wings over the wetlands Louisiana's Waders 2007 Louisiana Bird Calendar



















what is a wading bird?

Selecting the most graceful bird group within the entire class (Aves) of birds – arguably the most graceful of all animal classes – is a difficult task. By the same token, however, it is equally difficult to deny the top spot to the exquisitelysculpted, long-legged, long-necked, long-billed wading birds.

Biologically, the bird group known as the "wading birds" is comprised of those species belonging to the families Ardeidae (bitterns, herons, egrets), Threskiornithidae (ibises and spoonbills), Ciconiidae (Wood Stork), and Phoenicopteridae (flamingoes), all of which possess proportionately long legs, long necks, and long bills adapted for wading and feeding in relatively shallow water; and all of which belong to the bird order Ciconiiformes. To be sure, other bird groups possess similar combinations of long legs, long necks, and long bills. Both the cranes (order Gruiformes) and certain shorebirds (i.e. stilts, curlews, godwits, and some sandpipers; order Charadriiformes) are prime examples. But the cranes are more genetically allied with the rails, and the shorebirds possess bloodlines which are closer to the gulls and terns.

Seventeen species of wading birds regularly occur in Louisiana. These include the American Bittern, Least Bittern, Great Blue Heron, Great Egret, Snowy Egret, Reddish Egret, Tricolored Heron, Little Blue Heron, Cattle Egret, Green Heron, Black-crowned Night-Heron, Yellow-crowned Night-Heron, White Ibis, White-faced Ibis, Glossy Ibis, Roseate Spoonbill, and Wood Stork.



David Chauvin, Photographer_Cattle Egret



David Chauvin, Photographer_Green Heron



Ronnie Gaubert, Photographer_Tricolored Heron



Charles Bush, Photographer_American Bittern



David Chauvin, Photographer_Great Blue Here





Charlie Hohorst, Photographer_Roseate Spoonbill



Charlie Hohorst, Photographer_Great Blue Heron



Charlie Hohorst, Photographer_Glossy Ibis



Darlene Boucher, Photographer_Great Egret

safety everywhere." Ever

Charlie Hohorst, Photographer Roseate Spoonbill

wading birds in Louisiana

Would you believe that the majority of Louisiana's 33 million total acres is officially classified as wetlands? While it is true that a substantial portion of these wetlands has been drained or otherwise degraded, Louisiana is still a very "wet" place, particularly when compared to other states.

In Louisiana, the term "wetlands" encompasses much more than the wide, 3 million acre swath of marshes located within the coastal zone itself. In fact, of the 60+ distinctive natural communities identified by the state's biologists, at least 47 can be classified as "totally wet" (bays, lakes, rivers, bayous, etc.) or "wetland" (marshes, swamps, bottomlands, etc.) in nature.

Obviously, this is great news if you happen to be a wading bird living in Louisiana! For wading birds, "water water everywhere" translates not only to "food food everywhere," but also "safety safety everywhere." Every aspect of a wading bird's life history involves water: foraging, breeding, nesting, roosting, migrating – you name it.

Feeding is a wading bird's most spontaneous activity, occurring throughout the state's freshwater, brackish, and saline marshes, and at the edges of most any water body including estuarine bays, lakes, ponds, woodland pools, swamps, rivers, bayous, creeks, canals, and ditches. Breeding and nesting most often occur over carefully selected swamp or lake habitats. Roosting sites employ the tallest canopy tree layers available along rivers and streams as well as within and along the edges of swamps and lakes.

From a conservation planning standpoint, southern Louisiana has been fortunate to have had the luxury of conducting numerous wading and seabird nesting surveys from 1976 through the present. In the most recent published survey (Michot, Jeske, et al. 2003), a total of 496 historical nesting colony sites within south Louisiana (all or parts of 32 parishes, from Avoyelles parish southward through the coastal barrier islands) were surveyed in April-June of 2001. Of those sites, 298 were inactive, 162 were active, and 36 new locations were discovered. From this data, the surveyors have extrapolated that an additional 289 undiscovered sites probably exist within the study area, bringing the hypothetical total to 487. Moreover, a substantial number of additional sites also exist within the northern half of the state, particularly within the Red River, Sabine River, and Ouachita-Black River watersheds.

What this means is that Louisiana is a wading bird mecca. Based on these surveys and a comparison of estimates from other states, Louisiana supports significant numbers of wading birds. In fact, there are more waders in Louisiana than in any other state.



3lack-crowned Night-Heron David Chauvin, Photographer_Reddis

wading birds & colonial nesting

According to the National Audubon Society's The Sibley Guide to Bird Life and Behavior (2001), approximately 13% of all bird species qualify as colonial nesters. Those birds which choose colonial nesting do so for several reasons. Besides the obvious "safety in numbers" hypothesis, additional factors include generalized region-wide scarcity of suitable breeding habitat, proximity to suitable foraging habitat, as well as what can most easily be described as the "networking" factor: the collective benefits associated with living in a group, such as learning where the best food supplies are located on a day-to-day basis.

Most wading bird species are colonial nesters, annually gathering in mixed-

species aggregations which can include up to 13 different species. Here in Louisiana, wading bird colonies commonly include other waterbirds such as Anhingas and Neotropic Cormorants, particularly in sites near or within the coastal zone. Too, some wading bird species will often merge into large seabird (Brown Pelican, Black Skimmer, miscellaneous gulls and terns) nesting colonies when conditions allow.

Within the southern third of Louisiana, wading bird nesting season begins as early as the latter half of January, when Great Egrets initiate nest-building. As late winter turns to early spring, more species pile in with each passing week. The more strongly neotropical the species, the later the arrival. Little Blue Heron, Tricolored Heron, and Yellowcrowned Night-Heron are the last to arrive, usually by mid-March in the coastal zone, and about 2 weeks later in northern Louisiana.

Once eggs begin hatching, the wading bird nesting colony is instantly transformed into a wading bird rookery. Rookeries are typically full of action and quite noisy with the constant cries of nestlings and adults. During daylight hours, the airspace around a rookery is almost always filled with adult birds hurrying back and forth from foraging areas with food for the nestlings, as well as late arrivals who might still be in the process of transporting heavy twigs with which to build nests.

Throughout most of Louisiana, wading bird chicks begin fledging out of nests as early as the latter half of March, with peak fledging occurring by late May/early June. Once fledged, the adults work with the young birds by "flying" them to appropriate nearby sites for lessons in foraging, as well as lessons in flying. For the first several weeks after fledging, the young usually return to their respective rookery sites for roosting each night. Soon afterward adults escort them to newly-selected roosting sites, most often at isolated sites, atop tall trees lining the banks of rivers, bayous, lakes, or swamps.

For the most part, wading bird nest/rookery sites are ephemeral in nature, primarily due to the fact that the concentration of waste products from both the adults and young birds tends to deoxygenate the water below, resulting in an accelerated demise in the very vegetation which supports the nests. Consequently, waders are forced to abandon even the best colonial nesting sites at regular intervals (every 10-20 years). Other factors causing nest site abandonment include periodic droughts, loss of nearby foraging areas, or encroachment by humans. Hurricanes too, take their toll! The devastating hurricanes of 2005 and the ensuing region-wide drought through the 2006 spring-summer nesting season, caused a substantial number of these colony sites within Louisiana's coastal zone to be abandoned. Where have these birds relocated? At this point, "the jury is still out."



David Chauvin, Photographer_Great Egret

Joe Turner, Photographer_Little Blue Heron





Patti Ardoin, Photographer_Great Egret

nuptial plumage

As with numerous other bird species, wading birds exhibit markedly visible changes over certain parts of their bodies in response to the onset of breeding season. With wading birds, the most notable changes include the appearance of bright colors about the bill, lores, and legs, and a special molt in specific areas of the head, neck, and scapular feathers, producing elaborately elongated and/or lace-like feathers known as nuptial plumes. Nuptial plumes can be raised or lowered at will; and combined with the almost surrealistic breeding season color changes in the "bare parts" (bills, lores, and legs). Nuptial plume displays play an important role in the welldocumented, often complex, courtship activities of this group.

Coined by the French as aigrettes (from which the common noun, "egret" was derived), these specialized feathers were treasured first by feather collectors, and then by fashion-hungry Victorian era men and women, all to the great detriment of numerous bird species, and especially so with wading bird species. In his Louisiana Birds (1955, 1960, 1974, LSU Press), George Lowery, Jr. laments the sudden and precipitous decline of several species of herons, egrets, and allies, which were "once virtually exterminated by plume hunters seeking feathers primarily for women's hats. Since the plumes are at their finest in nesting season, the birds were killed mostly at that time. This persecution not only decimated the ranks of the adults but also left eggs unhatched and young to die in the nest."

In *The Birder's Handbook* (Ehrlich, Dobkin, and Wheye, 1988), this quote

from writer Herbert Job says it all: "Here are some official figures of the trade from one source alone, of auctions at the London Commercial Sales Rooms during 1902. There were sold 1.608 packages of. . . herons' plumes. A package is said to average in weight 30 ounces. This makes a total of 48,240 ounces. As it requires about four birds to make an ounce of plumes, these sales meant 192,960 herons killed at their nests, and from two to three times that number of young or eggs destroyed... In 1903, the price for plumes offered to hunters was \$32 per ounce, which makes the plumes worth about twice their weight in gold."

The Birder's Handbook authors go on to state that later, the price per ounce would climb to \$80.

This awful practice reached its peak around the turn of the 20th century; but by 1900 the federal government finally heard the outraged cries of ornithologists and other concerned citizens, and eventually passed legislation known as the Lacey Act (1900), which effectively put an end to the commercial sale of U.S. wild bird feathers both at home and abroad.

But within the bird world, the aftermath of this nightmarish fashion trend would be felt for the next 60-70 years, at least. Here in Louisiana, for example, it would not be until the latter half of the 20th century before recovery of species such as the Snowy Egret and Roseate Spoonbill would be considered complete.



Charlie Hohorst, Photographer_Cattle Egret



Charlie Hohorst, Photographer_Wood Stork and Roseate Spoonbill



David Chauvin, Photographer_Great Egret

Louisiana's 2007 Bird Watching Dates to Remember

Eagle Expo 2007

February 8-10, 2007, Morgan City contact info 985-395 4905

Audubon Country Birdfest

March 30, 31 & April 1, 2007, St. Francisville contact info 800-488-6502

The Great Louisiana Birdfest April 12-15, 2007, Mandeville contact info 985-626-1238

Grand Isle Migratory Bird Celebration *April 13-14, 2007*, Grand Isle contact info 800-259-0869

American Birding Association Convention April 23-29, 2007, Lafayette contact info 719-578-9703

Neotropical Songbird Tour Atchafalaya Basin *May 12, 2007*, Sherburne Wildlife Management Area contact info 318-793-5529

Wood Stork Week

July 21, 2007, Sherburne Wildlife Management Area contact info 337-948-0255

Feliciana Hummingbird Celebration *July 27-28, 2007,* St. Francisville contact info 800-488-6502

Folsom Hummingbird Festival *September 8, 2007,* Folsom contact info 985-796-9309

Wings Over the Wetlands October 6, 2007, Jean Lafitte National Park & Preserve contact info 504-589-2330

For more information about these events, please visit http://birdlouisiana.com



George Ritchey, Photographer



ibises White Ibis (pictured) (Eudocimus albus) White-faced Ibis (Plegadis chihi) Glossy Ibis (Plegadis falcinellus)

Called bec croche (pron. BECK-crawsh; "crooked beak") by Cajuns, the ibises once supplied several generations of Louisiana deep-swamp trappers and fishermen with sustenance. Unlike the herons and egrets, the ibises are powerful fliers, usually arranged in long, undulating lines of 12-200 birds. In Louisiana, crawfish is a primary food source for all three species.

In Louisiana, the ibises usually favor marshes (vs. swamps) for foraging, which they most often carry out in small groups of 6-24 birds. During the winter months, gregarious roosts along isolated hardwood river bottoms and cypress swamps may hold thousands of birds. During a mid-1990s Christmas Bird Count held around the Lacassine National Wildlife Refuge (Cameron and Jeff Davis parishes), a "mega-flock" of about 44,000 individuals, predominately White-faced Ibis, was counted during departure from and re-entry to their nocturnal roost along the Mermentau River.

Considered together as "the dark ibises," or "the Plegadis ibises," non-expert observers find the White-faced and Glossy Ibises virtually impossible to distinguish in the field. The Glossy Ibis is a much more cosmopolitan species, ranging throughout much of Europe and western Asia southward through India, Madagascar, the Philippines, and even Australia, whereas the White-faced Ibis is pretty much restricted in distribution to the western U.S. and tropical America.

The White Ibis is a New World species ranging from the southern Atlantic and Gulf Coasts of the U.S., southward through the Caribbean, Mexico, Central America, and northern South America. This species utilizes both grass-dominated (marshes, ricefields) and tree-dominated (swamps) wetland habitats for foraging. Like the dark ibises, the White Ibis is fundamentally gregarious, forming massive roosting colonies which break up into hundreds of small flocks for daily commutes to and from foraging areas.



Darlene Boucher, Photographer

february sunday tuesday wednesday thursday friday monday saturday IANUARY 3 28 30 3 Groundhog Day 5 8 Ο 6 Eagle Expo Eagle Expo Eagle Expo 4 Morgan City Morgan City Morgan City 985 395 4905 985 395 4905 985 395 4905 Blooming Yellowtop fills the swamps Green Herons return to coastal zone with golden color 3 2 5 6 Valentine's Day spoil islands provide excellent wading bird nesting habitat 18 2422 23 President's Day Mardi Gras Great Blue Herons begin nesting MARCH 2 25 26 27 28 1 3

great egret (Ardea alba)

Standing an average of 39-inches tall and possessing a 50-plus-inch wingspan, the Great Egret weighs but 2 lbs., resulting in the most willowy build of any wader. Adding to this lithe structure is its super-thin, laterally-compressed body, and overtly-narrow, snake-like head.

Amazingly, the Great Egret makes its home on all of the world's continents, with the exception of Antarctica. Outside of the Rocky Mountain states of Montana, Wyoming, Colorado, and Utah, and parts of New England, it is commonly found throughout the U.S. and all of Mexico. Here in Louisiana, Great Egrets are common throughout all wet habitats, far outnumbering the Great Blue Heron whenever the two occur together, which is quite often. Circumstantial evidence indicates that the Great Egret is one of several wading bird species which has especially benefited from ricecrawfish aquaculture. Even during the winter months, Christmas Bird Count data from the rice-growing parishes of Lafayette, Acadia, Jeff Davis, and Cameron show the Great Egret to be the most numerous of any local heron or egret.

Known as the "Long White" by 19th-20th century plume hunters, the Great Egret was very nearly hunted out of existence by 1920 here in the U.S. It made a rapid comeback, however, and is now among the most common and numerous wader throughout the Atlantic, Pacific, and Gulf coasts as well as the entire Mississippi River Alluvial Valley.

Foraging Great Egrets possess a hunting posture unique among the wading birds: standing perfectly still, but leaning well forward, with neck and head nearly-completely outstretched. Like the Great Blue Heron, the list of prey items on the Great Egret's menu is obtusely long, with crawfish always hovering near the top.



Patti Ardoin, Photographer

march2007



night-herons

Black-crowned Night-Heron (Nycticorax nycticorax) Yellow-crowned Night-Heron (pictured) (Nyctanassa violacea)

Stocky, large-eyed, and heavy-billed, these are the *gros becs* (pron. grow-Beck; "big beak") of the Cajuns. Several generations of Cajuns, especially those deep-swamp dwellers such as trappers and fishermen, relied on night-heron flesh – especially that of the Yellow-crowned – for a substantial portion of their spring and summer diets. These days, of course, the killing of any wading bird is illegal.

As their names – and their proportionately large red eyes – proclaim, both of these species are primarily nocturnal hunters. Not surprisingly, both are crustacean specialists, though, like most wading birds, they will eat just about anything that they can catch.

Also noteworthy is the fact that, like several other wading bird species both of the night-herons are seemingly acclimatizing to civilization. This is especially true for the Yellow-crowned, as numerous observers have been recently recording it nesting in cities and suburbs in mature live oak trees, preferably near water, and preferably within parks, golf courses, botanic gardens, and other quasi-protected locales.

The Black-crowned Night-Heron habitually draws its head down tight against its body, both when perched and in flight, giving it a trademark, "hunch-backed" profile. "Living down" to this seemingly sinister posture, Black-crowneds are not above taking eggs and even young chicks from adjacent nesting terns, herons, and ibises in mixed rookeries. It seems that this species' scientific name (*Nycticorax* = "night raven") is quite appropriate.

Prey-wise, the Yellow-crowned is a well-known crawfish specialist, feasting heavily on them both in swamp and – much to the dismay of farmers – in artificial aquaculture situations, where it will go so far as to raid the pyramidal, "walk-in" crawfish traps by tipping them over and relieving them of their contents. Crawfish farmers are even experimenting with changing the color (traditionally, white) of the traps' plastic collars in efforts to deter the birds.



Joe Turner, Photographer

april2007

sunday	monday	tuesday	wednesday	thursday	friday	saturday
Audubon Country Birdfest St. Francisville 800-488-6502	2	3	4	5	6	7
April Fools' Day	Passover				Good Friday	
Palm Sunday	 					
8	9	10 Roseate Spoonbills ini-	11	The Great Louisiana Birdfest Mandeville 985 626-1238	The Great LA Birdfest Mandeville 985 626-1238 Grand Isle Migratory Bird Celebration Grand Isle	The Great LA Birdfest 14 Mandeville 985 626-1238 Grand Isle Migratory Bird Celebration Grand Isle
Easter Sunday		tiate nesting activities			800-259-0869	800-259-0869
The Great Louisiana Birdfest Mandeville 985 626-1238	16	17 Great and Snowy Egrets begin foraging	18	spoonbill's pink plumage comes from the	20	21 Peak blooming for
	 	in flooded ricefields		crustaceans they eat		Louisiana Irises
22 Earth Day	American Birding Association Convention Lafayette 719-578-9703	American Birding Association Convention Lafayette 719-578-9703	American Birding Association Convention Lafayette 719-578-9703	American Birding Association Convention Lafayette 719-578-9703	American Birding Association Convention Lafayette 719-578-9703	American Birding Association Convention Lafayette 719-578-9703
American Birding Association Convention Lafayette 719-578-9703	30 Male alligators start to bellow in Louisiana marshes	мау 1	2	3	4	5

roseate spoonbill (Platalea ajaja)

Nicknamed the "Cajun Flamingo" by some Louisiana birders due to the plethora of "flamingo" reports which pour in each summer from uninitiated observers, the Roseate Spoonbill is actually a very close relative of the ibises. Compared with other wading birds (with the notable exception of the Wood Stork), the Roseate Spoonbill is a fairly stout and heavy bird, possessing an almost "Disney-like" combination of colors, especially during breeding season, when the naked skin on the head turns pale seagreen, along with a rich, dark-salmon tail, to go with its pink wings and belly and watermelonred scapulars, chest, and legs.

The U.S. Gulf Rim, from south Texas eastward intermittently to south Florida, represents the northernmost breeding range for this primarily tropical species. Nevertheless, postbreeding wanderers have shocked bird-watchers as far north and west as Utah, Nebraska, and Pennsylvania. Just after the early 20th century peak of plume hunting, the Roseate Spoonbill's U.S. breeding range had contracted to but a few isolated/protected coastal haunts in Texas, Louisiana, and Florida. These few colonies managed to hold out until the mid 20th century, when the U.S. Fish & Wildlife Service began to actively acquire more coastal lands for its National Wildlife Refuge program. Today, the outlook for this species in the U.S. is considerably brighter.

Contrary to what most folks might expect, the Roseate Spoonbill's spatula-shaped bill is not used to scoop up mud. Instead, the bill is richly enervated, and functions more like a broad palate, able to taste and feel prey as the bird swishes it below the water's surface, scythe-style, where it clamps down whenever food is detected.



Charlie Bush, Photographer



cattle egret (Bubulcus ibis)

Looking at a Cattle Egret working its favorite roadside or pasture, it's difficult to imagine such a squatty, landloving, "wading" bird to be one of the best oceanic navigators in the world; yet that is precisely – among many other things – what this species has become.

Within recent history here in North America, the Cattle Egret is one of the few, if not the only, exotic species which found its way here completely on its own. It then successfully radiated throughout our continent, presently maintaining summer colonies from Oregon (intermittently) through southern Ontario and Maine, and southward through southern California to Florida. Southward, it maintains a year round presence through Mexico, Central America, the West Indies, and most all of South America.

Originally an Old World (Europe, Asia, Africa) species, the Cattle Egret's arrival into the New World is a welldocumented story, crossing the southern Atlantic into northern South America in the late 1880s, into south Florida by 1942, and into southern Louisiana and Texas by 1955.

By far the most terrestrial wading bird species in the world, the Cattle Egret evolved its propensity for insectforaging alongside grazing wild mammals in the steppes and savannahs of Eurasia and Africa, parlaying it into a very successful strategy alongside domestic cattle upon its arrival in the New World. These days, Cattle Egrets commonly congregate not only around cattle, but also behind plowing and harvesting farm equipment, and commercial mowers along highway roadsides and within cities and suburbs. All of these humanwrought activities result in the flushing of its favorite foodstuffs - grasshoppers and crickets - along with bounty of "incidental take," such as spiders, centipedes, earthworms, frogs, and lizards. Regarding aquatic foraging, only in specific instances resulting in similar human-induced windfalls will a Cattle Egret occasion to wet its feet in aquatic systems, most often in newlyflooded ricefields, where multitudes of terrestrial insects and other invertebrates float up to the surface.



Mark Lagrange, Photographer

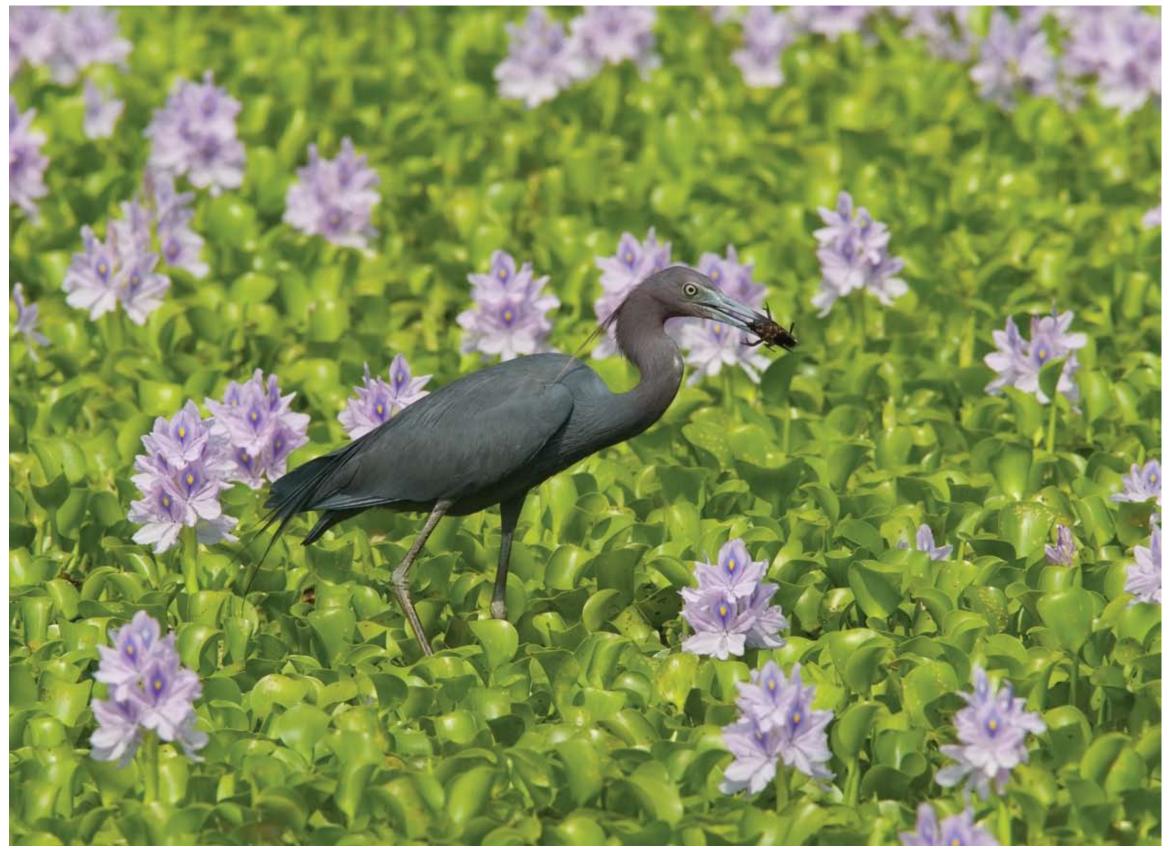


snowy egret (Egretta thula)

One of the most common wading birds in the U.S., the range of the Snowy Egret is more widespread than all but the Great Blue Heron and Black-crowned Night-Heron, and it is certainly more numerous than both of those species combined. This is an amazing scenario, especially considering the degree at which "snowies" (called "short whites" by plume hunters) were slaughtered for the U.S./European hat trade. In fact, so low had the Gulf Coast Snowy Egret population plummeted, that Louisiana's Edward A. McIlhenny (renowned naturalist, and progenitor of now-world-famous "Tabasco" brand pepper sauce) took it upon himself to restore our state's population by excavating a large pond and installing bamboo (which he himself grew in great quantities at his "Jungle Gardens" on Avery Island in Iberia parish) nesting platforms for the birds.

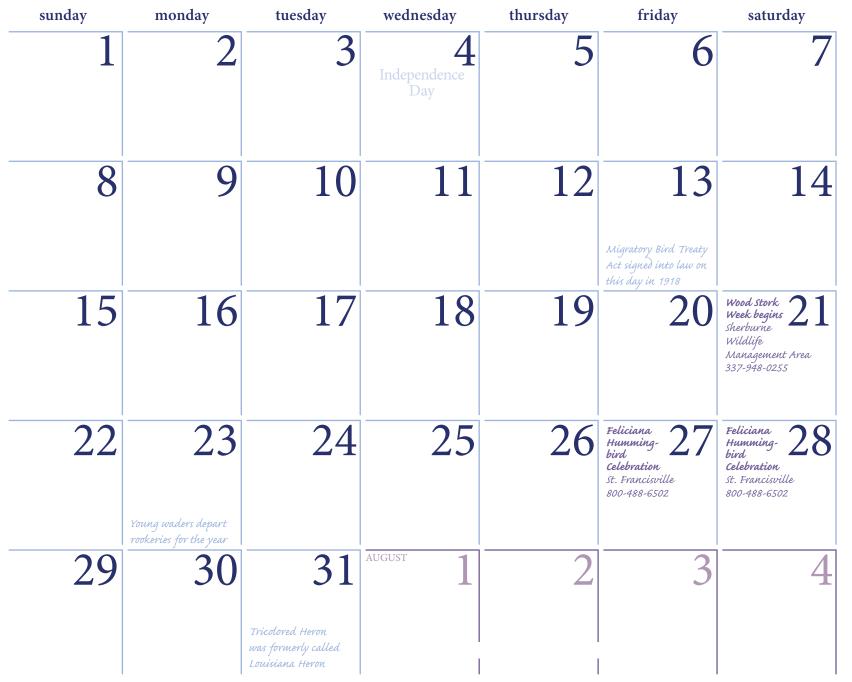
In *Louisiana Birds* (1974) George Lowery, Jr. wrote, "McIlhenny's efforts in behalf of the Snowy Egret were largely responsible for its survival." McIlhenny's "Bird City" project was a featured article in the *Saturday Evening Post* magazine, and then culminated in the 1939 book, *The Autobiography of an Egret* by McIlhenny himself.

Described as a "dashing hunter" by Texas ornithologist Harry Oberholser, the Snowy Egret typically employs a "quiver step" walking technique as it stalks small aquatic creatures within the shallow water habitats in which it forages. With its black legs and yellow feet, it is thought that the resulting legs/feet color contrast aids the bird in its kinetic hunting style.



David Chauvin, Photographer

july2007



little blue heron (Egretta caerulea)

Little Blues are wide-ranging in inland swampy habitats from the eastern half of the U.S., south through Mexico, Central America, and as far south as Uruguay, South America.

From a distance, the Little Blue Heron looks entirely steel-blue; but closer inspection reveals a delicately-colored neck and head which George Lowery, Jr. (*Louisiana Birds, 1974*) describes as "vinaceous purple." Moreover, "young-of-the-year" Little Blue Herons tend to confuse observers in that their plumage is entirely white, with only their dark-tipped blue-gray bills providing the clue to their real identity. By the following spring, these birds begin their molt into true adult plumage, exhibiting a mix of blue and white feathers earning them the nickname, "calico crane."

Little Blue Herons occupy a wide array of breeding sites throughout Louisiana, particularly within the many swampy habitats associated with the floodplains of all of the state's rivers. In mixed species rookeries, Little Blues undergo the highest degree of nest site competition with the aggressive Cattle Egret, for both species tend to select sites of similar heights and similar substrates (primarily, the tops of buttonbush, *Cephalanthus occidentalis*). During egg-laying, male Little Blues will not eat, and only rarely leave the immediate vicinity of the nest.

Much like the Tricolored Heron, the Little Blue Heron is strongly migratory, departing Louisiana by October for tropical wintering grounds. By mid to late March, squadrons of Little Blues, often mixed in with Fulvous Whistling-Duck, Blue-winged Teal, and shorebirds such as Upland Sandpiper, stream up the Mexican and Texas coastlines and into the ricefields of southeastern Texas and southwestern Louisiana. Once there, birds may spend up to 2 weeks, alternating periods of resting and foraging, before continuing north and east.



Charlie Hohorst, Photographer

august sunday monday tuesday wednesday thursday friday saturday 3 5 8 9 10 7 6 Young waders forage/ roost on their own 18 3 15 16 7 Juvenile night-herons Cloudless Sulphur turn up along small Butterflies migrate creeks, bayous, pocket into Louisiana marshes 22 23 2425 19 Wading bird numbers (residents + migrants) peak in Louisiana 26 30 27 28 3 Alligator eggs begin hatching

wood stork (Mycteria americana)

Weighing in at a hefty 5+ lbs. and possessing a wingspan of 5.5-feet, the Wood Stork is rivaled only by the Great Blue Heron as the largest of the North American waders. In the U.S., this big bird formerly nested throughout the swamps of South Carolina, Georgia, and all of the Gulf Coast states, but is currently restricted to the few remaining old-growth baldcypress swamps in peninsular Florida. However, each summer, post-breeding wanderers both from its remnant southeastern U.S. enclave and from Mexico and Central America routinely show up throughout the Gulf Coast states and southern California, with some straggling as far north as Montana, Michigan, and New Brunswick.

In Louisiana, our summer Wood Storks originate both from Florida and Mexican/Guatemalan breeding colonies. It seems that rice-crawfish aquaculture has provided crucial foraging habitat, though numerous foraging reports also emanate from natural swamps and marshes, particularly toward the end of the summer and into early fall.

Primarily, Wood Stork prey items include numerous species of fishes, but they will also readily take the usual wading bird fare of salamanders, frogs, lizards, snakes, crustaceans, large insects, and even turtles, wood rats, and baby alligators. J.J. Audubon himself reported Wood Storks also taking young rails and grackles.

As with all true storks, Wood Storks are exceptionally strong fliers, though you'd never know it from the always slow, deliberate, and stately movements of these large, heavy birds. So heavy are Wood Storks that they most often linger in their baldcypress roosts until at least midmorning, when sun-created thermals literally lift them up to soaring altitudes where upper level winds carry them to their foraging grounds in nearby swamps, ricefields, and marshes.



Joe Turner, Photographer

september2007



green heron (Butorides virescens)

Often going by the Cajun moniker, "Cop-cop" in southern Louisiana, this little heron possesses a 2-foot wingspan, but weighs only 7-ounces. In addition to its stocky build, the Green Heron shares qualities with the bitterns, often adopting a "sky-gazing" pose when disturbed.

Green Herons are known for their ability to utilize any wet spot, from ditch culverts to expansive swamps. Besides a bit of water, all they need are a few shrubs for proper concealment. Expectably, Green Herons possess the most extensive breeding range of any wader in Louisiana, being absent from only the pine regions of the state. They are also among the least-likely to utilize mixed-species rookeries, though on occasion will nest in small, loose, same-species colonies, similar again to that of the Least Bittern. During courtship, the male Green Heron puts on quite a show, expanding its throat and erecting its neck feathers, while calling and alternately hopping from foot to foot in a sort of exaggerated "strutting" action.

Regarding foraging, Green Herons are most often observed to "still-hunt" in a totallyhorizontal position, body crouched and tilted forward, and neck stretched out. Frozen in this position, they often resemble a partiallysubmerged branch or tree root. On the other hand, the Green Heron is among the only wading-bird to be observed taking prey via actually diving into the water. Strangest of all, Green Herons are known to "angle" for fish by tossing items as varied as live insects, berries, pieces of crackers, and even twigs into the water, then hunker down and wait for fishes attracted by their "bait."



David Cagnolatti, Photographer

october2007



reddish egret (Egretta rufescens)

A bit heavier-billed and somewhat huskier than other mid-sized herons and egrets, the Reddish Egret possesses not only the smallest, but also the most habitat-restricted range of all North American wading bird species. Here in the U.S., the Reddish Egret is confined to the beaches and conjoining salt-marshes of the Texas, Louisiana, and south Florida Gulf Coasts. This represents the northernmost edge of its mostly-tropical range, which extends southward no further than coastal Bahamas, Cuba, Mexico, and Guatemala.

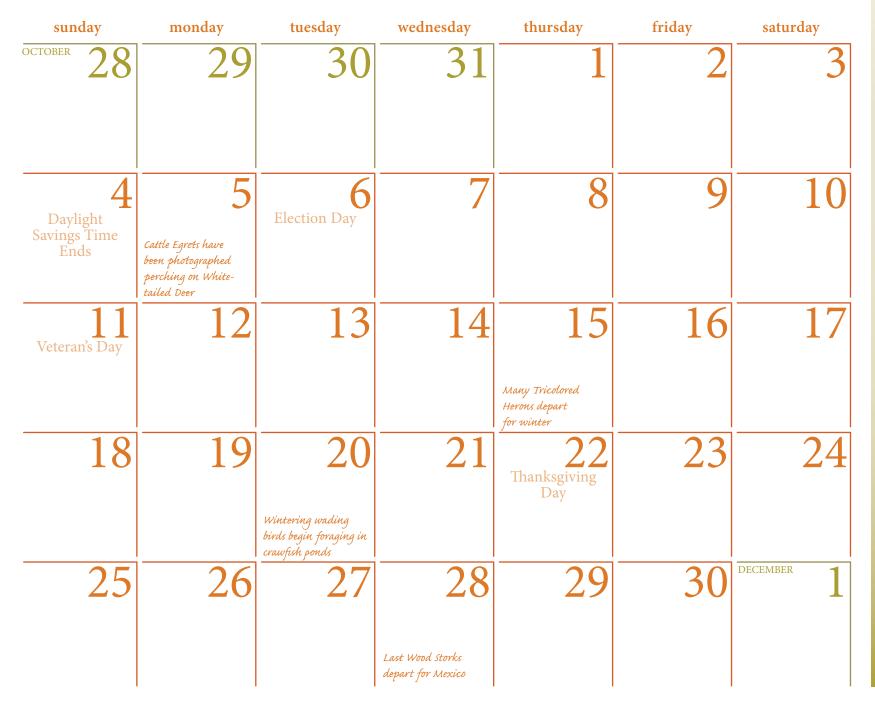
In Louisiana, Reddish Egret sightings most commonly occur throughout the coast during mid-summer through early fall, but small numbers have also been recorded during the winter and spring months. According to state breeding bird data, the only known Reddish Egret rookeries have been located on barrier islands, spoil banks, and "mud lumps" off of the coast of southeastern parishes such as Terrebonne, Jefferson, St. Bernard, and possibly Plaquemines.

Like the Little Blue Heron, nuptial plumage of the Reddish Egret is restricted to the crown, nape, and neck, where those normally-small feathers become long and rangy, resulting in a "lion's mane" appearance.

Of all North American wading bird species, the Reddish Egret possesses what is surely the oddest hunting technique. Described by some as the "drunken sailor" technique, Texas ornithologist Harry Oberholser describes it thusly: "When feeding. . . the Reddish Egret dashes and staggers about in shallows as if wildly excited, wings flopping and body inclining forward. It strides rapidly in one direction, abruptly halts, leaps in the air, reels usually in a half-turn, descends, and lurches off on another course. Amid these frantic starts, stops, and pirouettes, it seizes prey with a swift thrusting jab of its bill."



november2007



great blue heron (Ardea herodias)

Along with the diminutive Green Heron, the Great Blue Heron enjoys the widest North American distribution of any wading bird, ranging from southern Canada south through just about all of the United States and Mexico. The Great Blue Heron also commonly occurs through the Greater Antilles and the Galapagos Islands. Far from being limited to large water bodies, this species forages in just about any wet place, including beaches, bays, marshes, ponds, lakes, rivers, swamps, and even backyard garden pools!

At 4-feet in height, and with a 7-foot wingspan, the Great Blue Heron is the largest North American heron or egret. Typically, large birds such as the storks, vultures, eagles, and the true cranes test the limits of the laws of aerodynamics. Heavier body weights equate to more drag and wing-load, which most big birds deal with by developing a soaring – as opposed to flapping – flight style. Not so with the Great Blue Heron, which, even at its fastest flight speed, possesses one of the most painfully slow wing beats of any

one of the most painfully-slow wing beats of any bird. Yet even on takeoff, Great Blue Heron wing beats do not appear the least bit labored.

Because of its large size, the Great Blue Heron is capable of taking surprisingly large fish. Individuals have been observed taking catfish of 1 lb. and over, as well as 12-ounce bluegills. Other common prey items include frogs, salamanders, lizards, snakes, shrimp, crawfish, grasshoppers, locusts, dragonflies, mice, and rats.

When disturbed, Great Blues launch off with a most annoyed-sounding, deep, hoarse, "FRAHNK...FRAHNK!" So deep and low is this cry, that the usually-still wetland air around it detectably reverberates.



David Chauvin, Photographer

december 2007



tricolored heron (Egretta tricolor)

Rivaled in grace only by the Snowy Egret, the Tricolored Heron's 2.5-foot by 2.5-foot frame weighs in at a mere 13-ounces! These extreme massto-weight proportions result in such a perfectly streamlined and elegant form, mesmerizing all those fortunate enough to observe it each time it takes wing, low and slow, over the marsh. Indeed, the Tricolored Heron lives every bit up to its old genus name, *Hydranassa*, or "Queen of the Water."

Confined mainly to coastal habitats, the Tricolored Heron ranges along both the Atlantic and Gulf Coasts of the U.S., southward through most of the Caribbean Islands, Mexico, Central America, and South America south to Ecuador and Brazil. Here in Louisiana, this species largely crowds its breeding colonies into the coastal zone. Demonstrably more marsh-loving than swamp-loving, even the nesting sites of the Tricolored Heron always seem to be located well away from the tall-tree forest edges of the other waders, and in more open scrubby wetlands.

When perched, the blue-backed Tricolored Heron might be confused with the similar-sized Little Blue Heron, but on the wing it becomes more easily distinguished from the latter, as it often flares to one side or the other, flashing its two-toned blue-white underparts; a field mark shared by no other wading bird.

Strongly migratory, the vast majority of Louisiana's Tricolored Herons evacuate the state by November, headed for points south. During the winter months only a few remain stateside, and mostly confined to coastal zone haunts south of the Interstate-10 corridor. Tricoloreds return to Louisiana early each spring, "sneaking" back into the state, circumnavigating coastal Texas northward and eastward. Spring arrival in Louisiana begins at the onset of March, coinciding with the early-spring arrival of trans-gulf migrants like Yellow-crowned Night-Heron, Green Heron, and Cattle Egret.

summary

Prior to Hurricanes Katrina and Rita that impacted the Louisiana coast during the summer and fall of 2005, it was thought that Louisiana's annual wetland loss rate would result in the disappearance of an additional 700 square miles of wetland habitat between 2000 and 2050. However, in two one-day events during 2005, Louisiana lost over 200 square miles of precious coastal habitats, more than 30% of the projected loss for the next 50 year period. These numbers are still preliminary as some areas are expected to rebound, but what and how much is unknown. What is known is that Louisiana's wetland loss crisis continues, meaning the impacts to wading birds continue. During the spring breeding season of 2006, BTNEP and other partners conducted surveys of wading bird and seabird rookeries across the Louisiana coast to determine the impacts of these storms. The data are still being analyzed and a report will soon follow, but what is known is that many of the historical nesting colony locations have disappeared. For more information, go to www.btnep.org

Grand Isle

Land Loss 1932 to 2000 Land Gain 1932 to 2000 Predicted Land Loss 2000 to 2050 Predicted Land Gain 2000 to 2050 Backdrop Fall 1999 Landsat Thematic Mapper Satellite Images Louisiana Land Change Study Boundary

Prepared by: U.S. Geological Survey National Wetlands Research Center Lafayette, Louisiana

flowing right past us: the solution to Louisiana's wetland loss crisis

The foreground photos on the front cover are by Charlie Hohorst. The background photo is by Darlene Boucher.

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1 n 1927 the great Mississippi River once again overflowed its banks. The fact that the river spilled over its banks was nothing new as this was part of a natural cycle that occurred every springa cycle that was the life-sustaining blood of the vast wetland landscape known as the Mississippi Deltaic Plain.

What was different about this flood was the magnitude of water coming down river. Even though families along the river had built their homes elevated and on the highest ground, thousands of acres of farmlands, communities, and towns were inundated. The flood pitted neighbor against neighbor as some dynamited the levees across the river or farther downstream in desperate attempts to try and save their own properties. Many homes and lives were lost, livestock died, and crops failed.

Once the flood abated came the cries for a national response to this disaster... and that's just what happened. Soon thereafter, the federal government tasked the U.S. Army Corps of Engineers with constructing a levee system that essentially straightjacketed the river in place. Once constructed, these levees were mountains in an otherwise relatively flat landscape. Little thought if any was given to the fate of hundreds of square miles of swamp and marsh that made up much of the state's coastal landscape; at the time, these areas were thought of as "wasteland" and there to be reclaimed at will and put into agricultural production or some other use. That initial step, leveeing of the river, represented the first of many human actions that have resulted in what is known as Louisiana's biggest environmental crisis: the loss of our vast coastal wetland system–our buffer against devastating hurricanes.

By the mid-1900s, the effects of cutting off the river's nutrients, freshwater, and sediments were becoming obvious as large tracts of marsh were converting to open water. That rate of loss hastened and peaked during the 1970s and 1980s. Although the rate of loss has slowed some, *Louisiana continues to lose over 20 square miles of wetlands each year.*



To address this and other environmental *I* issues, the State of Louisiana petitioned the federal government to create the Barataria-Terrebonne National Estuary Program. The issues were daunting and complex ranging from wetland loss to water quality to changes in living resources. Beginning in the early 1990s, BTNEP began its planning process by coordinating with government agencies as well as varying stakeholder groups. After thousands of hours of work by many different individuals, a plan was developed. There were many actions identified within the plan, one of which focused on birds and their habitats. Since the 1990s, BTNEP has worked with many partners to acquire threatened habitat known to be important to birds, initiated a number of habitat restoration projects focused toward birds, conducted bird monitoring projects with state and federal partners, sponsored birding festivals, and developed educational products that are distributed across this country.

Currently the BTNEP program is focusing on and promoting the restoration of our lost coast by using what built this area in the first place-sediments carried by the Mississippi *River.* Each year, the mighty Mississippi carries over 100 million tons of sediments, where most if not all are lost to the deep waters of the Gulf of Mexico. Additionally, the federal government spends millions of dollars to dredge the lower river below New Orleans in order to maintain shipping lanes. Unfortunately, most of this sediment too is lost to the deep waters of the gulf. To be effective in the fight against wetland loss, we must use these sediment resources wisely. Hydraulic pumps can be used to effectively mine sediments from the bottom of the river and pump them great distances to where they are needed. Transport of slurry material is not a new science. Many small scale projects have been initiated along the Louisiana coast where dredged earthen material was used. This technology is currently used in many places here and overseas.

If we are to expect any chance of success, we must treat sediments as a resource and not an obstacle. Riverine sediments are a renewable resource that is replenished each year by the forces of nature–a resource that can be used to rebuild Louisiana's coastal habitats.

To find out more about efforts to address birds and their habitats or to learn about sediment use in the Mississippi River, go to **www.btnep.org.**

Darlene Boucher, Photographer



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