resided in the house with their husbands and children. One bedroom, the Holden room, is furnished as it would have been for one of these couples, while the front master bedroom evokes nostalgia with its half-canopy bed, toilet articles and old-time decorations. The built-in clothes closet in this room was an innovation for that time. Harriet and her daughters spent much time in the sitting room, where they pursued needlework and other hobbies. Magazines and mail-order catalogs, like those on display, were important influences. The "Wardian case" in the window, containing ferns and tropical plants, was a popular item in those days. A little girl's prize possession, a beautiful doll, has a place of honor, but this one was just for admiring not playing with.



Family photos were displayed in the master bedroom and throughout the house.

A smaller front bedroom is of great interest, since it demonstrates the condition of the house before restoration, something of the building's construction and methods used in its repair. A section of one of the walls shows how they became so sturdy. An extraordinary amount of wood was used for them and the flooring, stacked and staggered with several coats of plaster, horsehair and shells, providing insulation and soundproofing as well as protection against fire and storm.

Rooms on the third floor at present are used by staff as offices, but visitors are conducted up there so they may see the famous Growlery in the tower, reached by another small stairway. Apart from the corner built-in washbasin, this room is unfurnished, but

one can imagine the Colonel thoroughly enjoying his hideaway, with his mechanical chair and telescope to scan far over the bay, his fertile mind ever dreaming up new ideas and plans.

Pressed glass (below) was popular at the time. The Fultons displayed indoor plants throughout the house (right).



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Some people have wanted to see the basement and in the future it is hoped to include this in the tours, on a self-guided basis. There would indeed be much of interest there, since it was the mechanical heart of the structure, with its furnace, pumps and cisterns. It was vital to the domestic arrangements, too, with ingenious food-cooling and laundry areas and, not least, the large kitchen. This basement is six feet above ground, so there is plenty of air and light. It must have been a cheery place to prepare the huge amounts of food to sustain the family and all the guests. A dumb waiter in the cook's pantry stood ready to convey it up to the one in the butler's pantry just off the dining room.

Public response to the opening of Fulton Mansion has been so great that accommodating all the tour requests would be almost impossible but for the volunteer docent program, which June Secrist says is a godsend. Docents are a mainstay of museums nationwide and, seeing a definite need for such a program here, she instigated one, personally selecting and training a fine group of volunteers. Rockport is known to have an abundance of potential volunteers ready to become involved in worthwhile projects. The standards for selection and training at the Fulton Mansion are very high. The docents now enrolled include not only retirees,



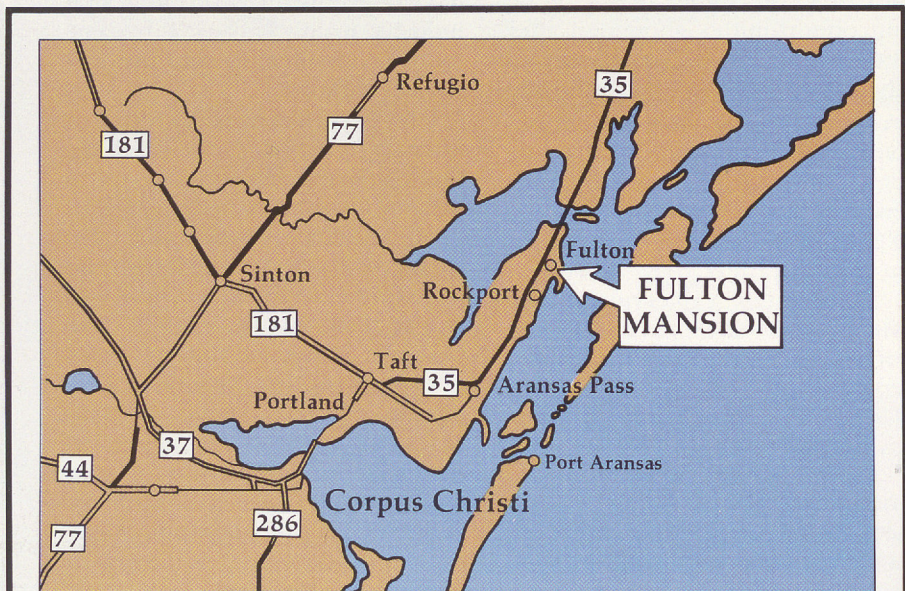
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but people of various ages, occupations and backgrounds who give up at least four hours a month of spare time. All of them are well-versed and eager to share their interest with the public.

At present, tour groups can only be accepted from 9 a.m. to 11:30 a.m. and from 1 p.m. to 3:40 p.m. This gives time for the tours to be completed and allow for a lunch break and for

closing-up business at the end of the day. No tours are given on Mondays and Tuesdays. Some waiting in line is likely to be necessary, especially on weekends. Also, be prepared for those stairs. Physical problems might make it inadvisable for some people to go beyond the first floor. For the handicapped, the first floor is accessible by a ramp at the back veranda. Another reminder: this is a historic structure without recreational or other facilities. Since Rockport and Fulton are resort areas, though, there is plenty nearby to take up the slack in that regard.

In fact, for the many vacationers who flock to this part of the coast, this is a good way to round out their holiday enjoyment. Others make the trip out of particular interest. For all who present themselves at the door of the Fulton Mansion, as so many callers did in the days of yore, there is a chance to experience the atmosphere of bygone times and gain some understanding of people who were so much a part of the development of Texas. One of George Fulton's many talents was that of communicator. Of all his dreams for the future, perhaps this means of providing such insight is his greatest legacy. * *



Fulton Mansion State Historic Structure

Location: Aransas County, 3.4 miles north of Rockport on Fulton Beach Road. Hours: 9 a.m. to 11:30 a.m. and 1 p.m. to 3:40 p.m., Wednesdays through Sundays.

For information: write Fulton Mansion State Historic Structure, P.O. Box 1859, Fulton 78358 or call 512-729-0386.

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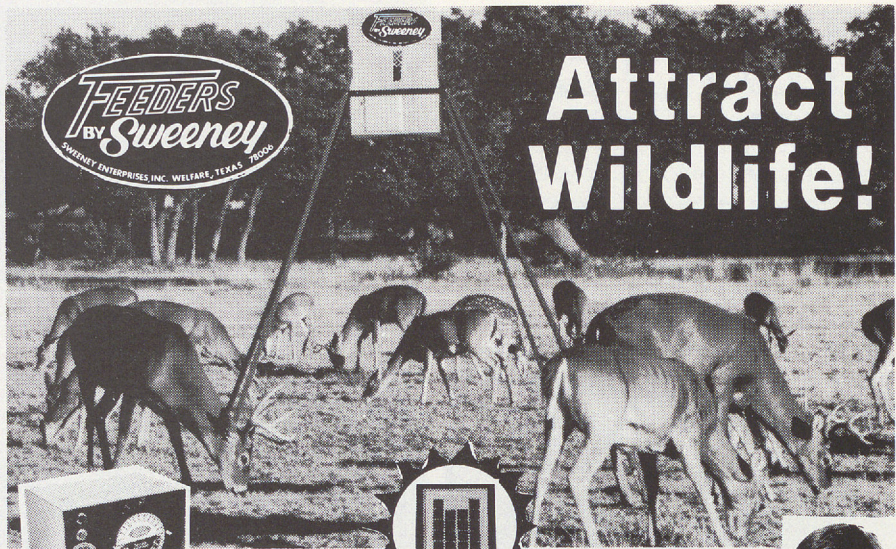
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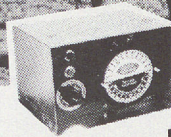
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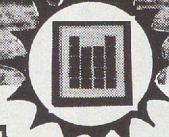


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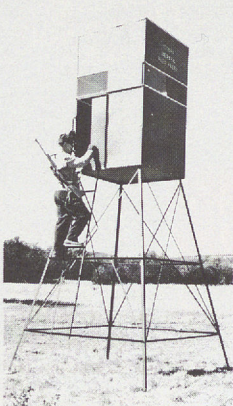


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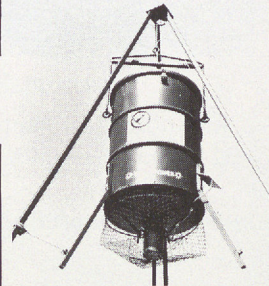
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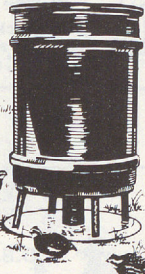
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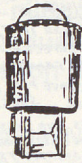
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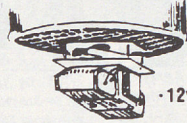
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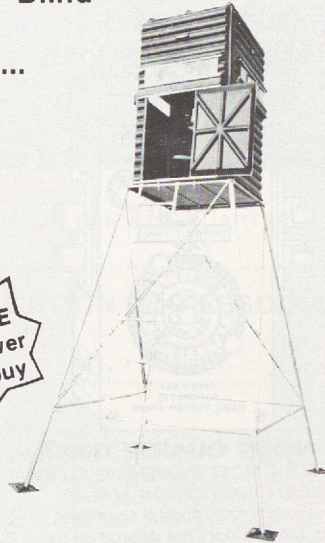
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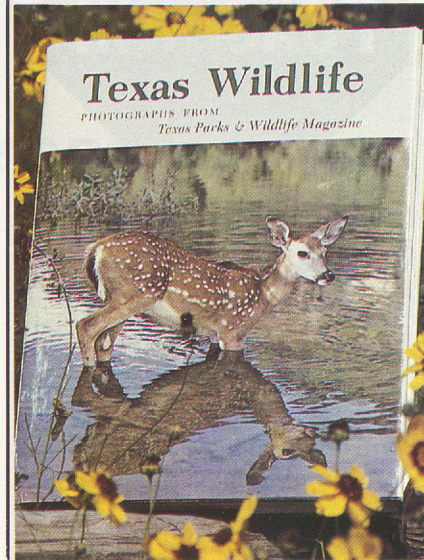
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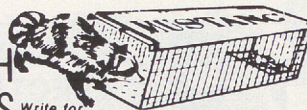
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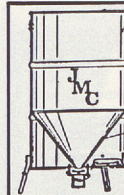
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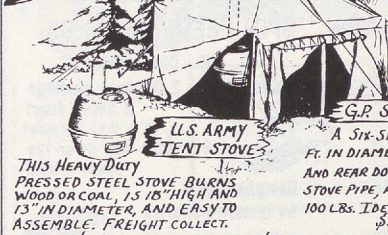
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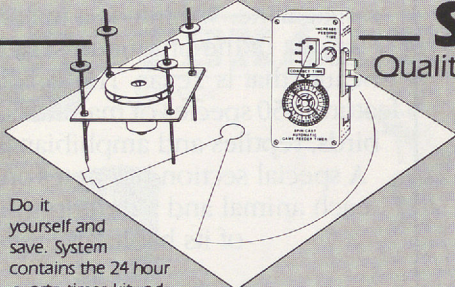
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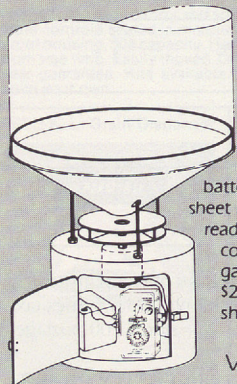
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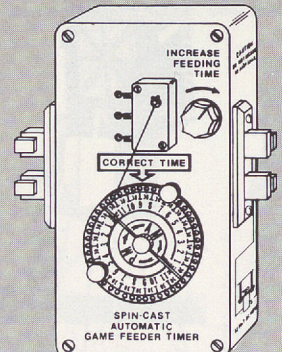
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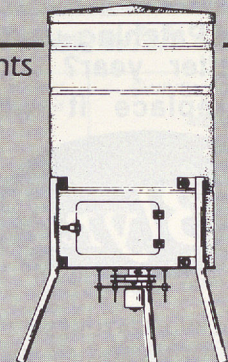
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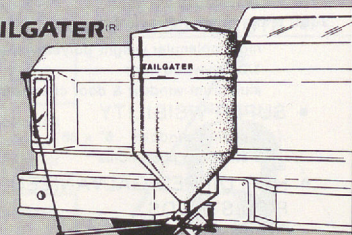
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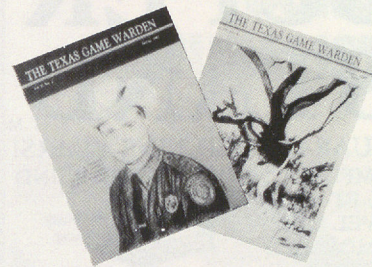
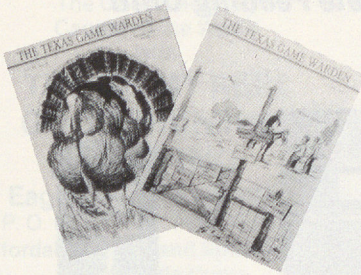
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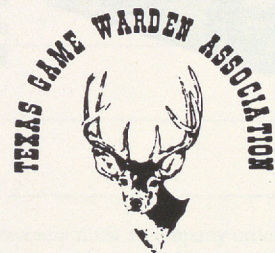


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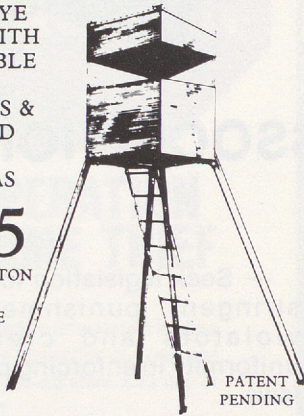
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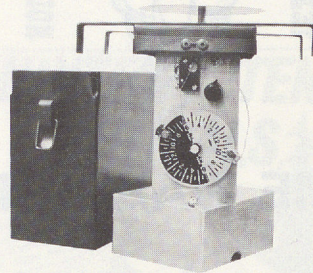
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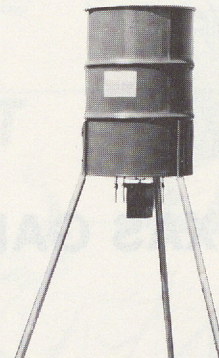
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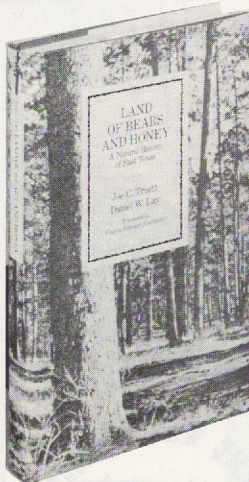
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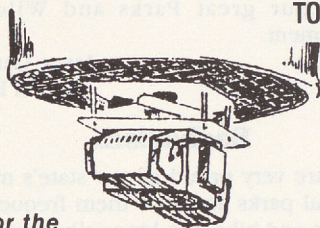
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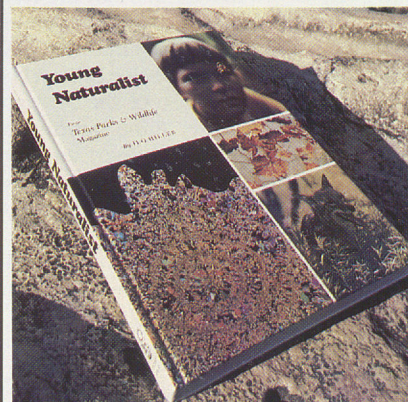
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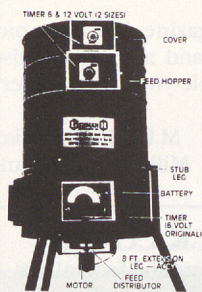
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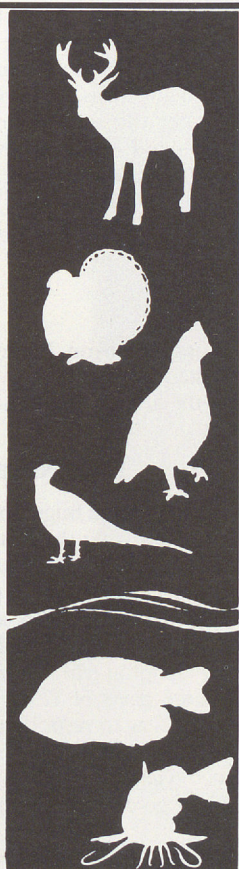
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Letters to the Editor

Valuable Information

We moved to Texas in 1982 and ever since I have been searching for information such as you had in "It's Not the Heat, It's the Humidity" in the July issue. We are retired from Illinois and my husband has a heart condition. He walks five miles every day and I worry because of the heat and humidity. I tried to get some information from the doctor and the American Heart Association, but it seemed no one had any information to help me. I would like to pass the article on to each of the above and to our three married children who like to jog. Thank you for publishing such valuable information.

Mrs. Rosemary L. Henson
Corpus Christi

Hot Weather Problems

The pendulum has swung too far in the direction of ignoring the electrolytes lost from the human body in hot weather. This was ignored in the article "It's Not the Heat, It's the Humidity" in the July issue.

Late last summer I went to the emergency room because of strange and worrisome symptoms. The doctor told me I was dehydrated and needed salts. Being trained in chemistry in my early years, I think of salts such as sodium, potassium and calcium instead of just table salt. I immediately took two Gatoraids and later used table salt and a salt substitute (mainly potassium salts) liberally on my food. By evening of the same day I was feeling fine. I am in the heat every day in the summer and perspire profusely. I have learned that I cannot get enough salts out of my food.

Many articles are written lately as if everyone needs to restrict sodium in their diets. That is not true. I suspect that the people writing these articles have never unloaded a truckload of hay on a hot summer day.

Walter R. Bennett
Springtown

■ People who do extremely strenuous work during the summer should consult their doctor for specific dietary requirements, but most people do not need to take extra salt. Here is what registered dietitian Dr. Dan Benardot says: "The most important impact of exercise on mineral metabolism is the loss of sodium and potassium in sweat. Potassium is best replaced through the intake of foods such as banana, carrot, chicken, grapefruit, orange, potato and tomato. Supplemental doses of potassium have been shown to be irritating to

the stomach and may be associated with pain. Extremely heavy sweating that might occur on a hot day with a very long and hard workout could lead to losses of over 8,000 mg. of sodium per day. While this is an amount that could conceivably disturb fluid balance, it is very unlikely that losses of this magnitude would occur. When you consider that the average intake of sodium in this country is already excessive, the thought of taking more could only be considered overkill. What should be replaced is water. Listen carefully to your body. If it's thirsty, drink water."

Splendid

I am employed at the Hico City Hospital. They had received some of your magazines and I was thumbing through them on my break. I couldn't help but notice the excellent photography. It is splendid. I am really impressed with your magazine and would enjoy reading it each month. Thank you for your concern for nature.

Beverly Hicks
Hico

Rough Canyon Recreation Area

As frequent visitors to the Guadalupe River, we particularly enjoyed the article on Texas rivers in the June issue. We now have many ideas about other rivers to visit.

Under the section on the Rio Grande, Devil's and Pecos Rivers, a National Park Service Recreation Area was mentioned named Rough Canyon. We would like to know where it is and how to get more information on it.

The David Creels
Houston

■ Rough Canyon Recreation Area is on Amistad Reservoir. For information, contact the area at 512-775-1911.

Tick Removal

"Bothersome Bugs" in the July issue suggested applying the hot tip of a cigarette near the back of a tick to remove it. This is not the accepted way. A person could burn himself or kill the tick and leave the head embedded. Anyway, it is not safe to smoke on a camping trip in wooded areas, as dry as some parts of Texas are now. The accepted way to remove a tick is to cover it with heavy oil such as Vaseline to occlude the oxygen. Within 30 minutes the tick will let go and the camper can remove it.

Pat Berlet
San Antonio

Much to Appreciate

I'm a real fan of your magazine with its beautiful photography and interesting articles. My husband and I have enjoyed camping with our friends in many of our fantastic state parks. But I recently discovered another great feature of the Texas Parks and Wildlife Department. I was injured while camping at Palmetto State Park in June, and the kind, professional assistance of Superintendent Dick Willet could not have been surpassed.

We Texans have much to appreciate about our great Parks and Wildlife Department.

Joyce Garivay
Round Rock

Barbarism

We are very proud of our state's many beautiful parks and visit them frequently to camp and hike. We especially enjoy the wildlife and find it abhorrent that people still hunt defenseless creatures for pleasure, and that *Texas Parks & Wildlife* magazine glorifies such barbarism. Therefore, we are not renewing our subscription at this time.

Mr. and Mrs. W.T. Newsom
Fort Worth

Don't Change

Ignore the guy who wrote in to say he thinks you should show fewer flowers and do more stories on hunting (July). You have the best, please don't stray from the present. Keep 'em coming.

Paul Sullivan
Longview

No People Pictures

Yours is a fine magazine, but keep pictures of people out and animals in, also birds. Boats and people you can see every day, but not wildlife.

M.H. "Bill" Kunkel
Milburn, Oklahoma

INSIDE BACK COVER

Once protected by state and federal law, the alligator has recovered to the point that the first hunting season since 1969 is scheduled for September 7 through 23 in parts of Southeast Texas. Alligator harvest will be closely controlled by issuance of tags to landowners, similar to the antlerless deer hunting permit system. Photo by Bill Reaves.



