

In March and April, then again in July and August the greatest number of birds stop off here on their migratory routes. Least terns nest here in the spring. Bolivar Flats has been recognized by the Western Hemisphere Shorebird Reserve Network as an important resting and feeding location for migrating shorebirds from throughout the Western Hemisphere. The Houston Audubon Society manages this property through a lease from the State of Texas.

To get there, from the ferry landing drive north on Texas 87 to where it meets loop 108. Turn east at Rettilon road. Once on the beach, turn right, and drive carefully on the beach until you reach the barricades at the edge of the sanctuary. Access from there is by foot. For more information, call 713-932-1639.

Two sanctuaries are owned and maintained by the Houston Audubon Society at **High Island: Smith Oaks Sanctuary** and **Boy Scout Woods Nature Sanctuary**. High Island is famous for spectacular "fallouts" of migrating songbirds in the spring. Twenty to thirty warbler species can be viewed during a day as well as many other neotropical songbird species. As coastal hardwood forests and oak mottes become more scarce, these tiny birds will find fewer and fewer places to rest during their migrations. Habitat concerns include resting points all along migratory flyways, in addition to habitat needs at nesting sites and wintering sites.

High Island can be reached from Houston by taking Texas 124 south from I-10 (at Winnie), or from the Bolivar Ferry by following Texas 87 past the flats into the town of High Island. For more information, call the Audubon Society at 713-932-1639.

At the far west end of Galveston Island is **San Luis Pass**, between the Gulf and West Bay. This popular wade-fishing spot is also an excellent site for viewing birds, especially black skimmers and terns, which nest here in the spring and summer. Tidal flats, ponds and marshes interspersed with dunes provide a diversity of habitats for numerous species of marsh and marine birds. Exercise care when driving near San Luis Pass, as nesting terns and skimmers raise their young perilously close to off-road tracks and trails. Baby birds are well-camouflaged and hard to see in the sand.

Nature Making Progress

Three facilities under development are protecting habitat for wildlife. **The Baytown Nature Center** will be a wildlife sanctuary with interpretive trails on the shores of Scott Bay and the San Jacinto River. Currently being built on the site of the Brownwood subdivision, which fell victim to subsidence in the early 1980's, the nature center will be an important nesting and migrating site in the Galveston Bay region.

For more information, call the City of Baytown Parks and Recreation Department, 713-713-420-6597.

The Galveston Bay Coastal Prairie Preserve is in Galveston County, and is historic habitat for Attwater's greater prairie chickens, an endangered species. In the spring of 1995, eight males were counted on the "booming ground," plus eight hens. The land was donated to the Nature Conservancy of Texas by Mobil Exploration and Producing, U.S., Inc., and is being managed for prairie chicken habitat. The site is not currently open to the public. For more information, call 512-972-2559.

The **Wallisville Lake, Texas Project** is 20,000 acres of federally owned and managed lands in the Trinity River delta. The area, which includes the largest cypress swamp in Texas, is used extensively by dozens of species of nesting birds. Bald eagles nest here, as well as herons, egrets, and waterfowl.

Managed by the U.S. Army Corps of Engineers, future plans include hiking trails, canoe launch, and picnic facilities. Currently, the easiest access is by boat from under the I-10 bridge over the Trinity River in Chambers County.

Take the Wallisville exit and follow the access road under the bridge to the river. For information, call 409 389-2285.

General Information

A few precautions will benefit both humans and animals, making the wildlife watching experience beneficial to all.

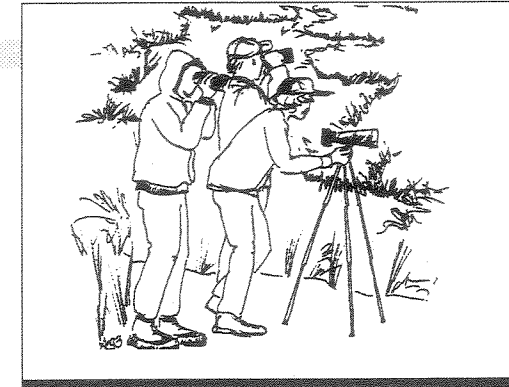
Mosquito repellent is a must, as is sunscreen and plenty of drinking water. When walking, watch out for snakes, of which some species are venomous. When driving, stay on established trails and marked roads. During the spring and summer months, be aware of baby birds and other animals that can stray into roads and trails.

Observe wildlife from a distance at which they feel comfortable. If the animals move or fly away, you are too close. Scaring birds off nests can literally cause the eggs to "fry" in the hot sun. Harassment of wildlife, especially protected species, is not only illegal, but it can be dangerous. Keep pets on a leash or leave them at home.

Enjoy wildlife from a comfortable distance, leave only footprints, and take only memories (and photos!).

Wildlife Watching Around Galveston Bay

Enjoying the Bay's Diversity



Galveston Bay and its surrounding land is blessed with an abundance of ecologically valuable sites and a substantial tourist support infrastructure. **Ecotourism** is a term commonly used to describe tourism based upon the natural rather than man-made attractions of a locality. Ecotourism is the tourist industry's most rapidly expanding sector.

With more than 500 species of birds residing, wintering or migrating through southeast Texas, the Galveston Bay area has several outstanding wildlife viewing sites. While there are too many to describe in detail here, the more accessible or unique sites are described below.

By driving anywhere from a few minutes to two hours, local residents can join visitors from all 50 states and many foreign countries enjoying the diverse wildlife in the Galveston Bay watershed.

Following is a sampling of wildlife viewing opportunities in the Galveston Bay area. These are by no means all the places one can go to enjoy nature in our area, but all of these places can be enjoyed during a day trip.

National Wildlife Refuges

The National Wildlife Refuge System is a network of lands and waters managed specifically for wildlife. This unique collection of over 500 diverse areas in the United States, managed by the U.S. Fish & Wildlife Service, is vitally important as habitat for hundreds

of species of birds, mammals, reptiles, amphibians, fish and plants.

Refuges, unlike parks, are managed specifically for the benefit of the wildlife. Therefore, public facilities tend to be spartan, enabling the wildlife to thrive with little human disturbance. Camping is generally not allowed, although campsites are often a short drive away.

Anahuac National Wildlife Refuge (ANWR), on the east side of Galveston Bay, contains 30,577 acres of marshland and coastal prairie habitat. Established in 1963, ANWR is an important link in the chain of refuges extending along the Gulf coast of Texas. The refuge provides habitat for enormous concentrations of ducks and geese of the Central Flyway which winter on the Texas coast.

The refuge is one of the best places in the United States to see nine species of rails (especially yellow rails and black rails) and other marsh birds. Songbirds are diverse in the willows and salt cedars during the spring. Numerous water birds, including herons, egrets, and ibis, can be found on the refuge throughout the year. Muskrat and nutria are some of the common refuge furbearers, along with other small mammals. Alligators

are abundant and frequently seen on the refuge.

Wildlife observation, fishing and waterfowl hunting are popular activities on the Anahuac Refuge. Twelve miles of graveled roads provide excellent viewing activities and access to remote areas. Winter and spring months are best for birdwatching. Hiking on designated trails is welcomed. Hunters must contact refuge headquarters in the fall before waterfowl season for hunting regulations. To get to ANWR, from I-10 at Hankamer, travel south on Texas 61 for two miles to FM 562. Continue south on 562 for eight miles, then turn east on FM 1985 for four miles to the refuge sign. For more information, call 409-267-3337.

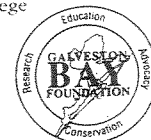
Brazoria National Wildlife Refuge is located in Brazoria County, along the shore of Christmas Bay. This 43,388-acre refuge is utilized by a great diversity of resident and migratory wildlife. Large concentrations of geese and ducks (24 species) are a great spectacle. Thirteen species of sparrows winter on the refuge, and fifteen species of wading birds nest here. Birdwatchers can enjoy a variety of more than 50 migrant species, including 30 warbler species during spring and fall migrations. As part of the Freeport Christmas Bird Count, the refuge is consistently number one or two in the nation in number of species sighted.

The Brazoria National Wildlife Refuge Complex, which includes San Bernard National Wildlife Refuge and Big Boggy Refuge (both of which are not in the Galveston

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The Galveston Bay Foundation is a nonprofit organization whose mission is to preserve and enhance the Bay for its multiple uses through education, conservation, research and advocacy. The mission of the U.S. Fish and Wildlife Service is to conserve, protect and enhance the nation's fish and wildlife and their habitats for the continuing benefit of the American people.

For more information, contact the Galveston Bay Foundation at 17324-A Highway 3, Webster, Texas 77598, or call 713/332-3381.



Bay watershed), has been designated as an internationally significant shorebird site by the Western Hemisphere Shorebird Reserve Network. This designation indicates that the combined complex hosted over 100,000 shorebirds during spring migration. The Brazoria refuge is open only the first full weekend of each month throughout the year, and the first and third weekends November through April. Facilities include observation platform, trails, photo blind, and restrooms. Waterfowl hunting is permitted in limited areas. Classroom programs and tours for groups are available by special arrangement.

The entrance gate is located 15 miles east of Lake Jackson by taking FM 2004 to FM 523 and then to CR 227. For more information, call (409) 849-6062

State Parks and Wildlife Management Areas

State parks and wildlife management areas in Texas are administered by the Texas Parks and Wildlife Department. Parks tend to be more developed than refuges, with camping and recreational facilities as well as excellent wildlife viewing opportunities. Wildlife Management Areas often require special permission to enter, and their management is similar to that of federal wildlife refuges.

Candy Abshier Wildlife Management Area, near Smith Point in Chambers County, offers outstanding bird watching opportunities during the spring and fall migrations. An oak grove on the shore of East Bay furnishes a safe stopover for songbirds to rest and recover during the spring migration. After a rainy cold front, large numbers of birds will land in the trees along the coast to regain strength after a long, non-stop flight across the Gulf of Mexico. Such a **fallout** can include 20 to 30 warbler species.

In the fall, the staging of thousands of hawks during their southern migration is a common sight after cold fronts. Sometimes the "kettles" of hawks float upward on circular thermal currents are so dense they show up on air traffic control radar at Houston airports! Twenty species of raptors have been recorded during the organized "hawk watch," daily from 7 a.m. until noon, mid September through mid October.

To get there, take I-10 to Hankamer, then Texas 61 south to FM 562. Continue south, then west on 562 to Smith Point. For information, call 409-736-2551.

Atkinson Island Wildlife Management Area, in upper Galveston Bay, just east of Morgan's Point and the Houston Ship Channel, is accessible only by boat. The island attracts estuarine birds, migrating songbirds and raptors. Large numbers of ruby-throated hummingbirds stop during September to feed on honeysuckle and trumpet creeper while migrating south. Wading birds and other colonial waterbirds roost all year, and several species of waterfowl spend the winter here. Boaters should be aware that landing and moving about on all bird nesting islands during the spring nesting season is prohibited. Please observe the birds from a distance.

A Texas Conservation Passport is generally required to visit the island, as well as registration with TPWD area headquarters (call 409-736-2551), and guided tours are available periodically.

Galveston Island State Park, about ten miles from the city of Galveston on the west end of Galveston Island, is a wildlife watcher's delight. Diverse habitats include ocean, bay, open pond, coastal wetland, oak grove, prairie, beach and sand dune. An extensive beach where gulls, terns and shorebirds abound is on the Gulf side of the island, while on the Bay side nature trails allow viewing access to waterfowl and marsh wildlife species such as purple gallinules and rails, seaside and sharp-tailed sparrows, shorebirds, fish and crabs. The park includes camping and beach areas.

San Jacinto State Historical Park preserves the location of the famous 1836 battle in which Texas wrested independence from Mexico. Located at the confluence of Buffalo Bayou and the San Jacinto River, the park includes the San Jacinto Monument and Museum and the Battleship Texas. The 1,000-acre park includes some 200 acres of intermediate to brackish marsh, and more marsh is being added as efforts are implemented to convert shallow open water throughout the park back to its historic marsh condition.

Park roads take visitors to vantage points overlooking the marsh, providing unique opportunities for windshield birders, small children

and handicapped visitors. Species vary seasonally, but in summer, wood ibis, roseate spoonbills, white pelicans, osprey and a variety of shore and wading birds are visible. Other species seen regularly include mottled ducks, least terns, peregrine falcons, reddish egrets and dozens of species of migratory songbirds.

The park is located between SH 225 and I-10 on Battleground Road (SH 134). No fee is charged for enjoying the wildlife. For more information, call 713-479-2431.

Sheldon Lake State Park and Wildlife Management Area is one of the area's best-kept secrets. Originally constructed as a water source for WWII industries, the

1,200-acre reservoir is stocked with fish, and a boat launch is available. During the winter, spectacular viewing is provided by large flocks of geese and canvasback ducks on the freshwater marsh and lake. Wading birds, shorebirds and numerous other species of ducks join osprey and other birds of prey in winter months. Alligators are plentiful, along with raccoons, mink, skunks, nutria and white-tailed deer.

Other activities at Sheldon Lake are fishing, wildlife and nature study, and canoeing. Demonstration gardens show visitors landscaping techniques using native plants, and educational programs are offered through the Environmental Center.

To get there, take U.S. 90 from Houston northeast to Sheldon, then Sheldon Road north one mile to Garret Road. Turn west on Garret; the entrance is a little over two miles. Call 713-456-9350 for more information.

Special Places for Wildlife

Privately-owned and managed wildlife sanctuaries, nature centers and municipal parks are excellent places to see and learn about wildlife. Each location has its own unique focus, and an effort to visit all of them will provide the visitor with a comprehensive understanding of the diversity of wildlife and habitats that coexist with one of the largest metropolitan areas in North America!

Armand Bayou Nature Center is a private, nonprofit nature center in the Clear Lake area with interpretive exhibits, guided tours and a bird-viewing blind. This 1,900-acre reserve includes coastal prairie habitat, wooded trails, brackish marshes and freshwater ponds. Wild turkeys were recently released here, and hawks, ducks, wading birds and migrating songbirds are abundant. Coyotes and river otters have been sighted here, as well as alligators, turtles and numerous white-tailed deer. An historic farmhouse is the centerpiece for exhibits about early pioneer residents.

The nature center is closed on Monday and Tuesday. Admission is charged, and special classes and field trips are available. To get there from Houston, take I-45 south to Bay Area Boulevard. Drive east six miles to the entrance of the nature center. Call (713) 474-2551 for information.

Big Reef Nature Park, on the far east end of Galveston, on the Bolivar Roads side of the south jetty, supports a wide array of diverse habitats including tidal lagoons, mud flats, salt marshes, sand dunes and beach communities. Big Reef is also important stopover habitat for migrating birds, as well as nesting habitat.

The park is a partnership of the Galveston Parks Board of Trustees, the City of Galveston and the U.S. Fish & Wildlife Service. A two-mile-long nature trail with interpretive signs and markers brings visitors in contact with each of the park's habitat types.

To get there, take Seawall Boulevard east until it ends, then turn right on Boddeker Drive (also known as South Jetty Road). You'll see a sign on your left, and parking is along the road.

One of the best ways to see bottlenose dolphins, brown pelicans and magnificent frigate birds is by riding the **Bolivar Ferry** from Galveston to Port Bolivar. Motorists, bicyclists and pedestrians taking the free, 15-minute ride can feed the birds off the stern of the ship or just enjoy the scenery as the ferry crosses Bolivar Roads, the pass between Galveston Bay and the Gulf of Mexico.

One of the most spectacular birdwatching sites on the coast is the **Bolivar Flats Shorebird Sanctuary**, just a short drive from the ferry landing on Bolivar Peninsula. The sanctuary consists of 550 acres of salt marsh, beach and uplands adjacent to more than 500 acres of mud flats. It is not unusual to see thousands of shorebirds, gulls and terns as well as several rare marine species. Threatened piping plovers are known to winter here. Herons, egrets and roseate spoonbills are regulars, as well as white and brown pelicans.

