



*The Habitats of
Barataria-Terrebonne*

*Their Importance to Migratory
and Resident Birds*

A Publication of the Barataria-Terrebonne National Estuary Program

2007

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The Habitats of Barataria-Terrebonne Their Importance to Migratory and Resident Birds

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2007

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THREE HUNDRED YEARS AGO the French explorer Pierre Le Moyne, Sieur d'Iberville, sailed over one of the many shallow sandbars that marked the mouth of the Mississippi River into a teeming wilderness paradise. Landing at what we now call "Head of Passes," he went ashore, found a great quantity of game, "duck, geese, snipe, teal, bustards (wild turkey), and other birds," and went hunting "a variety of animals such as stags, deer, buffalos (bison)." A short distance upstream Iberville climbed a willow and looked out over what we now call Barataria-Terrebonne. He saw impenetrable, endless marshes, dense canebrakes, limitless possibilities and resources. As he continued upstream, the river became cloaked in towering Bald Cypress swamp filled with thousands of Carolina Parakeets. He met with the native Americans and traded with them for their bounty of bear, bison, and corn. He and the later French explorers learned of the opossum and the pelican, and they feasted on oysters, crawfish, shrimp, redfish, sheephead, and Sandhill Cranes.

Iberville's observations mark the first written qualitative assessment of the living resources of southeast Louisiana. He was followed by a succession of explorers, missionaries, and, finally, scientists who recorded and measured various aspects of the system's animal populations.



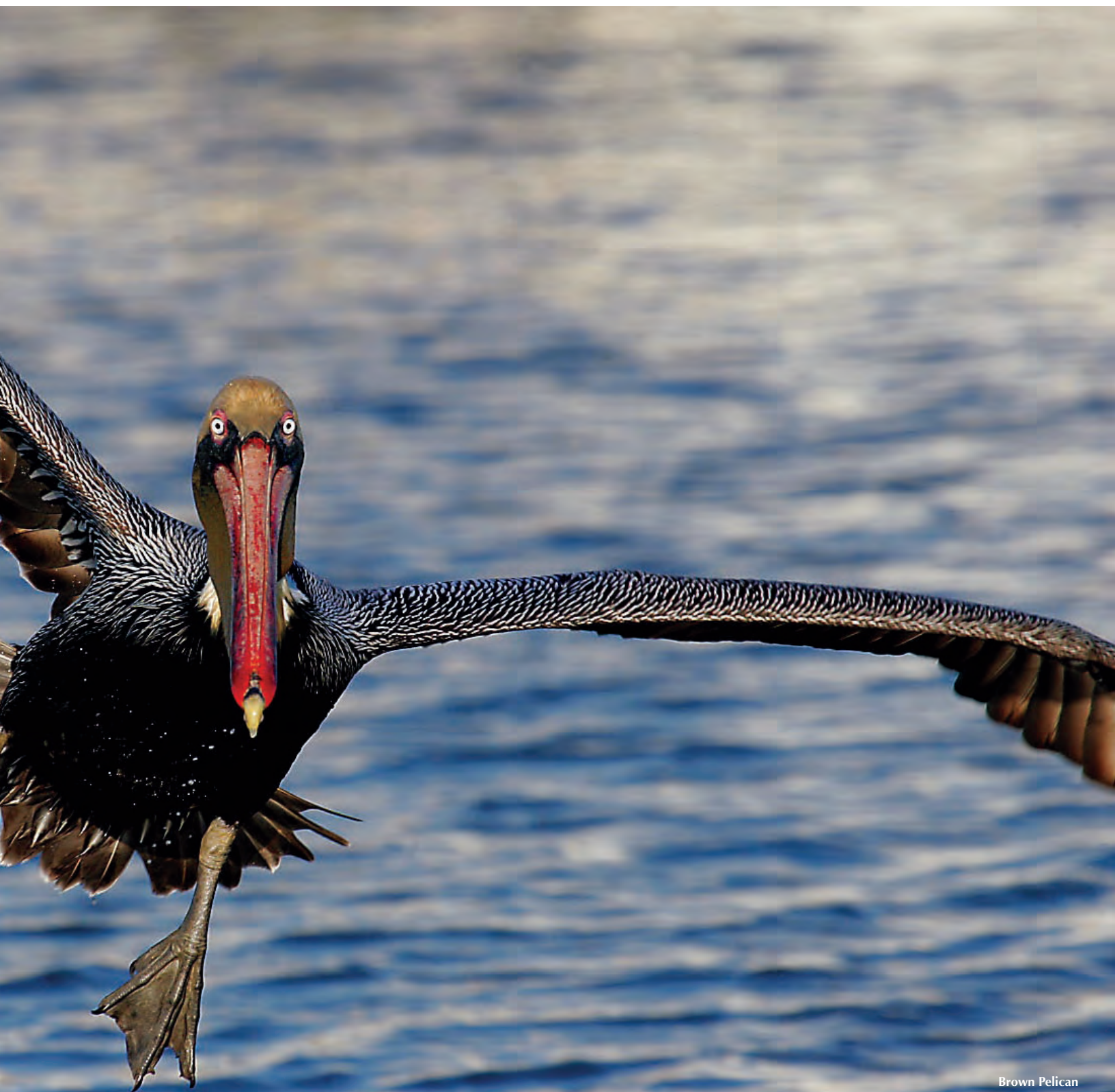
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TODAY - “PRODUCTIVE AND FRAGILE”

We now know that Iberville’s initial assumptions were incorrect: the resources and possibilities were not limitless, and human interaction has caused serious detrimental effects not only to many species of animals but also to the landscape itself. Through time, people and nature have combined to alter this fragile ecosystem in many ways. In spite of these changes, Barataria-Terrebonne still maintains a tremendous variety of habitats and continues to be one of the most biologically productive places in the world. Part of this productivity is represented by the tremendous numbers of migratory and resident birds that are found throughout this region.

The birds pictured throughout this document are only a few species of the hundreds that are known to Barataria-Terrebonne. Read on and learn of the bountifulness of coastal Louisiana’s natural places and why this area is so important to many species of birds - not only those that reside here but also to the many migrants that pass through during different times of the year.





Brown Pelican

BARATARIA- TERREBONNE:



ONE OF AMERICA'S BEST KEPT SECRETS

From a national perspective, when places such as Chesapeake Bay or the Florida Everglades are mentioned, certain images are conjured in the mind of what these places are like. Some may consider these places to be beautiful, some mysterious, and others may see them as controversial because of the environmental, social, and cultural problems that they face. But all would know them as national treasures. Now mention Louisiana's Barataria and Terrebonne basins, and most assuredly the images would not reflect the distinctive character, the cultural diversity, or the ecological importance of one of America's best kept secrets.

While people from south Louisiana are of a unique cultural mix, they too may not know of the importance of Barataria-Terrebonne's natural places. Not only is Barataria-Terrebonne one of America's best kept secrets, it is nearly without rival from an ecological and economic perspective - surely a national treasure.

For those not familiar with this area, the Barataria-Terrebonne basins lie in south-central Louisiana bounded by two great river systems, the Mississippi and the Atchafalaya. Both basins are considered part of the Mississippi River Deltaic Plain that were historically built and nourished as part of the natural deltaic process of the meandering of the Mississippi River over thousands of years. Barataria-Terrebonne encompasses an area of over four-million-acres of marshes and swamps, farms and timberlands, and bays and bayous that are rich almost beyond imagination in natural resources.

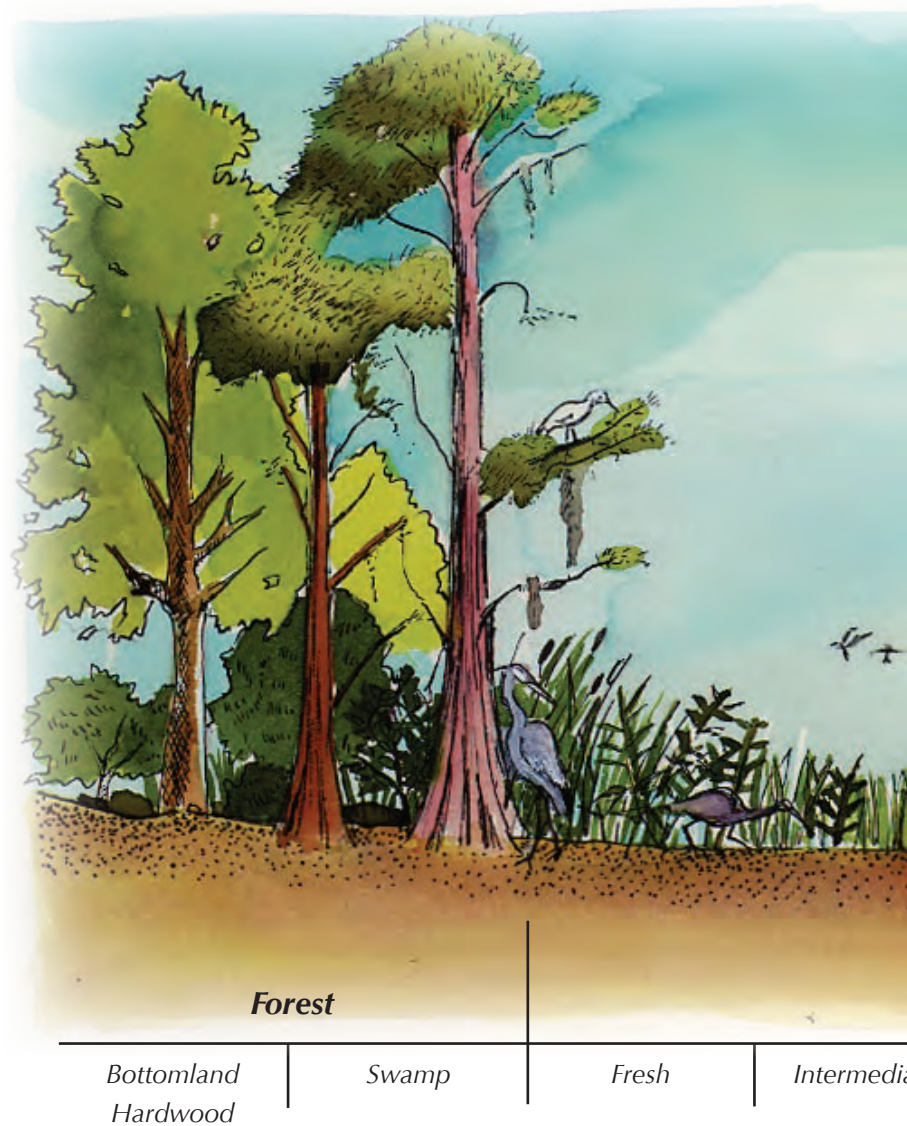
This richness, supported by the many different habitats found throughout Barataria-Terrebonne is demonstrated in part by the millions of birds that spend part or all of their life here in southeast Louisiana.

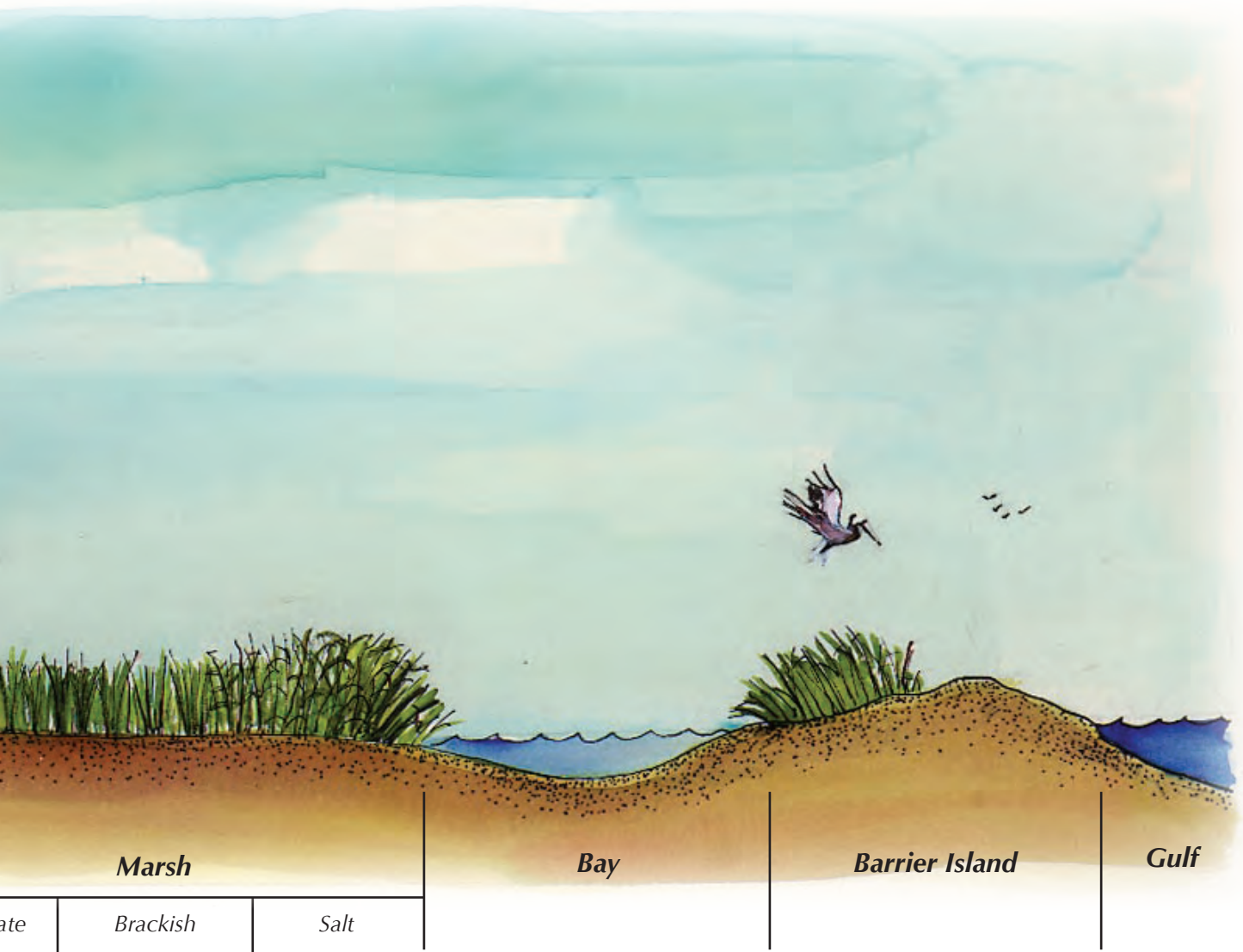


THE HABITATS OF BARATARIA-TERREBONNE: ARE THESE AREAS IMPORTANT TO BIRDS?

All living creatures are directly tied to the habitats that sustain them. In general, birds need three things: places to nest; shelter from predators and inclement weather; and adequate food and water. Essentially, each of these needs are themselves provided by different habitats.

Barataria-Terrebonne is a patchwork of many different habitat types. Each of these different habitat types is used by different birds for different reasons. While much of this region consists of water, there are large expanses of wetland areas including saltwater marsh, freshwater marsh, and forested wetlands. These marsh and forested wetland habitats are lower in elevation than the surrounding natural ridges, causing them to remain wet throughout much of the year. Small remnants of upland forests still remain along the natural ridges of bayous and streams; however, many of these upland forests and some forested wetlands have been cleared for agriculture and residential/urban development.





Birds need three things: places to nest; shelter from predators and inclement weather; and adequate food and water.



Reddish Egret

BARRIER AND HEADLAND BEACHES

Along southeast Louisiana's coast are numerous barrier islands and headland beaches, many of which are accessible only by boat. The beaches, mudflats, and adjacent gulf and bay waters form a relatively narrow ribbon of habitats that are extremely important to many species of birds that pass through on their long migratory journey, including shorebirds such as Wilson's and Snowy Plovers, Willets, Sanderlings, Red Knots, and threatened Piping Plovers. These areas are also important to colonial water birds, among which are Laughing Gulls, Least and Foster's Terns, and endangered Brown Pelicans. The barrier islands and headland beaches are used not only as staging and "refueling" areas for migrants but also as nesting sites for other common birds such as Royal and Caspian Terns, Black-necked Stilts, Roseate Spoonbills, Great and Snowy Egrets, Tricolored Herons, and Black Skimmers.

Common plants found on barrier beaches and mudflats include Maritime Saltwort, Bushy Sea-oxeye, Black Mangrove, Seashore Saltgrass, and Smooth Cordgrass.



Wilson's Plover



Ruddy Turnstone



Red Knot



Along southeast Louisiana's coast are numerous barrier islands and headland beaches.

Roseate Spoonbills in Louisiana



Roseate Spoonbills nest only in Texas, Louisiana, and Florida in the United States.

The renowned Roger Tory Peterson said of the Roseate Spoonbill that (It is) "One of the most breathtaking of the world's weird birds". This very large member of the Ibis family is spectacular in soft pink plumage. In breeding season, Roseate Spoonbills exhibit wide carmine epaulets, and orange on the tail. The bird's unusual, large, spatulate bill strikes some as adding interest, and others as aesthetically unsatisfying. It is, however, an effective feeding tool that the bird moves back and forth in shallow water to catch live prey.

Roseate Spoonbills nest only in Texas, Louisiana, and Florida in the United States, with the Louisiana sites the northernmost part of their nesting range. Market hunters very nearly wiped out Roseate Spoonbills in the early 1900s when the pink plumage was in great demand for ladies' hats. In 1940 it was rare to observe a Roseate Spoonbill in Louisiana, but the birds rebounded strongly in Cameron and Vermilion Parishes. In recent years Louisiana birds have been extending their range eastward. There is a large colony at Lake Martin in St. Martin Parish, and nesting birds at Port Fourchon, in Lafourche Parish. While Texas spoonbills are migratory, Louisiana birds are not.

Swamps and marshes are Roseate Spoonbills' preferred habitat. They nest in colonies, building large nests of sticks, twigs and other plant material. The female, having selected a nesting site in a tree fork, waves a small, leafy branch. A male, accepting her invitation, offers her small sticks, suggestive of nest building. The courtship proceeds with head bobbing, dance-like motions, and rubbing of bills. The pair now proceeds to nest building. The female does the construction while the male supplies the materials. Only when they are satisfied with their nest, do the pair mate. Two or three eggs are incubated for 22-24 days. The young birds, which are white, fledge at six weeks. It will take them three years to achieve adult plumage.

MARSHES

There are many places in southeast Louisiana where vast freshwater, intermediate, brackish, and saltwater marshes stretch as far as one can see. These seemingly endless lush green fields with their intermittent ponds, lakes, and bays are important habitat for millions of birds.

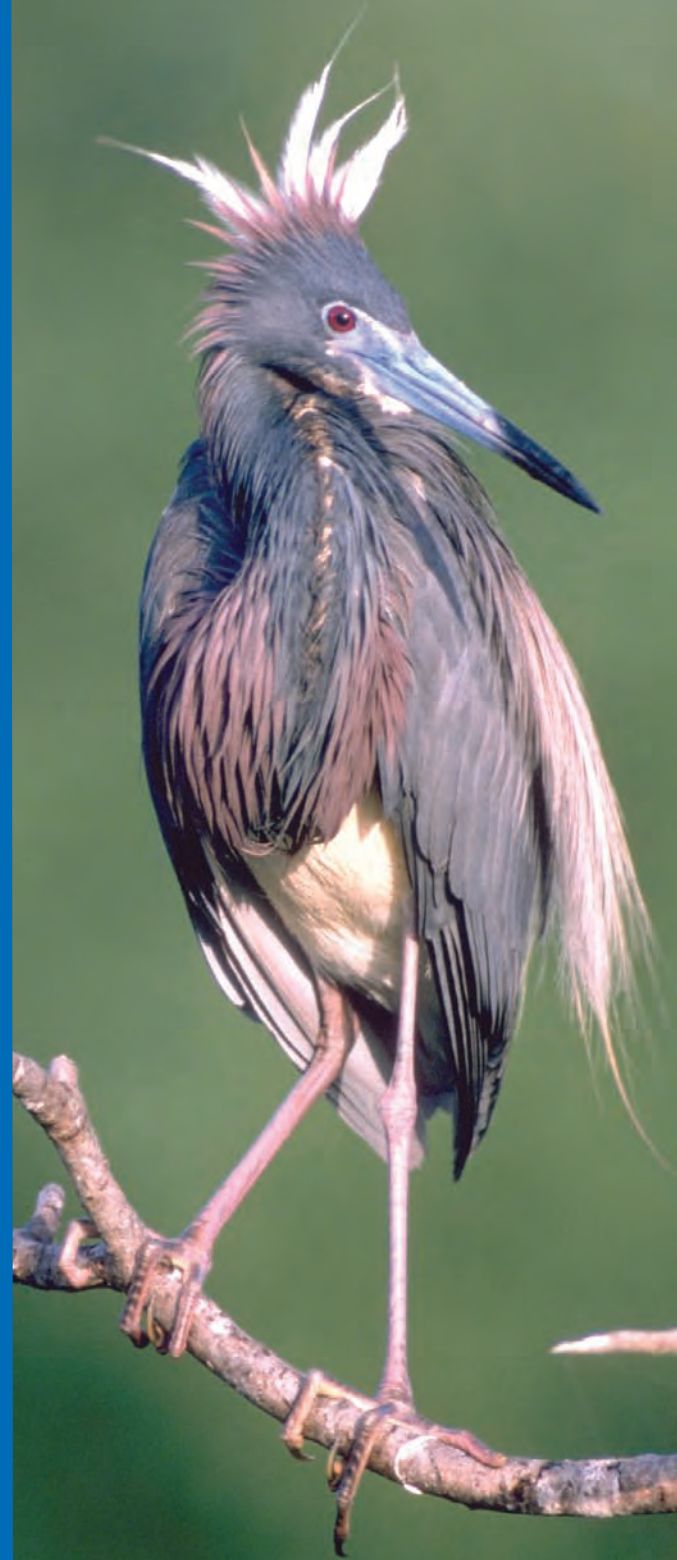
Because the slope of the Mississippi deltaic plain from north to south is so gentle, changes in marsh communities are gradual and the boundaries often difficult to discern. Typically these marsh communities parallel the coast and are distinguished from one another by the plant species that make up these floral communities.

Freshwater marshes constitute the northernmost reaches of marsh habitat fringing many of Barataria-Terrebonne's Bald Cypress/Water Tupelo swamps. These marshes support the greatest plant diversity of all marsh habitats. Common plants of freshwater marshes include Maidencane, Spikesedge, Bulltongue, Alligatorweed, Giant Cutgrass, Pickerelweed, Pennywort, Cattail, Southern Wildrice, Coontail, Common Duckweed, and Waterlilies.

Much of Barataria-Terrebonne's freshwater marsh is "floatant" meaning that it is buoyant during certain times of the year. Also known colloquially as "trembling prairies," these marshes break away from the sinking land and float during periods when water levels are elevated. Rare across the United States, some floating marshes are so buoyant that they quake when walked on while others are so firm that it is difficult to tell that they are floating. Firm floating marshes can be classified as evergreen shrub/scrub habitat because of the thick stands of Wax Myrtle that colonize them.

Freshwater marsh gives way to intermediate, brackish, and finally saltwater marsh, representing an increase in salinity and decrease in plant diversity as one progresses southward toward the Gulf of Mexico. Common plants of intermediate marshes include Bulltongue, Giant Bulrush, Common Threesquare, Deer Pea, Switch Grass, Walter's Millet, Alligator Weed, and Southern Naiad. Brackish marshes are dominated by Marshhay Cordgrass, Olney Bulrush, Leafy Threesquare and Widgeongrass, while salt marshes are characterized by Smooth Cordgrass, Saltgrass, Black Needlerush, and Saltwort.

Many of these non-fresh marsh habitats are rooted to the ground and are not buoyant, meaning they are inundated during high tides. Plants that are common to these marsh habitats have evolved to tolerate salt water and flooding for short periods.



Tricolored Heron



Marshes with their intermittent ponds, lakes, and bays are important habitat for millions of birds.

These marshes serve as resting and feeding habitats for millions of wintering waterfowl and marsh dependent birds including Pied-billed Grebes, American Bitterns, American Coots, Soras, Green-winged Teal, Gadwall, Northern Pintail, and Swamp Sparrows. Marsh habitats are also important to Neotropical migrant wading birds such as Snowy Egrets, Little Blue and Tricolored Herons, and Black-necked Stilts, and Neotropical migrant shorebirds including Semipalmated Plovers, Long-billed Dowitchers, Lesser Yellowlegs, and Solitary and Western Sandpipers.

Migratory songbirds that visit southeast Louisiana's marsh habitats include Northern Waterthrush, Yellow Warblers, Common Yellowthroats, and Indigo Buntings. These birds can typically be found in the floating marsh habitats that support shrub species of plants. Among the resident marsh birds that nest and make their home here are Mottled Ducks, Common Moorhens, Glossy and White-faced Ibis, and Marsh Wrens. Common Loons, Horned Grebes, Lesser Scaup, and Red-breasted Mergansers are usually found in winter on the open lakes and bays that fringe many of these marsh habitats.

Distributions of many species of birds are influenced by salinity, with species such as Clapper Rails and Seaside Sparrows restricted to salt marsh, whereas Least Bitterns, King Rails, and Purple Gallinules can be found in fresher marshes. Some species, on the other hand, can tolerate a wide range of salinities and are found throughout all marsh habitats including Red-winged Blackbirds, Great Blue Herons, and White Ibis.



Many species of birds are influenced by salinity.



Prothonotary Warbler



Black-crowned Night-Heron

FORESTED WETLANDS

Inland from the marshes are the seemingly impenetrable forested wetlands of Barataria-Terrebonne that include both swamp and bottomland hardwoods. A swamp forest with its cathedral Bald Cypress, moss-festooned Water Tupelo, and tea-stained water is a notable hallmark of Louisiana. These majestic cypress-tupelo forests are important not only to migrants such as Yellow-crowned Night-Herons, Acadian Flycatchers, Northern Parulas, and Hooded, Prothonotary, and Yellow-throated Warblers, but are equally important to resident Great Blue Herons, Wood Ducks, Red-shouldered Hawks, Barred Owls, and Pileated Woodpeckers. In the winter, these swamps host Yellow-bellied Sapsuckers, Eastern Phoebes, and hordes of Yellow-rumped Warblers.

Swamp forests are not much higher in elevation than the adjacent freshwater marshes and are typically flooded much of the year; meanwhile they serve as a transition between marsh and upland habitats. Trees and shrubs that dominate this ecosystem have evolved to tolerate prolonged flooding including Bald Cypress, Water Tupelo, Swamp Red Maple, Black Willow, Pumpkin Ash, Green Ash, Water Locust, and Buttonbush.

Many of these cypress-tupelo swamps are flanked by bottomland hardwoods of Barataria-Terrebonne. Here, forested wetland plant diversity is at its greatest. Like cypress-tupelo swamp, bottomland hardwood forests are also very important to migratory songbirds including Yellow-billed Cuckoos, Summer Tanagers, Red-eyed Vireos, and Great Crested Flycatchers. Resident birds such as Eastern Screech-Owls, Northern Cardinals, Blue Jays, and Carolina Chickadees are common inhabitants of these forests. In winter, forested wetlands shelter Sharp-shinned Hawks, American Woodcocks, Hermit Thrushes, Ruby-crowned Kinglets, Blue-headed Vireos, and White-throated Sparrows.

Prominent in bottomland hardwood plant communities are Overcup Oak, Water Hickory, Sugarberry, Swamp Dogwood, Privet, Water Elm, Water Oak, Sweet Gum, Box Elder, Winged Elm, hawthorns, Red Mulberry, and Pecan trees.



Forested wetlands of Barataria-Terrebonne include both swamp and bottomland hardwoods.

Swallow-tailed Kite



This bird of prey graces Louisiana's skies during the spring and summer. It nests in Louisiana and other coastal states of the southeast, and winters in Brazil. Its beauty and rarity make this a favorite of bird watchers around the world. The long, pointed wings and very long, deeply forked tail make this bird appear to be larger than it is. Although the kite sports a four-foot wingspan, its body is only crow-sized. The white head and body contrast sharply with the black back, wings, and tail. The undersides of the wings are white except for the black flight feathers (primaries and secondaries). This bird's unique aerodynamic design allows it to "kite" or float in the air like a paper kite, hardly ever having to flap its wings. The Swallow-tailed Kite's silhouette is similar to the more common Mississippi Kite. The latter is smaller, square-tailed, and gray and charcoal in color.

Kites are distinguished from members of the hawk family by being weak predators. They generally hunt very small animals and pose absolutely no threat to game species, livestock, domestic animals, or pets. Flying insects are the staple of the Swallow-tailed Kite's diet. During summer months, kites also eat a lot of wasp larvae. Grabbing the wasp nest on the wing, the kite flies rapidly away from the wasp nest-guards, and finds a safe place to extract the larvae with its hooked bill. Small vertebrate animals become especially important as prey during the spring and summer when kites raise their young. Vertebrates preyed upon include lizards, tree frogs, small snakes, tree-roosting bats, and nestling birds.

This species is rare and of conservation interest because the U.S. population suffered a dramatic decline from 1880 to 1940. The primary reason for this decline was human alteration of the kite's nesting and feeding habitat. Extensive logging of the southeastern United States over a period of about 60 years left virtually no forested wetlands intact. Changes in agricultural practices in the northernmost part of the kite's former breeding range also destroyed nesting habitat. Wanton shooting, as well as egg collecting, hastened the species' decline. Swallow-tailed Kites and other native raptors are protected by state and federal laws. It is illegal to shoot one, and anyone caught shooting one will face heavy fines, may serve jail time, and may lose his or her hunting license for life.

Conservationists consider the Swallow-tailed Kite to be an area-sensitive species. Large areas of suitable habitat (forested wetlands and bottomland hardwood forests) must be protected to ensure its future. The forested wetlands of Louisiana have provided a stronghold for the Swallow-tailed Kite. Populations nest in the Pearl, Atchafalaya, and Sabine River Basins, and recent sighting reports suggest that small groups may nest in the Barataria-Terrebonne basin. Jennifer Coulson of Tulane University studies the current population's distribution, status, and demography, as well as the species' nesting ecology and habitat needs in Louisiana. She hopes to learn more about the distribution of this species within the Barataria-Terrebonne basin. If you see a Swallow-tailed Kite, please e-mail a report of your sighting to her: Jacoulson@aol.com



Eastern Screech-Owl



Hooded Warbler



Ruby-crowned Kinglet



Eastern Phoebe



Yellow-bellied Sapsucker



Prothonotary Warbler



Great Blue Heron



Summer Tanager



Orange-crowned Warbler



Chipping Sparrow

A Louisiana Spectacle



Not to be confused with the aftermath of a nuclear explosion, a fall-out is a weather-induced grounding of migratory birds. Under typical North American spring weather conditions, prevailing south winds enable migrant birds traveling north from Mexico, Central America, and the West Indies to overshoot the gulf coast and make their first landfall 30 - 50 miles inland. During occasional fall-out events, however, coastal patches of woods offer critical rest stops for migrant birds. Fall-outs occur when cold, dry air masses coming from the north collide with warm, moist air proceeding inland from the Gulf of Mexico. The heavy cold air forces the warm air mass upwards, where it cools, condenses, and precipitates to the ground as rain. The mixing line between the cold front and the warm front is often characterized by violent thunderstorms and strong winds. North winds prevail once the cold front passes through. Spring migrant birds moving north across the Gulf of Mexico that encounter those storms and winds are subject to increased energy demands, which may exhaust the reserves of fat they have accumulated on the wintering grounds. Some perish before reaching land. In a 1995 *Journal of Field Ornithology* article, David and Melissa Wiedenfeld estimated that 40,000 Neotropical migrant birds were killed on April 8, 1993, in the vicinity of Grand Isle, Louisiana, during a severe storm. Those birds that are able to reach the coast will often land in the first available patch of woods, "falling out" of the sky into the trees. Upon arrival, they must replenish depleted food and water reserves before continuing their northward journeys.

In Louisiana, coastal wood patches on cheniers, bayou ridges, and maritime forests provide essential stopover habitat for migrant birds during occasional fall-out conditions. Where those woods are accessible, as at The Nature Conservancy's Lafitte Woods Preserve on Grand Isle, birdwatchers lucky or savvy enough to be present during a big fall-out are treated to an amazing spectacle. Trees and shrubs teem with birds, while others search for food among the leaf litter on the forest floor. Nearly every species of Neotropical migratory land bird breeding in the eastern United States may be seen moving through Louisiana's coastal wooded areas during a major fall-out - warblers, vireos, tanagers, thrushes, cuckoos, nighthawks, hummingbirds, raptors - along with an occasional heron, rail, or other bird species thrown in as well.

A mulberry tree with ripe fruits may be filled with a kaleidoscopic mix of birds, including blood-red Summer Tanagers, velvety-red Scarlet Tanagers, orange Baltimore Orioles, burnt-orange Orchard Orioles, deep-blue Indigo Buntings, and multi-hued Painted Buntings. Intent on feeding and drinking, fall-out birds often seem unconcerned with the attentions of birdwatchers, and allow close study.

Although some areas have been conserved, erosion, subsidence, saltwater intrusion, exotic plants, development, and incompatible grazing practices threaten much of Louisiana's coastal migratory bird stopover habitat. Conservation and restoration of our coastal woodlands will be necessary to ensure that future generations of birdwatchers can enjoy the spectacle of a fall-out.

For more information about cheniers and their importance related to birds go to www.birds.btneq.org



A fall-out is a weather-induced grounding of migratory birds.



Upland forests once dominated many of Louisiana's barrier islands.

UPLAND FORESTS

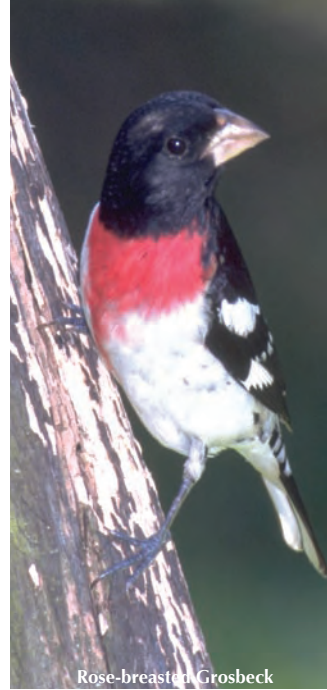
Found along the natural ridges of relict distributaries (bayous) and on cheniers (former beach ridges) near the coast are the upland forests of Barataria-Terrebonne. Much of these formerly vast forests were cleared for agricultural and urban development long ago as they represented the highest ground available. This “highest ground” was the last place to flood during periods of heavy rainfall or strong southerly winds. Historically, upland forests also dominated many of the barrier islands that exist today.

Chenieres on barrier islands are of particular importance to migratory songbirds just before or after their gulf crossing including Swainson’s Thrushes, Yellow-throated Vireos, Scarlet Tanagers, Painted Buntings, Rose-breasted Grosbeaks, Baltimore Orioles, Tennessee, Cerulean, Blackburnian, Kentucky, Wilson’s, and Black-throated Green Warblers, and many others. These upland plant communities produce seeds, fruit, and host insects important to songbirds that spend part of their migratory journey in these habitats.

Plant associations of upland forests vary depending on geography. Typically, upland forests along natural ridges are dominated by Live Oak, American Elm, Water Oak, Southern Red Oak, Sugarberry, and Honey Locust. However, barrier islands support Live Oak, Sugarberry, Red Mulberry, Elderberry and Toothache trees.



Indigo Bunting



Rose-breasted Grosbeck



Orchard Oriole



Scarlet Tanager



Eastern Phoebe



Painted Bunting

Agricultural Wetlands as Critical Waterbird Habitat in Louisiana



Over 280 bird species have been identified in and around crawfish-rice systems in Louisiana.

Rice and/or crawfish are cultivated in over 300,000 ha of shallow earthen impoundments within 160 km of the Gulf of Mexico from the central Texas coast eastward to southeastern Louisiana. The region includes both the Gulf Coastal Plain and the Lower Mississippi River Valley. Annual loss of 4,475 ha of coastal wetlands over the past 50 years has significantly reduced desirable natural freshwater habitat in the region.

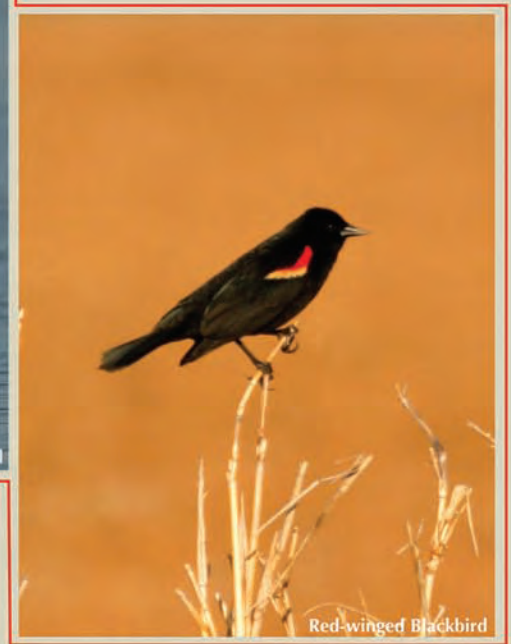
The suite of resident, migrant, breeding, and wintering waterbirds depending on this region includes grebes, pelicans, cormorants, anhingas, wading birds, waterfowl, coots, rails, gallinules, shorebirds, gulls, and terns. All these species groups

now utilize the artificial freshwater wetland habitat provided by

the agricultural wetlands, and they include local, regional, continental, and hemispherical populations.

Crawfish ponds are especially valuable cool season habitat for predaceous waterbirds because they provide shallow water systems rich in invertebrate and small vertebrate prey during the period from mid-autumn through mid-spring when most ricefields are drained.





Numerous other bird species utilize riparian areas around agricultural wetlands either as residents or seasonal visitors. Over 280 bird species have been identified in and around crawfish-rice systems in Louisiana.

While birds are conspicuous species associated with agricultural wetlands, numerous other vertebrate species including mammals, reptiles and amphibians utilize the habitat. In addition, fishes in waterways receiving pond effluents receive significant food resources when water is released from the ponds.



URBAN AND AGRICULTURAL LANDS

As described earlier, much of the upland forests and bottomland hardwoods that historically existed was cleared for urban and agricultural development. Urban areas throughout Barataria-Terrebonne consist mainly of small communities and neighborhoods that can offer suitable habitats for birds. Ideal backyard habitats have not only bird houses and feeders, but also a wide variety of trees and shrubs that can meet the needs of the birds with which we are most familiar, including Northern Mockingbirds, Brown Thrashers, Northern Cardinals, Carolina Wrens, and Mourning Doves. Such yards also accommodate exotic and sometimes nuisance species such as European Starlings, House Sparrows, and Rock Pigeons.

Agricultural lands, of course, have the potential to benefit birds. Areas of sugarcane, southeast Louisiana's predominant crop, generally provide little benefit to either resident or migratory birds. Nevertheless, Red-winged Blackbirds, Tree Swallows, and some raptors can be found near such fields. When fallow, sugarcane fields provide habitat for Eastern Meadowlarks and wintering Le Conte's and Song Sparrows. Crawfish ponds have been created on some agricultural lands. They are heavily used by waterfowl, wading birds, and shorebirds.

Other migrants that spend winter months in Barataria-Terrebonne frequent upland forest habitats, particularly those adjacent to agricultural fields. They include Red-tailed Hawks, American Kestrels, Savannah Sparrows, and American Pipits.



Ideal backyard habitats have not only bird houses and feeders, but also a wide variety of trees and shrubs that can meet the needs of the birds.

Hummingbird Bander Extraordinaire

How far would you go to attract hummingbirds to your yard? Would you paint your house red? Well, that's exactly what federally permitted Hummingbird Bander, Nancy Newfield of Metairie, Louisiana, did. And it surely has gotten results. During the Winter Hummingbird Season of 2001-2002, which unofficially runs from November 15 to March 31, Ms. Newfield recorded 27 winter hummingbirds of 5 species in her Metairie yard.

Nancy has been banding hummingbirds since 1979, but she has been in love with these beautiful birds since childhood. She has written about them, lectured about them, and educated thousands of adults and children about these tiny birds. Ms. Newfield's banding study, *The Louisiana Winter Hummingbird Project*, conducted under the authority of the federal Bird Banding Laboratory, primarily deals with western hummingbird species, which winter in Louisiana. The species banded by Nancy in Louisiana include our very common Ruby-throated Hummingbird, and the following not-so-common species: Anna's, Black-chinned, Broad-tailed, Broad-billed, Buff-bellied, Rufous, Allen's, Calliope, and Blue-throated.

Even after handling these beauties, she is still waiting for the BIG ONE and speculates that the White-eared Hummingbird may just be the next species putting in an appearance in our fair state.



Buff-bellied Hummingbird



Rufous Hummingbird



Anna's Hummingbird

THE BIRDS OF BARATARIA - TERREBONNE: HOW MANY AND WHO ARE THEY?

Over 400 species of birds are known to have been found in Barataria-Terrebonne. Of this number, it is thought that 185 are considered common to abundant at least during part of the year. Birds can be grouped together based on similar feeding and habitat requirements, migratory patterns, and size. These groups include colonial nesting birds, wading birds, waterfowl, shorebirds, songbirds, and raptors (birds of prey).

Examples of birds common to southeast Louisiana are:

COLONIAL NESTING BIRDS

Laughing Gulls, Royal Terns, Brown Pelicans, and Black Skimmers;

WADING BIRDS

Great Blue Herons, Reddish Egrets, Snowy Egrets, and White Ibis;

WATERFOWL

Blue-winged Teal, Gadwalls, Northern Pintails, and Hooded Mergansers;

SHOREBIRDS

Willetts, Sanderlings, Killdeers, Ruddy Turnstones, and Black-bellied Plovers;

SONGBIRDS

Northern Cardinals, Blue Jays, White-eyed Vireos, and Bay-breasted Warblers; and

RAPTORS

Ospreys, Red-tailed Hawks, Mississippi Kites, Northern Harriers, and Great Horned Owls.

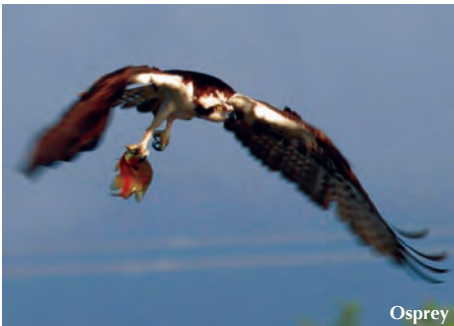
Birds can also be grouped as migratory or residents and migratory birds can be further grouped as either temperate or Nearctic-Neotropical migrants. Obviously, residents spend their entire lives in a particular geographic region, whereas migratory birds spend their breeding season in one region and their winter in another. Examples of resident birds include Northern Bobwhites, Northern Mockingbirds, and Carolina Wrens. Some individuals of these species might never wander farther than a few miles from the nest where they were hatched!



Black Skimmer



White-eyed Vireo



Osprey



Yellow-crowned Night-Heron



Wood Duck



Sanderling

Temperate migrants, on the other hand, breed in the northern United States and Canada and spend winter months as far south as the gulf coast. Such birds include Snow Geese, Golden-crowned Kinglets, Loggerhead Shrikes, Sedge and Winter Wrens, and White-crowned, Lincoln's, and Vesper Sparrows. Nearctic-Neotropical migrants are defined as bird species for

which the majority of individuals breed north of the Tropic of Cancer and winter south of that same latitude. Examples are Magnolia Warblers, Swallow-tailed Kites, arctic Peregrine Falcons, and Wood Thrushes. Some of these migrants make extraordinary journeys by leaving the polar arctic tundra and eventually arriving along beaches in the southern hemisphere. American Golden-Plovers, Red Knots, Dunlins, and others make extremely long flights that can involve up to about 6,500 miles one way!

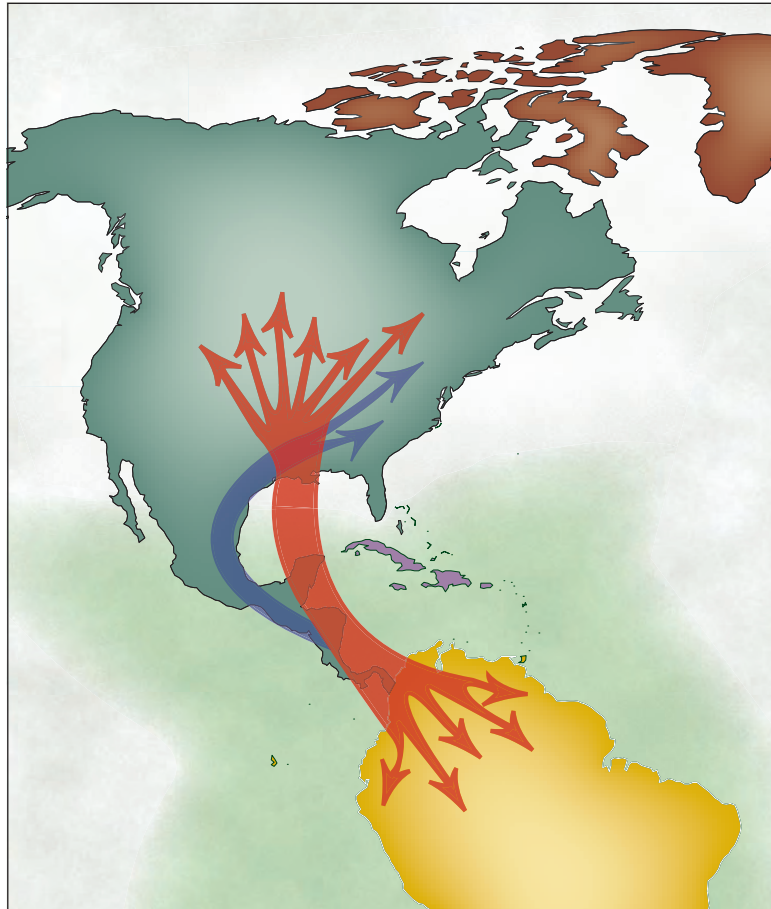
The three main reasons for the abundance and great variety of bird species in Barataria-Terrebonne are - habitat, geography, and productivity. Since many birds require specific natural settings in which to forage and nest, these numerous habitats offer attractive opportunities for many different bird species.

The geography of Barataria-Terrebonne might be more significant than habitat variety in explaining the popularity of this region for our feathered friends. Many bird species found here are Nearctic-Neotropical migrants. The location of this region along the central gulf coast provides an ideal "jumping off point" for many migrants crossing the gulf on their way south during fall migration and a convenient "returning point" for those returning the following spring.



In addition, many temperate migrants in search of milder winter climates forage in Barataria-Terrebonne's rich productive habitats during the colder months.

The sheer numbers of birds found throughout this region are partly due to the high productivity of the many wetland habitat types that occur here. Generally, estuarine wetlands are considered to be among the more biologically productive areas on earth. Here, this productivity is further enhanced by the influence of the Mississippi and Atchafalaya Rivers with the abundant nutrients and sediments they carry. Tides carry fresh water and nutrients into the bays and wetlands of Barataria-Terrebonne, which in turn stimulates the growth of plants and algae. Plants and algae serve as the basis of the food chain that support the many birds that are found here.



Hummingbirds—The Year-Round Backyard Visitor



Broad-billed Hummingbird



Rufous Hummingbird

During the winter, Louisiana becomes a haven for a variety of Western Hummingbirds.

Those of us who live in the beautiful Barataria-Terrebonne Basins have many wonderful things to enjoy: the scenic beauty of bayous and swamps, the abundant wildlife, delicious seafood, charming people, and hummingbirds all year long.

Not so many years ago, people in south Louisiana thought that the Ruby-throated Hummingbird was the only species of hummingbird found within the borders of our state. Today, those people willing to maintain gardens with hummer-attracting flowers and to keep hummingbird feeders clean and filled are rewarded with beautiful birds that are normally found in the western United States and Mexico.

*Hypotheses about the changes in hummingbird migration patterns are as abundant as blooms on a Mexican Cigar bush, and we will probably never know the real reason why they are coming to Louisiana and points east in ever increasing numbers each year. But they **are** coming. During the Winter Hummingbird Season of 2001-2002, which runs unofficially from November 1 to March 31, over 800 hummingbirds of eight species were recorded via the **Louisiana Western Winter Hummingbird Report**. The Internet has linked hummingbird lovers together via a chat group called Humnet. Members report sightings weekly, by Parish, throughout the winter season.*

In Lafourche Parish during the 2001-2002 season, the Rufous Hummingbird, which breeds in the Pacific Northwest and western Canada, was the most numerous species reported. Other species included Buff-bellied, Allen's, Black-chinned, Calliope, Broad-tailed, and Broad-billed. Many Ruby-throated Hummingbirds are also found to be wintering in Louisiana.

So, rather than taking your feeders down when Labor Day arrives, clean and re-fill them and tie a few red ribbons in your trees and shrubs, and you may just be able to enjoy these delightful and beautiful birds all year long.

Although Ruby-throated hummingbirds are the only species of North American hummingbird that breed in Louisiana, they are definitely not the only species of hummingbird to be found in our bird-rich state. During the winter, Louisiana becomes a haven for a variety of Western Hummingbirds, including Black-chinned, Calliope, Buff-bellied, Broad-billed and three different Selasphorus hummers—Allen's, Rufous and Broad-tailed. In fact, during the winter months, Ruby-throated hummingbirds are out-numbered by western species by a margin of roughly 5:1.

Previous hummingbird wisdom preached that Louisiana residents should remove their feeders around Labor Day so that the Ruby-throated hummingbirds would not linger here and become “trapped” when winter set in. Over the past few years, assisted by the Internet and the LSU hosted listserv, Humnet, tracking of hummingbirds in Louisiana has become almost a science. Tom Sylvest of Gramercy, since 1999, has maintained a database of all western hummingbirds observed in the parishes of Louisiana. During the 2003-2004 season, observers reported 475 Rufous, 121 Black-chinned, 67 Buff-bellied, 39 Calliope, 15 Allen’s, 10 Broad-tailed, and 2 Broad-billed hummingbirds between July and April. A tally is also maintained for wintering Ruby-throats that are observed in Louisiana from December onward, as these birds are considered to be “wintering” here rather than migrating.

Western hummingbirds are concentrated in the southernmost parishes of the state, but observations have been reported from several areas in the middle and northern portions as well. East Baton Rouge and Lafayette parishes lead the tally, but this is possibly due to the fact that many observers in those areas subscribe to Humnet. Humnet, which is a listserv devoted to discussions about hummingbirds and gardening to attract them has almost 300 subscribers, many from outside of Louisiana. A question asked on Humnet can almost always receive an answer from a well-known hummingbird authority, because there are several who subscribe to, and regularly contribute to exchanges on a daily basis.

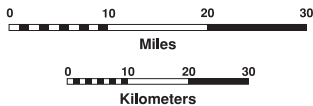


Ruby-throated Hummingbird

HABITAT CHANGE IN BARATARIA - TERREBONNE: HOW DOES THIS AFFECT BIRDS?

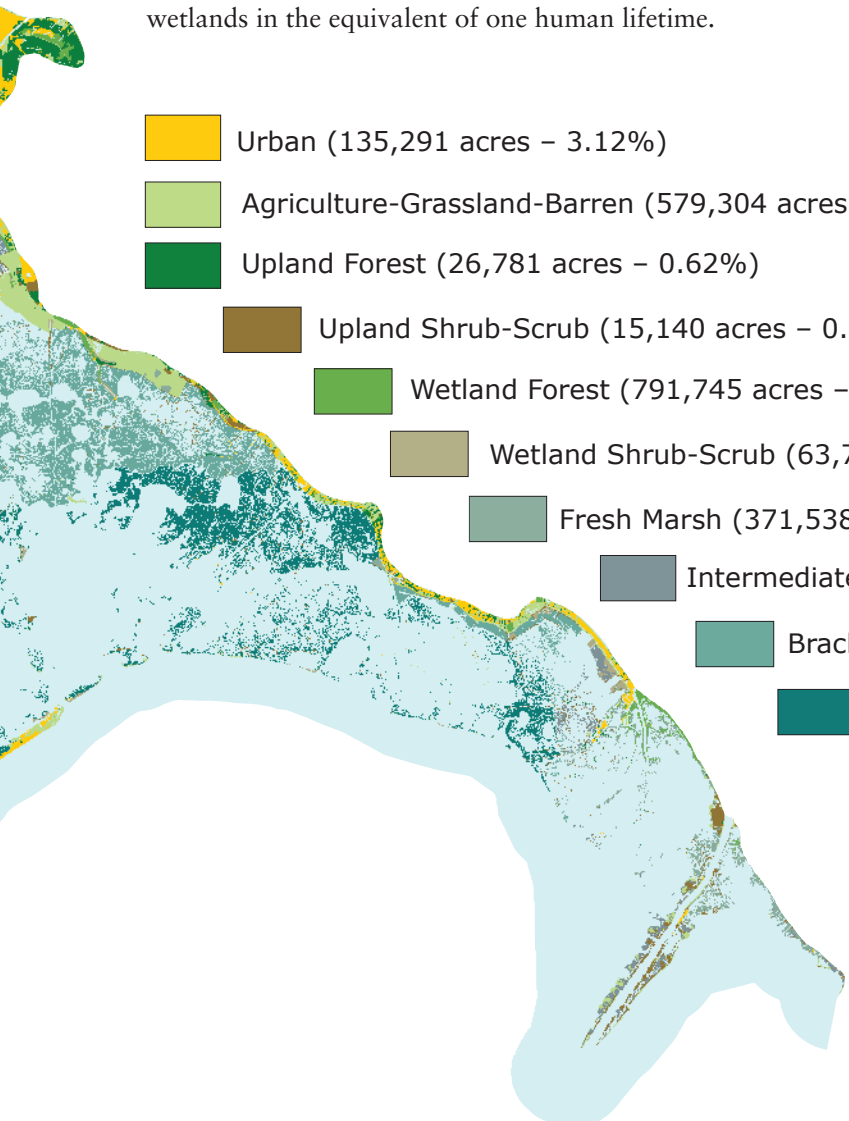
A bird soars in a graceful arc, weary from its long migration from South America. The first patches of land it sees on its way north are the barrier islands along southeast Louisiana's coast. Now fighting against the winds of an approaching storm, the exhausted bird glides toward the cheniers on Grand Isle. These live oak forests are all that's left. Those of Raccoon Point, Timbalier, Grand Terre, and other islands along Louisiana's coast no longer exist.

These islands have been there for a long time. As far as the birds are concerned, they will always be there. But the birds don't know that these islands are getting smaller every year. Recently they have become more fragmented and more prone to destruction from storm surge. Predictions suggest that many of them will not exist in 20 to 30 years.



Habitats naturally evolve from one type to another over time. Under normal, natural circumstances these changes are random and influence many different habitat types, which ultimately maximizes species diversity. As these habitats are altered, the animals that live or utilize them either adapt to the changes or move to find more desirable locations. Historically in coastal Louisiana, habitat changes have occurred relatively slowly over hundreds of years. These changes were greatly influenced during the last 8,000 years by the periodic natural shifting of the meandering Mississippi River due to its abandoning an old (usually long and winding) route for a shorter course to the Gulf of Mexico.

Through this ongoing process, a newly abandoned river delta would soon begin to deteriorate due to changes in water salinity and to subsidence (sinking of the land) while a new river delta began forming elsewhere. These natural processes were relatively slow to act upon the landscape. In recent times, however, coastal Louisiana has undergone dramatic change in a much shorter period. This rapid change is due in large part to human influence. Our actions have hastened the loss of thousands of acres of wetlands in the equivalent of one human lifetime.



- Urban (135,291 acres – 3.12%)
- Agriculture-Grassland-Barren (579,304 acres – 13.35%)
- Upland Forest (26,781 acres – 0.62%)
- Upland Shrub-Scrub (15,140 acres – 0.35%)
- Wetland Forest (791,745 acres – 18.24%)
- Wetland Shrub-Scrub (63,763 acres – 1.47%)
- Fresh Marsh (371,538 acres – 8.56%)
- Intermediate Marsh (102,918 acres – 2.37%)
- Brackish Marsh (170,406 acres – 3.93%)
- Saline Marsh (200,045 acres – 4.61%)
- Water (1,883,515 acres – 43.39%)



Humans have confined the mighty Mississippi River with a levee system for the purpose of flood protection after the Great Flood of 1927. These levees have essentially restricted the river and its freshwater, nutrients, and sediments within its banks and prevented the natural process of overbank flooding that created southeast Louisiana's ridges and marshes. Furthermore, thousands of acres of upland forests and forested wetlands have been cleared for urban development and agricultural use. The marshes have been crisscrossed by a dense network of canals dredged for navigation, drainage, and natural resource exploration. In 1914, Louisiana led the nation in lumber production; by 1930 essentially all of the Barataria-Terrebonne old growth cypress/tupelo swamps had been logged to build homes and businesses. In addition, we have caused the extirpation of species and the extinction of others for food and clothing, and have introduced nonnative plants and animals that out-compete those that naturally occur. In short, we have drastically changed the face of the landscape, and these changes continue today.

Barataria-Terrebonne loses 16 square miles of wetlands a year. Directly determining the effect of this loss and its implications on resident and migratory birds is difficult. It has been suggested that declines of many species of Nearctic-Neotropical migrants are due to reduced wintering habitat in Central and South America. Meanwhile it is likely that continued loss of Barataria-Terrebonne's barrier islands, marshes, and forested wetlands will also negatively impact many bird species.

Wood Storks Across Louisiana

Residents and visitors alike are now enjoying opportunities to view soaring flocks of huge Wood Storks in Louisiana's skies from mid-May to mid-September. Called "gourd heads" because the black, un-feathered heads and necks contrast sharply with the huge white bodies, Wood Storks are one of the largest birds to visit Louisiana.

Wood Storks can often be viewed close to roads as they feed in crawfish ponds that are being drained. Several thousand storks spend much of July in the so-called South Farm/North Farm area of the Sherburne WMA Complex near the community of Ramah in the Atchafalaya Basin just off I-10. They come to the area because the large, shallow water impoundments at the two sites are drained during the month of July and provide tremendous concentrations of fish and crawfish that the storks feed on.

Wood Storks once nested in Louisiana but have not done so for many years. Most of the storks found in Louisiana come from a major nesting area in northeastern Mexico where they nest in the winter and then disperse in a northeasterly direction in mid-spring. The storks originally fed in the flood plains of major river systems as waters left from spring floods dried up. Now, the storks have come to depend on drying crawfish pond systems for a dependable food supply. The Mexican storks are also apparently being joined in Louisiana by a few storks that come from the much smaller nesting population in Georgia and Florida.



Wood Storks are one of the largest birds to visit Louisiana.

POPULATION DECLINES FOR MANY BIRD SPECIES: ARE WE AFFECTED?

In recent years, spring has become quieter and the fall skies emptier. The reason - serious population declines of many bird species. Data collected over the last several decades have shown significant population reductions of numerous migratory bird species. Many of them are forest-dwelling songbirds that are disappearing at a rate of from one to three percent per year. But those songbirds are not the only group of birds that has shown population decreases. Over a recent ten-year period, at least nine types of shorebirds have diminished to half or less of their former numbers. In addition, the number of birds detected by radar crossing the Gulf of Mexico annually has decreased by half within the past twenty years.

There are many reasons for these declines. Habitat loss, collision with tall structures and reflective windows, predation from cats, and introduction of exotics are all causes of population declines. Natural mortality from diseases and natural predation as well as habitat loss are thought to be the biggest factors for decline in bird numbers.

Annually thousands of birds, including songbirds, waterfowl, and others collide with tall structures during flight. Skyscraper reflective windows are particularly dangerous because on them an approaching bird will perceive three-dimensional images of trees, the ground, and sky; in such cases, birds that fail to alter their flight paths, of course, usually have fatal collisions. Many birds migrate at night and find it difficult or impossible to see radio towers, cellular phone towers, and supporting cables and often suffer the same fate.

Feral cats and those allowed outside have killed untold numbers of birds. Scientific efforts have demonstrated that cats may kill millions of small birds each year, most of which are resident and migratory songbirds. Fledglings, roosting, and nesting birds are all at risk to predation from cats.

Exotic birds have competed against native species with serious consequences. For example, the European Starling was introduced to the United States during the late 1800's. From a handful of released birds, the starling has expanded its range through the United States and has one of the broadest geographic ranges of any resident bird species. Starlings are cavity nesters, fiercely defending their nests against other would-be cavity nesters. In search of quality nesting sites, starlings have been observed constantly harassing nesting birds sometimes to the point where the original nesting bird abandons its nest in search of another.



Bird feathers were used in the millinery trade throughout the 1800 and early 1900's.

Birds have a greater value than the beauty that they bring to our lives each year. Birds play an important ecological role. They help to protect our crops and forests by eating insects and feeding their young with foliage-devouring caterpillars. Many plants depend on birds for seed dispersal and pollination. Birds also serve as modern-day “miner’s canaries.” Their sensitivity to changes in climate, habitat structure, and toxins warns us of environmental dangers. The economic contribution from hunting, fishing, and ecotourism is part of an industry that is worth over \$100 billion annually in the United States alone. For these reasons, it is imperative that we begin working together now to ensure that we are left with more than just pictures and drawings of what once was.



Carver of Birds

Hamilton Dantin, carver of birds, has been interested in nature, wildlife, and the swamps and marshes of southeast Louisiana all of his life. A native of the Raceland area, he grew up along Bayou Lafourche and has been a carver for almost 30 years. His skill as a carver was honed under the watchful eyes of local carvers, Remie Roussell and Richard Waguespack. In Dantin's words, he is “dedicated to capturing the realism of nature found in waterfowl, shorebirds and songbirds”. He has even been commissioned to carve a replica of someone's pet dog.

Ham, as he is best known, and his wife, Nathalie, are both birders and backyard birdwatchers, feeding several hundred pounds of bird seed during the winter months to their backyard visitors.

Although he had hunted waterfowl for many years, he now enjoys capturing the spirit of the birds in wood. Asked which might be his favorite bird to carve, Dantin replied, “Well, I never tire of carving the Wood Duck”. His skill as a carver has been recognized with awards at carving exhibitions, and he attends many fairs and festivals exhibiting and selling his beautiful depictions of some of the birds which inhabit the Barataria-Terrebonne Estuary.

BIRDS NOW EXTINCT: WHAT ARE WE MISSING?

Not so long ago, Barataria-Terrebonne was home to seemingly endless flocks of Passenger Pigeons and Carolina Parakeets. Their sheer numbers would have suggested that extinction of these species would be impossible. However, their gregarious habits made them easy targets for opportunistic market hunters and others interested in their take.

Passenger Pigeons, native to the eastern United States, were probably among the most numerous birds on the North American continent, likely numbering into the billions. Throughout much of the 1800's, Passenger Pigeons were said to be so abundant that a flying flock would darken the sky above, and their wing flapping would sound like thunder. This flocking behavior made it easy for market hunters to harvest large numbers of these birds which were marketed in eastern cities. By the late 1800's their population began a precipitous decline from which it never recovered. The last known Passenger Pigeon died in a zoo in 1914.

Carolina Parakeets were common inhabitants of bottomland hardwood forests throughout the southeastern United States during the 1700's and early 1800's. By 1880 this species was largely eliminated throughout much of its native range. They were opportunistic feeders, foraging on several native fruit and seed resources throughout the south. Little is known of their life history, although several eggs were collected from tree cavities. No doubt the species' appetite for orchard fruits accounted for it's extinction. The parakeet's noisy disposition and tendency to flock in large groups alerted hunters to its presence.

Still considered extinct by some, the Ivory-billed Woodpecker, if it still exists, is now likely North America's rarest species, perhaps numbering only a handful of individuals. Considered by some to have been recently rediscovered in east-central Arkansas, efforts are now underway to obtain proof and to protect nearby forested habitat. It was once a widely distributed species throughout the southeast United States. Remnant populations possibly existed into the 1960's in central Florida, and the late 1940's in the Santee River region of South Carolina; the last definite occurrence was in the 1940's in northeastern Louisiana. Rumors of its existence in the Big Thicket region of Texas were frequent in the 1960's.

Historically, Ivory-billed Woodpeckers were residents of old-growth bottomland hardwood forests. The species was opportunistic, foraging in areas of extensive dead and dying trees and moving on to another such patch when food sources

were diminished. At times during the year, the species foraged on temporarily available food resources such as acorns. During a majority of the year, the species appeared to favor the oak-tupelo-gum areas, with only occasional forays into Bald Cypress forests. In the lower Mississippi valley, the favored area was likely the higher part of the “first bottoms” where these trees grow in profusion. The ivory-bill was known to make 4-inch gashes in a tree’s cambium and, occasionally, to pry unloosened bark. The ivory-bill frequently fed by bark-scaling, an activity not practiced as frequently by the Pileated Woodpecker. Numerous old Bald Cypress along some waterways are pock-marked with suitable roosting holes, some of which may have been originally carved by ivory-bills.

Some authors claim that the species was sedentary, remaining within a few miles of the nest tree. This may have been true in rich old-growth bottomlands, but likely did not hold for birds in second-growth areas, where the species had to forage over a wider territory to find adequate resources. Other authors hold that this was a nomadic “disaster species,” moving into areas killed by storms, fires, insect attack, or flooding. However they were perceived, we now may be faced with the most difficult task of all—bringing “the lord god bird” back from the brink of extinction or resigning ourselves that they have joined the Passenger Pigeon and Carolina Parakeet.

BIRDS ONCE ENDANGERED: ARE THERE ANY SUCCESS STORIES?

The Barataria-Terrebonne basin’s expansive coastal wetlands and barrier islands are helping three spectacular birds, the Bald Eagle, the Peregrine Falcon, and the Brown Pelican, recover from the brink of extinction. Within Louisiana, the Bald Eagle and Brown Pelican breed primarily in the southeastern part of the state. The arctic Peregrine Falcon, however, breeds in the far north and passes through Barataria-Terrebonne during migration. A few decades ago, these three distinctive birds were rarely seen in Louisiana. Now, thanks to the Endangered Species Act, improved pesticide regulations, and other habitat conservation efforts, these birds are regularly observed in many areas of southeast Louisiana.

During the 1960s, Bald Eagles and Peregrine Falcons were almost extirpated from the continental United States, and Brown Pelicans had totally disappeared from Louisiana by 1963. Although loss of nesting habitat contributed to all of their declines, the major threat to these species was organochlorine pesticides. At that time, DDT was sprayed extensively in coastal Louisiana to control mosquitos, and endrin was widely used in sugarcane production. Predators like eagles, falcons, and pelicans accumulated harmful amounts of these pesticide residues through the food chain.



and fish. The residues affected calcium deposition during egg formation, resulting in thin-shelled eggs that were crushed during incubation.

Rachel Carson, a former U.S. Fish and Wildlife Service researcher, drew international attention to the disastrous effects of environmentally persistent pesticides on bird populations in her 1962 book, *Silent Spring*. Populations of some raptors and fish-eating birds were crashing because of hatching failures associated with environmental contaminants. As a result, Bald Eagles were listed as endangered in 1967, and Peregrine Falcons and Brown Pelicans in 1970. Passage of the Endangered Species Act in 1973 gave legal protection to these species and, under certain conditions, to their habitat. The U.S. Environmental Protection Agency banned the use of DDT in 1972 and significantly limited the use of endrin. Since then, pesticide residues have declined in the United States, and populations of these species have increased.

Today, all three birds are well on the road to recovery. Though the Bald Eagle is still officially threatened, its rapid recovery is perhaps the Endangered Species Act's most symbolic success. In spite of the Brown Pelican's becoming delisted as endangered along the Atlantic coast, that status remains in Louisiana through today. Meanwhile, the arctic Peregrine Falcon was officially removed from the Federal list of endangered species in October 1994. The Bald Eagle is also protected under the Bald and Golden Eagle Protection Act, and like the Peregrine Falcon, Brown Pelican, and other migratory birds, will continue to be protected under the Migratory Bird Treaty Act when delisted.

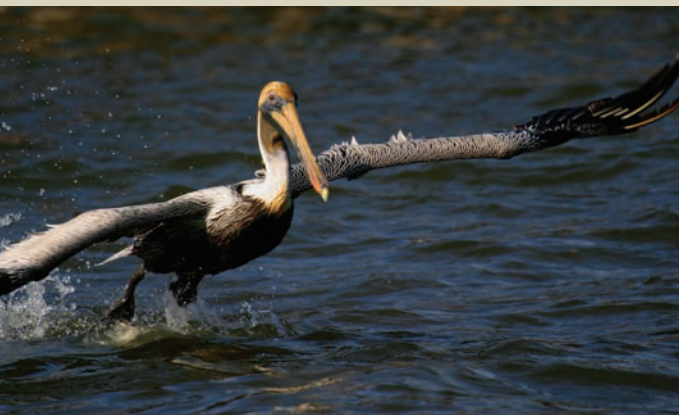
Today, Bald Eagles are expanding their nesting territories throughout southern Louisiana. Eagles mate for life and usually return to nest within a few miles of where they were raised, typically in Bald Cypress trees near freshwater marshes or open water. Many nest sites in the Barataria-Terrebonne basins are located in the Lake Salvador area, and in the coastal swamps and marshes between Houma and the Lake Verret basin and the Lower Atchafalaya River. The Louisiana Department of Wildlife and Fisheries and U.S. Fish and Wildlife Service monitor bald eagle nests in Louisiana, and those agencies advocate measures to protect nesting territories, especially during the October-to-May breeding season. In contrast, the arctic Peregrine Falcon, one of three peregrine subspecies in North America, breeds in Alaska, northern Canada, and Greenland. Each spring and fall, arctic Peregrine Falcons migrate between their tundra nesting grounds and Latin American wintering sites as far south as the tip of South America. While migrating across southeast Louisiana, these high-speed aerial predators encounter good hunting opportunities in Barataria-Terrebonne's marshlands and coastal beaches.

Meanwhile, Brown Pelicans in the Barataria-Terrebonne basins nest on Queen Bess Island in Barataria Bay and on the Isles Dernieres barrier islands in Terrebonne Parish; they also nest farther east within the Chandeleur Islands in Breton Sound. Gulf coast pelicans typically build their nests during the winter, spring, and summer in mangroves or other shrubby vegetation. In Louisiana, however, Brown Pelicans often nest in shallow depressions on the ground because eroding barrier islands lack sufficient shrub and tree cover. The number of nesting pairs in Louisiana has continued to increase since the joint reintroduction effort by the Louisiana Department of Wildlife and Fisheries and the Florida Game and Fresh Water Fish Commission from 1968 to 1980. Although still listed as endangered in Louisiana, the state's Brown Pelican population is now stable or increasing, and is being considered for delisting.

Legal protection, banning of DDT, captive breeding and reintroduction programs, and habitat conservation have saved the Bald Eagle, arctic Peregrine Falcon, and Brown Pelican from extinction. Louisiana can be proud of its contribution to these three success stories achieved through the cooperative efforts of government agencies, conservation organizations, and concerned citizens.



The Brown Pelican



The Brown Pelican is the state bird of Louisiana.

The Brown Pelican (Pelecanus occidentalis) is the state bird of Louisiana. It can be seen year around in the coastal zone and in estuarine environments in the Barataria-Terrebonne system. It is difficult to imagine, though, that at one time this magnificent bird could not be found in the state! A combination of factors, including exposure to pesticide residues that accumulated in the food chain, caused the population to swiftly decline in the late 1950's. By 1963 the species had disappeared from Louisiana.

Beginning in 1968, 50 young birds were imported from Florida by the Louisiana Wildlife and Fisheries Commission, in an effort to reintroduce the species. The island of Grand Terre was chosen as a location to release some of those birds.

Efforts to reintroduce birds in the southwestern part of the state had several setbacks. At Rockefeller Refuge, the young birds were hand fed by biologists, and showed no desire to find their own food. Cold weather in the winter of 1968 killed all of the birds. In 1969, pelicans released at Rockefeller flew off and were never seen again. After this, biologists decided to focus only on reintroduction in southeastern Louisiana.

In 1971, state biologists discovered that mature pelicans were nesting on Grand Terre, and soon, the annual influx of Florida juveniles were augmented by "home grown" nestlings.

Imported birds kept arriving until 1980. By this time, the pelican was observed in nesting colonies along most of Louisiana's barrier islands, and the reintroduction was determined to be a success. The reintroduction of 1,276 birds over 13 years has resulted in 50,000 now thriving in our state.

In early 2002, federal wildlife officials announced that they were in the process of officially de-listing the Brown Pelican as an endangered species in both Louisiana and Texas.



MORE INFORMATION: WHO DO YOU CONTACT?

There are many sources of information regarding birds—their needs, migration patterns, population status, life histories, etc. Please visit these web addresses to find out what others are doing and how you can become involved in bird conservation.

Partners in Flight
www.PartnersInFlight.org

National Audubon Society
www.audubon.org

Gulf Coast Bird Observatory
www.gcbo.org

The Nature Conservancy
www.tnc.org

U. S. Fish and Wildlife Service
www.fws.org

Barataria-Terrebonne National Estuary Program
www.btnep.org

The “Audubon of Terrebonne”

He was the Audubon of Terrebonne. His rare collection of watercolor paintings of native birds and seasonal migrants to southeast Louisiana and some native wild flowers are now the property of the Terrebonne Museum.

The artist was Edwin Clarence Wurzlow, Sr., former Terrebonne Parish Clerk of Court. E. C.'s hobbies were art and science. He began painting in the late 1800's, before he was 20 years old. Early on, like Audubon, he studied not so much from books as from the swampy wilderness. He mixed his own pigments from natural sources with colors made from berries and grasses obtained from the swamp and with brushes made from cattails. In the beginning he could not afford paints and brushes.

The bird paintings he left as a heritage to the people of Terrebonne include: a Pileated Woodpecker; a pair of Northern Mockingbirds guarding their nest of eggs; a pair of Purple Finches; a colorful Blue Jay perched on a branch; a Yellow-shafted Flicker in a moss-draped tree; a Common Yellowthroat; a trio of Orchard Orioles, a Northern Cardinal and his mate in a flowering shrub; a pair of Prothonotary Warblers; and others. His native flower paintings are: species from the milkweed family; Hibiscus; Catalpa trees; Morning Glories; Pickerel Weed; and Purple Loosestrifes.

A naturalist, E.C.'s home was complete with a large collection of stuffed birds and an extensive collection of south Louisiana plants, ranging from the rarest to the well-known Spanish moss (a member of the pineapple family). Known internationally, E. C.'s native plant list, cited as the most complete at that time, was given to his son. Upon his death his widow donated the collection of beetles and grasses to the natural history department of the Louisiana State Museum.

Mr. Wurzlow was born in Houma, LA in 1865, of German and old Louisiana parentage. He died in 1920. The birds that E. C. painted can still be found in and around the Houma community. Most have never deserted the city streets.

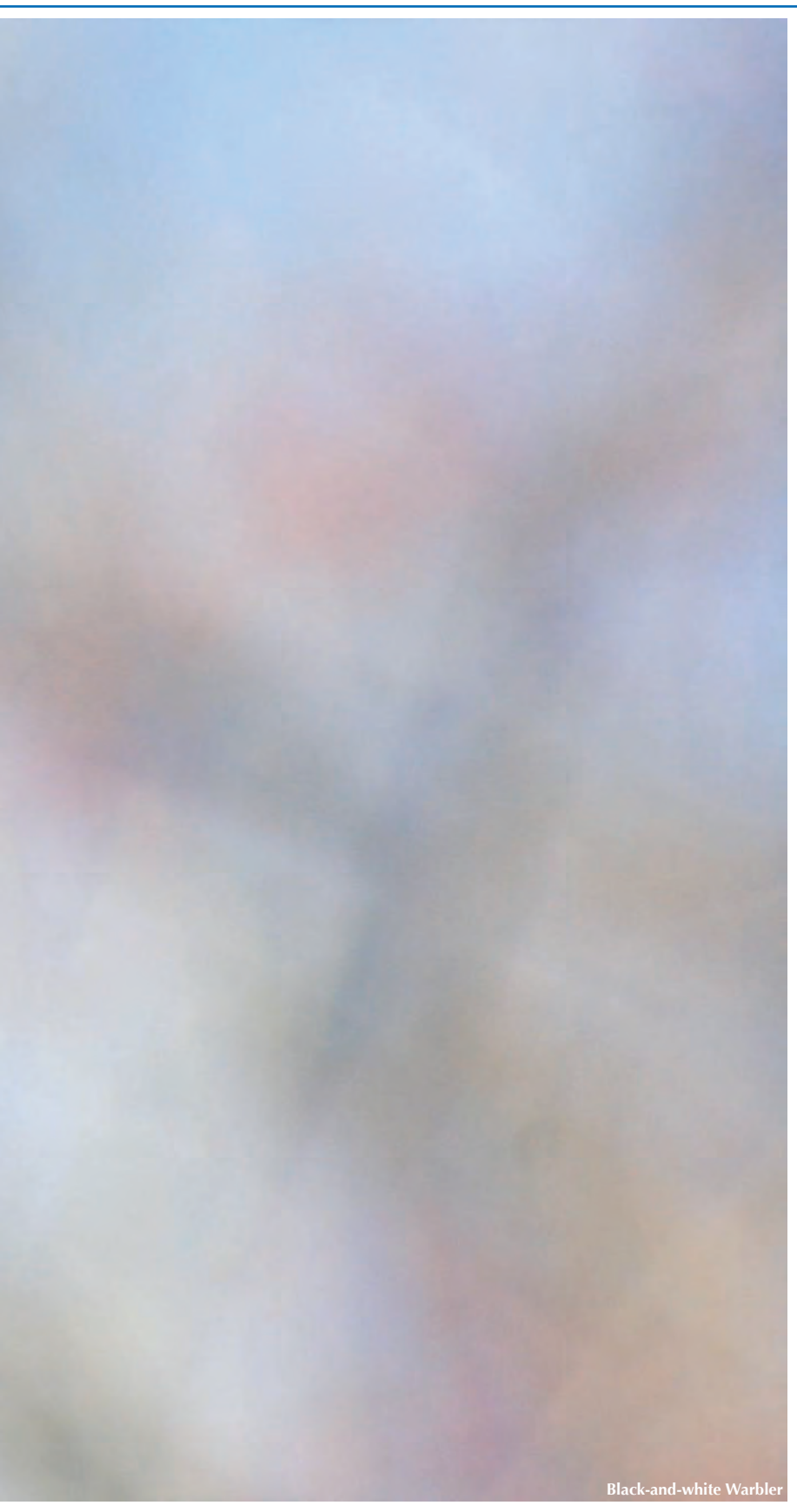


Common Yellowthroat

Edwin Clarence Wurzlow, Sr. 1865-1920
E.C. Wurzlow







Black-and-white Warbler

BIRD DISTRIBUTION

The occurrence chart on the following pages is based on data compiled during the last 40 years in Southeast Louisiana, an area broadly representative of the Barataria-Terrebonne Estuary, but including the Florida Parishes as well. It reflects tens of thousands of hours in the field by dozens of observers who must remain nameless here, including the early records of Audubon and the intrepid observers who studied the birdlife of this area in the early 1900s. Any work of this sort necessarily simplifies in places the complex temporal character of bird distribution. Many species which can be found at any time of the year are nonetheless migratory, with populations reflecting the influx of individuals from north or south, depending on the season. Examples include Marsh Wren, Blue-gray Gnatcatcher, and Gray Catbird. It is also true that, for better or worse, the abundances given here cannot be considered static. Land use patterns and introduction of exotics have caused some species to become more common, while others have suffered notable declines over the period during which these data have been accumulated.

Species	January	February	March	April	May	June	July	August	September	October	November	December
* Black-bellied Whistling-Duck	WE,MI											
Fulvous Whistling-Duck	WE											
Greater White-fronted Goose	WE											
Snow Goose	WE											
Ross's Goose	WE											
Canada Goose	WE	historic				feral breeder				?	historic	
Brant (1)	WE											
Tundra Swan (7)	WE			?								
Wood Duck	WE											
Gadwall	WE,WA											
Eurasian Wigeon (3)	WE,WA											
American Wigeon	WE,WA											
American Black Duck	WE	status									uncertain	
Mallard	WE,WA					feral breeder						
Mottled Duck	* WE,CO											
Blue-winged Teal	*? WA,WE											
Cinnamon Teal	WA,WE											
Northern Shoveler	WA,WE											
Northern Pintail	WE,WA											
Green-winged Teal	WE,WA											
Canvasback	WE,WA											
Redhead	WA											
Ring-necked Duck	WE,WA											
Greater Scaup	CO,WA											
Lesser Scaup	CO,WA											
King Eider (3)	CO,WA											
Surf Scoter	WA,CO											
White-winged Scoter	WA,CO											

Abundance
 50+/day
 Common 10-49/day
 Fairly Common 5-9/day
 Uncommon 0-4/day
 Rare <1/day, <5/season
 Casual <1/year

Breeding record(s)
 * Pine Woods (breeding) ** Erratic, irruptive *** Introduced (I)

All abundances codes are approximate, relational and assume appropriate habitat and season, with allowances for detectability of nocturnal and secretive species. Waterfowl, wading birds, seabirds, shorebirds, blackbirds and migrants of many species routinely accumulate in larger flocks than indicated by the color codes.

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WA - Water (open water of ponds, bayous, rivers, lakes, bays, gulf) • **WE - Wetlands** (swamps, marshes, and shallow ponds; bayou, river & canal edges; shallow impoundments, ditches, wet or flooded fields)

WI - Widespread (found in a variety of habitats) • **WO - Woods** (forest from swamp to upland, woodlots, shaded residential areas)

Species	January	February	March	April	May	June	July	August	September	October	November	December
Black Scoter	WA, CO											
Long-tailed Duck	WA, CO											
Bufflehead	WA, CO											
Common Goldeneye	WA, CO											
Hooded Merganser	WE, WA											
Common Merganser	WA											
Red-breasted Merganser	WA											
Masked Duck (1)	WE											
Ruddy Duck	WA, WE											
Wild Turkey	WO											
Northern Bobwhite	FI, PI											
Common Loon	WA, CO											
Pied-billed Grebe	WA, WE											
Horned Grebe	WA											
Red-necked Grebe (2)	WA											
Eared Grebe	WA											
Western Grebe (3)	WA											
Cory's Shearwater	PE											
Greater Shearwater (4)	PE											
Manx Shearwater (1)	PE											
Audubon's Shearwater	PE											
Wilson's Storm-Petrel	PE											
Leach's Storm-Petrel	PE											
Band-rumped Storm-Petrel	PE											
Red-billed Tropicbird (4)	PE											
Masked Booby	PE											
Brown Booby (6)	PE											
Red-footed Booby (1)	PE											
Northern Gannet	PE, CO											
American White Pelican	WE, WA											

Abundant 50+/day
Common 10-49/day
Fairly Common 5-9/day
Uncommon 0-4/day
Rare <1/day, <5/season
Casual <1/year

Breeding record(s) * **Pine Woods (breeding)** ** **Erratic, irruptive** *** **Introduced (I)**

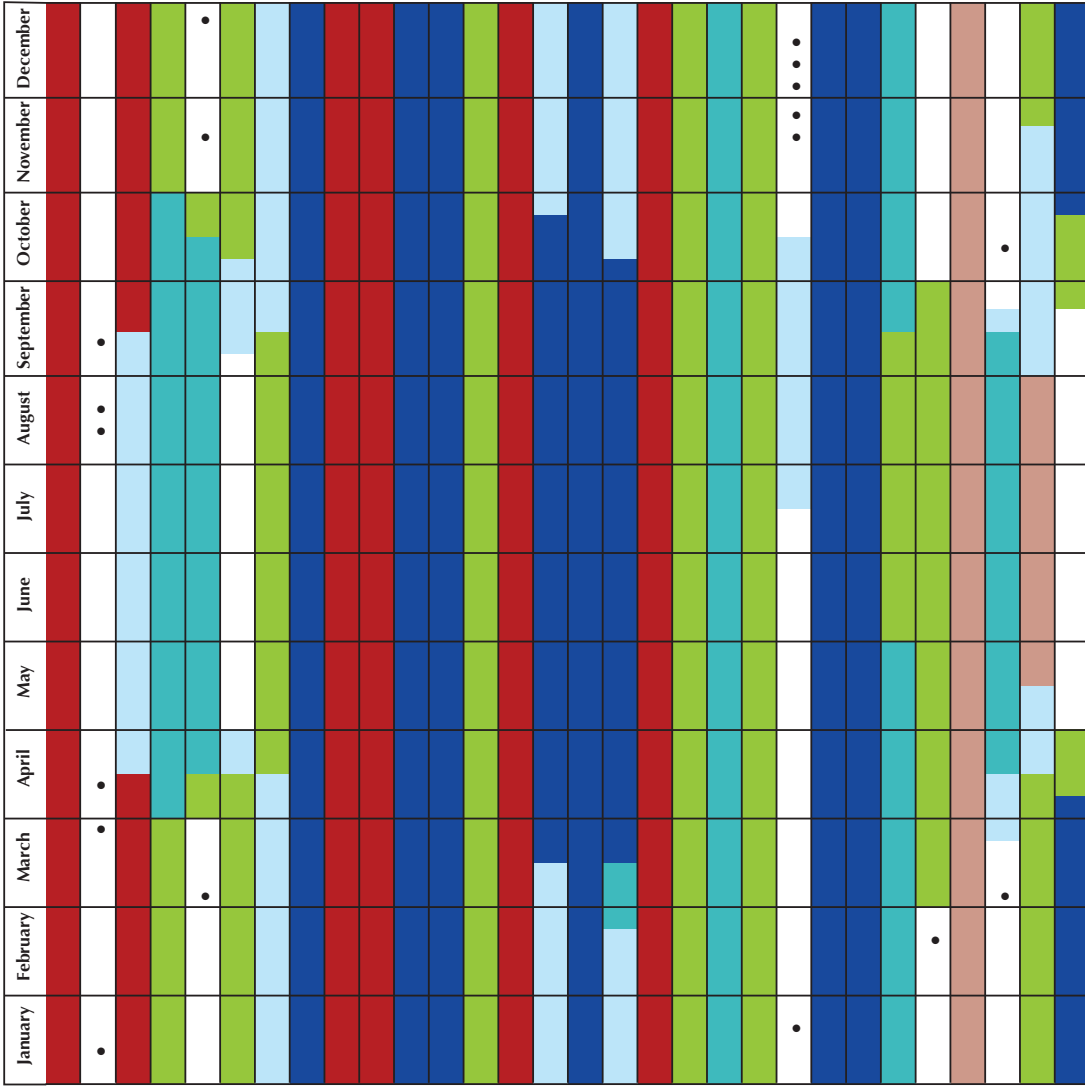
WA - CO - Coastal (beaches, barrier islands, headlands, coastal mudflats, rock jetties, bays and nearshore gulf) • **FI - Fields** (pastures, agricultural areas, tall grasses) • **MI - Miscellaneous** (includes feeders, unclassified habitats & occurrences of single vagrants outside of expected habitat) • **PE - Pelagic** (offshore, marine, deep water beyond the coastal zone) • **PI - Pine Woods** (areas in the Florida parishes dominated by pine) • **SG - Short Grass** (mowed or grazed grass, new growth in agricultural fields and marshes) • **WA - Water** (open water of ponds, bayous, rivers, lakes, bays, gulf) • **WE - Wetlands** (swamps, marshes, and shallow ponds; bayou, river & canal edges; shallow impoundments, ditches, wet or flooded fields) • **WI - Widespread** (found in a variety of habitats) • **WO - Woods** (forest from swamp to upland, woodlots, shaded residential areas)

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Species

Brown Pelican * WA, CO
 Neotropic Cormorant (6) WA
 Double-crested Cormorant * WA, WE
 Anhinga * WE
 Magnificent Frigatebird CO, AE
 American Bittern WE
 Least Bittern WE
 Great Blue Heron * WE
 Great Egret * WE
 Snowy Egret * WE
 Little Blue Heron * WE
 Tricolored Heron * WE, CO
 Reddish Egret * CO
 Cattle Egret * WI
 Green Heron * WE
 Black-crowned Night-Heron * WE
 Yellow-crowned Night-Heron * WE, MI
 White Ibis * WE
 Glossy Ibis * WE
 White-faced Ibis * WE
 Roseate Spoonbill (local) WE
 Wood Stork WE
 Black Vulture * WI, AE
 Turkey Vulture * WI, AE
 Osprey * MI, WE
 Swallow-tailed Kite * WO, AE
 White-tailed Kite (bred once) * MI
 Mississippi Kite * WO, AE
 Bald Eagle * MI, AE
 Northern Harrier WE, FI



Abundant 50+/day
Common 10-49/day
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Uncommon 0-4/day
Rare <1/day, <5/season
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Breeding record(s) *
Pine Woods (breeding) **
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Species	January	February	March	April	May	June	July	August	September	October	November	December
Sharp-shinned Hawk	WO,MI						•					
Cooper's Hawk	* WO,MI											
N. Goshawk (1)	MI										•	
Red-shouldered Hawk	* WO											
Broad-winged Hawk	** WO,AE,PI											
Swainson's Hawk	AE,WI											
Zone-tailed Hawk (1)	MI											•
Red-tailed Hawk	* WI,AE											
Ferruginous Hawk (1)	AE,MI	•									•	•
Rough-legged Hawk (9, returnee)	AE,MI	•									•	•
Golden Eagle (1 dated record)	AE										•	•
Crested Caracara (1)	FI,MI											•
American Kestrel	** WI											
Merlin	WI											
Peregrine Falcon	WI											
Yellow Rail	WE											
Black Rail (2 dated records)	WE	•										
Clapper Rail	* WE,CO											
King Rail	* WE											
Virginia Rail	WE											
Sora	WE											
Purple Gallinule	* WE											
Common Moorhen	* WE											
American Coot	*? WE,WA											
Sandhill Crane (7)	FI,WE	•										
Black-bellied Plover	SG,CO											
American Golden-Plover	SG	•										
Lesser Sand-Plover (1)	CO											
Snowy Plover	CO											
Wilson's Plover	* CO											

Abundant 50+/day
Common 10-49/day
Fairly Common 5-9/day
Uncommon 0-4/day
Rare <1/day, <5/season
Casual <1/year

Breeding record(s) * **Pine Woods (breeding)** ** **Erratic, irruptive** *** **Introduced (I)**

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WI - Widespread (found in a variety of habitats) • **WO - Woods** (forest from swamp to upland, woodlots, shaded residential areas)

Species	January	February	March	April	May	June	July	August	September	October	November	December
Semipalmated Plover	CO, WE											
Piping Plover	CO											
Killdeer	* SG, WI											
American Oystercatcher (local)	* CO											
Black-necked Stilt	* WE											
American Avocet	WE, CO											
Greater Yellowlegs	WE											
Lesser Yellowlegs	WE											
Solitary Sandpiper	WE											
Willet	* CO											
Spotted Sandpiper	WE											
Upland Sandpiper	SG											
Whimbrel	CO											
Long-billed Curlew (local)	CO											
Hudsonian Godwit (7)	WE, CO											
Marbled Godwit	WE, CO											
Ruddy Turnstone	CO											
Red Knot	CO											
Sanderling	CO											
Semipalmated Sandpiper	WE, CO											
Western Sandpiper	WE, CO											
Least Sandpiper	WE, CO											
White-rumped Sandpiper	WE											
Baird's Sandpiper	SG											
Pectoral Sandpiper	WE											
Purple Sandpiper (2)	CO											
Dunlin	WE, CO											
Curlew Sandpiper (2)	WE											
Stilt Sandpiper	WE											
Buff-breasted Sandpiper	SG											

Abundant 50+/day
Common 10-49/day
Fairly Common 5-9/day
Uncommon 0-4/day
Rare <1/day, <5/season
Casual <1/year

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Species	January	February	March	April	May	June	July	August	September	October	November	December
Ruff (2)								••				
Short-billed Dowitcher	WE,CO											
Long-billed Dowitcher	WE											
Wilson's Snipe	WE											
American Woodcock	*? WO											
Wilson's Phalarope	WE	•					••					
Red-necked Phalarope (8)	CO,PE				•			••••		••••		
Red Phalarope (2)	CO									••••		
Pomarine Jaeger	PE											
Parasitic Jaeger	PE	•					••?					
Long-tailed Jaeger (3)	PE				•							
Laughing Gull	* WI											
Franklin's Gull	WA,CO	•										
Bonaparte's Gull	WA											
Ring-billed Gull	WI											
California Gull (3)	WA,CO,MI	•										
Herring Gull	* WI											
Thayer's Gull (9)	WA,CO,MI	••••	•									
Lesser Black-backed Gull	WA,CO											
Glaucous Gull	WA,CO											
Great Black-backed Gull	WA,CO											
Kelp Gull	* CO											
Sabine's Gull (5)	CO,WA	•										
Black-legged Kittiwake (2)	PE,CO											
Gull-billed Tern	* CO,MI,WE											
Caspian Tern	* WA,WE,CO											
Royal Tern	* WA,CO											
Sandwich Tern	* CO											
Common Tern	* CO,PE											
Forster's Tern	* WE,WA,CO											

Abundant 50+/day **Common** 10-49/day **Fairly Common** 5-9/day **Uncommon** 0-4/day **Rare** <1/day, <5/season **Casual** <1/year

Breeding record(s) * Pine Woods (breeding) ** Erratic, irruptive *** Introduced (I)

in forest • CO - Coastal (beaches, barrier islands, headlands, coastal mudflats, rock jetties, bays and nearshore gull) • FI - Fields (pastures, agricultural areas; tall grasses) • MI - Miscellaneous (includes leeches, unclassified habitats & occurrences of single vagrants outside of expected habitat) • PE - Pelagic (offshore, marine, deep water beyond the coastal zone) • PI - Pine Woods (areas in the Florida parishes dominated by pine) • SC - Short Grass (mowed or grazed grass, new growth in agricultural fields and marshes)

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Species	January	February	March	April	May	June	July	August	September	October	November	December
Least Tern	•	•										
Bridled Tern				?								
Sooty Tern				?		local breeder						
Black Tern	• • •	•									• •	
Brown Noddy (1)									• • ?	?		
Black Skimmer												
Ancient Murrelet (1)				•								
Rock Pigeon (1)												• •
Band-tailed Pigeon (3)												
Eurasian Collared-Dove (1)												
White-winged Dove												
Mourning Dove												
Inca Dove							local					
Common Ground-Dove						local breeder						
(Monk Parakeet) (1)						local						
Black-billed Cuckoo		•						•			•	
Yellow-billed Cuckoo		•										•
Mangrove Cuckoo (1)												•
Smooth-billed Ani (specimen 1893)	?	?					•					
Groove-billed Ani												
Barn Owl												
Eastern Screech Owl												
Great Horned Owl												
Snowy Owl (2)	winter 1878-9											
Burrowing Owl												
Barred Owl												
Long-eared Owl (1)												•
Short-eared Owl												
Northern Saw-whet Owl (2)												
Lesser Nighthawk (10)												

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Uncommon 0-4/day
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Casual <1/year

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Species	January	February	March	April	May	June	July	August	September	October	November	December
Common Nighthawk												
Antillean Nighthawk (1, returnee)												
Chuck-will's Widow												
Whip-poor-will												
Chimney Swift												
Vaux's Swift (3)												
Broad-billed Hummingbird												
Buff-bellied Hummingbird												
Blue-throated Hummingbird (1)												
Magnificent Hummingbird (1)												
Ruby-throated Hummingbird												
Black-chinned Hummingbird												
Anna's Hummingbird (1-2, returnee)												
Calliope Hummingbird												
Broad-tailed Hummingbird												
Rufous Hummingbird												
Allen's Hummingbird												
Belted Kingfisher												
Red-headed Woodpecker												
Red-bellied Woodpecker												
Yellow-bellied Sapsucker												
Red-naped Sapsucker (2)												
Downy Woodpecker												
Hairy Woodpecker												
Red-cockaded Woodpecker												
Northern Flicker												
Pileated Woodpecker												
Olive-sided Flycatcher												
Western Wood-Pewee (1)												
Eastern Wood-Pewee												

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Species	January	February	March	April	May	June	July	August	September	October	November	December
Yellow-bellied Flycatcher				?	?			?	?	?		
Acadian Flycatcher			•									
Alder Flycatcher				?	?			?	?	?		
Willow Flycatcher (1 specimen)					?	status uncertain			•	•		
(Willow/Alder) Flycatcher												
Least Flycatcher			?	?	?							
Cordilleran Flycatcher (1)												
Eastern Phoebe												
Say's Phoebe (4)												
Vermilion Flycatcher												
Ash-throated Flycatcher												
Great Crested Flycatcher												
Brown-crested Flycatcher												
Great Kiskadee (4, returnee)						nest built						
Sulphur-bellied Flycatcher (1)												
(Tropical/Couch's) Kingbird (4)												
Tropical Kingbird (3)												
Couch's Kingbird (1)												
Western Kingbird												
Eastern Kingbird												
Gray Kingbird (1 fall)												
Scissor-tailed Flycatcher												
Fork-tailed Flycatcher (1)												
Loggerhead Shrike												
White-eyed Vireo												
Bell's Vireo (7)												
Yellow-throated Vireo												
Blue-headed Vireo												
Warbling Vireo												
Philadelphina Vireo												

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in forest) • **CO - Coastal** (beaches, barrier islands, headlands, coastal mudflats, rock jetties, bays and nearshore gulf) • **FI - Fields** (pastures, agricultural areas, tall grasses) • **MI - Miscellaneous** (includes feeders, unclassified habitats & occurrences of single vagrants outside of expected habitat) • **PE - Pelagic** (offshore, marine, deep water beyond the coastal zone) • **PI - Pine Woods** (areas in the Florida parishes dominated by pine) • **SG - Short Grass** (mowed or grazed grass, new growth in agricultural fields and marshes)

WA - Water (open water of ponds, bayous, rivers, lakes, bays, gulf) • **WE - Wetlands** (swamps, marshes, and shallow ponds; bayou, river & canal edges; shallow impoundments, ditches, wet or flooded fields)

WI - Widespread (found in a variety of habitats) • **WO - Woods** (forest from swamp to upland, woodlots, shaded residential areas)

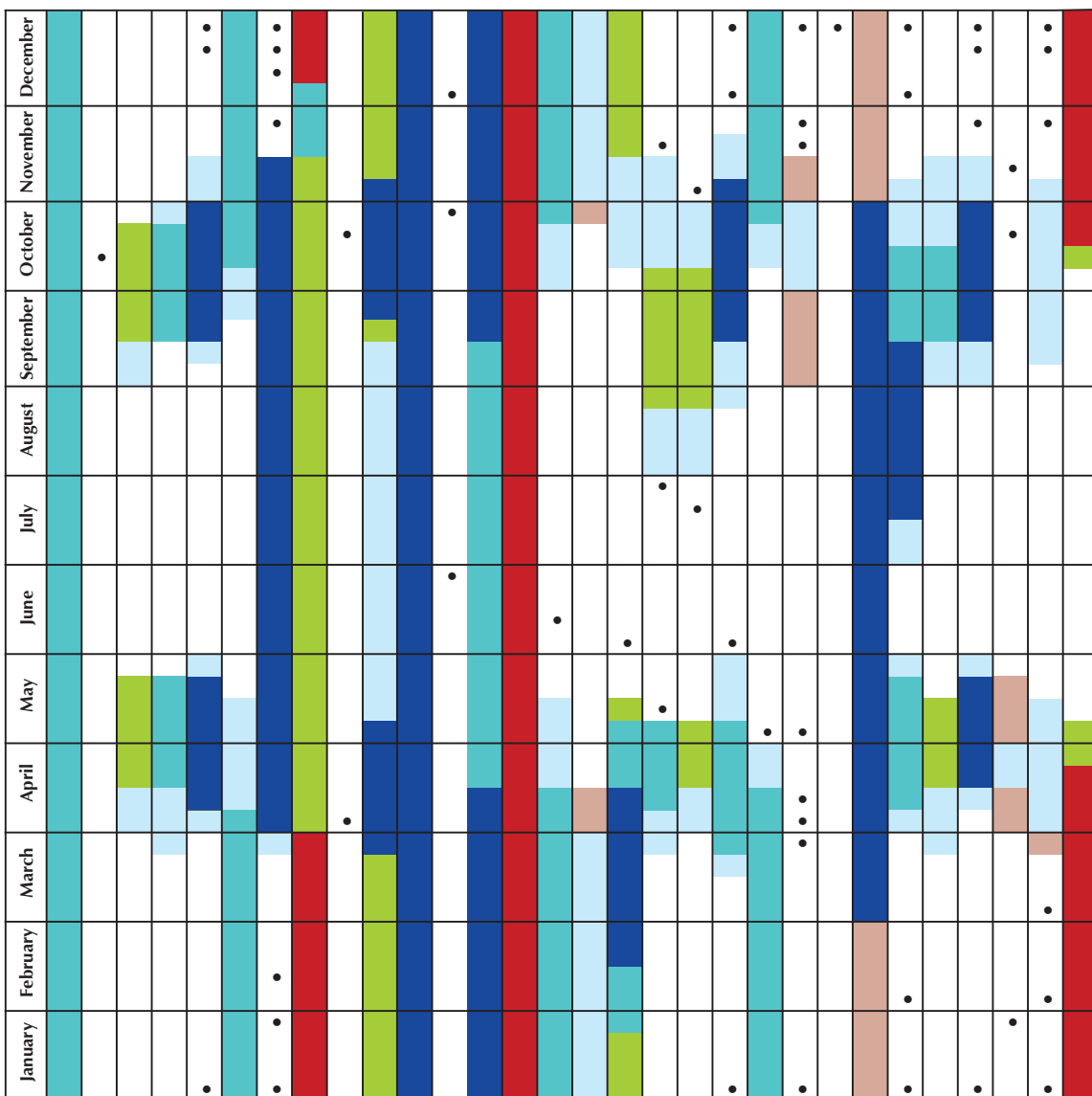
Species	January	February	March	April	May	June	July	August	September	October	November	December
Red-eyed Vireo												
Black-whiskered Vireo												
Blue Jay												
American Crow												
Fish Crow												
Horned Lark (9)												
Purple Martin												
Tree Swallow												
N. Rough-winged Swallow												
Bank Swallow												
Cliff Swallow												
Cave Swallow												
Barn Swallow												
Carolina Chickadee												
Tufted Titmouse												
Red-breasted Nuthatch												
White-breasted Nuthatch												
Brown-headed Nuthatch												
Brown Creeper												
Rock Wren (1)												
Carolina Wren												
Bewick's Wren												
House Wren												
Winter Wren												
Sedge Wren												
Marsh Wren												
Golden-crowned Kinglet												
Ruby-crowned Kinglet												
Blue-gray Gnatcatcher												
Northern Wheatear (3)												

Abundant 50+/day
Common 10-49/day
Fairly Common 5-9/day
Uncommon 0-4/day
Rare <1/day, <5/season
Casual <1/year

Breeding record(s) * Pine Woods (breeding) ** Pine Woods (breeding) *** Erratic, irruptive **** Introduced (I)

Abundance codes: * WO - Water (open water of ponds, bayous, rivers, lakes, bays, gulf) • MI - Miscellaneous (includes feeders, nearshore gulf) • FI - Fields (pastures, agricultural areas, tall grasses) • CO - Coastal (beaches, barrier islands, headlands, coastal mudflats, rock jetties, bays and in forest) • SG - Short Grass (mowed or grazed grass; new growth in agricultural fields and marshes by pine) • WA - Water (open water of ponds, bayous, rivers, lakes, bays, gulf) • WE - Wetlands (swamps, marshes, and shallow ponds; bayou, river & canal edges; shallow impoundments, ditches, wet or flooded fields) • WI - Widespread (found in a variety of habitats) • WO - Woods (forest from swamp to upland, woodlots, shaded residential areas)

Question: (For records accepted by earlier authorities but without surviving documentation or uncertain to species in similar-appearing pairs. When adjacent to color bars, indicates insufficient data to assign early or late dates of migrants. (Numbers in parentheses refer to the number of individual records when ten or fewer.) "Returnee" refers to a bird thought to be the same individual returning to same location in subsequent years.) **Record** • (Single or multiple records in a time period; a series may also represent one long staying individual.) • **AE - Aerial** (often seen in flight) • **BR - Brush** (scrub, edges, overgrown fields, clearings)



Abundance and Breeding Record Legend:

- Abundant (50+/day):** Red
- Common (10-49/day):** Dark Blue
- Fairly Common (5-9/day):** Light Blue
- Uncommon (0-4/day):** Green
- Rare (<1/day, <5/season):** Light Blue
- Casual (<1/year):** Brown

Breeding record(s) and Pine Woods (breeding) Legend:

- *** Pine Woods (breeding)
- **** Erratic, irruptive
- ***** Introduced (I)

Habitat Codes:

- MI:** Miscellaneous (includes feeders, nearshore gulf)
- CO:** Coastal (beaches, barrier islands, headlands, coastal mudflats, rock jetties, bays and marine, deep water beyond the coastal zone)
- FI:** Fields (pastures, agricultural areas, tall grasses)
- PE:** Pelagic (offshore, unclassified habitats & occurrences of single vagrants outside of expected habitat)
- PI:** Pine Woods (areas in the Florida parishes dominated by pine)
- SG:** Short Grass (mowed or grazed grass, new growth in agricultural fields and marshes)
- WA:** Water (open water of ponds, bayous, rivers, lakes, bays, gulf)
- WE:** Wetlands (swamps, marshes, and shallow ponds; bayou, river & canal edges; shallow impoundments, ditches, wet or flooded fields)
- WI:** Widespread (found in a variety of habitats)
- WO:** Woods (forest from swamp to upland, woodlots, shaded residential areas)

Notes: All abundance codes are approximate, relational and assume appropriate habitat and season, with allowances for detectability of nocturnal and secretive species. Waterfowl, wading birds, seabirds, shorebirds, blackbirds and migrants of many species routinely accumulate in larger flocks than indicated by the color codes.

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Species	January	February	March	April	May	June	July	August	September	October	November	December
Black-throated Gray Warbler	WO											
Black-throated Green Warbler	WO											
Townsend's Warbler (2)	WO											
Hermit Warbler (1)	WO											
Blackburnian Warbler	WO											
Yellow-throated Warbler	WO											
Pine Warbler	WO											
Prairie Warbler	WO											
Palm Warbler	WO											
Bay-breasted Warbler	WO											
Blackpoll Warbler	WO											
Cerulean Warbler	WO											
Black-and-white Warbler	WO											
American Redstart	WO											
Prothonotary Warbler (1 winter)	WO											
Worm-eating Warbler	WO											
Swainson's Warbler	WO											
Ovenbird	WO											
Northern Waterthrush	WO											
Louisiana Waterthrush	WO											
Kentucky Warbler	WO											
Connecticut Warbler (1)	WO, BR											
Mourning Warbler	BR											
MacCillivray's Warbler (6)	BR											
Common Yellowthroat	WI											
Hooded Warbler	WO											
Wilson's Warbler	BR, WO											
Canada Warbler	WO											
Painted Redstart (2)	MI											
Yellow-breasted Chat	BR											

Abundant 50+/day
Common 10-49/day
Fairly Common 5-9/day
Uncommon 0-4/day
Rare <1/day, <5/season
Casual <1/year

Breeding record(s) *
Pine Woods (breeding) **
Erratic, irruptive ***
Introduced (I)

WO - Wetlands (swamps, marshes, and shallow ponds; bayou, river & canal edges; shallow impoundments, ditches, wet or flooded fields)
MI - Miscellaneous (includes feeders, nearshore gulf)
FI - Fields (pastures, agricultural areas, tall grasses)
CO - Coastal (beaches, barrier islands, headlands, coastal mudflats, rock jetties, bays and nearshore gulf)
SG - Short Grass (mowed or grazed grass, new growth in agricultural fields and marshes by pine)
WA - Water (open water of ponds, bayous, rivers, lakes, bays, gulf)
PI - Pine Woods (areas in the Florida parishes dominated by pine)
BR - Brush (scrub, edges, overgrown fields, clearings often seen in flight)
AE - Aerial (often seen in flight)
WO, BR - Woods (forest from swamp to upland, woodlots, shaded residential areas)

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Species

Species	January	February	March	April	May	June	July	August	September	October	November	December
Summer Tanager	•											
Scarlet Tanager												
Western Tanager												
Spotted Towhee (1)												
Eastern Towhee												
Bachman's Sparrow												
Chipping Sparrow												
Clay-colored Sparrow												
Field Sparrow												
Vesper Sparrow												
Lark Sparrow												
Lark Bunting (5)												
Savannah Sparrow												
Grasshopper Sparrow												
Henslow's Sparrow												
Le Conte's Sparrow												
Nelson's Sharp-tailed Sparrow												
Seaside Sparrow												
Fox Sparrow												
Song Sparrow												
Lincoln's Sparrow												
Swamp Sparrow												
White-throated Sparrow												
Harris's Sparrow (6)												
White-crowned Sparrow												
Golden-crowned Sparrow (1)												
Dark-eyed Junco												
McCown's Longspur (1)												
Lapland Longspur												
Smith's Longspur (1)												

Abundant 50+/day
Common 10-49/day
Breeding record(s) *
Fairly Common 5-9/day
Uncommon 0-4/day
Rare <1/day, <5/season
Casual <1/year

Introduced (I)
Pine Woods (breeding) ** Erratic, irruptive ***
CO - Coastal (beaches, barrier islands, headlands, coastal mudflats, rock jetties, bays and nearshore gulf)
FI - Fields (pastures, agricultural areas, tall grasses)
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Species	January	February	March	April	May	June	July	August	September	October	November	December
Northern Cardinal	•	•	•	•	•	•	•	•	•	•	•	•
Rose-breasted Grosbeak	•	•	•	•	•	•	•	•	•	•	•	•
Black-headed Grosbeak	•	•	•	•	•	•	•	•	•	•	•	•
Blue Grosbeak	•	•	•	•	•	•	•	•	•	•	•	•
Lazuli Bunting (2, returnee)	•	•	•	•	•	•	•	•	•	•	•	•
Indigo Bunting	•	•	•	•	•	•	•	•	•	•	•	•
Painted Bunting	•	•	•	•	•	•	•	•	•	•	•	•
Dickcissel	•	•	•	•	•	•	•	•	•	•	•	•
Bobolink	•	•	•	•	•	•	•	•	•	•	•	•
Red-winged Blackbird	•	•	•	•	•	•	•	•	•	•	•	•
Eastern Meadowlark	•	•	•	•	•	•	•	•	•	•	•	•
Western Meadowlark	•	•	•	•	•	•	•	•	•	•	•	•
Yellow-headed Blackbird	•	•	•	•	•	•	•	•	•	•	•	•
Rusty Blackbird	•	•	•	•	•	•	•	•	•	•	•	•
Brewer's Blackbird	•	•	•	•	•	•	•	•	•	•	•	•
Common Grackle	•	•	•	•	•	•	•	•	•	•	•	•
Boat-tailed Grackle	•	•	•	•	•	•	•	•	•	•	•	•
Shiny Cowbird	•	•	•	•	•	•	•	•	•	•	•	•
Bronzed Cowbird	•	•	•	•	•	•	•	•	•	•	•	•
Brown-headed Cowbird	•	•	•	•	•	•	•	•	•	•	•	•
Orchard Oriole	•	•	•	•	•	•	•	•	•	•	•	•
Hooded Oriole (1)	•	•	•	•	•	•	•	•	•	•	•	•
Bullock's Oriole	•	•	•	•	•	•	•	•	•	•	•	•
Baltimore Oriole	•	•	•	•	•	•	•	•	•	•	•	•
Scott's Oriole (3)	•	•	•	•	•	•	•	•	•	•	•	•
Purple Finch	•	•	•	•	•	•	•	•	•	•	•	•
House Finch (1)	•	•	•	•	•	•	•	•	•	•	•	•
Red Crossbill (1, 1888)	•	•	•	•	•	•	•	•	•	•	•	•
Pine Siskin	•	•	•	•	•	•	•	•	•	•	•	•
Lesser Goldfinch (1)	•	•	•	•	•	•	•	•	•	•	•	•

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Breeding record(s) *
Pine Woods (breeding) **
Erratic, irruptive ***
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Species	January	February	March	April	May	June	July	August	September	October	November	December
American Goldfinch	Abundant	Abundant	Common	Fairly Common	Fairly Common	Fairly Common	Uncommon	Uncommon	Rare	Rare	Casual	Casual
Evening Grosbeak	Abundant	Abundant	Common	Fairly Common	Fairly Common	Fairly Common	Uncommon	Uncommon	Rare	Rare	Casual	Casual
House Sparrow (I)	Abundant	Abundant	Common	Fairly Common	Fairly Common	Fairly Common	Uncommon	Uncommon	Rare	Rare	Casual	Casual

Abundant 50+/day
Common 10-49/day
Fairly Common 5-9/day
Uncommon 0-4/day
Rare <1/day, <5/season
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421 species (with Monk Parakeet, not yet on the official Louisiana list.)

7 extinct and extirpated species:

- Trumpeter Swan
- Whooping Crane
- Eskimo Curlew
- Passenger Pigeon
- Carolina Parakeet
- Ivory-billed Woodpecker
- Bachman's Warbler

Total species: 428

Coverage Area

The checklist is useful for all of the Barataria-Terrebonne National Estuary and southeast Louisiana, but individual records are from:

- Plaquemines
- Lafourche
- Terrebonne
- St. Bernard
- Orleans
- Jefferson
- St. Charles
- St. James
- St. John the Baptist
- Ascension
- Livingston
- St. Tammany
- Tangipahoa
- Washington
- and offshore Gulf of Mexico

Matrix compiled by:

Dan Purrington with David Muth, Phillip Wallace, Mac Myers, Steve Cardiff, Nancy Newfield and Richard DeMay, September 2008



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