

# Louisiana Ducks 2015



# About Ducks

Ducks belong to the waterfowl family Anatidae which also includes swans and geese. Worldwide, this family contains over 150 species arranged into about 45 genera. Here in North America, 50 species occur regularly, with an additional nine species recorded as "accidentals" (non-breeding species which occasionally stray into the continent). Due mainly to their economic importance as game birds, ducks have long been carefully monitored. Since 1955, with the development of modern-day aerial surveying techniques, the North American duck population has been shown to annually fluctuate between 25-45 million individuals. Most recently (2013) our continental duck population has exhibited a slight uptick to 45.6 million birds, owing to increased habitat conservation efforts in both breeding and wintering areas. Still, the populations of some species such as the

Wood Duck,
Russ Norwood
- photographer

As with all waterbird groups, ducks possess highly specialized bills, feet, and plumages

American Black Duck and the

scaups (Greater Scaup, Lesser

Scaup) have recently

experienced declines.

which enable them to live, forage, and breed in a wide variety of open-water and wetland habitats spread across arctic, temperate, and tropical climates. Some species, such as the Wood Duck and the Hooded Merganser are adapted to living in forested wetlands such as swamps and bottomland hardwoods. Others, like the scoters and eiders, live primarily at sea or in marine estuaries. Others, such as the scaup species and Green-winged Teal are more flexible in habitat preferences, living in a diverse array of places including lakes, ponds, rivers, and marshes as well as marine environments.

Duck bills are prominent and most often flattened to facilitate straining water in order to capture tiny plants, seeds and invertebrates; but most species are also able to capture small fishes, shellfish, snails, acorns, rootstocks of aquatic plants, and other larger items. To this general food list, many diving ducks also add small clams and mussels whenever and wherever opportunities arise. Duck feet are strongly webbed, enabling them to swim and dive for their

food. Duck plumage is underlain with a layer of down feathering in order to insulate their bodies for living on water.

As with the shorebirds (plovers, sandpipers, and allies), most duck species are densely muscled and swift and powerful fliers. Many of the longer distance migratory species are capable of sustained flights with air speeds averaging 45 mph or more. In general, however, most fall-migrating duck species move in shorter distances, stopping whenever and wherever food supplies and open/unfrozen water can be found. As winter wears on, the ducks continue their southerly journeys as dictated by these two factors. Due to their prowess in the air, ducks are able to accomplish daily commutes of a hundred miles or more between roosting and foraging areas in whatever regions they might settle.

Based on primary modes of foraging, ducks are split into two groups: the "dabblers" and the "divers." Dabbling ducks typically "tip up" when feeding, with their posteriors remaining above the water while they search the subsurface with outstretched necks for prey items. With diving ducks, the entire body is submersed as the bird swims underwater after its food. These two general modes of feeding have resulted in some primary differences in body shape, neck length, leg placement, and foot structure between the two groups.



◆ Green-winged Teal, Alan Murphy photographer



- Northern Shoveler, Alan Murphy photographer
- Surf Scoter, Greg Lavaty photographer

Cutout: Blue-winged Teal, Charlie Hohorst - photographer

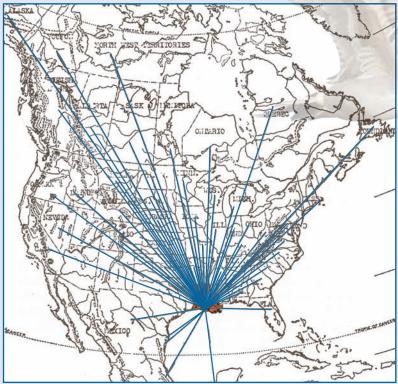
# isiana Ducks

Given the plethora of large lakes, swamps, marshes, and rivers, combined with over a million additional acres of rice/crawfish aquaculture fields, prime duck habitat is abundant in Louisiana.

Due to a number of factors – not the least of which is the fact that they have always been considered a plenteous and important food source for local peoples – ducks have been prominently reported throughout Louisiana's history, from colonial times through the present. From 1718-1734 Franco-Dutch naturalist Antoine Simon Le Page Du Pratz explored much of Louisiana, culminating in the publication century, and by 1912 had begun banding ducks in Iberia of his book, The History of Louisiana (1758) in France. In it, he is quick to mention that "Wild Ducks are fatter, more delicate, and of better taste than those in France," and concluding "for one you see in France you may here count a thousand." He comments on a number of duck species, reserving his highest praise for the Wood Duck, known then as the "Perching Duck" or the "Carolina Summer Duck," mentioning "Their plumage is quite beautiful, and so changeable that no painting can imitate it."

A century or so later, John James Audubon would produce a Wood Duck painting in Louisiana which even Le Page himself would applaud. Ducks were among the first birds that Audubon reported on his arrival to Louisiana on New Year's Day 1821. As the keelboat *Columbus* eased into the tiny Mississippi River port of Bayou Sara at noon that day, he wrote, "Many Irish Geese [Double-crested Cormorant] in the Eddys – Mallards, but few Geese..." One week later he would finally arrive in New Orleans. During his long stay there he commonly reported on wild birds he found for sale at the [French] Market; and among these – especially during the winter months – ducks were among the most commonly reported.

Shortly after the turn of the 20th century, market hunting was outlawed and sport hunting was on the rise, especially for waterfowl. From the advent of this fledgling sporthunting industry, the monitoring of North America's duck population had become serious business. During this period, duck banding had become the primary means to decipher where the birds were breeding, where they were wintering, and the continental routes which they were using to travel in between. Louisiana naturalist E. A. McIlhenny had been hunting the marshes of coastal Louisiana since he was a boy in the latter half of the 19th and Vermilion parishes. In a report published in 1934, he detailed 21 years of duck banding experiments, during which time he had banded 21,996 individuals representing 15 duck species.



▲ Map depicting McIlhenny's duck banding returns from **Banding Migratory Wild Fowl** 

Prior to McIlhenny's work, it was assumed that migratory ducks followed a rather straight north-south pathway between their nesting and wintering areas; but as the below map depicts, banding returns from his operations came from 34 states, 10 Canadian and 4 Mexican provinces, as well as Guatemala in Central America.

The biggest leap in waterfowl censusing came just after WWII when biologists who had become pilots in the service realized that airborne monitoring would be the most efficient and accurate method of keeping tabs on waterfowl. *The Flyway System* devised by these biologists is still in use today. The system split the continent into four separate flyways, each of which would develop its own censusing, monitoring, and management planning protocols. Biologists working the flyways by air would become known as Flyway Biologists.

One of the earliest Flyway Biologists, John J. "Johnny" Lynch, was working out of Lafayette, Louisiana. Prior to the war he had been working as a junior biologist with the Division of Wildlife Research at the Bureau of Biological Survey (a predecessor to today's U.S. Fish & Wildlife Service), investigating waterfowl foraging and food items at the Delta Migratory Waterfowl Refuge down near the mouth of the Mississippi River. After the war he joined other Flyway Biologists in pioneering aerial waterfowl survey techniques, as well as winter habitat management studies here in Louisiana. Among his many accomplishments, Johnny Lynch is said to have been among the first of the Flyway Biologists to point out the prairie pothole region of the Northern Plains as the most crucially-important breeding area in the North American continent.

### Louisiana Ducks continued..

For many years, Louisiana's winter duck population has averaged around 2.7 million birds. Most recently (January 2014) however, the state's total has climbed to around 3.8 million birds, reflecting a similar uptick in North America's total duck population (45.6 million in July 2013 vs. long-term average of 20.9 million). Both continental and regional duck population estimates are known to fluctuate

**^**Black-bellied

Whistling-Duck,

Alan Murphy photographer

dramatically from year to year, but this most recent uptick has captured the

optimism of waterfowl biologists and duck conservation organizations which have been working hard over the past few decades to acquire, conserve, and restore both breeding and wintering waterfowl habitats throughout the United States and Canada.

To date, 31 species of ducks have been recorded in Louisiana. Of these, only six species actually nest in Louisiana: Black-bellied Whistling Duck, Fulvous Whistling Duck, Mottled Duck, Blue-winged Teal, Wood Duck, and Hooded Merganser. Fifteen additional species routinely overwinter here: Gadwall, American Wigeon, Mallard, Northern Shoveler, Northern Pintail, Green-winged Teal, Canvasback, Redhead, Ring-necked Duck, Greater Scaup, Lesser Scaup, Bufflehead, Common Goldeneye, Red-breasted Merganser, and Ruddy Duck. An additional 10 species occur on a rare, irregular, or occasional basis: Eurasian Wigeon, American Black Duck, Cinnamon Teal,

King Eider, Surf Scoter, White-winged Scoter, Black Scoter, Long-tailed Duck, Common Merganser, and Masked Duck.



▲Blue-winged Teal, Charlie Hohorst - photographer



Redhead, Greg Lavaty photographer



^ Common Goldeneye, Alan Murphy - photographer

### Identifying Ducks in the Field

As with many birds, the complexity of colors and plumage patterns presented by various duck species requires careful and often prolonged study in order to identify them. Due to hunting pressure, ducks are understandably wary of human presence, and generally will not tolerate close study, especially during hunting season (November-January in Louisiana). Occasionally ducks will allow approaches by vehicles of 100 yards or less, so long as occupants remain inside their vehicles. In most cases, however, identification of individual duck species usually requires the use of a 20-60X spotting scope mounted on a tripod or vehicle window mount adaptor. Only hunters, well-concealed in blinds, have the opportunity (and responsibility) to identify ducks at closer range and without the aid of magnification equipment.

▲Bufflehead, Greg Lavaty - photographer

In any case, students of duck identification should begin by focusing on characters which are easiest to assess, including body size and shape, flight style, and the appearance (or lack thereof) of white patches on various parts of the bird's body. In many cases, tail shape/length and vocalizations can provide easy clues as to a bird's identity.

White coloration shows up well, as light reflects off of white surfaces, seeming to illuminate these surfaces, even from great distances and on cloudy days. The shapes and exact locations of the broad white upperwing patches of the Black-bellied Whistling-Duck, the wigeons, the Common Goldeneye, the mergansers, and the White-winged Scoter are all often quite visible, as is the small white speculum of the Gadwall, the white throat of

the Wood Duck, the white crown of the male American Wigeon, the white bar dividing the breast and belly of the male Green-winged Teal, white ring around the bill of the Ring-necked Duck, and the distinctively-shaped white facial patches on the male Bluewinged Teal, female scaups, Long-tailed Duck, scoters, goldeneyes, Bufflehead, Hooded Merganser, and Ruddy Duck can all provide substantial clues in identifying these species.

Diving ducks sit low on the water, often with tails lowered, whereas dabbling ducks sit higher, often with tails raised. In the air, the short bodies of the Ring-necked Duck, scaups, and Ruddy Duck result in a "bumble-bee" appearance on the wing. Conversely, the long square tail of the Wood Duck gives it a sleeker, long-bodied look in the air. Similarly, the body of the Blue-winged Teal averages only 1.5" longer than that of the Green-winged Teal; but this, combined with the relatively shorter neck of the Green-winged, results in a more "buzzy" or "bumble-bee" flight style, compared with the longer, more graceful lines of the Blue-winged.

Duck vocalizations are another area of concentration for duck identification students. If ducks are whistling, for example, many species can be eliminated from contention, leaving only a few: Northern Pintail, the teals, and the wigeons (keeping in mind that the wings of some species such as the scoters and the goldeneyes can produce rather loud whistling of a different nature). Black-bellied Whistling-Duck, Fulvous Whistling-Duck, and Wood Duck are vocal, each giving very loud and distinctive calls, especially when in flight.

quickly point out the important characters, allowing beginners more time looking at the birds than at their field guides. And remember to keep as low-profile as possible, remaining

in your vehicle

if possible.



▲ Gadwall, Greg Lavaty - photographer

As with all bird-watching, there is simply no substitute for experience in learning the

ducks. The only way to learn is by time spent in the field, repeatedly studying every

visible character and listening to every audible vocalization and wing-whistle in as

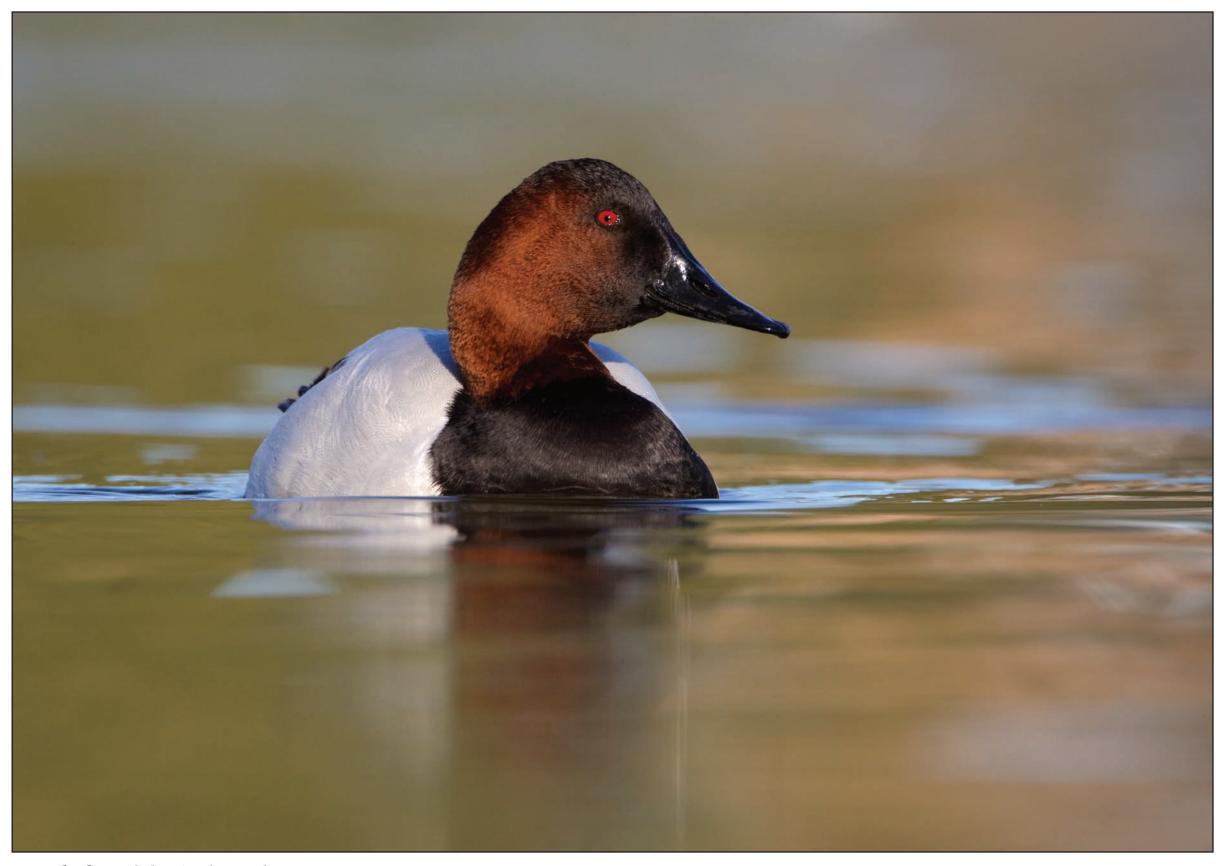
wide a variety of duck species, viewing distances, and light-qualities as possible. Going out in the field with more experienced observers is highly recommended, as they can

# Bird Watching Dates to Remember

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<b>Eagle Expo 2015</b> February 26-28, 2015	_Morgan City	_ 985-395-4905
<b>The Great Louisiana Birdfest</b> April 10 -12, 2015	_Mandeville, North Lake Nature Center_	_ 985-626-1238
Grand Isle Migratory Bird Cel April 17 -18, 2015	ebration _Grand Isle	_ 800-259-0869
Shorebird Extravaganza April 30 - May 3, 2015		_ 225-642-5763
Neotropical Songbird Tour May 9, 2015	_Sherburne Wildlife Management Area _	_ 318-793-5529
Lafayette Hummingbird Day September 19, 2015	_Lafayette	_ 337-993-2473
Yellow Rails & Rice Festival 20 October 28 - November 1, 2015		_ 225-642-5763

For more information about these events, please visit www.birdlouisiana.com





Canvasback, David Chauvin Photographer

# January 2015

SUNDAY	MONDAY	TUESDAY	WEDNESDAY	THURSDAY	FRIDAY	SATURDAY
		30	31	New Year's Day	2	3
4	5	2014 LDWF Counts 194,000 ducks on Catahoula Lake	7	8	9	10
11	12	13	14	15	16	17
18	Martin Luther King Day	20 1992 Louisiana's last recorded Masked Duck, Lafourche Parish	21	22	2013 LDWF Tallies 240,000 ducks in Northeast Louisiana	24
25	26	27	28	29	30	31

Cutout: Canvasback, Maslowski Wildlife - photographer

### Canvasback

### Aythya valisineria

The Canvasback is a large-bodied, relatively short-winged diver which makes its home exclusively in North America. It breeds in the mixed-grass Prairie-Pothole-Parkland region of the northern Great Plains of the United States and southwestern Canada all the way through the wetlands associated with the tundra and boreal forest habitats of northwestern Canada's Yukon through central Alaska.

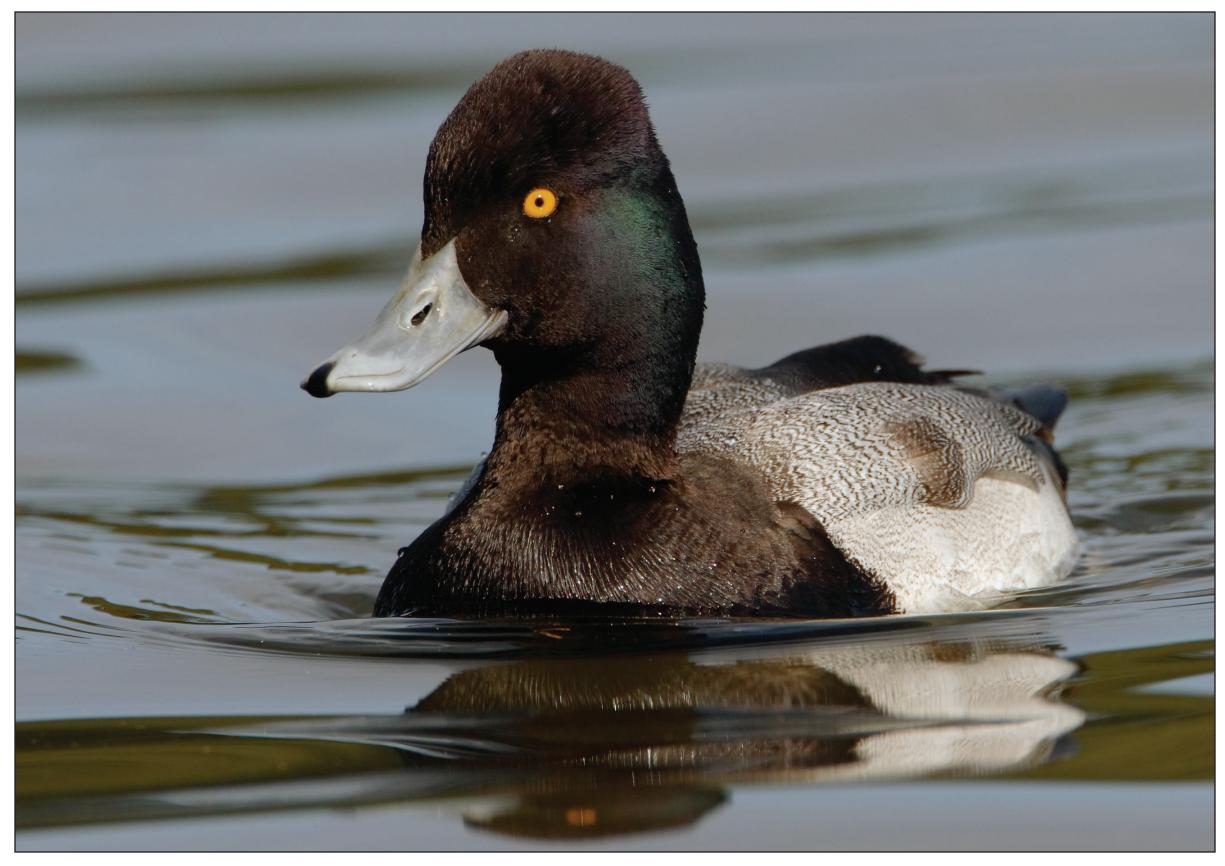
During the non-breeding season it seeks the buds and roots of *Vallisnerea americana* or wild celery, an aquatic plant that the Canvasback favors so much that its species name was derived from it. A strong diver, it also forages on other submerged aquatic plants and takes animal foods such as snails and small clams at depths approaching 30-feet.

According to ecologist Thomas Mowbray, the Canvasback has somewhat shifted its migration pathways since the 1960s, probably in response to a decline in continental populations of tuberous aquatic plants. The winter months find the Canvasback congregating at traditional wintering sites in bays and coastal lakes along the Atlantic, Pacific, and Gulf coasts of the United States, more recently concentrating in especially high numbers in San Francisco and San Pablo Bays on the Pacific side, Chesapeake Bay and Pamlico Sound on the Atlantic, and the delta lakes of southeastern Louisiana on the northern Gulf of Mexico.

Handsomely proportioned and highly-regarded by hunters and birders alike, the Canvasback is called canard cheval ("horse duck") in French Louisiana, and similarly, pato caballo in Spanish by the Isleno people of St. Bernard Parish. The crown of the Canvasback's long head slopes seamlessly into its equally-long bill, generating an unmistakable equine-like profile, distinguishable even from long distances – particularly in combination with its stark white, black, and bright-chestnut plumage pattern.

Annually, over 10% of North America's Canvasbacks overwinter in Louisiana, focusing on the large shallow lakes along the Mississippi Delta. Catahoula Lake in northeastern Louisiana is also a traditional Canvasback site.

For more information on birding in Calcasieu Parish, contact the Lake Charles/Southwest Louisiana Convention & Visitors Bureau at 800 456-7952 or visit www.visitlakecharles.org.



Lesser Scaup, David Chauvin Photographer

# February 2015

SUNDAY 1	MONDAY 2	TUESDAY 3	WEDNESDAY 4	THURSDAY 5	FRIDAY 6	SATURDAY 7
8	9	10	11	12	13	14
Local Mottled Ducks begin nesting in Louisiana	16	Mardi Gras Day	1929 U.S. Migratory Bird Conservation Act passed	19	20	21
1981 Eurasian Wigeon reported from Orleans Parish	23	24	25	Eagle	27 Expo 2015_Morgo 985-395-4905	an City
Cutout, Lacor Sagun	<b>2</b> , David Chauvin - ph	3 otographar	1885 Louisiana's first Long-tailed Duck recorded at Lake Catherine	5	6	7

### Lesser Scaup Aythya affinis

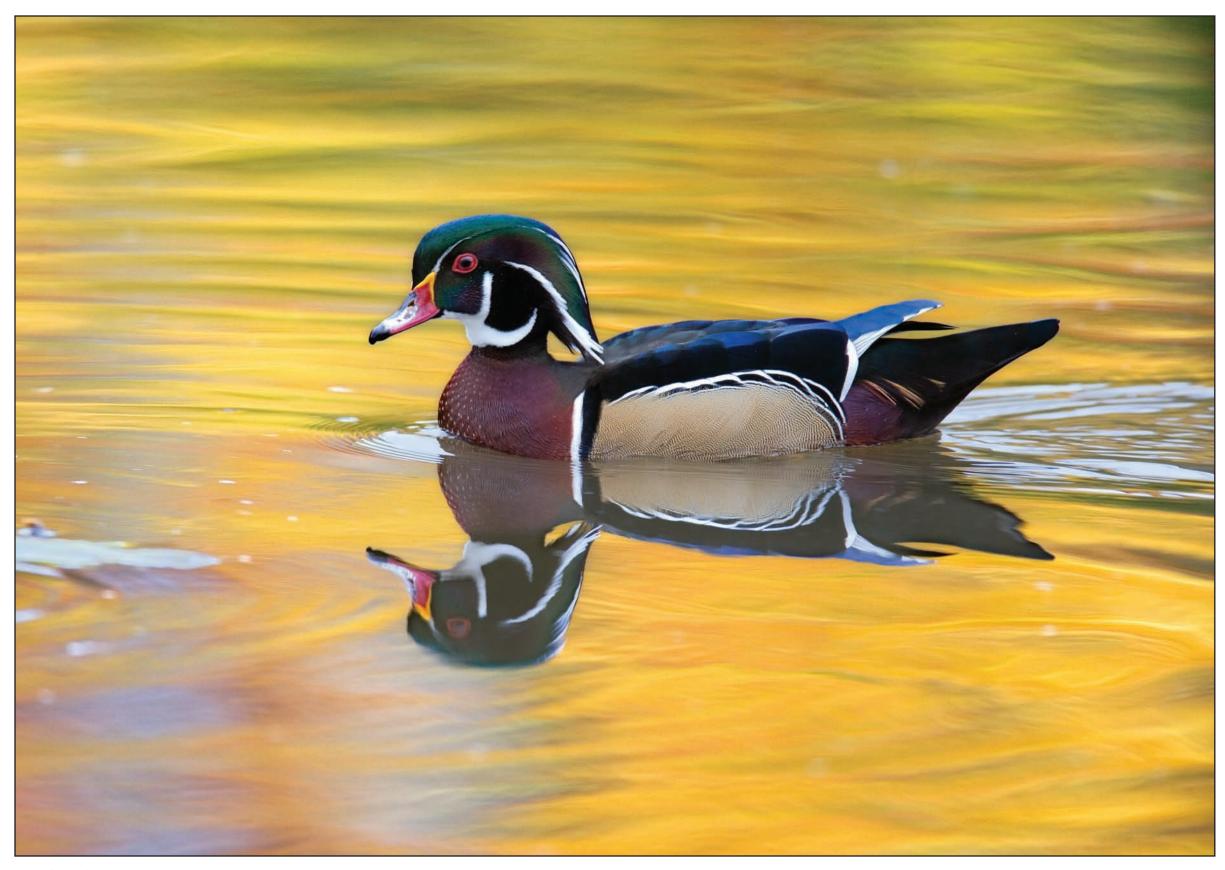
Known simply as the dos gris (pron. "doe-GREE"), often contracted into the English "dog" by south Louisiana hunters, the Lesser Scaup visits Louisiana in large numbers each winter. While omitting the nearshore Gulf waters from their routine winter waterfowl surveys where Lesser as well as Greater scaups are both known to winter - aerial duck surveyors do make a special effort to survey the scaup population each January, focusing their efforts in Lake Pontchartrain and Catahoula Lake where impressive concentrations traditionally occur.

Continent-wide, the scaup population experienced a slow, steady decline from the 1970s through the present. Causes for this decline were thought to stem primarily from breeding and wintering habitat degradation, where similar declines in clam and mussel populations – the scaup's main food source – are occurring. Recent estimates fix the North American population at about 4.25 million birds, some 23% below the long-term average. The most recent scaup population estimate for Louisiana (January 2014) was 826,000 birds, representing nearly 20% of the entire North American population.

In contrast to the Greater Scaup, the Lesser Scaup's North American breeding range is broad and contiguous, extending from the forested tundra of interior Alaska southeastward through the Yukon and the Northwest Territories. From there, breeding densities decline into the Pacific Northwest and eastward through the northern United States and Quebec. The Lesser Scaup's winter range is equally broad, taking in the Pacific and Atlantic Coasts, much of the southern United States, Mexico, Central America, and the Caribbean.

On their breeding grounds the scaups focus on amphipods, midges, and leeches, adding more aquatic plant seeds as the summer wears on. In winter, diets are comprised mostly of animal life, including small clams and mussels, which they hunt by diving to the bottom and probing with their bills and swinging them side to side as they swim along. Completely at home underwater, they even swallow prey items while submerged.

For more information on birding in St. Bernard Parish, contact the St. Bernard Parish Office of Tourism at 504 278-4242 or visit www.visitstbernard.com.



 $\textbf{Wood Duck,} \, \textbf{Maslowski Wildlife} \, \, \textit{Photographer} \,$ 

# March 2015

SUNDAY	MONDAY	TUESDAY	WEDNESDAY	THURSDAY	FRIDAY	SATURDAY
1900 Louisiana's first White- winged Scoter reported from Sabine River, Calcasieu Parish	2	3	4	5	6	7
Daylight <sup>8</sup> Saving Time Begins	Wood Duck nesting begins in Louisiana	1937 Ducks Unlimited established	11	12	13	14
15	1934 U.S. Migratory Bird Hunting Stamp Act passed	St. Patrick's Day	18	19	20 1890 Louisiana's first Surf Scoter reported from Orleans Parish	21
22	23	24	25	26	27	28
29	30	31	1		3	4
Cutout: Wood Duck,	Greg Lavaty - photogr	apher		}		

### Wood Duck

#### Aix sponsa

A member of the "Perching Duck" tribe of dabblers, the Wood Duck is considered by many to be the most beautiful duck in the world, rivaled only by its sibling species, the Mandarin Duck (Aix galericulata) of Australasia, the only other species within the tiny genus, Aix. The Wood Duck survived near-extinction toward the turn of the twentieth century, when it was severely overhunted for its excellent flesh and fine plumage. Fortunately, at the time, deep swamp habitats still held a sufficient reserve of Wood Ducks, and by the middle of the century full recovery was achieved. Among other things, Texas ornithologist Harry Oberholser attributed the post-WWII construction of many state parks with wooded lakes during the 1950s - coupled with the Wood Duck's successful adaptation to artificial nest boxes as highlights in the comeback story of the Wood Duck.

One of several North American cavity-nesting duck species, the Wood Duck selects cavity trees (or nest boxes) located as near to permanent water as possible. Nest heights range from 6-50'. Upon hatching, ducklings climb up to the entry of the nest cavity. Once at the cavity opening they drop fearlessly down to the mother hen who sits on the ground or water below, constantly calling.

In addition to a wide variety of spiders, insects, and aquatic plants, Wood Ducks also eat the nuts of several tree species including oaks, hickories, and beech, as well as the fruits of others such as flowering dogwood, black cherry, and muscadine. They seem particularly fond of acorns, and have been known to dive to water depths of 3' to secure them. Wood Ducks have also been observed eating pecans and filberts in commercial orchards.

Today, the Wood Duck breeds throughout all of the eastern United States, the Pacific Northwest down through most of California, southern Canada, and Cuba. In Louisiana, the Wood Duck nests in swamps and stream bottoms statewide. Old Cajun/Creole names include *canard branchu* ("branch-dwelling duck") or simply *canard bois* ("wood duck").

For more information on birding in **St. Mary Parish**, contact the Cajun Coast Visitors and Convention Bureau at 800 256-2931 or visit www.cajuncoast.com.



**Black-bellied Whistling-Duck, Russ Norwood** *Photographer* 

# April 2015

SUNDAY	<b>YY</b>	TUESDAY	WEDNESDAY	THURSDAY	FRIDAY	SATURDAY
29	30	31	1	2	3	4
5	6	7	8	9	10	11
Easter		Blue-winged Teal begin nesting in Louisiana		Louisiana's first King Eider recorded near Grand Terre Island	Mandeville, No	iisiana Birdfest rth Lake Nature 5-626-1238
12	13	14	15	2012 Three <b>16</b>	17	18
The Great Louisiana BirdfestContinues			1938 Flock of 75 Black Scoter observed at Holly Beach, Cameron Parish	Long-tailed Ducks observed together in Cameron Parish		ry Bird Celebration 00-259-0869
19	20	21	22	23	24	25
			Earth Day			
26	27	28	29	30	1	2
					horebird Extravagai nings225-642-5	

Cutout: Black-bellied Whistling-Duck, Greg Lavaty - photographer

### Black-bellied Whistling-Duck

#### Dendrocygana autumnalis

Louisiana's first record of the Black-bellied Whistling-Duck came from a hunter's bag in the Pecan Island area on 20 December 1969, involving a bird that had been banded on 10 April 1968 near Sinton, Texas. About one year later, a hunter took another bird – this one an immature specimen – from several miles north of Bossier City. Shortly thereafter, Black-bellied Whistling-Ducks were liberated from experimental enclosures at Rockefeller State Wildlife Refuge down in coastal Cameron Parish. Eventually these liberated birds set up nesting areas in nearby Lacassine National Wildlife Refuge, where they have been commonly reported through the present.

Beginning in the late 1980s, Black-bellied Whistling-Duck reports spread through surrounding southwestern Louisiana parishes, and over the next 25 years have spread through the entire state and northward into the Mississippi River Valley of northern Arkansas and Mississippi. This duck has repeatedly exhibited a lack of concern or downright obliviousness toward human activities. Over the past decade, post-breeding flocks of over 1,000 individuals have been annually reported from, among other places, urban New Orleans.

Black-bellied Whistling-Ducks are overwhelmingly vegetarian, eating a variety of grain-type seeds including those of domesticated/exotic plants such as rice, sorghum, millet, and Bermuda grass. In all foraging studies, animal life (small snails, worms, and leeches) comprised less than 10% of this species' total intake. Preferred foraging habitat includes shallow vegetation-choked lakes, ponds, and freshwater marshes, as well as cultivated fields and pastures, where they have often been observed to forage goose-style on dry land.

Like the Wood Duck and Hooded Merganser, the Black-bellied Whistling –Duck nests in the cavities of swamp trees. Many of our Louisiana birds migrate southward into coastal Mexico for the winter, but a substantial number remain behind in south Louisiana, as is evidenced from the species' regular appearance on Christmas Bird Count tally sheets.

If you are in search of **Black-bellied Whistling-Ducks**, look to the marshes and lakes that are found along roadsides in **Calcasieu Parish** during spring and summer months.



Fulvous Whistling-Duck, Greg Lavaty Photographer

# May 2015

SUNDAY	NDAY	TUESDAY	WEDNESDAY	THURSDAY	FRIDAY	
	27	28	29		horebird Extravagar nings225-642-5	
Shorebird ExtravaganzaJennings 225-642-5763	4	5	6	7 1989 Louisiana Office of Coastal Restoration & Management established	8	Neotropical Songbird TourSherburne_ Wildlife Management Area 318-793-5529
Mother's Day	11	12	13	14	15	16
17	18	19	Last Mallards depart Louisiana	21	22	23
24	25 Memorial Day 1900 U.S. Lacey Act passed	26	27	28	29	30

Cutout: Fulvous Whistling-Duck, Greg Lavaty - photographer

### Fulvous Whistling-Duck

Dendrocygna bicolor

Among the most widely distributed duck species in the world, the Fulvous Whistling-Duck lives in mostly tropical/sub-tropical regions of Africa and Asia as well as the Americas. Here in the New World it is a year-round resident along the Gulf Coast of southern Texas, the Atlantic Coastal Plain of peninsular Florida, the Gulf and Pacific coastal plains of Mexico, as well as Cuba, Haiti, and the Dominican Republic. Over the past century, it has been expanding its breeding range into more temperate regions, including mostly agricultural lands in extreme southern California, and the upper Gulf Coastal Plain of Texas and Louisiana.

Earliest Louisiana records for this species date back to the late 19th century, where birds were reported from the marshes and lakes of eastern New Orleans. By the early 1900s records were established on the central and southwestern portions of Louisiana's coastal zone. By mid-century, Waterfowl Flyway Biologist John T. Lynch was the first to record rice field nesting of this species in southwestern Louisiana, reporting that birds were nesting on both dry levees and (floating) on the water.

As in Texas, most Louisiana hunters and rice farmers know it as the "Mexican Squealer." Old Louisiana French names for it include *canard yankee* – which seems odd as the species came to Louisiana from the south and not the north – or simply *siffleur* ("whistler").

About the size of a Wood Duck (but with shorter blunt-tipped wings), the Fulvous Whistling-Duck remains strongly Neotropical in its migration pattern, with nearly all of the Louisiana breeding population departing the state for southern Texas and Mexico by November, and returning in large flocks in March. During the winter months only a few birds are reported from coastal Louisiana, mostly from the isolated band of freshwater marshes in Cameron Parish.

As with the Black-bellied Whistling-Duck, the Fulvous Whistling-Duck is primarily granivorous in food preference, focusing on the seeds of moist soil, floating aquatic, and emergent aquatic plants.

For more information on birding in Lafourche Parish, contact the Bayou Lafourche Area Convention and Visitors Bureau *at* 877 537-5800.



**Hooded Merganser, Brian Zwiebel** *Photographer* 

# **June 2015**

SUNDAY	MONDAY	TUESDAY	WEDNESDAY	THURSDAY	FRIDAY	SATURDAY
31	1	2	3	4	5	6
7 1971 Female Northern Pintail with brood observed at Delta NWR	8	9	10	1994 Female King Eider found at Breton NWR, St. Bernard Parish	12	Gadwall are the last winter ducks to depart Louisiana
14	15	16	17	18	19	20
Father's Day	22	23	1986 North American Waterfowl Management Plan signed by U.S. & Canada	25	26	27
28	29	30		2	3	4

Cutout: Hooded Merganser, Greg Lavaty - photographer

### Hooded Merganser Lophodytes cucullatus

The Hooded Merganser is the smallest of the three mergansers. Like the Wood Duck, the Hooded Merganser is a swamp-dwelling, tree hole-nesting duck, endemic to the North American continent. It breeds in forested wetlands of the Pacific Northwest and throughout much of eastern North America, with highest populations concentrated in the Great Lakes region.

During the winter months some Hooded Mergansers remain in the northern portions of their breeding range, but most move south into the Gulf Coast and from Texas to California.

Unlike the other two merganser species, which are primarily piscivorous, the Hooded Merganser exhibits a more diverse diet that includes aquatic insects and crustaceans – especially crawfish. Thus, it's easy to understand how this species has come to be so well-adapted to the cypress-tupelo swamps of Louisiana! Yet it's difficult to ascertain whether Hooded Merganser nesting in the Bayou State is a recent development or if it has been occurring all along – only in very modest numbers.

Back in the early part of the 20th century, when (apparently) no official nest records were on file for this species in Louisiana, ornithologist Harry Oberholser characterized the Hooded Merganser as no more than a "rare winter resident." By the mid-1950s ornithologist George Lowery, Jr. upgraded the Hooded Merganser's Louisiana status to "a moderately common winter resident and uncommon breeder," but lamented the fact that not a single state record existed for the July-October period, "despite the fact that the species is known to breed in the state."

By the advent of the 21st century, ornithologists David Wiedenfeld and Mark Swan (*Louisiana Breeding Bird Atlas, 2000*) confirmed about a dozen instances of breeding Hooded Merganser in Louisiana, spread out over eight parishes within the Mississippi and Red River floodplains, mentioning that most nests were located in artificial Wood Duck nest boxes.

For more information on birding **Terrebonne Parish**, contact the **Houma Area Convention and Visitors**Bureau at 800 688-2732 or visit www.houmatravel.com.



Mottled Duck, Greg Lavaty Photographer

# July 2015

SUNDAY	MONDAY	TUESDAY	WEDNESDAY	THURSDAY	FRIDAY	SATURDAY
28	29	30	1	2	3	4 Independence Day
5	1990 NRCS Wetland Reserve Program signed	7	8	9	10	11
12	13	14	In Auk article, E.A. McIlhenny reports banding 21,996 ducks 1912-1933	16	17	18
19	20	21	22	23	24	25
2013 U.S. duck population estimated at 45.6 million	27	28	29	30	31	
Cutout: Mottled Duc	k, Charlie Hohorst - μ	hotographer		3		

### Mottled Duck

### Anas fulvigula

Known as the "Summer Mallard" throughout much of its U.S. Gulf Coast breeding range, or more simply as canard d'ete ("Summer Duck") by Louisiana French speakers, the Mottled Duck is distributed throughout the coastal zone of peninsular Florida westward through coastal Alabama, Mississippi, Louisiana, and Texas through Tampico on the northern Gulf Coast of Mexico.

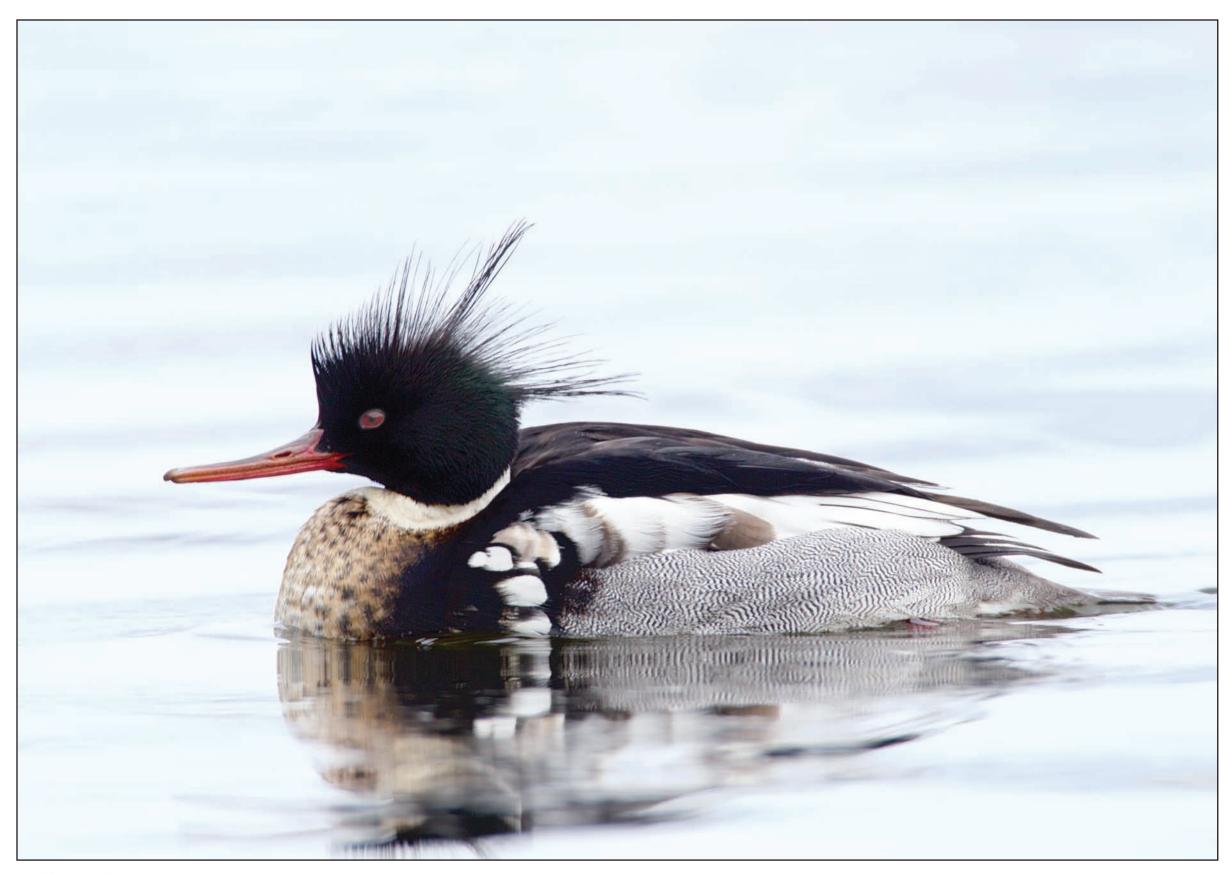
As with the American Black Duck in the northeastern United States, the Mottled Duck population in Florida, and perhaps in other Gulf Coastal states such as Louisiana, is being threatened by hybridization with escaped domestic Mallards. In southwestern Louisiana, nest predation by expanding populations of the coyote is yet another conservation issue involving this species. In 1988, researcher C. E. Stutzenbaker found Mottled Duck remains in 20.9% of the 43 alligator stomachs that he examined from southwestern Louisiana marshes, thus elevating the alligator far higher onto the list of potential Mottled Duck predators than previously suspected.

Most recent U.S. Mottled Duck population estimates range just below 700,000 birds, the majority of which occur on the Texas and Louisiana coastal zones. However, the Texas population is believed to be rapidly declining as of late, compared with the Louisiana population thought to be relatively stable.

Owing to its close kinship with the Mallard and the American Black Duck, the Mottled Duck can be easily confused with the female Mallard as well as either sex of the American Black. In general, the Mottled Duck is substantially smaller than both the female Mallard and American Black Duck, and its body color is of a much darker brown than the Mallard, but significantly lighter than the chocolate-brown body of the American Black.

Food studies have shown that animal life – primarily aquatic insects, snails, crawfish, and small fishes – can comprise over 40% of the Mottled Duck's diet, substantially more than most other North American duck species. Mottled Ducks prefer notably shallow (6" or less) water with lots of emergent aquatic vegetation for foraging.

For more information on birding **Grand Isle, LA**, contact the **Grand Isle Tourism Office** at 985 787-2229 or visit www.townofgrandisle.com.



 $\textbf{Red-breasted Merganser,} \ \textbf{Maslowski Wildlife} \ \textit{Photographer}$ 

# August 2015

SUNDAY	MONDAY	TUESDAY	WEDNESDAY	THURSDA	FRIDAY	SATURDAY
26	27	28	29		31	1
2	3	4	5	6	7 1938 Delta Waterfowl Foundation established	8
9	Gadwall are the first winter ducks to arrive in Louisiana	11	12	Louisiana 13 Average Maximum Winter Duck Population estimated at 2.7 million	14	15
16	17	18	19	20	21	22
23	24	25	26	27	28	29 1849 Louisiana's first Cinnamon Teal recorded near Opelousas, St. Landry Parish

Cutout: Red-breasted Merganser, Greg Lavaty - photographer

### Red-breasted Merganser

Mergus serrator

The Red-breasted Merganser is a common winter visitor to Louisiana, especially within the protected bays, estuaries, and lakes along our coast. Inland observations of transient individuals are also fairly common during spring and fall migration. Because it is more common here than the Common Merganser, and even the breeding Hooded Merganser, it is probably the Red-breasted Merganser which Louisiana French-speakers first nicknamed, *bec-scie* ("sawbill").

Similar to the Common Merganser in appearance, distribution range, and behavior, the Red-breasted Merganser, differs only in its strong predilection for marine environments during the non-breeding season. This species is a ground-nester around both freshwater and marine wetlands in tundra and boreal forest habitats throughout Alaska and most of Canada. During the winter months it removes to the Great Lakes and to the coastal waters of much of the North American continent, northern Mexico included.

Among all ducks, Red-breasted Mergansers are one of the swiftest fliers. On the wing, their flight profile truly takes term "streamlined" to its limits, often appearing as no more than a dark-and-white horizontal line of color zipping effortlessly just above the water's surface.

Red-breasteds are primarily fish eaters, chasing them sub-surface in relatively shallow waters. Like savvy human fishermen, they often cue in on gull activity in order to find fish. Like white pelicans and cormorants, Red-breasted Mergansers have been frequently documented in cooperatively herding fish in order to concentrate them for easier hunting.

Tolerant of other bird species, and gregarious in nature, the Red-breasted Merganser can be found mixed in with other diving ducks and even other waterbirds such as cormorants and loons. Likewise, most duck species are known to be very territorial in breeding behavior, but there are records of Red-breasted Mergansers nesting amidst tens of thousands of terns and gulls.

If you are in search of **Red-breasted Mergansers** to add to your Louisiana list, visit the marshes of **lower Lafourche Parish** particularly around the **Port Fourchon Area**.



**Blue-winged Teal, Charlie Hohorst** *Photographer* 

# September 2015

	W					
SUNDAY	MONDAY	TUESDAY	WEDNESDAY	THURSDAY	FRIDAY	SATURDAY
	31		2	3	4	5
6	Labor Day	8	9	10	11	2013 LDWF Tallies 75,000 ducks in Statewide Survey
13	14	15	16	17	18	Lafayette Hummingbird DayLafayette 337-993-2473
1918 U.S. Migratory Bird Treaty Act passed	21	22	23	24	25	26
27	28	29	30	1	2	3

Cutout: Blue-winged Teal, Greg Lavaty - photographer

### Blue-winged Teal

Anas discors

Firmly entrenched as a breeder in the Mixed Grass Prairie-Parkland region of the north-central United States and the Prairie Provinces of Canada, nesting Blue-winged Teal quickly become spotty and irregular as one moves away from its continental breeding epicenter. Nonetheless, it is one of only two North American Anas species (the other, Anas fulvigula, the Mottled Duck) to regularly nest in Louisiana, with the majority of nest records concentrated in the heavily vegetated freshwater marsh ponds of our coastal zone.

Here the annual Blue-winged Teal population ebbs and flows with the seasons, dictated primarily by climatic conditions. It is the first of the Nearctic ducks to arrive in fall. In the month of September nearly a half-million birds can be counted in Louisiana. By early winter, the count may already be whittled down to 25% (about 115,000 birds) or less of the early fall numbers. And depending on the severity of our December-January weather, might ebb to 12.5% or less by late winter.

The Blue-winged Teal's high spring and fall numbers here have earned it a few French Louisiana nicknames: printanier or sarcelle du printemps ("spring teal"), and sarcelle d'automne ("fall teal").

The Blue-winged Teal is a small duck, possessing a body length which averages just under 16" and a weight of a mere 13 oz. Still, its relatively long wings, neck, and bill give it a graceful appearance both in the air and on the water. The large pale-blue forewing patch combined with the white facial crescent and white underwings of the male allow for rather easy identification, especially on low-flying birds.

Though it possesses a bill that is similarly spatulate – if not as exaggeratedly so – as that of its close cousin the Northern Shoveler, the overwhelmingly vegetarian diet of the Blue-winged Teal is nearly opposite that of the spoonbill. Only during breeding season do female Blue-wingeds go after protein originating from insect larvae and snails. Otherwise, small seeds of moist-soil and aquatic plants comprise the bulk of its food choices.

If you are in search of **Blue-winged Teal** to add to your Louisiana list, visit the marshes around and **north of Grand Isle, LA**.



**Green-winged Teal, Alan Murphy** *Photographer* 

# October 2015

### **SUNDAY MONDAY** TUESDAY WEDNESDAY **THURSDAY FRIDAY SATURDAY** 2 Chandeleur Sound 12 13 16 first Fulvous Whistling-Ducks Catherine 21 22 23 18 19 20 30 25 26 **27** 28 29 31 Halloween Yellow Rails & Rice Festival 2015 Jennings 225-642-5763

Cutout: Green-winged Teal, Charlie Hohorst - photographer

### Green-winged Teal

Anas crecca

With three subspecies, the Green-winged Teal makes use of nearly the entire northern hemisphere at one part of the year or another. It is a common breeder and winterer throughout most of North America and the Caribbean, Europe, Asia, and in colder weather down as far south as Central America and through the Nile region of North Africa. In contrast to most other dabbling ducks, breeding Green-winged Teal generally eschew prairie-pothole habitats, preferring deciduous parklands associated with river deltas and other open-canopied forested wetlands.

Population estimates for the Green-winged Teal in the United States are set at about 3.3 million birds. According to waterfowl biologists its population numbers are trending upwards, probably due to the fact that it nests in comparatively isolated and secluded swampy areas where agriculture and urban expansion are not issues. Louisiana annually hosts nearly a half-million Green-winged Teal, making it second only to the Gadwall as the most populous wintering species in the state. Here, some hunters still know it as the *sarcelle d'hiver* ("winter teal").

Averaging only 14" in length and 12 oz. in weight the Green-winged Teal is North America's smallest dabbling duck. Its small size and quick, deep wingbeats allow for agile flying. This quickness in flight might translate to absolute airspeed. Many believe the Green-winged Teal to be the fastest of all ducks. Actually, Green-winged Teal airspeeds average no more than 30-40 mph, compared to the 45-55 mph averaged by most larger dabbling ducks.

As with the Northern Shoveler and the other teal species, the Green-winged Teal is a shallow water feeding specialist, most attracted to marshy areas with lots of submerged vegetation and muddy bottoms, including rice fields, crawfish ponds, and other flooded ag fields. Smaller billed than the other teal and the shoveler, which tend to prefer plankton-sized plant and animal life, the Green-wing's menu of food items is broader and includes the seeds of grasses, sedges, and other aquatic plants as well as aquatic insects and larvae, along with snails, crustaceans, and other items.

If you're looking for **Green-winged Teal** to add to your Louisiana list, visit the flooded forests of **St. Mary Parish**.



Northern Pintail, Greg Lavaty Photographer

# November 2015

SUNDAY	MONDAY	TUESDAY	WEDNESDAY	THURSDAY	FRIDAY	SATURDAY
Daylight Saving Time Ends Yellow Rails & Rice Festival 2015Jennings 225-642-5763	2	3	4	5	2013 LDWF Tallies 1.02 million ducks in Statewide Survey	7
8	9	10	Veterans' Day	1990 Louisiana Coastal Wetlands Planning, Protection & Restoration Act passed	13	14
15	16	17	18	19	1955 <b>20</b> George Lowery, Jr. counts 21 Common Merganser on University Lake, Baton Rouge	21
22	23	1970 Louisiana's first Black-bellied Whistling Duck observed in Bossier Parish	25	26 Thanksgiving	27	28
29  Cutout: Northern Pir	30	1	2	3	4	5

### Morthern Pintail

#### Anas acuta

Known as the "sprigtail" or simply "sprig" by most North American hunters, some Louisiana French speakers refer to the Northern Pintail as *paille-en-queue* ("strawin-tail") or *cou-long* ("long neck"). Possessing long, slender neck, tail, and wings – punctuated by the long, thin needle-like central tail feathers of the male – this medium-sized dabbler cuts through the air with a grace and elegance seen in no other duck, particularly when accompanied by the male's haunting train-whistle-like call. Even when high up in the sky, the long tail of a pintail may be seen through binoculars or scope, offering a major identification clue.

As with many North American ducks, the Northern Pintail is circumpolar in distribution, occurring in Eurasia as well as throughout much of the Americas north of the equator. In North America, pintails possess one of the largest breeding ranges of all the *Anas* species. Nesting occurs throughout much of Canada and Alaska through the Great Plains, Northwest, and Far West of the continental United States, with wintering birds stretching southward through the entire southern half of the United States through Mexico, Central America, and Cuba, and into northern South America.

The North American pintail population suffered severe declines between 1970-1990, dropping from 6 million birds to less than 3 million during that period. Presently, conservation measures have induced a fair degree of stability, and the North American population stands at about 3.5 million birds. Recent (2013) estimates put the Louisiana winter population of the Northern Pintail at about 91,000 birds.

In winter, the Northern Pintail seems most attracted to large open expanses of shallow water, such as those found in lakes, estuaries, and agricultural fields – flooded or simply muddy – where it occasionally congregates in great flocks. In the late winter of 1988-89 a flock estimated at 10,000 birds (potentially, 10% or more of all Louisiana pintails!) was observed in a very large, muddy agricultural field in southern Rapides Parish.

If you're looking for **Northern Pintails** to add to your Louisiana list, visit the freshwater marshes of **St. Bernard Parish** from November through early spring.



 $\textbf{Mallard, Charlie Hohorst} \ \textit{Photographer}$ 

# December 2015

SUNDAY	MONDAY	TUESDAY	WEDNESDAY	THURSDAY	FRIDAY	SATURDAY
29	30	1	2	3	4	5
6	7	8	9	2013 LDWF Tallies 1.95 million ducks in Statewide Survey	11	1933 E.A. McIlhenny bands 1,514 ducks in one day
2013 LDWF Counts 226,000 Scaup on Lake Pontchartrain	14	15	1989 North American Wetlands Conservation Act passed	17	18	19
20	21	22	23	24	25 Christmas	26
27	28	29	30	31		
Cutout: Mallard, Gre	g Lavaty - photograp	her				

### Mallard

#### Anas platyrhynchos

Considered by hunters and ornithologists alike to be the best known and most highly adapted duck in the world, the Mallard has risen to iconic status, with the "Greenhead" emblem adorning all manner of outdoor gear and business signage. Indeed, the Mallard breeds throughout most of the continental United States, Canada and coastal Greenland, as well as Europe, Asia, the Virgin Islands, the Hawaiian Islands, New Zealand, and Australia!

In North America, the Mallard is the most abundant of all duck species. Recent estimates put the total North American Mallard population at about 10.5 million, well above its long-term average of about 8 million. Originally, it was known as a primarily central and western species, the Mallard has spread throughout the eastern United States as a result of habitat changes within its old range and introductions of domesticated Mallards into northeastern parks, farm ponds, etc.

In Louisiana, results from the 1994-96 Louisiana Breeding Bird Atlas survey show confirmed or probable Mallard nesting in no fewer than nine Louisiana parishes scattered across the state, though surveyors believe that all of those records are a result of domesticated birds that had escaped into the wild. Our state annually hosts a winter population of about 200,000 birds. Prized in the Bayou State as much if not more than anywhere else, the old Cajun/Creole name for the Mallard is canard Francais ("French Duck" perhaps owing to the fact that French colonists knew the Mallard from France).

As with most duck species, Mallards are primarily carnivorous during the breeding season, consuming insects, snails, freshwater shrimp, and earthworms. Outside of breeding season, they turn to seeds, roots, and foliage of aquatic and moist-soil plants; but in winter their focus is on domestic grain crops including wheat, corn, barley, and rice. Within the Mississippi Alluvial Valley wintering Mallards are most attracted to flooded bottomland hardwood forests where they forage for acorns, which are favored over cereal crops.

If you're looking for **Mallards** to add to your Louisiana list, visit the marshes of **Terrebonne Parish** from November through early spring.

# By the end of the 19th century, biologists and other interested parties recognized that ducks were being over harvested by "market hunters," and by 1900 the *Lacey Act*, prohibiting commercial trade in all forms of wildlife was passed. In 1918 the passage of the *Migratory Bird Treaty Act* prohibited the over harvest of ducks and all other migratory birds by sport hunters, establishing discrete hunting seasons with specified bag limits for various species of migratory game birds. In 1929 the *Migratory Bird Conservation Act* was passed, authorizing the acquisition of lands for the express purpose of conserving migratory birds by the U.S. Department of the Interior. With the passage of the *Duck Stamp Act of 1934*, the Department was authorized to begin acquiring lands for the establishment of the

Private citizens were stirred into waterfowl conservation action in the aftermath of the Dust Bowl of the 1930s, when millions of acres of farmland and duck nesting habitat in the Great Plains of the U.S. and Canada were laid to waste. *Delta Waterfowl*, a northern plains duck conservation group founded in 1911, hired its first scientific director in 1938, and duck ecology studies began in earnest. *Delta Waterfowl* is still active in waterfowl conservation studies and activities today, initiating conservation services such as the *Alternative Land Use Program* for farmers and other private landowners, Adopt-A-Pothole, Hen Houses, the Waterfowl Heritage Fund, and more.

National Wildlife Refuge (NWR) system.

*Ducks Unlimited*, another waterfowl conservation group formed by private citizens, traces its beginnings to the post-Dust Bowl year of 1937. Dedicated to the acquisition of not only waterfowl breeding habitat in the Northern Plains but also waterfowl wintering habitat elsewhere in North America, *Ducks Unlimited* has conserved over

### Duck Conservation

11 million acres to date in the U.S., Canada, and Mexico. In Louisiana, winter home for a substantial portion of North America's waterfowl population, *Ducks Unlimited* has acquired nearly 400,000 acres of wetland habitat at a cost of over \$80 million.

Despite all these measures North America's waterfowl population numbers continued to drop amidst an onslaught of habitat loss and chemical pollution. By the latter part of the 20th century – when over half of the continent's wetlands had been converted to other land uses or lost, and the population of most duck species were plummeting – the U.S. Fish & Wildlife Service initiated the *North American Waterfowl Conservation Plan (NAWCP)*. Several years later Congress passed the *North American Wetlands Conservation Act (NAWCA)*, authorizing matching grants for the acquisition of more habitat.

Eventually, NAWCP spawned the *Joint Venture Program*, calling for self-directed partnerships of government



→ Wood Ducks, Maslowski Wildlife - photographer

agencies, private organizations, corporations, and individuals to tackle habitat conservation issues. The North American continent was divided into 18 habitat regions, with each developing its own set of plans, objectives, and goals. Coastal Louisiana was put into the *Gulf Coast Joint Venture*, with the remainder of the state put into the *Lower Mississippi Valley Joint Venture*. To date, North America's Joint Ventures have facilitated over 5,700 partners in securing about \$7.5 billion in funds to preserve, restore or enhance over 22 million acres of wetland waterfowl habitat in Canada, the United States, and Mexico.

At about the same time that NAWCP and NAWCA were initiated, the U.S. Department of Agriculture became involved in providing farmers and other private landowners with opportunities to protect, restore, and enhance wildlife habitat located on their properties via the Conservation Reserve Program. By 1990, the Department added special benefits for wetland habitat conservation via a sister program known as the *Wetlands* 

Reserve Program – known today as the Agriculture Conservation Easement Program. This program is periodically reauthorized through the USDA's Farm Bill, and provides funding and technical assistance (via the USDA's Natural Resource Conservation Service biologists) to farmers and land managers for the express purpose of conserving wetland habitats on their properties.

With the late-20th century additions of these high-impact wetlands conservation programs and initiatives to those organizations and programs which were already – and still are – in place, the outlook for North America's waterfowl populations has brightened considerably. Today most waterfowl species populations are recovering and presently secure as a result.

- 1. I-10 Eastbound Welcome Center 337-589-7774
- Sabine National Wildlife Refuge Visitor Center 337-762-3816
- 3. Southwest Louisiana Convention & Visitors Bureau 337-436-9588
- Rockefeller State Wildlife Refuge 337-538-2276
- 5. Cameron Prairie National Wildlife Refuge 337-598-2216
- 6. Lacassine National Wildlife Refuge Headquarters
- Lafayette Convention & Visitors Commission 337-232-3737
- 8. Acadiana Park Nature Station 337-291-8448
- 9. Vermilion Parish Tourist Commission Visitor Center 337-898-6600

- 10. Atchafalaya Welcome Center 337-228-1094
- 11. Lake Fausse Pointe State Park Visitor Center 888-677-7200
- 12. Iberia Parish Convention & Visitors Bureau 888-942-3742
- 13. Tabasco® Pepper Sauce Factory 337-365-8173
- 14. Cajun Coast Convention & Visitors Bureau Franklin, LA 70538 • 337-828-2555
- 15. Cajun Coast Convention & Visitors Bureau Patterson, LA 70392 985-395-4905
- 16. Louis Armstrong International Airport Kenner, LA 70062
- 17. New Orleans Metropolitan Convention & Visitors Bureau 504-566-5011
- 18. Audubon Louisiana Nature Center 504-861-2537

- 19. Audubon Aquarium of the Americas 800-774-7394
- 20. Audubon Zoo 866-487-2966
- 21. St. Bernard Parish Tourism Commission 888-278-2054
- 22. Houma Area Convention & Visitors Bureau
- 23. Wetlands Acadian Cultural Center 985-448-1375
- 24. W.J. DeFelice Marine Center LUMCON 985-537-5800
- 25. Lafourche Parish Tourist Commission 985-537-5800
- 26. Grand Isle State Park Visitor Center 985-787-2559
- 27. Grand Isle Tourist Information 985-787-2997

- 28. Plaquemines Tourism Center Belle Chasse, LA 70037 • 504-394-0018
- 29. Barataria Preserve Visitors Center Jean Lafitte 504-589-2330
- 30. BREC's Baton Rouge Zoo 225-775-3877
- 31. State Capitol Welcome Center 225-342-7317
- 32. Tickfaw State Park Nature Center 888-981-2020
- 33. Fontainebleau State Park 888-677-3668
- 34. I-10 Slidell Welcome Center 985-646-6451

For more information contact any of these locations.

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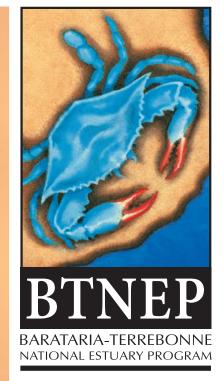




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