



CREATING A WORLD CLASS PARKS SYSTEM for TEXAS

a report from

ENVIRONMENT TEXAS



EXECUTIVE SUMMARY

You can't count the many ways that state parks make life better here in Texas. They protect the clean water that we depend on. They provide a home for some of Texas' most wondrous wildlife. The beautiful natural scenery of our parks provides a backdrop for some of the most amazing hikes you can imagine. And the breadth and range of those parks gives people all across Texas untold opportunities for fishing, swimming, camping and other recreational activities.

Unfortunately, our parks system is in a state of crisis. Rampant disrepair and staff shortages due to years of budget cuts hinder the parks' ability to protect the resources they house. In addition, the Legislature has failed to appropriate funds to Texas Parks and Wildlife Department to invest for the future by acquiring new park lands.



With Texas' population expected to double in the next few decades, demand will grow for access to parks and more of our treasured natural areas will be threatened by encroaching development. Polling done by Texas Tech University found that Texans "are becoming increasingly frustrated about the lack of access to lands to experience nature." Already, urban and suburban development is encroaching on treasured natural landscapes.



The effects of population growth will be strongest in Texas's largest cities. While the state of Texas maintains sizable parks in west Texas and other parts of the state, our metropolitan areas are notably underserved. While the state currently averages about 52 acres of parkland per 1000 people, in the cities it is far worse. The greater Houston area has only 40 acres, Austin 17.5, Dallas 15.9, and San Antonio 9.9.

TPWD has proposed the establishment of new, 5,000-acre parks near these major metro areas.

- ★ Dallas/Fort Worth: TPWD is considering establish a park in Palo Pinto county (just west of Fort Worth) that would protect the threatened cross-timbers ecosystem
- ★ Houston: TPWD has identified the gulf coast prairies, pine-oak forests and post oak savanna near Houston as critical for protection
- ★ Austin/San Antonio: The Edwards Plateau, west of Austin and San Antonio, is a critical resource that is threatened with pollution from environmentally harmful development. South Texas plains and post oak savanna are also in need of protection near San Antonio.
- ★ Rio Grande Valley: Among the least-served areas in the state, the Rio Grande Valley should protect South Texas plains.



This report examines these eco-regions and illustrates the importance of these natural areas for water quality, plants and wildlife, and recreation. It also covers the threats to each region, which are largely due to urban and suburban sprawl.

There is widespread public support for creating these new parks. 77% of Texans polled in a the Texas Tech study either strongly or moderately support "more Texas Parks and Wildlife funding to buy additional land for conservation of natural resources and outdoor recreation".

In 2007, the Legislature should appropriate at least \$15 million for a park land acquisition program. In the long-term, Texas will need significant funding to realize the Texas Tech goal of 55 acres of parks per 1,000.

With land prices continuing to rise, it is imprudent to put off these investments any longer. State leaders should explore all potential sources of funding, including raising or eliminating the cap on the sporting goods tax, creating a new real-estate transfer tax, or submitting a general bond measure to the voters of Texas for approval.

INTRODUCTION

From the desert wilderness of Big Bend Ranch to the bayous and live oaks of Brazos Bend State Park, our parks system is a big part of what makes Texas special. Our parks help protect drinking water supplies and wildlife habitat, provide countless recreation opportunities, and are home to some of the most breathtaking views in America. They're also a major economic engine for the state, generating more than one billion dollars in economic activity for local communities.

Sadly, this great resource has suffered under serious neglect in recent years. Shamefully ranked 49th in the nation in per-capita spending on state parks, the Legislature has let Texas state parks go without even the minimal support needed to maintain them, never mind acquiring new land for our state's rapidly growing population. According to the Fort Worth Star-Telegram "while state government increased spending for services generally by 68 percent between 1990 and 2003 -- it decreased spending on parks by 34 percent".

Years of budget cuts have forced the agency to lay off dozens of park rangers, close campgrounds, cut back hours of operation (some parks are only open by appointment), and seriously curtail grants for local parks. Last fall, the Texas Parks and Wildlife Department (TPWD) even considered selling part of Big Bend Ranch State Park. In July, TPWD Executive Director Bob Cook announced that new proposed budget cuts would mean the agency would have no choice but to close 18 state parks.

The public outcry over the state of our parks has created considerable momentum for increased funding in the next Legislative session, which convenes in January 2007. However, our parks need more than stop-gap measures to prevent further closures. The Legislature needs to make a major investment to help the Texas Parks and Wildlife Department implement its vision of a world class parks system in Texas.

In 2001, Texas Tech University released a major study predicting the state's future needs for parks and natural areas. The researchers found that with only 52 acres of parks per 1000 Texans, and far fewer near the state's major cities (San Antonio has but 9.9 acres per 1000), "the current acreage available for outdoor recreation does not meet demand," a situation which would only worsen as our population continues its dramatic growth. They also warned that "efforts to conserve and restore biologically sustainable habitats in each of the ecoregions of Texas remain inadequate." The study recommended the state establish a level of service of 55 acres per 1,000 people for state parks in Texas, with an emphasis on creating new parks that protect threatened ecosystems and that are close to the state's major metropolitan areas. Under current population trends, this would mean protecting some 860 square miles of natural areas as parks by the year 2030 (approximately 0.3 per cent of the land and water area of Texas).

In 2002, the Texas Parks and Wildlife Department issued its own needs assessment – the Land and Water Resource Conservation and Recreation Plan. In the report, the Department laid out a ten year plan to "provide optimal wildlife habitat and quality outdoor experiences" by creating new 5000-acre parks within 90 minutes of each of the state's major cities (Austin, Dallas, Fort Worth, San Antonio, Houston) and the lower Rio Grande Valley. The Department further recommended expanding 14 existing state parks.

The Department is already half-way into its ten year plan, yet none of the new parks have been created, nor have any parks been expanded. In fact, according to the State Parks Advisory Panel of the TPWD, while Texas' population is growing at a rapid pace, "there has not been a major acquisition and development program for state parks since 1967". Appropriately, the Panel called on the Legislature to appropriate \$15 million per year for the acquisition and development of new park land.

This report examines the natural areas that could be protected as parks if the Legislature funds a land acquisition program. As the Legislature considers parks funding issues in the 2007 Legislative session, they should make sure to not just provide short-term funding to keep the parks open, but also fund an ambitious park acquisition program that keeps up with the needs of our growing population and properly protects the many Texas natural areas threatened with development.



CROSS-TIMBERS

In 1854, a railroad advance-man described the Cross-Timbers region of north Texas as “... by far the richest and most beautiful district of country I have ever seen, in Texas or elsewhere.” Once crisscrossed with wild rivers and covered by a vast forest of post oak and blackjacks, the region provided habitat to wildlife such as the red and gray wolf, black and grizzly bear, and plains bison.

Since then development and reservoir construction have dramatically altered the landscape, and the Cross-Timbers ecoregion is currently ranked lowest in the state in “conserved status” by Texas Parks and Wildlife (TPWD).

Yet, in places, the beauty and grandeur of pre-settlement days endure. Just west of the Dallas-Fort Worth metroplex lies an ecological sub-region – the West Cross Timbers, within which exists a prime candidate for parkland protection.



Expansive land tracts and extremely mixed habitat characterize West Cross Timbers. Mature oaks intermingle with pockets of prairie, and riparian areas exist there alongside rivers, such as the Trinity and Brazos. Ancient deciduous forests grace ridges and rugged escarpments; and though their trees are short and craggy, a fact that has saved them from the axe, those forests serve the important function of preserving water.



PROTECTING WATER RESOURCES

Riparian forests improve water quality by filtering sediment from runoff. The runoff slows when it collides with trees and undergrowth and much of the sediment in the runoff settles to the forest floor instead of entering the river system. This is a critical process because an excess amount of sediment in the river system inhibits biodiversity. An excess amount of sediment makes the river cloudy, preventing sunlight from penetrating deep enough into the water to nourish aquatic plants. Fish depend upon these plants for food and oxygen. These cloudy conditions also inhibit the ability of fish to hunt and find food. Additionally, an excessive amount of sediment can clog the gills of fish. Human development increases the amount of sediment that enters river systems. Farmland contributes a great portion of excess sediment loads in river systems. It has been proven that riparian forests reduce the sediment load in rivers by up to 80%.



Riparian forests and grasslands also reduce flooding and storm water runoff. Vegetation slows water runoff, allowing much of it to sink into the soil. This process helps maintain water supplies and prevents flood damage. The forests and grasslands found in the region are important for maintaining water quality. The roots systems facilitate the transportation of rainwater into groundwater. The groundwater feeds into the many river systems in the area, including the North Bosque, Trinity, and Brazos Rivers.

CROSS-TIMBERS

It is more beneficial for the ecosystem and humans for water to be stored underground. Otherwise, excess flood waters flood communities, causing costly damage to communities and businesses. A 1993 study of the Midwest indicated that flood damages are dramatically reduced in forested areas. Property damage between \$50,000 and \$250,000 per mile of development are prevented by forests.

PROTECTING WILDLIFE

The forests consist of some of the most pristine old-growth in the country. The region supports the least disturbed forest in the Eastern United States. Despite this fact, the forest has undergone serious alteration. The forest used to extend for 30,500 square miles. Today, only 15% of the original old growth forest remains intact. Most of the forest is now fragmented along the edges of road systems.

The forest and surrounding grasslands provide critical habitat to populations of white-tailed deer and other wildlife species -- including, some say, the Texas Bigfoot! Over 280 species of birds can be found in the area. Many bird species require large expanses of un-fragmented forest to breed and forage. If more forest is developed, there will be a decline in bird populations.

THREATS

With the vital North Bosque, Trinity, and Brazos Rivers running through the region, the Cross-Timbers plays a vital role in securing drinking water supplies for millions of Texans. Unfortunately, these waterways are increasingly threatened by polluted runoff as development intrudes into the region. Animal waste from the region's growing dairy industry and silt pollution from the area's many rock quarries also put the region's water supply at risk.

OPPORTUNITIES

This eco-region may be home to Texas' newest state park, thanks to funding secured through the sale of TPWD property on Eagle Mountain Lake in Fort Worth. The state sold the property to the Tarrant Regional Water district, to own and manage as a local park, for \$9.6 million. In the fall of 2006, Governor Perry urged that the funds be used to create a new state park in the Dallas Fort Worth region. The Legislature is currently deciding whether to use the funds for that purpose or to supplement TPWD operations.

TPWD is currently investigating potential properties to purchase for the new park, including in Palo Pinto County. Palo Pinto, known as the "hill country" of North Texas, is an area where the Brazos River flows through beautiful cedar-covered hills and mountains; old growth timber still exists, with post oaks believed to be more than 100 years old; and birdwatchers observe more than 280 species of birds, even endangered species such as Whooping Crane and the Golden-cheeked Warbler.



CROSS-TIMBERS

EAST TEXAS PINEYWOODS

When settlers first came to the region known today as the East Texas Pineywoods, they encountered pines and hardwoods extending for miles in a verdant swath broken only by murky, meandering rivers. Trees in excess of one hundred, or even several hundred years of age grew to 150 feet in height and more than 5 feet in diameter.



Forest dominated the landscape until 18 million acres of timber were cut down during the “bonanza era” in commercial lumbering -- roughly from 1876 to 1917. The long-term task of developing a vigorous second-growth forest was undertaken under Roosevelt’s New Deal in the 1930s.

East Texas is presently home to the majority of forestland in the state. Away from the region’s cities and suburbs, areas of Pine-Oak forests are interspersed with Magnolia, Yaupon Holly, Dogwood, and many other beautiful trees. But only 7% of those acreages are publicly owned; and National Geographic has called the Pineywoods one of the fastest disappearing ecoregions in the southeastern United States.

PROTECTING WATER RESOURCES

Pineywoods forests are the source of water for Texans from Houston to Texarkana and help protect that water’s quality by recharging groundwater, slowing runoff, stabilizing soil, preventing erosion and floods, and filtering pollution.



The rivers which flow through the region are also vital to the commercial fishing and shrimping industries on the Texas gulf coast. Toxins and high levels of sediment inhibit the reproduction of fish and other wildlife species. An excess of nutrients in the water leads to algae blooms, which create hypoxic conditions in the water. Oxygen depletion and excess sediment make it impossible for aquatic species to survive.

PROTECTING WILDLIFE HABITAT

The often-hollow trunks and limbs of snags provide excellent homes for all kinds of critters, including the threatened Rafinesque’s big-eared bat, which like all bats, makes the lives of people more comfortable by eating millions of bugs, especially mosquitoes every night. Fallen logs provide nesting sites, feed sites, or escape cover to many different types of invertebrates, reptiles, amphibians, and mammals. Fireflies require decaying logs to complete their life cycle. Among the region’s rare or endangered wildlife are the Louisiana pinesnake, the alligator snapping turtle, and the timber rattlesnake. Among the at-risk birds that find refuge in the Pineywoods are the Bachman’s sparrow and other grassland savannah nesters and winterers. The Pineywoods, along with the Gulf Coast ecoregions, also provides a home to the world’s most diverse, highly threatened mussel populations.



EAST TEXAS PINEYWOODS

The most varied and richest wildlife habitats left in Texas are located in the bottomland hardwood forests of the Pineywoods. Bottomland hardwood forests, and other riparian and wetland habitats are crucial to a stunning variety of wildlife, including waterfowl, resident waterbirds, and migratory songbirds and raptors. Among the land animals that rely on bottomlands for survival are deer, squirrels, otter, beaver, mink, and raccoons.

Riparian habitat is also critical to the survival of Black Bears. Although the last Black Bear in the state is thought to have been shot 50 years ago, *Ursus Americanus* seems to be making an unaided return to East Texas from Louisiana, through the Neches River corridor. Many people view this as a wonderful occurrence that will produce long-term benefits in increased eco-tourism and return of a sense of “wildness” to the region.

East Texas forestlands are also vital to the survival of a number of rare or endangered plants and wildlife species. Rare plants found in the region include the southern lady’s slipper orchid, the golden glade cress, the white bladderpod, and Texas trailing phlox. Rare plant communities include longleaf

pine savannas and beech-magnolia forest.

RECREATIONAL OPPORTUNITIES

Outdoor recreation is an indispensable part of life in Texas, both culturally and economically. In 2001, 4.5 million Texans (29% of the population) participated in fishing, hunting and wildlife watching. Through trip expenses, equipment purchases, and other costs, recreationists spent \$5.4 billion in Texas. The Pineywoods provide a variety of hunting and fishing opportunities, with prevalent game including boar, deer, and bass. There is also the opportunity to view rare woodpecker species. The red-crested pileated woodpecker is the largest in the world.

THREATS

Sadly, much of the best remaining bottomland hardwood habitat is threatened by potential reservoir constructions. And, other threats to the ecological health of the Pineywoods are mounting. Because East Texas has the second fastest-growing population in the nation, strong pressures exist to turn forestlands over to development interest. Furthermore, the consolidation of timber interest around the country has led to sales of large East Texas timber tracts; which ironically means that the demise of the timber industry is currently almost as harmful to the region as its bonanza era was previously.

OPPORTUNITIES

Texas Parks and Wildlife seeks to expand several Pineywoods parks, including Village Creek State Park ten miles north of Beaumont. The park is relatively small with 1,090 acres of heavily forested swamps containing cypress, river birch, and yaupon trees. Unfortunately, Hurricane Rita wiped out 30-80% of the trees in parts of the forest. Expansion of the park would provide greater recreational opportunities for people in the Houston/Beaumont region and would give the park some of its natural beauty back as the rest of the forest slowly recovers.



**EAST TEXAS
PINEYWOODS**

TEXAS HILL COUNTRY

After the Edwards Plateau erupted from the earth about 10 million years ago, the ocean that once covered it receded, and a long period of aggressive erosion began. Runoff water, streams and rivers continually cut upward and downward on the landscape to form fissures, sinkholes, underground streams, caverns, and caves. In the east, southeast area of the Plateau, those forces produced the valleys and low, rounded hills of the Texas Hill Country.



The Texas Hill Country is an extremely scenic area of rolling, tree-covered hills and steep-sided canyons, cut deeply through by fast-moving streams. Wildflowers and rare shrubs flourish in the shelter of limestone bluffs. And, marvelously, where springs and sheltering canyon walls create unique conditions, hardwood trees grow as tall as the hardwood forests of the eastern United States.

PROTECTING WATER RESOURCES

Natural areas in the Hill Country are important for protecting the Edwards Aquifer. The Aquifer provides drinking water for Waco, Temple, Georgetown, Austin, San Marcos, New Braunfels, and San Antonio. Rain must be able to soak into the ground for the aquifer to be refilled. Impervious cover in areas of urban development, such as parking lots, hinder this process. Instead of soaking into the ground, water is flushed through storm drains out into rivers, where it is carried to the Gulf of Mexico. Without open land, the Edwards Aquifer will not be recharged, and there will be a water shortage.



Erosion is also accelerated by impervious cover. Instead of soaking into the ground, rainwater is flushed across impenetrable concrete surfaces. Thus, a large amount of water enters the river system at a high velocity. This situation causes a great amount of river bed erosion, causing an excess amount of sediment load to enter the river system. The sediment obscures sunlight necessary to maintain aquatic plants that supply oxygen for fish and other animal species.

Water quality in river systems is maintained by natural areas free from human development. The many rivers in the region include the Frio, Guadalupe, Medina, Nueces, Blanco, and Pedernales Rivers. Urban, suburban, and farming areas dump pollutants into the river system. Waste water and fertilizers put excess nutrients into the rivers.

PROTECTING WILDLIFE HABITAT

The Hill Country is perhaps most famous for its beautiful flora. The Bluebonnet, Texas' state flower, has its home here, as does the Indian Paintbrush. Less traditionally beautiful, but perhaps even more fascinating, are the wildlife that live in the region's subterranean aquatic ecosystem, which is the most diverse groundwater ecosystem known in the entire world. A dozen types of salamander, which have adapted to their existence there by being colorless and eyeless, live in the aquifer including the endangered Barton Springs salamander.

Several species of plants and wildlife appear in the Texas Hill Country and nowhere else in the world, including the salamanders mentioned above, four turtles and a number of plants, including one of the rarest cacti in the world, the Tobusch's Fishhook.

Endangered Golden-cheeked Warblers nest nowhere else on earth but the Hill Country and other areas of Edwards Plateau, and the same can be said for almost all of the endangered Black-capped Vireo.

RECREATIONAL OPPORTUNITIES

Each year, 5 million tourists visit the Hill Country to enjoy its many outdoor activities. Massive limestone outcroppings yield opportunities for rock climbing and hiking. The Hill Country has many geological wonders, with an intricate underground water system that tempts many to explore its caves.



TEXAS HILL
COUNTRY

There are also a variety of water activities available. Canoeing, swimming, boating, and rafting are popular pastimes. Lined with giant bald cypress trees and sycamores, Hill Country rivers are among the state's most popular scenic resources. Millions of recreational users spend their summer on the Frio, Guadalupe, Medina, Nueces, Blanco, Pedernales, and other rivers. According to the Outdoor Industry Association, some 7% of Texans go canoeing.

The Hill Country is also known as the Texas Deer Hunting Capitol. However, a lessening of plant diversity currently threatens the deer population there as well as populations of turkey, quail, dove, songbirds, reptiles, and other mammals of the region.

THREATS

As the central Texas population booms, the scenic Hill Country is quickly changing as new residential subdivisions cover over rural ranch lands. Moreover, the region's complex hydrological system faces threats from over-pumping of aquifers, destruction of riparian forests, and ever-expanding sources of polluted runoff.

OPPORTUNITIES

The Hill Country holds the greatest number of parks proposed for expansion by TPWD, including Government Canyon, Hill Colorado Bend, Guadalupe River, Pedernales Falls and Inks Lake State Parks.

Located just outside San Antonio, Government Canyon State Park is the newest addition to the state park system. Of the over 8,000 acres of park, 88% of the land lies over the Edwards Aquifer recharge zone, making this land and its protection crucial to San Antonio and surrounding areas. Expanding this park would accomplish multiple goals, including water quality protection and increased recreational opportunities for San Antonio residents.



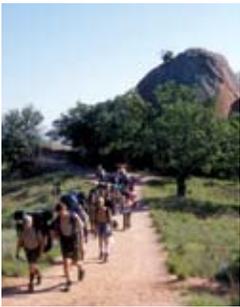
**TEXAS HILL
COUNTRY**

LLANO UPLIFT

Although actually a basin in relation to the surrounding terrain, Llano Uplift got its name because its geologic origin was as an uplift. The geology of the Llano Uplift is strikingly different from that of the Hill Country. In the Hill Country, as elsewhere on the Edwards Plateau, Precambrian rocks (the oldest rocks in the world) are deeply buried under other, newer rocks. But on the Llano Uplift, Precambrian rocks are exposed. Those rocks and the Uplift itself can be thought of as the “roots” of ancient mountains whose higher, newer elevations have eroded.



Large granite domes, such as Enchanted Rock, characterize the landscape of Llano Uplift. Enchanted Rock has been designated a National Natural Landmark. Tonkawa Indians believed ghost fires flickered at the top of the Rock and claimed to hear weird creaking and groaning, which geologists now say resulted from the rock's heating by day and contracting in the cool night.



PROTECTING WILDLIFE

Vegetation on the Llano Uplift includes oak and oak-hickory woodlands, along with mesquite savanna and some grassland types that were once more widely distributed. Its bare rock surfaces and shallow soils support unique plant communities of lichens, stonecrop and mosses. Stunted oak trees and cacti grow out of cracks in the granite domes. Crevices between boulders collect soils and rain water and contain surprising lush growths of ferns and unusual wildflowers. Shallow, ephemeral pools contain specialized animals and plants found nowhere else on earth.

The region provides habitat for a number of endangered species, including the Red Cockaded Woodpecker, Attwater's Prairie Chicken, Golden-Cheeked Warbler, and the ocelot. Tragically, habitat loss contributed to the extinction of the Ivory Billed Woodpecker and plants like the Amistad Gambusia and Phantom Shiner.



WATER QUALITY

The Llano Uplift covers a vital aquifer system, including the Hickory, Ellenburger – San Saba, and Marble Falls aquifers. Water is drawn from these aquifers for drinking, irrigation, and other uses.

LLANO UPLIFT

RECREATION OPPORTUNITIES

Enchanted Rock State Park, just outside of Fredericksburg, is one of Texas' most famous landmarks. Rising 425 feet above the ground, this pink granite batholith is hard to miss. Hikers and rock-climbers from all over the state gather here to conquer the rocks' steep inclines and narrow caves. Visitors can observe beautiful vistas, scenery, and Indian and historical artifacts. Because of minimal light pollution, they can also take pleasure in extraordinary stargazing. Other activities include primitive back packing, camping, hiking, technical and rock climbing, picnicking, geological study, and bird watching.

THREATS

Although Llano Uplift still retains much of its primitive character, it too is threatened by development, as its towns become popular centers for retirees and second homeowners. In addition, its hills and domes are increasingly despoiled by the quarrying of granite and marble.

OPPORTUNITIES

According to parks officials, Enchanted Rock State Park is quickly becoming an island in a sea of development. However, opportunities currently exist to purchase adjacent land that would make it a far superior park and protect some of the Llano Uplift.

GULF COAST PRAIRIE

Long ago, Texas' Gulf Coast Prairie was a paradise of wildflowers, grasses, birds, and butterflies. 6.5 million acres extended relatively undisturbed from Corpus Christi to the Louisiana border and ran some 75 miles inland. Today, the region's historic ecosystem is considered critically imperiled; less than one percent remains. Yet Gulf Coast Prairie continues to bestow a surprising number of benefits to the state.

Prairie areas are hydrologically complex – an inter-fingering of uplands and wetlands. They consist of rare prairie grasses, bottomland hardwood forest, marshes, pothole wetlands (freshwater depressions smaller and more defined than marshes), and pimple (1 –2 feet tall) mounds that provide critical habitat to wildlife and plants.

PROTECTING WATER and AIR

In addition to providing habitat, the Gulf Coast Prairie protects the region's air and water. Like other plant life, Prairie grasses play an important role in filtering pollutants from the air. Moreover, their deep underground structures (which insures survival after fire) makes Prairie grasslands valuable carbon dioxide sinks that mitigate the negative impacts of greenhouse gasses. Prairie wetlands also recharge the Gulf Coast Aquifer and restore ground-water levels.

Additionally, this region is a natural buffer against flooding. The grassland and riparian areas are capable of absorbing massive amounts of water, minimizing the effects of floods. The grassland and riparian vegetation can also act as a buffer against dramatic events, such as storm surges. The vegetation slows the rapid flow of water during storms and makes the effects less severe. Additionally, much of the storm water is absorbed by the sponge-like soil rather than discharged across the land. Any development in this region is at risk for flood and storm-surge damage. The importance of this is demonstrated on Houston's west side, where an increase in flooding has been caused by conversion of open Prairie to commercial and residential developments.

PROTECTING WILDLIFE

Prized Prairie flora include five rare, endemic plant communities and 24 rare plant species that survive only inland where, unfortunately, the Prairie's conserved status is lowest. Some of the showiest are blazing stars (with up to three foot spikes of purple flowers); compass plants (with leaves pointing east and west); button snakeroot (an important nectar source for many insects); sweet goldenrod (with a liquorice odor and that can be used to make a tea); false indigos (yellow or white flowered species, whose flowers were used by early settlers to dye Easter eggs); and butterfly weed (with bright orange flowers favored by butterflies). In the spring, these wildflowers put on a dazzling display of color.

Birds, in flight or on the ground, are as impressive in their way as wildflowers are in theirs. The Gulf Coast routinely host more red-tailed hawk, northern harrier, white ibis, and white-faced ibis than any other region in the United States. In spring, Prairie wetlands are the first source of freshwater encountered by birds migrating across the western Gulf of Mexico. And in autumn, first thousands, then millions, of migratory birds arrive, and Gulf Coast Prairie becomes the site of one of the most incredible natural spectacles in North America.

Bison, pronghorn antelope, and red wolves are gone now, but a countless number of wildlife species still find a home on Prairie lands. Among that number are beaver, alligator, deer, coyote, bobcat and squirrels. Rare animals also find refuge there. For example: the whooping crane, aplomado falcon, white-tailed hawk, Gulf Coast hog-nosed and eastern spotted skunks; the endangered and perhaps doomed Attwater's prairie chicken; and a number of migratory grassland birds.



**GULF COAST
PRAIRIE**

THREATS

The prairie is at an extreme risk of being lost. The coastal prairie between Texas and Louisiana used to cover 13 million acres. Now only 250,000 acres remain. Understandably, the Louisiana National Heritage Program says that the coastal prairie is “critically imperiled.”



Much of the land was lost to urban and agricultural development. Between 1978-1983, over 100,000 acres of the Katy Prairie alone were urbanized. Population growth will undoubtedly lead to urban and suburban sprawl that will destroy precious prairie land.

OPPORTUNITIES

Texas Parks and Wildlife (TPWD) acknowledges the need for Gulf Coast Prairie conservation and would like to extend its holdings in the region. The agency is on record as wanting to expand Brazos Bend State Park. This park, located just southwest of Houston, is one of the most heavily visited state parks in Texas. Another option for TPWD would be the purchase of land on Katy Prairie, which is rapidly falling victim to Houston’s westward expansion. TPWD calculates that to protect the Katy Prairie ecosystem and its more than 300 species, 50,000 acres must be preserved. That long-term goal (now adopted by the Katy Prairie Conservancy) is most effectively advanced through land acquisition. Availability and affordability will ultimately determine TPWD’s decision.



GULF COAST PRAIRIE

POST OAK SAVANNAH

Post Oak Savannah is a relatively long and narrow ecoregion, stretching from the Red River to San Antonio. Tyler, Bryan and College Station are the region's biggest cities. However, Dallas-Fort Worth, Waco, Austin, and Houston lie close by and represent the boundaries of Texas' Urban Triangle, where nearly 75 percent of the state's population resides. Expansion of TPWD's holdings almost anywhere in Post Oak Savannah will serve a large number of Texans.

Post Oak Savannah is an ecoregion whose description seems like pages torn from a fairytale. In pre-settlement times, wide vistas of tall grasses and a myriad of wildflowers were broken only by occasional clumps of giant trees located along rivers and creeks.

Post Oak Savannah is sometimes referred to as "Clay Pan Savannah" because of the dense clay pan that underlies almost all of its soil. When the clay pan is covered with a sandy surface, bogs can be created that wondrously give rise to mosses, ferns, orchids, and various carnivorous plants.

Occasionally, Savannah bogs drain to seep-fed creeks that can spill over into forested swamps called "bay galls." Bay galls and forested seeps are present in even smaller numbers than bogs; but where they exist, so do wild azalea, orchids, ferns, epiphyte species and the rare and endangered Texas trillium.

Bastrop County is a distinctive part of Post Oak Savannah. Its soil curiously differs from the rest of the region in that it does not have the clay pan underlayer. The county's Carrizo sand area is especially remarkable. For example, the Lost Pine Forest is located there. This forest is eighty miles from the pine regions of East Texas and is the westernmost tract of southern pine in the United States. It is a narrow belt of loblolly pines, thought to be a remnant of an Ice Age pine forest, parts of which did not survive the shift to a warm, dry climate. Carrizo sands is also home to sphagnum bogs, which are rife with ferns and pitcher plants.

PROTECTING WILDLIFE

Any discussion of Post Oak Savannah wildlife is incomplete without mention of the Houston Toad, an endangered three-inch nocturnal creature who is seldom seen and whose precise living quarters are not know. Bastrop County is one of only a handful of southeast Texas counties supporting breeding populations of the species.

RECREATIONAL OPPORTUNITIES

Bobwhite quail, wild turkey, and white-tail deer lend their wild beauty to the region and tempt hunters from across the state and beyond. That allure has a huge economic ramification. Every year, deer hunters alone (approximately 100,000 of them) contribute about \$73,200,000 to the Post Oak Savannah economy.

THREATS

A host of threats could prevent future generations of Texas from enjoying the beautiful landscape and precious habitat of Post Oak Savannah. These include reservoir construction; timber clearing; rapid land fragmentation; the introduction of exotic grasses (implicated in the reduction of many local non-game bird populations); fire suppression; and lignite coal mining operations (environmental regulations do not require mining operators to restore native trees and grasses).

OPPORTUNITIES

Hopefully, TPWD will help constrain these threats and simultaneously protect historic landscape and recreational opportunities by increasing its stewardship in the region. The agency has indicated a wish to expand Bastrop State Park. That is a very good place to start considering Bastrop's unique beauty and its proximity to Austin, San Antonio and Houston.



POST OAK SAVANNAH

SOUTH TEXAS PLAINS

From green pastures to thick brush country, the South Texas Plains has some of Texas' most unique landscapes, and some of its most endangered. The region is a diverse mix of Chihuahan desert, subtropical woodlands, semi-arid scrubs and trees, and coastal grasslands. It is a rough land, prone to drought, and covered with thick brush, cacti and predators. Inhabitants like to say, "If it doesn't sting you, stick you, or bite you, it ain't from around here."



A particularly marvelous subregion of the South Texas Plains is the Lower Rio Grande Valley. This is the only subtropical area of Texas. When Spanish explorer Alonzo Alvarez de Pineda arrived at the Valley nearly 500 years ago, he found the land abundant with wildlife. Birds, butterflies, ocelots, jaguarundi and other animals made their homes along the palm tree-lined Rio Grande River, coastal savannas and brushlands.

Today the Lower Rio Grande Valley remains the richest, most bio-diverse area in North America. Although it is a small area comprised of only four counties, the Valley has a unique variety of habitats that supports a wide diversity of plant and animal life as well as an enormous number of species. According to the US Fish and Wildlife Service there are eleven distinct biotic communities (flora and related fauna) in the Valley.

PROTECTING WILDLIFE

The area also harbors many rare animals and plants, especially cacti. For example, a few remaining wild tropical cats, like ocelots and jaguarundies, are found in the Valley, as well as the rare Ferruginous Pygmy-owl, Green jay, Elf Owl, Texas tortoise, Indigo snake and Mexican burrowing toad. Rare cacti include Albert's black lace cactus, star cactus, and Runyons cory cactus.

Of the more than 620 species of birds that have been found in Texas, 512 species have been found in the Lower Rio Grande Valley...more than any other area in Texas and more than most other states. Because of the Valley's proximity to Mexico, because it is so far south, and because of its unique habitat, many of the Valley's bird species can be found nowhere else in North America.

RECREATIONAL OPPORTUNITIES:

Not surprisingly, the Lower Rio Grande Valley is an international Mecca for birdwatchers and is the second most popular destination in North America for birders. As more and more people realize the ecological treasures that exist in the Valley, ecotourism plays an increasingly important role there. Each year, ecotourism brings millions of dollars to the region and creates thousands of jobs. These are extremely positive occurrences in an area that is one of the poorest in the United States. Ecotourism focuses primarily on birding, but butterfly and dragonfly are also big draws. Other fauna and flora have their admirers too. Photography, backpacking, horseback riding, and cycling are some of the activities that visitors to the Valley enjoy, in addition to wildlife watching.

THREATS

Even as the Valley's ecotourism sector continues to gain momentum, however, the fragile natural assets upon which it depends -- the region's uniquely diverse habitats and ecosystems -- are subject to increasing pressure from human development. During the past 100 years, 95% to 99% of the land in the Valley has been cleared and at least 97% is in private ownership. Most wild areas have disappeared, and the Valley's once abundant wildlife, including the ocelot and jaguarundi, are listed by the federal government as endangered or threatened. Extensive groves of Sabal palm that once flourished in the Valley are now reduced to a few strands in or near Brownsville.

Such habit loss and degradation is caused by many things, including sprawling urban development, conversion to croplands, and insufficient river flow. A border fence to control illegal immigration (if built) would further mar the region's natural beauty and impede wildlife movement.



**SOUTH TEXAS
PLAINS**

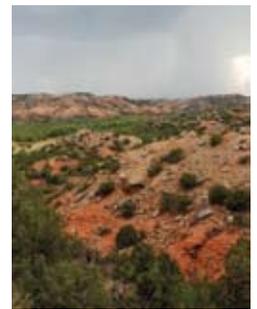
OPPORTUNITIES

To protect remaining fragments of the natural landscape, a variety of wildlife preserves and refuges has been established. The Valley has three National Wildlife Refuges -- Santa Ana N.W.R., Laguna Atascosa N.W.R. and Lower Rio Grande Valley N.W. R. Also, numerous state, county, city, non-profit and for profit refuges and sanctuaries exist, all richly endowed with flora and fauna, many quite different from each other.

Working together, community and governmental organizations have made great strides toward protecting native habitat -- most notably by establishing the Rio Grande Valley Wildlife Corridor and nine Rio Grande Valley World Birding Centers. But the job is far from over.

Not all of the Valley's eleven biotic communities are yet represented on protected lands, and Texas Parks and Wildlife warns that publicly owned habitat is "insufficient to sustain many of the region's threatened plants, animals and communities."

More habitat conservation is needed to protect the Valley's ecosystem and just as importantly to serve needs of its people. The Valley is among the most underserved regions in Texas for public access to parks. While there are on average 52 acres of state parkland per 1,000 people across the state, the greater McAllen area has but 6 acres per 1,000 and lacks a single large Texas Parks and Wildlife site. This scarcity of protected lands not only threatens wildlife but also cheats Texans of quality nature experiences to which we are all entitled.



SOUTH TEXAS PLAINS

FUNDING A PARK ACQUISITION PROGRAM

Texas currently ranks 49th in the nation for per capita spending on state parks. Fortunately, there are a number of options which Texas can pursue to fund a new park land acquisition program.

SPORTING GOODS TAX

Until 1993 Texas state and local parks were funded by a portion of the state sales tax on cigarette sales, which amounted to a quarter-cent per pack of cigarettes. As cigarette sales started to decline, legislators decided to switch funding for parks to a more stable source, the sporting goods tax (those sales taxes collected on sporting goods). As many sporting goods such as fishing rods, backpacks, and binoculars are used when visiting state parks, the tax was a more appropriate and logical source of funding. Sporting goods is thus defined as, “an item of tangible personal property designed and sold for use in a sport or sporting activity, excluding apparel and footwear except that which is suitable only for use in a sport or sporting activity, and excluding board games, electronic games and similar devices, aircraft and powered vehicles, and replacement parts and accessories for any excluded item.” The Comptroller has no means of measuring the exact amount of revenues generated by sporting goods. Instead, estimates are derived from the annual NSGA report. In 2004 revenue estimates for sporting goods were over \$94 million and is expected to top \$104 million by 2007. Unfortunately, in 1993 the Texas legislature placed a cap of \$32 million on the sporting goods tax and only allocated about \$15.5 million of the \$32 million as actual revenue that could be used for state parks. The rest of the money goes back into Texas’ general fund.

BONDS

The state could also sell bonds to finance a park acquisition program. In 2001, Texas voters approved Proposition 8, authorizing more than \$100 million in bond funding for critical maintenance and repair needs for state parks. While \$46 million of these bonds have not yet been issued, the funds can not be used to purchase new park land. A new bond program could be a smart way to fund the park acquisition program, as it would allow the state to purchase projects at a faster rate than if they had to rely on uncertain biennial appropriations. With land values rising at a much higher rate than inflation (or the cost of debt service on the bond), this lets the state maximize limited funds.

REAL ESTATE TRANSFER TAX

A real estate transfer tax, also known as “real property transfer taxes” is a tax on the sale of property. Levied by 37 states (not including Texas), the money raised from this tax can be used for multiple purposes, but some states including Florida (see sidebar) have required that a portion of the revenue raised be used specifically for park land and open space preservation. Naturally linking the improved quality of life (and the accompanying rise in property value) that comes with creation or local and state parks, the tax can be a successful tool to fund natural area and park protection. In December 2006, the Senate Subcommittee on Agriculture, Rural Affairs & Coastal Resources called for such a tax on coastal counties as a way to fund coastal erosion programs. If expanded to cover the state and to fund a broader preservation program including coastal and park land protection, the tax could provide a stable funding source for an ambitious conservation effort.

CONCLUSION

Texans want and deserve a world class parks system, and they’re willing to pay to help build such a system. But for too long, our parks have been nickled and dimed by our elected officials. In order to protect water quality and wildlife, our growing ecotourism industry, and to protect Texas’ wild character, we must pursue a bold new strategy to protect our vanishing natural areas.

The state of Florida, similar politically and in size to Texas, provides an excellent model on what can be achieved with smart, forward-looking investments. The state has protected at least 1.7 million acres of land since 1990 thanks to the vision and leadership of their elected officials. Texas deserves no less. It’s time for the state to provide the resources and planning to create a parks system as big and bold as the Texas spirit.

FLORIDA’S SUCCESS STORY

The Florida Forever program, billed as the “most ambitious program for acquiring conservation lands of any state or nation in the world” directs \$300 million every year to the purchase and protection of parks and natural areas. The state program is funded through the sale of bonds backed by a portion of “documentary stamp taxes,” taxes levied on real estate transfers, mortgages, and other securities transactions. Florida Forever’s predecessor, Preservation 2000, protected more than 1.7 million acres of land during the 1990s.

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**CREATING A
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for
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a report by
**Joan Susman,
Luke Metzger,
Hillary Turby and
Laura Childers**



815 Brazos, Suite 600
Austin, Texas 78701

Tel: 512.479.0388
Fax: 512.479.0400

www.EnvironmentTexas.org