

Louisiana
HUMMINGBIRDS





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G. Lavaty

Immature Male Ruby-throated

Hummingbird (opposite page)

Immature Male Ruby-throated Hummingbird visiting Firebush (right)

Introduction to the Hummingbird Family

Can anyone forget the thrill of seeing a hummingbird for the first time? Hovering on near invisible wings, this impossibly small bird hardly seems real, but facts are even more amazing than fiction. The hummingbird family is huge, encompassing more than 330 species, all of which are limited to the Western Hemisphere, mostly south of the United States – Mexico border. Sixteen or seventeen species nest in the US, all but one west of Louisiana. Although the majority of species live south of the US and Canada, all share a number of common traits that set them apart from ordinary birds. As more people begin to appreciate hum-

mingbirds in their gardens and in the wild, they want to learn how to best provide for the birds that visit their homes as well as to conserve the wild lands these birds require to ensure healthy populations far into the future.



Sultan's Turban
Malva viscus drummondii

Adult Male Ruby-throated Hummingbird



R. DeMay

The Hummingbird Lifestyle



Indian Pink
Spigelia marylandica

Whereas other

kinds of birds can hover, hummingbirds are the only ones that are also capable of flying backwards and upside down, although only for brief periods. The ability to hover in place enables the birds to exploit nectar sources without having to land on delicate flowers. Hummingbirds are excellent pollinators. Because they are warm-blooded and do not require the air temperature to warm them, they are more effective pollinators than insects in cooler climates.

The hummingbird diet consists of nectar, small insects, spiders, and occasionally sap and pollen. Each type of food provides



different elements of the nutritional needs of the birds. Nectar yields sugar required for the enormous amount of energy that hummingbirds expend each day. Insects and spiders provide protein necessary for growth and cell repair as well as essential vitamins and minerals. Sap also contains sugar, but it is a minor part of any hummingbird's diet. The role of pollen in the diet is not known.

Nectar is an important food for several other types of birds, as well as for bees and butterflies, so competition for this food source can be intense. Hummingbirds defend individual territories, which are centered around abundant nectar supplies. Breeding

females also defend the area surrounding the nest. Exciting aerial duels are frequent near the center of the territory as the dominant bird challenges any intruder for possession of the richest nectar source. Bluff and bravado take the place of mortal combat in these usually bloodless challenges. Occasionally, combatants collide, grapple, and fall to the ground but serious injuries are rare.

Insects can be snatched from the air or gleaned from foliage. Hummingbirds sometimes sally out and trace erratic patterns amid clouds of nearly invisible gnats, thereby gaining maximum nutrition from a minimum investment of energy. They can survive for a short time on a diet composed solely of nectar or of insects, but they must have both to maintain good health.

At times of exceptional energy demands, such as during sustained cold weather, hummingbirds can enter a state of reduced metabolic function called torpor. While in torpor, the bird's respiration and heart rate become slow and erratic. The metabolic rate drops to about one fifth the normal rate, and the body temperature drops precipitously. The torpid bird appears to be dead but it remains pliable. If handled, it might emit a soft, mouse-like squeak. By becoming torpid, hummingbirds are able to reduce their need for food. In this way, the birds can sleep through a cold night without seriously depleting their energy reserves. Torpor is a natural phenomenon so if a torpid bird is discovered, it is not necessary or advisable to rouse it unless it is in imminent danger.

“Hummingbirds are excellent pollinators.”

Adult Male Ruby-throated Hummingbird with Coral Bean



Arousal from torpor can be gradual or dramatic. In the morning, as the sun warms the air, the torpid bird's body temperature rises slowly. It may take an hour before the bird returns to normal condition. When a bird is held in one's hand, or is otherwise artificially warmed, the bird's temperature rises rapidly. Within minutes, the bird returns to normal, and it is ready to resume its daily activities. Although torpor is not unique to hummingbirds, little is known about it in other bird families.

Hummingbirds can sometimes be observed lying with wings outspread on the grass or even a concrete surface. This behavior is called sunbathing, although its purpose is not fully understood. Often the bird appears to be in distress, but it flies away as soon as a human approaches. Usually

observed on blazing hot days, sunbathing is also practiced in cooler weather. Many varied species of birds sunbathe in a similar manner. It is thought that sunbathing may be a way for birds to capture the sun's rays so that their bodies can manufacture vitamin D.

All hummingbirds emit a variety of twitters, chips, squeals, and chatters to communicate with other hummingbirds. Each species has its own particular repertoire, which can often help in identifying individuals to species. Vocalizations are generally used to let other birds know that space is occupied or to challenge potential rivals. Although some species do sing, none would be considered as a fine songster. The male Ruby-throated Hummingbird is reported to sing after copulation. However, the role of this behavior is not understood.

Immature Male Ruby-throated
Hummingbird



D. Demchick



Adult Female Rufous Hummingbird

J. Turner

Longevity and Mortality

The average lifespan

of a wild bird is difficult to determine.

Banding studies in Louisiana and elsewhere suggest that the average lifespan of a Ruby-throated may be three to four years, with nine years the recorded maximum. Longevity data for most species can be found on the USGS Patuxent Wildlife Research Center Bird Banding Laboratory web site: <http://www.pwrc.usgs.gov/BBL/homepage/longvltst.cfm>. The oldest known wild hummingbird documented there is a female Broad-tailed Hummingbird that was recaptured in Colorado 12 years, 2 months after it was initially

banded by a federally permitted hummingbird bander.

Hummingbirds may fall victim to a variety of natural and man-made hazards. Nestlings are vulnerable to windstorms, heavy rain, hail, and chilling, as well as to predation by snakes, squirrels, ants, and other kinds of birds, including Blue Jays. Adults and fledglings face peril from extreme weather and collisions with obstacles. Hummingbirds often fly into screen porches, picture windows, skyscrapers, and vehicles. Exhausted by a strenuous migration and insufficient food, they might be easy prey for house cats,



Trumpet Creeper
Campsis radicans

dogs, shrikes, and hawks. Domestic cats are probably the primary predator of hummingbirds. Orioles, tanagers, and flycatchers have been noted killing hummingbirds, but they probably do not do so regularly. Praying mantises are well known as snatchers of hummingbirds, especially at feeders. Additionally, large spiders can snag them in their strong webs. Large dragonflies will chase hummingbirds, though they probably catch very few. There are even accounts of fishes and frogs leaping out of ponds to catch hum-

mingbirds, although such events must be rare.

The most serious threat to Ruby-throated Hummingbirds is the destruction of their breeding habitats, swamps and woodlands. Loss of these important ecosystems means loss of future generations. Wholesale applications of pesticides are also deleterious and may eliminate many of the small flying insects that are especially important to the nestling diet. In so many places, hummingbirds can no longer make their living where once they were abundant.

Immature Male Ruby-throated
Hummingbird





J. Turner

Adult Male Anna's Hummingbird
visiting Bottlebrush.

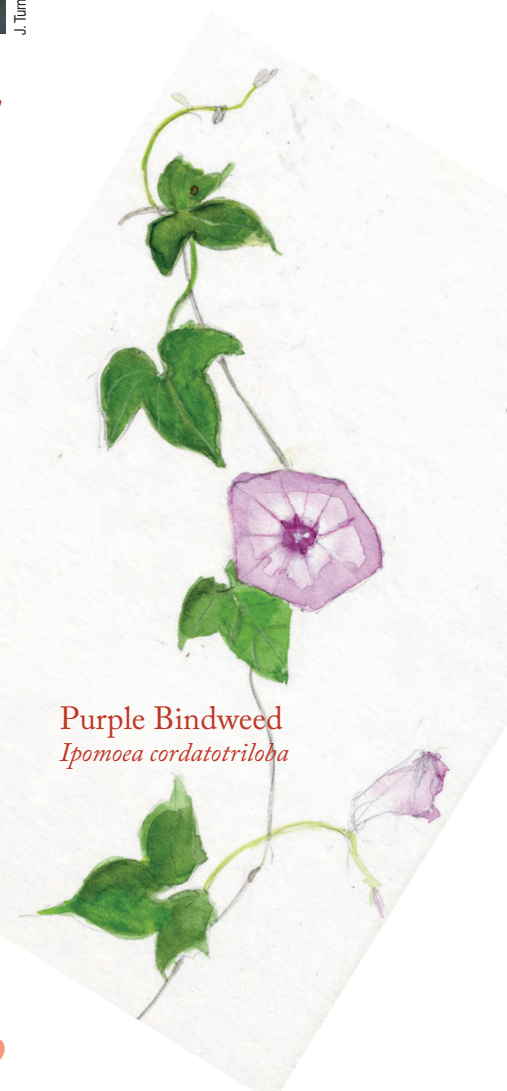
How Storms Affect Hummingbirds

Weather plays a

vital role in the life of every living thing. Ideal conditions provide excellent opportunities for hummingbirds to reproduce, develop, and migrate. However, ideal weather seldom lasts long enough for an entire generation to prosper. Many times in the course of its existence, each bird will face dire consequences from weather events of one kind or another.

Strong cold fronts in March and April that extend far into the Gulf of Mexico exact a terrible toll on thousands of northbound migrants as they buck strong headwinds and are pelted by cold rain. There

is no shelter over the open water unless an individual happens upon a petroleum structure. Even then, food is not likely to be available. Hardy survivors continue north as soon as conditions moderate. These birds begin searching for food immediately after they make landfall. However, nectar sources are often scarce on the immediate coast so their stay on the beach and in the marshes may be brief. Louisiana's coastal cheniers offer shelter and abundant insect food, making them a very valuable habitat for migrants of many species.



Purple Bindweed
Ipomoea cordatotriloba

“Still, loss of natural nectar sources can be every bit as fateful as direct action of wind and rain.”

During the nesting season, heavy rains can chill adult females and their nestlings. Accompanying winds can dump the young from a seemingly secure nest, as well. Early April nests may be more vulnerable to this kind of catastrophe than those initiated in mid May.

Hurricanes and tropical storms are major weather events that jeopardize everything in their path. A widespread misperception is that migrating birds can sense these storms from afar and avoid them by stopping or by altering their route. No evidence supports such an idea. To the contrary, there are many observations of hummingbirds visiting feeders during a lull in a storm. There is no doubt that many birds perish from the direct effect of a devastating storm. Nevertheless, many others can find some kind of shelter and ride out the high winds and heavy rains.

Still, loss of natural nectar sources can be every bit as fateful as direct action of wind and rain. Is it any wonder that hummingbirds will flock to feeders in huge numbers after a bad storm? Pity the ones that don't find ready man-made sources of sustenance. Most of the birds affected in this way will likely be migrants from other areas because Louisiana breeding populations generally depart before late August or early September – the peak of the tropical storm season. The major effect of hurricanes on local breeding populations is habitat destruction, the loss of trees in woodlands and swamps. The post-hurricane cleanup can even have a more dramatic impact than the storm itself. Additional areas are often cleared so birds returning the following spring may have to move to other areas and they may have to compete more intensely to secure good nest sites.

Immature Male Ruby-throated Hummingbird



R. DeMay



Adult Male Ruby-throated
Hummingbird

D. Demcheck

Louisiana's Only Breeding Hummingbird

Ruby-throated Hummingbird

Archilochus colubris

The Ruby-throated Hummingbird is Louisiana's only breeding hummingbird species. Members of this species nest across a vast range from central Florida to Canada's Maritime Provinces to central Texas and the eastern edges of the Great Plains north to central Alberta. In those far-flung localities, Ruby-throated Hummingbirds must adapt to a wide variety of habitats. In Louisiana, the preferred habitats are swamps and other woodlands. Occasionally, one may select a site near human habitation, but more secluded

places are usually chosen. They nest sparingly, or not at all, in the more urban parts of the state. Additionally, coastal marsh, prairie, and agricultural fields do not offer sufficient tree cover to appeal to them.

Breeding commences almost as soon as the first summer residents arrive from tropical wintering grounds to claim their territories. First arrivals are usually males, which can appear in late February, although more typically arrival is in early to mid March in the southern tier of parishes while their potential mates arrive a week or so later. In the more northerly parishes, first arrivals show up a week to two weeks later. In states



Coral Bean
Erythrina herbacea



far to the north, first arrivals are not usually until April or May.

Unlike most songbirds, male and female hummingbirds fulfill their reproductive duties separately, never forming cooperative pairs as many other birds do. Once mating has taken place, the male resumes his territorial displays so he can inseminate as many females as possible. He does not participate in nest construction, incubation, or raising the young. For this reason, hummingbirds are not referred to as pairs.

For his part, the male stakes out a territory centered on a good nectar source, which could be a large patch of flowering

plants or a feeder. There he flies stylized 'U' shaped display flights to assert his territorial claim. The display serves the twofold purpose of intimidating rival males and of demonstrating his prowess to females who might be searching for a mate. He will continue to display and to mate with as many females as possible in order to ensure that his genes are widely distributed within the local population.

Female Ruby-throated Hummingbirds establish their own territories centered on the nest site. Preferred sites are usually on slim, downward sloping twigs with an overhanging canopy of leaves. Often the nest

Female Ruby-throated Hummingbirds





D. Demcheck

Nestling Ruby-throated Hummingbird

is located above a stream, but sometimes a roadway makes a suitable substitute. Height above the ground or water can be as low as five or six feet to as high as fifty feet. Generally, good sites have few, if any, nectar sources nearby to reduce interaction with dominant males that may be drawn to an abundance of food

After arrival, a female wastes no time to search for a suitable nest site and to initiate construction, using plant down, especially those of dandelion or thistle. Some nests have bud scales incorporated into them as well. Spider silk is used to bind the structure to the substrate and to lash the nest materials together. Lichens, applied to the exterior during incubation, camouflage the nest. Six to ten days are required to complete the major part of the soft cup, which is

roughly the size of half a walnut shell.

When the nest is nearly complete, the female leaves her territory to seek a mate. She will cautiously enter a male's territory, signifying her acquiescence by demurely watching as the suitor exhibits his aerial prowess. A female that is unready will flee the territory of an aggressive male. The male then moves closer, facing the female, and he expresses his ardor with a short, side-to-side flight called a shuttle. During the shuttle, the male is generally quiet except for the whirring of his wings. His gorget is puffed out to catch any rays of sunlight.

Although often seeming to be inattentive, the female watches the male's movements from a hidden perch deep in shrubbery. If she is receptive, she signifies by giving a soft call and she cocks her tail feath-

“Generally, good sites have few, if any, nectar sources nearby to reduce interaction with dominant males that may be drawn to an abundance of food.”

Immature Male Ruby-throated
Hummingbird



G. Lavaty

*“Most birds can fatten
up sufficiently to
migrate in as little
as a week.”*

ers to one side. The male mounts immediately, turning his tail under hers to facilitate the ‘joining’ of their cloaca’, an act that lasts only a few seconds. When copulation is complete, the male flies to a higher perch and sings a few scratchy notes. The female remains perched, fluffing and flattening her feathers for a few seconds before flying off to her nesting territory where she continues nest construction.

The tiny nest is very nearly complete by the time the eggs are ready to be laid, a few days after mating. A complete clutch is usually two ‘tic-tac’-sized eggs, deposited one to three days apart. The 12-14 day incubation period begins as soon as the first egg is laid, leading to a one to three day gap in

the time of hatching. Occasionally, only one egg is laid and very rarely, three. Three lively, growing chicks may be too much for the nest to hold as accounts of such nests usually end when the structure bursts open and the young spill out onto the ground below.

The chicks hatch naked and blind, but when fed a protein-rich diet of insects and nectar, they develop rapidly. Pinfeathers emerge at about one week of age and the eyes open a few days later. Nestlings leave the nest at 18-22 days of age by which time they are as large as an adult. The female continues to feed the fledglings for about a week, until the young birds develop foraging skills. Young hummingbirds are very curious, and they will investigate anything red, whether or

not it offers anything to eat. In this manner, they learn the nectar-gathering skills needed for survival. Once the fledglings are proficient at finding their own food, the female chases them away so she can use the nearby resources for her next brood.

A female may begin a second nest while still caring for her fledged young. An entire, successful nesting cycle requires approximately six weeks. Thus, a nest begun in early April would fledge in mid-May. A second nest begun in mid May would fledge by the end of June or early July. Breeding winds down rapidly after the beginning of July, although a few individuals can still be found in breeding condition through the middle of the month. In more northerly regions, where Ruby-throated Hummingbirds get a much later start to the breeding season, nesting can extend into late August. Two broods have been recorded as far north as Michigan.

Adults undergo a complete molt of their body feathers as soon as the breeding cycle is finished. For males, this change of feathers begins around the summer solstice while females may wait to finish rearing any dependent young. The replacement of body feathers is accomplished in just a couple of weeks, and as the last old feathers are shed, the birds begin eating more heartily so they can pack on some fat to fuel the long migration ahead. Most birds can fatten up sufficiently to migrate in as little as a week. Once on the wintering grounds, the hummingbirds replace their flight feathers. These much larger feathers of the wing and tail require more time and energy to grow. They are replaced more slowly over the course of the winter. During that time, another molt of body feathers is completed just in time for the flight back north.

“Nestlings leave the nest at 18-22 days of age by which time they are as large as an adult.”

Adult Male Ruby-throated Hummingbird



“Triggered by the diminishing length of daylight hours, birds prepare for migration.”

Ruby-throated Hummingbirds crowd around a feeder in late summer.

Ruby-throated Hummingbird Migrations

The Ruby-throated Hummingbird is extremely migratory, embarking twice each year on a long, treacherous journey. From their breeding grounds, they fly southward, skirting the vast Gulf of Mexico, to reach wintering areas in the tropics of southern Mexico and Central America. Complete details of routes are not fully understood, but it is thought that most eastern birds bear westward before turning southward in order to avoid the potentially stormy Gulf in late summer. Not without hazards, this route provides a safer passage than one directly across the water.

Hummingbirds travel mostly by day and when nectar sources are at their peak of flowering. Southward migration takes

advantage of the copious nectar of Trumpet Creeper and Sultan’s Turban. Timing is critical because if food sources diminish that could spell disaster for small birds that must eat frequently. Each bird migrates as an individual, relying on innate navigational skills. Inexperienced young of the year must find their way without any parental guidance. Some will go astray or may be driven off course by inclement weather.

Triggered by the diminishing length of daylight hours, birds prepare for migration. Fat begins to accumulate in the furcula [the hollow area above the breast bone], in the abdominal cavity, and across the back. This fat will sustain the birds because they may travel non-stop for long distances, or in the event they stop to refuel in areas with few nectar sources. The average weight for a





R. DeMay

male Ruby-throated is 2.8 - 3.0 grams, while a non-gravid female might weigh 3.0 - 3.2 grams. Fat southbound migrants can tip the scales at more than 6.0 grams, a 100% weight gain.

The migration journey is made in stages, with brief refueling stops at favorable sites. Some stops may last just a few minutes while other sites might hold the birds for several days. Nevertheless, the birds keep moving regardless of a bounty of resources until they have reached their destination.

In winter, Ruby-throateds range from southern Mexico south to the central Pacific Coast of Costa Rica, where they can be found on dry, scrubby hillsides, in orchards, and around haciendas, habitats far different from the swamps and woodlands in which they nest. Of all North American hummingbird species, Ruby-throated Hummingbirds move farther south than any other.

As far as is known, no North American hummingbird ever travels as far south as South America.

In Louisiana, adult Ruby-throated Hummingbirds depart soon after breeding is complete, generally mid August to early September. Immature birds possibly linger longer, but the hordes of Ruby-throateds that crowd gardens and feeders in September and early October are nearly all transients from other regions. The huge numbers flocking around feeders after hurricanes and tropical storms are seeking man-made resources because most of the natural food sources have been destroyed.

Once the birds have reached their southern destination, they must compete for food with resident hummingbird species, some of which are much larger than they are. The wintering grounds are also home to a variety of other nectar-eating birds as well as

Adult Male Ruby-throated Hummingbird

“The hordes of Ruby-throateds that crowd gardens and feeders in September and early October are nearly all transients from other regions.”

numerous North American orioles and warblers. Life is not easy for the Ruby-throated Hummingbird, yet these birds often remain in their winter homes for nearly six months. Whether or not specific populations travel to specific localities is not known.

The northward movement of Ruby-throated Hummingbirds is no less dramatic and risky than the southward migration. Spurred by the lengthening days after the winter solstice, all individuals will have undergone a full molt of their body and flight feathers and they will have packed on fat for their journey so that they can move in top condition for breeding. Specific routes of individuals have not been discovered. However, it is well known that some individuals, eager to claim prime territories, take the

dangerous, 500 mile route across the Gulf of Mexico while others revisit the safer circum-gulf route they used to travel southward. For those birds flying across the water, landfall can be on the immediate coast, especially if hampered by late winter storms, which will have caused them to use up a lot of energy bucking headwinds or flying through rain. However, those birds finding clear skies and southerly winds can continue inland for 100 miles or more before making their first stop. Early in the season, native Crossvine and Carolina Jessamine will be abundantly flowering. Somewhat later, migrants and summer residents alike will find Red Buckeye, native irises, and Coral Honeysuckle available in scattered locales.

Adult Male Ruby-throated
Hummingbird approaching Bottlebrush.



J. Turner



J. Turner

Adult Buff-bellied Hummingbird

Louisiana's Second Season

The second season

overlaps the first on both ends, because 'winterers' can move in as early as late July. Some of these birds are transients while others may remain at a single site through the fall, winter, and much of the spring. This second season is marked by the presence of species that do not nest in the state. The number of individuals is small compared to the population of nesting Ruby-throated Hummingbirds. A few Ruby-throated Hummingbirds are present somewhere in the state every day of the year. The origin of those that are present

during the winter is not known, but they are generally thought to have originated from breeding populations elsewhere. The winterers are usually found at homes with gardens rich in winter-flowering plants or in yards where feeders are maintained after the main push of southbound Ruby-throated Hummingbirds pass. Only occasionally are these birds found in the wild.

Six species in addition to Ruby-throated Hummingbirds are recorded annually in Louisiana. The non-Ruby-throateds are discussed below in order of abundance of



Cypress Vine
Ipomoea quamoclit

“It is the most regular species found in Louisiana during the winter months . . . identified as Rufous Hummingbirds.”

occurrences. In numbers of winterers, Ruby-throateds rank third behind Rufous and Black-chinned but their numbers seem to be increasing.

Rufous Hummingbird

Selasphorus rufus

Rufous Hummingbirds breed in the Pacific Northwest, western Canada, and in southern Alaska. It is the most regular species found in Louisiana during the winter months, with as many as 66% of the individuals banded each year being identified as

Rufous Hummingbirds. The first member of this species found in the state was captured in the senate chamber of the Capitol building in February 1934!

Records extend from late July until late April, with peak abundance in December, January, and February. Gardens at favored locations have hosted as many as 13 individuals of this species at one time. There are reports from nearly all sections of the state. These birds are known for their feisty demeanor, making for a lively winter. Banding studies reveal that many of them return

Female Rufous Hummingbird



J. Turner



G. Lantry

Adult Male Black-chinned Hummingbird approaching feeder.

for subsequent winters, usually to the same site, 8 years in a couple of cases. However, a few choose different sites the next year for unknown reasons.

Black-chinned Hummingbird

Archilochus alexandri

Widespread as a breeding species throughout the western United States, areas of western Canada, and much of northern Mexico, the first Black-chinned Hummingbird found in the state was recorded in Baton Rouge in the 1950s. From then until the mid-1970s, a few more records accrued. By the mid 1980s, Black-chinneds occurred annually. In some years, they may appear in considerable numbers, whereas in other winter seasons their population in the state is quite reduced. In the early years of research on wintering hummingbirds, Black-chinneds seemed to outnumber Ruby-throateds by

about 5 to 1, but more recently, their numbers are nearly equal. No reason is apparent for this dramatic population shift.

Sightings have been recorded from early September to early May, with peak numbers being detected around Christmas. While members of this species have been reported from many parts of the state, the southeastern section seems to attract or hold more. As many as 6 individuals have been documented to occur at a single site at one time. On their Louisiana wintering grounds, Black-chinned Hummingbirds prefer habitats with oaks, and especially Live Oaks. However, even where conditions seem perfect, Black-chinned Hummingbirds may be less territorial than Rufous Hummingbirds, and they may be forced to roam around. Still, some individuals return to sites where they wintered in previous years – 6 years in one instance.

“Sightings (of Black-chinneds) have been recorded from early September to early May, with peak numbers being detected around Christmas.”

*“Initially a very rare
vagrant, small numbers
of Calliopes are now
recorded every winter.”*

Buff-bellied Hummingbird

Amazilia yucatanensis

The large, irascible Buff-bellied Hummingbird comes to winter in Louisiana from a breeding range that extends from the central coast of Texas south into Mexico. The first Louisiana record was an individual that was observed in New Orleans in November 1965. The number of reports has grown steadily since the 1980s. Nearly all records are from the southern half of the state. This species is known to be extending its breeding range northward and ornithologists speculate that it may begin breeding in the state one day.

Members of this tropical species have been sighted from late July until early May, with one remarkable individual remaining in Baton Rouge through an entire summer. Never numerous, Buff-bel-

lieds sometimes gather where the habitat is particularly inviting. Lush gardens in the Harahan and River Ridge suburbs of New Orleans regularly record multiples including 7 and 8 individuals banded in two favored yards within blocks of each other. Buffies prefer gardens filled with vibrant tropical shrubs such as Giant Turk's Cap and Shrimp Plant. Live Oaks are also a fine inducement. Buff-bellieds also exhibit a great deal of winter site fidelity and individuals often return to their previous winter homes for several years. One individual returned each winter season to a LaPlace garden for a record 8 additional years!

Calliope Hummingbird

Stellula calliope

The tiny Calliope Hummingbird, smallest of all North American birds,

Adult Buff-bellied Hummingbird taking flight.



J. Turner



D. Dembeck

was first discovered in a Reserve garden in December 1982. This species nests at high elevations in the western Rocky Mountains. Initially a very rare vagrant, small numbers of Calliopes are now recorded every winter. Reports have come from nearly all areas of Louisiana.

Dates of occurrence range from late July to late April with most reports in January and February. A few banded individuals indicate that some may roam considerable distances from their initial winter site, while many others show strong fidelity to a site by returning for as many as 6 years. Calliopes prefer dense habitat with low tangles of vines, especially blackberries. The maximum number reported to be present at a single time is 4.

Allen's Hummingbird

Selasphorus sasin

Allen's Hummingbird was first recorded in Louisiana in Reserve in October

1975. This species nests primarily in coastal California, where there are two populations, one migratory, the other resident. This species is closely related to the Rufous Hummingbird. Females and immature males are very similar to that species so an Allen's Hummingbird could easily remain obscured among the more numerous Rufous. Most records are from the southern portion of the state. On several occasions, 2 individuals have been present at a site at the same time.

Allen's have been recorded as early as early August and records continue into late March and early April. Returnees have been recorded in subsequent seasons. In Louisiana during the winter, preferred habitat seems to be suburban gardens.

Broad-tailed Hummingbird

Selasphorus platycercus

Louisiana's first Broad-tailed Hummingbird was discovered in Baton Rouge in December 1952. A common breeder in

Adult Male Calliope Hummingbird



G. Lavaty

Immature Male Allen's Hummingbird molting into adult plumage.

the Rocky Mountains, this species is now recorded annually in the state in very small numbers. The plumage of females is very similar to that of the much more abundant Rufous Hummingbird and some individuals could be overlooked. Most Broad-taileds have been recorded in the southern portion of the state.

First arrivals appear in late September. Records extend into winter and spring with the latest reports in early May. A few have returned in subsequent years, 5 years in one case though not at the original site. Given the apparent rarity of this species in Louisiana, it is difficult to identify preferred habitats. Nevertheless, 3 individuals were identified in a Baton Rouge garden at the same time.

Anna's Hummingbird

Calypte anna

The first three Anna's Hummingbirds for Louisiana were found nectaring from the light purple flowers of Salt Matri-

mony Vine [*Lycium carolinianum*] in an oil field west of Johnson's Bayou in Cameron Parish in November 1979. A common species on the Pacific coast north to western Canada and also in southern Arizona, records in Louisiana have been sporadic. In some years, a few may be recorded, but then an interval of several years may pass without any sightings. All records except one are from the southern parishes.

Reports are from early August to early March with a single occurrence beginning in mid March and lasting until mid-May. Interestingly, the individual that remained until May returned the following fall and to date, it is the only Anna's documented to return for a following winter. Most records are from suburban gardens.

Broad-billed Hummingbird

Cynanthus latirostris

The state's first record of a Broad-billed Hummingbird is from Metairie in November 1990. Common as a breeding species

only in southern Arizona and northern Mexico, Broad-billed Hummingbirds have proven to be rather sporadic in their occurrence in Louisiana. In most recent years, one or more have been reported. Except for a single report from Alexandria, other records are from the southern part of the state.

The dates of occurrence span from early October to early March. No individual has ever been known to have returned in subsequent winters. Two individuals banded in Louisiana were later found in Colorado, where they are even more rare than they are in the Bayou State. One of these individuals was recaptured in the spring following its banding while the other appeared the next fall.

Rare Species

Four species have occurred in Louisiana only once or twice. The large Blue-throated Hummingbird [*Lampornis clemenciae*], which breeds in the mountains of western Texas and southeastern Arizona as well as many parts of Mexico, was recorded in Baton Rouge in the fall of 1992 and in Slidell in the spring of 1995.

In June 1999, a Green Violetear [*Colibri thalassinus*] appeared at a feeder in Lafayette. It remained until early August. This spectacular Mexican species breeds no closer to the United States than the mountains around Mexico City, but one or more appear in Texas almost every year. Once they are north of the Rio Grande, they may stray far and wide with occurrences documented

“This second season is marked by the presence of species that do not nest in the state.”

Blue-throated Hummingbird (left)
Green Violetear (right)



“Migration routes of these winterers are not well known though they are the subject of considerable speculation among ornithologists and birders.”



G. Lanaty

over many states and even a few Canadian provinces. Another Green Violetear was identified in Sunset in May 2004.

There is a single record of a Magnificent Hummingbird [*Eugenes fulgens*] from Slidell from November 2004. This native of western Texas, southern Arizona, Mexico, and Central America strays from its usual haunts on occasion so it could occur again, but it will certainly always be rare in Louisiana.

The very large Green-breasted Mango [*Anthracothorax prevostii*] comes from lowlands in Mexico and southward. One or more are reported almost annually in Texas, but scattered records exist from a few other states including Wisconsin, North Carolina, and Georgia. In August 2009, one appeared in Greenwood, in western Caddo Parish, where its size and unusual plumage caught the eye of the observant homeowner. These four species may occur again in Louisiana, but they are unlikely to be found regularly.

What's next? The list of potential additions to the species already documented in Louisiana is fairly limited. However, once birds go astray, they may wander widely in search of appropriate habitat. There are verified sightings of White-eared Hummingbirds [*Hylocharis leucotis*] from Mississippi and Florida. A Costa's Hummingbird [*Calypte costae*] record from Alabama suggests that both of these species may have already traversed the state. The elegant Violet-crowned Hummingbird [*Amazilia violiceps*] was photographed in Texas within 150 miles of the state line. A recent record of this species from Virginia demonstrates the distance this vagrant may travel.

Migration routes of these winterers are not well-known though they are the subject of considerable speculation among ornithologists and birders. Rufous, which comprise the majority of the winterers, typically depart their nesting grounds in the summer, travel south along ridges in the Rocky

Mountains, and pass through Arizona in July and August. This route does not bring them anywhere close to Louisiana. Nevertheless, some Rufous begin arriving in the state at that time. Most of these birds are adults, some of which are returnees from previous seasons. Because the majority of winterers arrive in a late October through November time frame, it has been speculated that these birds actually migrate all the way to Mexico, but then move north and east to Louisiana. So far no evidence has been found to support this hypothesis.

Another hypothesis postulates that Rufous Hummingbirds will travel eastward from their northwestern breeding grounds and then turn southward as they reach the Great Lakes. A Rufous that was captured in Baton Rouge a few months after being banded in northeastern Indiana suggests some merit to this idea. A third theory has these birds arriving in Louisiana around the same

time that their brethren arrive in Mexico. According to that idea, birds of other species can easily be overlooked amid the hordes of Ruby-throateds that pass through the state in late summer.

Each idea has some merit, although there is scant evidence to support any of the theories. However, a fall west to east route across the Gulf Coast is documented by several examples. Additionally, the capture in Louisiana of several individuals westbound from wintering in Florida, Alabama, and Mississippi confirms that the same route is used in late winter or spring. Regardless of how improbable the migration route hypotheses may seem, it is a fact that many hummingbirds of several species move long distances to winter in Louisiana's safe havens. Banders will be kept busy for many years trying to decipher the pathways these birds travel.

“Regardless of how improbable the migration route hypotheses may seem, it is a fact that many hummingbirds of several species move long distances to winter in Louisiana’s safe havens.”

Adult Male Magnificent Hummingbird



Adult Male Ruby-throated Hummingbird



J. Turner

Identification Notes

Dwarf Red Buckeye
Aesculus pavia var. *pavia*



Field identification

of hummingbirds offers many challenges. Adult males can be readily identified if they are seen well, but females and immatures of some species can be distressingly similar. Immature hummingbirds molt into adult plumage over the winter months, so their general appearance may change over weeks and months. Sometimes, just getting a

good view of the rapidly moving birds can be difficult, but distinguishing among species requires a good look. All hummingbirds have dark brown eyes that appear to be black. The legs and feet of all Louisiana species are black. Voice is an additional character that is helpful to distinguish many of the species or species pairs. The brief accounts below cover basic identification criteria for the species found in Louisiana annually. More comprehensive discussions of all possible plumages of all North American species are covered in specialized field guides for hummingbirds that are referenced in the last section of this booklet.

Genus *Archilochus*

Ruby-throated and Black-chinned hummingbirds are the only species within the genus *Archilochus*, which is characterized by small size, glittering green back, and underparts that are grayish white to whitish gray. A few Ruby-throateds exhibit a wash of cinnamon coloration on the flanks, but there is never any on the tail feathers, which serves to distinguish members of this genus from the *Selasphorus*. The inner wing feathers are narrower than the outer ones, a characteristic that may be observed while an individual is perched.



Ruby-throated Hummingbird

[length 3 1/4 inches]

Adult Male: The crown, nape and back are bright, glittering emerald green. The gorget [throat] is iridescent ruby red, but it may reflect scarlet, yellow, gold, green, or black, depending on the angle from which light strikes it. The wings are blackish brown



J. Garvey

and the underparts are grayish white, with dark green on the sides and flanks. The two central tail feathers are the same emerald green as the back, while the outer eight are dull black. The outermost tail feathers are considerably longer than the middle ones, giving the tail a deeply notched shape. The bill is about the same length as the head.

Adult Female: The crown, nape, and back are bright, glittering emerald green, sometimes shading to yellowish green. The wings are blackish brown. The throat, breast, and belly are clean grayish white, sometimes with faint gray dots on the throat. The two central tail feathers are the same bright emerald green as the back. The outer eight are greenish gray at the base with a wide black band. The outermost three on each side have white tips. The fourth [from center] tail feathers are longer than the central and outer ones, which makes the tail appear to be rounded on each side. The bill is slightly longer than the head.

Immatures: This plumage closely resembles that of the adult female except that the

Adult Male Ruby-throated
Hummingbird (left)

Immature Male Ruby-throated Hummingbird (right)

Immature Male Ruby-throated
Hummingbird (left)
Female Black-chinned Hummingbird
(right)

throat may show a varied amount of greenish or dusky streaking or spotting. Young males may show a few to many iridescent red gorget feathers. Occasionally, the throat is perfectly white. A young female may exhibit faint grayish streaking or spotting, but there is never any iridescent red color.



R. DeMay

Black-chinned Hummingbird

[length 3 3/8 inches]

Adult Male: The nape and back are glittering dark green, the crown duller. The gorget [throat] is velvety black, bordered below by a band of iridescent violet. Violet can only be seen if the bird is facing the observer and if the light source is directly behind the observer. The wings are blackish brown. The underparts are dirty, whitish gray, cleanest-looking just below the gorget, and heavily overlaid with dark green on the sides and flanks. The two central tail feathers are the same glittering green as the back. The outer eight tail feathers are dull black. The outermost tail feathers are much longer than the

30

central ones, giving the tail a deeply notched shape. The bill is black and about one and one third times the length of the head.

Adult Female: The nape and back are glittering dark green, sometimes shading to yellowish green. The crown is dull, rather grayish. The wings are brownish black. The throat, breast, and belly are dingy, whitish gray, sometimes with dark grayish streaks or spots on the throat. The two central tail feathers are the same glittering dark green as the back. The outer eight tail feathers are greenish gray at the base with a wide black band. The three outermost tail feathers on each side have white tips. The fourth [from center] tail feathers are longer than the central and the outer ones, which makes the tail appear to be rounded on each side. The bill is black, about one and one half times the length of the head, and it is often slightly decurved.



J. Turner

Immatures: This plumage closely resembles that of the adult female except that the green of the back and rump does not shade to yellowish green. Brownish margins on each



G. Laney

back feather usually make the back appear much more dull than that of an immature male Ruby-throated. The throat of young males may show a varied amount of green or grayish streaking or spotting. A few iridescent violet feathers may be present on the throat. Young females closely resemble adult females, which never show any violet on the throat.

Ruby-throateds and Black-chinneds are extremely similar in appearance. Ornithologists rely on measurements of the bill, wing, and tail, as well as the shapes of certain wing feathers to distinguish immature and female birds to species. In the field, trained observers note subtle differences in coloring and some differences in behavior when identifying these two species. Their vocalizations, a soft 'tchew', are very similar. Black-chinned wings give a more pronounced 'whir' than those of Ruby-throateds.

Genus *Selasphorus*

Six species comprise the genus *Selasphorus*, but only three of them occur north of

Mexico. All three are known from Louisiana during the winter months. All members of the genus show significant rusty brown coloration in the tail feathers and a wash of cinnamon on the sides. The outermost wing feather of the adult male is sharply pointed, which causes a loud 'zing' sound as the bird flies. This characteristic sound can be muffled during the winter, when the feathers are worn or absent during molt.

Rufous Hummingbird

[length 3 1/2 inches]

Adult Male: The crown, nape, and back are bright rusty brown, often with a scattering of glittering green feathers. The crown can be green as well. Very rarely, the crown and back are almost completely green. The gorget [throat] is bright, iridescent reddish orange, changing to greenish or yellow depending upon the angle from which light strikes it. The wings are brownish black. The underparts are creamy white with a heavy wash of rufous coloration on the sides, flanks, and undertail coverts. The tail feathers are bright rufous at the base with more or less extensive black tips. The tip of each feather tapers to a blunt point. The center feathers are the longest with each succeeding feather being slightly shorter. A distinct notch is present on the second from center tail feather. The bill is black and about as long as the head.

Adult Female: The crown, nape, and back are bright, glittering bronze green. The

Immature Male Black-chinned Hummingbird

*“Six species comprise the genus *Selasphorus*, but only three of them occur north of Mexico.”*

“Rufous and Allen’s hummingbirds are quite vocal, giving nearly identical ‘chp, chp’ notes that are often run together if the individuals are excited.”

throat is white with heavy spotting or streaking of green and with a central spot or triangle of iridescent reddish orange, sometimes covering half the throat. The wings are brownish black. The underparts are creamy white with a heavy wash of rufous coloration on the sides, flanks, and undertail coverts. These colors become much more rich and vibrant as the bird becomes older. The central tail feathers are the same bronze green as the back with a varying amount of rufous at the base and with a blackish tip. The remaining tail feathers are rufous at the base with a broad black band and the outer three on each side have white tips. The central tail feathers are the longest with each succeeding feather being shorter, giving the tail a rounded shape. The bill is black and slightly longer than the head.

Immature Male: This plumage closely resembles that of the adult female except that the central tail feathers are mostly rufous and the rump is often rufous. As fall and winter progress, rufous feathers replace green ones until the back is mostly rusty brown like that of the adult male. The throat is heav-

ily streaked or spotted with green. A few to many iridescent reddish orange feathers may be present on the throat, at times forming a central spot.

Immature Female: This plumage closely resembles that of the adult female except that the colors of the flanks and undertail coverts are paler. The throat shows little streaking or spotting and the central spot of iridescent color on the throat is small or absent. The tail feathers may show less rufous coloration than those of an adult.

Allen’s Hummingbird

[length 3 1/4 inches]

Adult Male: The crown, nape, and back are bright, glittering bronze green. The rump is bright rufous. The gorget [throat] is bright, iridescent reddish orange, changing to greenish or yellow depending upon the angle from which light strikes it. The wings are brownish black. The underparts are creamy white with a heavy wash of rufous coloration on the sides, flanks, and undertail coverts. The tail feathers are bright rufous at the base with more or less extensive black tips. The tip of each feather tapers to a sharp point. The center feathers are the longest with each succeeding feather being slightly shorter. No notch is present on the second from center tail feather. The bill is black and about as long as the head.

Adult Female: The crown, nape, and back are bright, glittering bronze green. The throat is white with heavy spotting or



J. Turner

Adult Male Rufous Hummingbird

streaking of green and with a central spot of iridescent reddish orange. The wings are brownish black. The underparts are creamy white with a heavy wash of rufous coloration on the sides, flanks, and undertail coverts. These colors become much more rich and vibrant as the bird becomes older. The central tail feathers are the same bronze green as the back with a varying amount of rufous at the base and with a blackish tip. The remaining tail feathers are rufous at the base with a broad black band and the outer three on each side have white tips. The central tail feathers are the longest with each succeeding



D. Demchick

feather being shorter, giving the spread tail a somewhat rounded shape. The bill is black and slightly longer than the head.

Immature Male: This plumage closely resembles that of the adult female except that the central tail feathers are mostly rufous and the rump is usually rufous. By December, the back will begin to show new bright green feathers, sometimes quite a few. The throat is heavily streaked or spotted with green. A few iridescent reddish orange feathers may



J. Turner

be present on the throat, at times forming a central spot.

Immature Female: This plumage closely resembles that of the adult female except that the colors of the flanks and undertail coverts are paler. The throat shows little streaking or spotting and the central spot of iridescent color on the throat is small or absent. The tail feathers may show less rufous coloration than those of an adult. The tail feathers may show less rufous coloration than those of an adult.

Rufous and Allen's hummingbirds are quite vocal, giving nearly identical 'chp, chp' notes that are often run together if the individuals are excited. These two species are very closely related.

Broad-tailed Hummingbird

[Length 3 3/4 inches]

Adult Male: The crown, nape, back and rump are bright, glittering bluish green. The gorget [throat] is bright, iridescent rose red, but may appear green or yellow depending

Adult Female Rufous Hummingbird (left)
 Adult Male Allen's Hummingbird (right)

*“These three
Selasphorus, Rufous,
Allen’s, and
Broad-tailed, can be
very similar in
appearance.”*

Adult Male Broad-tailed Hummingbird
(left)
Immature Male Broad-tailed Hum-
mingbird (right)

upon the angle from which light strikes it. The wings are brownish black. The underparts are creamy white with a wash of cinnamon coloration on the sides and flanks. The undertail coverts are usually creamy white. The tail feathers are green with some rufous coloration at the base with little or no black at the tips. The tip of each feather tapers to a blunt point. The center feathers are the longest with each succeeding feather being slightly shorter. The bill is black and about as long as the head.



D. Demchick

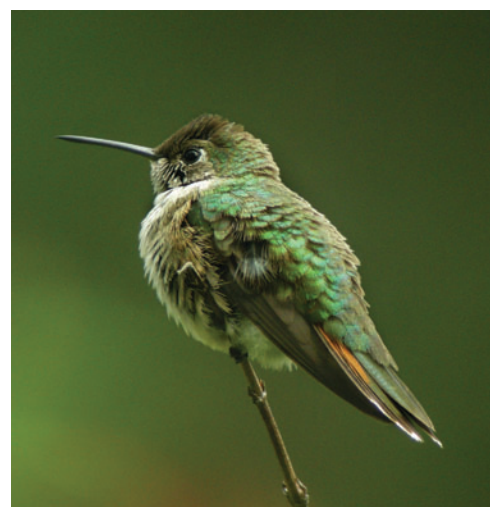
Adult Female: The crown, nape, back and rump are bright, glittering bluish green. The throat is creamy white with moderate spotting or streaking of green. A few adult females will have several rose red feathers at the center of the throat. The wings are brownish black. The underparts are creamy white with a wash of cinnamon coloration on the sides and flanks. The undertail coverts are creamy white. The central tail feathers are the same bluish green as the back without any rufous at the base. The remaining tail feathers are rufous at the base with a broad

black band and the outer three on each side have white tips. The central tail feathers are the longest with each succeeding feather being shorter, giving the spread tail a somewhat rounded shape. The bill is black and slightly longer than the head.

Immature Male: This plumage closely resembles that of the adult female except that the throat is heavily spotted with green and sometimes, a few rose red feathers.

Immature Female: This plumage closely resembles that of the adult female except that the colors of the flanks and undertail coverts are paler and the throat shows little streaking or spotting. There is seldom a central spot of iridescent color on the throat. The tail feathers may show less rufous coloration than those of an adult.

These three *Selasphorus*, Rufous, Allen’s, and Broad-tailed, can be very similar in appearance. Identifying adult males of all three species is reasonably straightforward. The adult male Broad-tailed wears a plumage that is superficially like that of the adult



D. Demchick

male Ruby-throated, but it is larger and the gorget rose red rather than ruby red. The tail of the male Broad-tailed is long, wide, and dark brown. Unlike most other North American hummingbird species that occur in Louisiana, the female Broad-tailed is smaller than her male counterpart. Therefore, she is only slightly larger than the female Rufous and Allen's, making field identification more problematic. For more information on separating these three species see http://losbird.org/los_news_189_00feb2.htm#8 and the two previously mentioned field guides.

Adult male Rufous can wear green backs like their close kin Allen's. However, this is a very, very rare circumstance. In any



J. Turner

other than adult male plumage, Rufous and Allen's are virtually identical. Careful birders usually refer to them by their genus, *Selasphorus*. Allen's are very slightly smaller than Rufous, a difference that is only discernible when members of each species are in close proximity. Allen's tail feathers are more nar-

row than those of Rufous, which often makes the tail appear to be very sharply pointed, like it was put through a pencil sharpener. Rufous and Allen's have nearly identical voices while Broad-taileds give a sweet, musical chirp.

Genus *Stellula*

The sole species in the genus *Stellula* is the Calliope Hummingbird. It is characterized by its small size, cinnamon coloration in the subspatulate tail feathers, and striped gorget.

Calliope Hummingbird

[length 3 inches]

Adult Male: The crown, nape, back and rump are bright, glittering bluish green. The gorget [throat] exhibits long, glittering magenta feathers that form stripes against a pure white background. The wings are dark brown. The underparts are creamy white with a wash of cinnamon coloration on the sides and flanks. The undertail coverts are usually creamy white. The tail feathers are dull brownish black with a touch of cinnamon coloration at the base. The tip of each feather is rounded. The center feathers are the about the same length as the remaining tail feathers, giving the tail a short, squared appearance. The bill is black and about as long as the head.

Adult Female: The crown, nape, back and rump are bright, glittering bluish green. The throat is creamy white with moderate spotting or streaking of green. A few adult

Adult Male Rufous Hummingbird exhibiting green flecks on back.

females will have one or two magenta feathers at the center of the throat. The wings are dark brown. The underparts are creamy white with a wash of cinnamon coloration on the sides and flanks. The undertail coverts are creamy white. The central tail feathers are brownish black with a slight edging of cinnamon near the base. The remaining tail feathers are similar but with a broad black band and the outer three on each side have

feathers. The tail feathers may show less cinnamon coloration than those of an adult.

In all plumages, a small black spot between the eye and the bill confirms this species's identity. The voice is a soft, musical chirp, often given in doublets.

Genus *Amazilia*

The genus *Amazilia* is large and varied.

Only a few species in the genus occur north of Mexico and the Buff-bellied is the only member to occur in Louisiana.

Buff-bellied Hummingbird

[length 4 inches]

Adult Male: The crown, nape, and back are bright metallic bronze green contrasting with the bright cinnamon of the rump. The throat and breast are glittering emerald green. The belly, flanks, and undertail coverts are pale cinnamon-buff. The wings are brownish black. The large, broad tail feathers are bright rufous, margined narrowly at the tip with dark slate. The central tail feathers are shorter than the outer ones, giving the tail a distinct notch. The slightly decurved bill

white tips. The central tail feathers are about the same length as the remaining feathers, giving the spread tail a short, squared appearance. The bill is black and slightly longer than the head.

Immature Male: This plumage closely resembles that of the adult female except that the throat is heavily spotted with green and sometimes a few magenta feathers.

Immature Female: This plumage closely resembles that of the adult female except that the colors of the flanks and undertail coverts are paler, and the throat shows little streaking or spotting. There are seldom any iridescent

Adult Male Calliope Hummingbird (left)
Buff-bellied Hummingbird with Coral
Honeysuckle (right)



D. Demchick



J. Turner

is coral red or pink with a blackish tip and about one and one half times the length of the head.

Adult Female: This plumage is very similar to that of the adult male, but it is usually duller. There may be more blackish coloration on the tail feathers as well. The bill is a somewhat less vibrant coral red, and it is more extensively blackish toward the tip.

Immatures: The plumage of immatures of both sexes is very similar to that of the adult female, but only the basal third of the bill is coral red or pink and the feathers of the throat and upper breast are edged with pale buff.

The Buff-bellied does not present a major identification problem, but determin-

ing the age and sex is difficult. The iridescent color of the throat sometimes seems to reflect blue rather than green, causing an observer to wonder if a much more rare male Broad-billed, which also has a reddish bill, might be present. A quick look at the tail will answer that question. While the tail of the Buff-bellied is bright rufous, that of the adult male Broad-billed is black. A female Broad-billed looks somewhat like a female Black-chinned, but she is larger and she has pink at the base of the mandible. Members of both species are very vocal and assertive. The voice of the Buff-bellied is a chatter that sounds like electrical static, while that of the Broad-billed is a harsh 'jdip', similar to the call of a Ruby-crowned Kinglet.

“The Buff-bellied does not present a major identification problem, but determining the age and sex is difficult.”



G. Lavaty

Buff-bellied Hummingbird

Ruby-throated Hummingbird at a backyard feeder.



R. DeMay

Welcoming Hummingbirds



Coral Honeysuckle
Lonicera sempervirens

Look around the neighborhood and note the natural attributes that might let hummingbirds know they are welcome to the area. A tract of woods with a natural stream is perfect, although not everyone will be able to live in such an environment. Still, no matter where one lives in Louisiana, enhancement of the existing habitat with native and exotic flora will give hummingbirds a good reason to come and stay a while.

Flowers are the first thing that many people think about when they want to attract hummingbirds. However, cover for

protection is as important as food. If space permits, plant a tree, preferably a Live Oak [*Quercus virginiana*] or a Water Oak [*Quercus nigra*]. Neither species needs to be mature to be of great value for many bird species, including hummingbirds. The dense foliage also harbors many insects, which are the best source of vital protein in a bird's diet. Native pines work well in some areas, too. Don't be fooled into planting the popular landscape trees such as Bradford Pear [*Pyrus calleryana*], River Birch [*Betula nigra*], or Savannah Holly [*Ilex x attenuata*]. Those offer neither food nor shelter to hummingbirds. Palms, which

have such tropical appeal, provide nothing for hummingbirds or most other native birds.

If there is little space for a large tree, consider a smaller tree or a large, evergreen shrub. Wax Myrtle [*Myrica cerifera*] or Carolina Cherry Laurel [*Prunus caroliniana*] are excellent choices, if native is desired. Among non-natives, consider Burford Holly [*Ilex cornuta*], Sweet Olive [*Osmanthus fragrans*], Winter Honeysuckle [*Lonicera fragrantissima*] or Loquat [*Eriobotrya japonica*]. Nectar of Loquat blossoms is also highly prized by wintering hummingbirds, so it serves a

twofold purpose, not to mention the delicious fruit the tree bears in spring. Large camellias and azaleas often provide good cover as well.

Once the cover plants are in place, an abundance of flowering plants should follow. The list of useful plants, ranging from native trees and shrubs to exotic perennials, is extensive. Because of climatic factors, this list is somewhat different from lists that have been developed for other parts of the United States and Canada. Many plants that work well in the Northeast, Southwest, or the Pacific Coast do not thrive in Louisiana's hot,

For hummingbirds, cover for protection is as important as food. Native Live Oaks are of great value to hummingbirds.



C. Hohorst

Coral Bean is a Louisiana native that blooms in April.



Clarence A. Fiechterhin © USDA-NRCS

“Flowering plants send an invitation to every passing hummingbird that you welcome them to your yard.”

humid climate. Therefore, choices should be made from among plants that are adapted to Louisiana’s growing conditions. One just can’t have too many fine attractors!

Typical hummingbird flowers are red in color, have a tubular shape, and have no strong scent. However, there are some notable exceptions to this general rule. Not all red flowers contain sufficient nectar for hummingbirds and not all good nectar producers have red flowers. Roses and geraniums [non-native *Pelargoniums*] have eye-catching color, but little nectar. Petunias are often listed as good hummingbird flowers, but most have very little nectar and they will be ignored if more productive blossoms are provided.

Flowering plants send an invitation to every passing hummingbird that you welcome them to your yard. The most successful strategy is to have some plants in flower over

the entire period that hummingbirds may be present. Plants blooming in early March will draw the first Ruby-throateds returning from their wintering grounds in Mexico and Central America. A succession of flowers over the next several months will provide a continuous attraction, not only for those that nest in Louisiana, but also for more northerly breeders that migrate through the state. Prolific blooms in late summer and fall provide vital sustenance for southbound migrants and for winter residents that find their way to our environs.

Many tropical and semi-tropical shrubs are popular landscape subjects in the southern part of the state. In older residential areas, nice patches of Shrimp Plant thrive. Mexican Cigars, Turk’s Caps, Firespikes, small-flowered species of *Canna*, and various *Salvia* species, such as Pineapple

Sage, paint splendid welcome signs during the fall and winter months, at least until a hard frost nips the leaves and flowers or a hard freeze ends flowering for the season.

The total number of useful plants for attracting hummingbirds to Louisiana gardens is extensive. The list on the following page provides some suggestions. Additions to our gardens are frequently made as new

plants become available horticulturally or as new cultivars that better adapt to the climate are developed, so this list is by no means comprehensive. Local nurseries are often good sources for plants and many nurseries have knowledgeable personnel who can give advice about plant selections and growing conditions.



Sultan's Turban is a Louisiana native that blooms spring through fall.

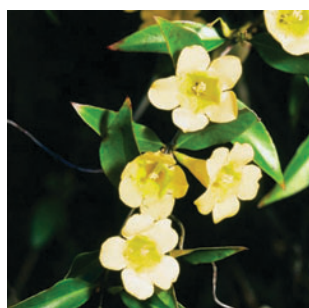
Jeff McMillan © USDA-NRCS

Some Plants That are Attractive to Hummingbirds



Cardinal Flower

Thomas G. Barnes @ USDA-NRCS



Carolina Jessamine

Jeff Bodner @ USDA-NRCS



Jewel Weed

Thomas G. Barnes @ USDA-NRCS



Wild Azalea

Jeff McMillan @ USDA-NRCS

Common Name

Scientific Name

Trees

Bottlebrush,
Weeping Bottlebrush
Citrus
Crybaby Tree
Dwarf Red Buckeye
Loquat, Japanese Plum
Orchid Tree

Callistemon citrinus
Callistemon viminalis
Citrus spp
Erythrina crista-galli
Aesculus pavia var. pavia
Eriobotrya japonica
Bauhinia variegata

Shrubs

Althaea / Rose of Sharon
Camellia
Canna
Cardinal Shrub
Coral Bean, Mamou
Desert Honeysuckle
Firebush
Firespike
Flowering Maple [Abutilon]
Fountain Plant
Giant Mexican Cigar
Giant Turk's Cap
King's Crown
Mexican Cigar
Mexican Honeysuckle
Red Firecracker Plant
Shrimp Plant
Sultan's Turban, Turk's Cap
Swamp Azalea
Wild Azalea
Winter Honeysuckle
Yellow Shrimp Plant

Hibiscus syriacus
Camellia sasanqua
Canna indica
Weigela florida
***Erythrina herbacea*, *Erythrina* 'Bidwillii'**
Anisacanthus quadrifidus var. wrightii
Hamelia patens
Odontonema strictum
Abutilon pictum, *Abutilon hybridum*
Russelia equisetiformis
Cuphea micropetala
Malva viscus pendulaflora
Dicliptera suberecta
Cuphea x 'David Verity'
Justicia spicigera
Russelia sarmentosa
Justicia brandegeana
Malva viscus drummondii
Rhododendron serrulatum/viscosum/oblongifolium
Rhododendron canescens
Lonicera fragrantissima
Pachystachys lutea

Annuals, Biennials, and Perennials

Aloe Vera, Soap Aloe
Anise Sage
Autumn Sage
Tropical Sage

Aloe barbadensis, *Aloe maculata*
Salvia guaranitica
Salvia greggii
Salvia coccinea

Plant names in bold are native to Louisiana.

Belize Sage
Cardinal Flower
 Cat Whiskers
 Crocosmia
 Forsythia Sage
Indian Pink
Iris [native species & cultivars]
Jewelweed
 Lion's Ear
 Lily of the Nile
 Mexican Bush Sage
 Mexican Milkweed
 Mexican Sage
 Mexican Sunflower
Murray's Penstemon
 Pentas
 Peruvian Lily
 Pineapple Sage
 Red Hot Poker
Standing Cypress

Vines

Candy Corn Vine
 Cardinal Climber
 Cape Honeysuckle
Coral Honeysuckle
Carolina Jessamine
Crossvine
Cypress Vine
 Firecracker Vine
 Mexican Flame Vine
Red Morning Glory
 Scarlet Runner Bean
Trumpet Creeper

Salvia miniata
Lobelia cardinalis
Orthosiphon stamineus
Crocosmia x 'Lucifer'
Salvia madrensis
Spigelia marylandica
Iris sp
Impatiens capensis
Leonotis leonurus
Agapanthus orientalis
Salvia leucantha
Asclepias currasavica
Salvia mexicana
Tithonia rotundifolia
Penstemon murrayanus
Pentas lanceolata
Alstroemeria pulchella
Salvia elegans
Kniphofia uvaria
Ipomopsis rubra

Manettia inflata
Ipomoea x multifida
Tecoma capensis
Lonicera sempervirens
Gelsemium sempervirens
Bignonia capreolata
Ipomoea quamoclit
Manettia cordifolia
Senecio confusus
Ipomoea hederifolia
Phaseolus coccineus
Campsis radicans



Trumpet Creeper
Campsis radicans

Feeders

Hummingbirds have survived for thousands upon thousands of years without human assistance. However, these birds are magnetically attracted to anything colored red, and feeders with bright red parts are very useful for enticing the fast-flying birds into the open where they are more easily observed. Birds may travel a mile or more to use a reliable feeder, especially if other nectar sources are scarce. The sugar syrup dispensed from the feeder supplements the birds' natural diet with unlimited calories to fuel their high energy lifestyle. Except under extraordinary circumstances, such as after a hard freeze, the feeder provides only a portion of the birds' daily nectar.

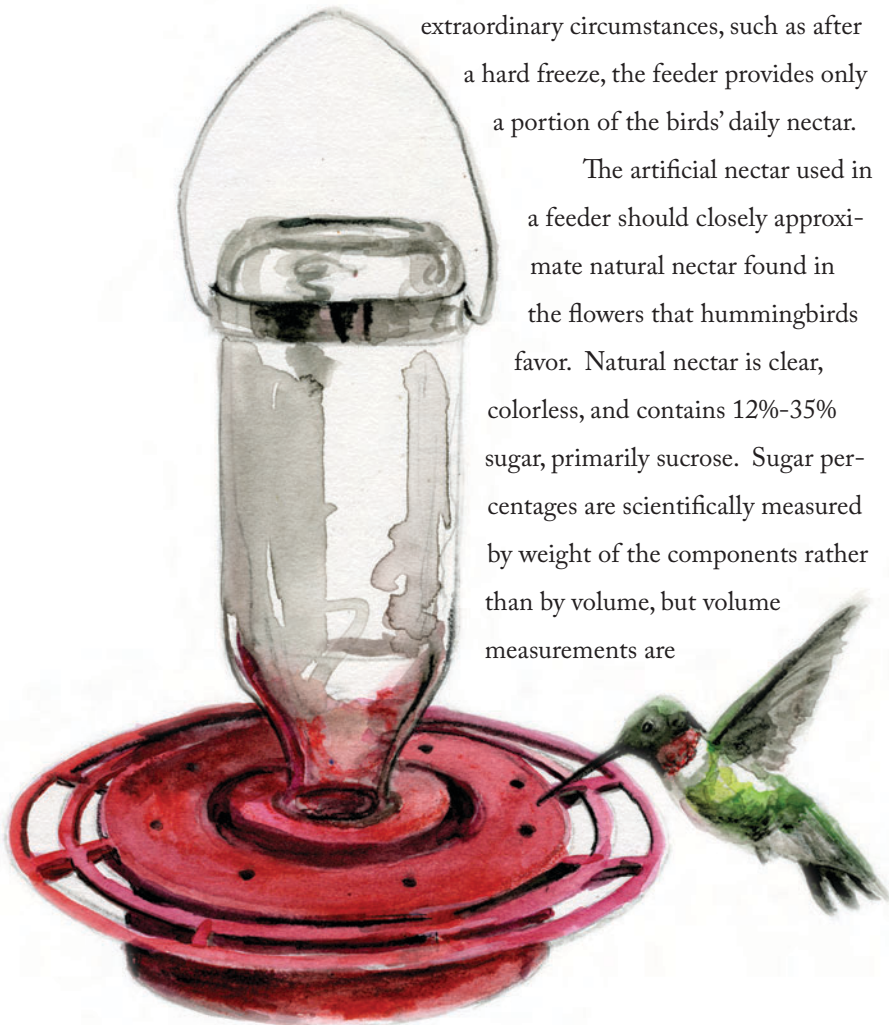
The artificial nectar used in a feeder should closely approximate natural nectar found in the flowers that hummingbirds favor. Natural nectar is clear, colorless, and contains 12%-35% sugar, primarily sucrose. Sugar percentages are scientifically measured by weight of the components rather than by volume, but volume measurements are

reasonably close to the scientific percentages. Natural nectar also contains trace amounts of vitamins, minerals, and amino acids. However, because the artificial nectar is only a supplement to the natural diet, supplying those elements is not necessary. Hummingbirds can get all of the trace elements and protein that they require by eating hundreds of tiny insects and spiders every day.

The formula most recommended for feeding hummingbirds consists of 1 part granulated cane sugar dissolved in 4 parts water, which equates to about 20% sugar. A 25% formula, consisting of 1 part cane sugar dissolved in 3 parts water will provide more calories while still falling within the parameters of natural nectar. Boiling the water or the solution is not necessary, but that will help dissolve the sugar and it may help the solution to remain fresh longer.

The feeder formula should never contain honey, food coloring, flavoring, or additives of vitamins, minerals, and protein. These are unnecessary and could prove harmful to the birds. Honey is not a natural food for hummingbirds and it is composed of a different kind of sugar. Mixed with water, honey spoils quickly as well. Fructose sugar and corn syrup are equally unsatisfactory.

A vast array of hummingbird feeders can be found at local stores and over the internet. They also come in a dizzying variety of designs and prices. High price does not necessarily indicate the nectar dispenser's usefulness or durability. Many commercially





G. Lavy

Female Broad-billed Hummingbird

available feeders are designed for their attractiveness to humans and some of those do not function well for the intended purpose. Make note of the styles used by others who have had good success with feeding hummingbirds.

When selecting a feeder, choose one that is attractive, durable, easy to clean, bee resistant, and has a capacity large enough to feed the birds for one or two days. Perches are assets because they encourage the birds to sit still for better viewing. However, they do provide an aggressive bird with a perch from which to defend the area. The ideal feeder has enough red color on it to be visible to hummingbirds from a distance.

To be effective, feeders should be kept supplied with nectar and they must be clean at all times. During periods of little

activity, the feeder does not need to be filled to capacity. Two or three ounces in a larger feeder can be completely sufficient and less sugar water will be wasted. Some hummingbird enthusiasts use feeders of several sizes at different times of the year. That way, they can adjust the amount of sugar solution offered according to the amount of hummingbird traffic.

In hot summer weather, the sugar water in feeders spoils within a couple of days. Spoilage is caused by molds and bacteria, which can be introduced by the birds themselves. At such time as the fluid begins to turn cloudy, it is advisable to change the feeders, whether or not the food has been completely consumed. Once mold forms, feeders become more difficult to clean. Spoilage is less of a problem in cooler

“Birds may travel a mile or more to use a reliable feeder, especially if other nectar sources are scarce.”

Adult Male Ruby-throated
Hummingbird



D. Demchek

“Research in Louisiana has found no evidence that migratory Ruby-throated Hummingbirds are artificially held back by feeders.”

weather, because the food may remain fresh for up to 5 days.

To clean the feeder, disassemble it and dump out the old sugar water. Soak the parts for about an hour in a solution of 1 gallon very hot water with 1 cup chlorine bleach added. Use a bottle brush or special feeder cleaning brush to scrub away any stubborn mold. A cotton swab or special small bottle brush can be used to clean the feeding ports. Rinse thoroughly and allow to air dry before refilling. Once the feeders are dry, any chlorine has completely oxidized, so there should be no odor or toxic residue.

Hummingbirds are not the only creatures to enjoy a ‘sugar rush’. Quite a few other birds learn to use hummingbird feeders. Orioles and House Finches are frequent visitors, and various warblers are known to relish

a sweet treat, but American Goldfinches, Carolina Chickadees, Tufted Titmice, Downy and Red-bellied woodpeckers can sometimes crowd out the intended guests. Everyone can be accommodated if several feeder types are used.

Bees, wasps, and ants are downright nuisances. Ants can be deterred by adding an ‘ant moat’ to the feeder or by greasing the access route. Both methods work well though they require frequent maintenance. Some people have found that bees can be enticed away from feeders by providing a dish of sugar water that is sweeter than that offered in the feeders. Others use traps baited with spoiled sugar syrup. It is often useful to change the type of feeder used. Saucer-type feeders are relatively bee-proof while many bottle-type feeders are not. Teflon tape can

be applied to cover cracks where bees can get access to the solution. NEVER use insecticides on or near hummingbird feeders.

Feeders are most effective when located within view of the flowers that attract hummingbirds. Place them high enough so that free-roaming cats cannot attack the birds while they are eating. Locations near windows allow the host maximum viewing pleasure. Locations very close to windows lessen the impact of birds hitting the panes of glass during territorial disputes. Because hummingbirds aggressively defend their nectar sources, several feeders placed out of sight of each other can accommodate more birds than a single feeder. Alternatively, during periods of intense activity such as the southward migration, clusters of several feeders can be effective to service many birds at one time.

Some individuals will attempt to dominate the feeders, but the press of many birds soon overwhelms their ability to keep all interlopers at bay.

Feeders are intended only to supplement the birds' natural foods, while drawing them into our yards for closer observation. Feeders do not supply all of a hummer's daily needs. These birds never become so accustomed to using feeders that they forget how to forage for themselves. Those that migrate to Mexico and points south of there find few feeders awaiting them.

Winter Feeding

People have long been admonished to remove feeders early in the fall lest they delay the normal course of southward migration. However, recent, long-term research in

Ruby-throated Hummingbirds



“For hummingbirds, bathing is a daily ritual, a means of keeping their all-important feathers clean and in good condition.”

Immature Male Ruby-throated stretching.

Louisiana has found no evidence that migratory Ruby-throated Hummingbirds are artificially held back by feeders. Significant numbers of hummingbirds, mostly members of species other than Ruby-throated, spend their winters in the abundant semi-tropical gardens that characterize the southern part of the state. The majority of wintering hummingbirds are found south of a line defined by Interstates 10 and 12, but a few can be found as far to the north as Shreveport and Monroe. The wintering birds are individuals that have migrated to Louisiana rather than birds that remain after their nesting season.

In recent years, the percentage of Ruby-throateds among the winterers has risen markedly. These birds are thought to originate far north of the state, although proof of this theory is lacking. So far, none

has been found to remain through the nesting season, but none has been documented to breed north of the state either. One was subsequently found dead in Manitoba, Canada. Additional banding studies may yet provide answers regarding the origin of wintering Ruby-throateds. Some of these birds have been recorded as returning for six or seven years, proving their ability to overwinter successfully.

Occasional freezing temperatures destroy many of the flowers and reduce insect activity, so feeders hosting birds at that time must be scrupulously maintained because the feeders are frequently the only source of nectar available. During freezing weather that extends for more than 12 hours, feeders hosting birds can be kept free-flowing by warmth from an electric light bulb. Detailed





J. Garvey

instructions can be found at: <http://www.hummingbirdsplus.org/winterfeeder.html>. Alternatively, a winter host could rise before daybreak to provide a feeder with warm nectar, which will freeze in about an hour. Therefore, the host must be available to make frequent feeder changes. Wintering birds sometimes eat during the overnight hours so it might be advisable to keep one feeder going through the night.

Water and Bathing

Birds need water for drinking and bathing. However, hummingbirds obtain most of their drinking water in the nectar they consume. In Louisiana, they can usually find the fluids they need in the environment. On rare occasions, hummingbirds have been

observed drinking water, but it is not necessary to provide them with drinking water.

Bathing is another matter. For hummingbirds, bathing is a daily ritual, a means of keeping their all-important feathers clean and in good condition. Hummingbirds bathe in a variety of ways, the simplest being to press their breast and belly feathers against a large, wet leaf. Many gardeners have noted hummingbirds flying through the spray of a hose or a sprinkler while the plants were being watered. Some birds may even immerse their entire bodies in water and others have been seen to dive in head first.

The birds can be very clever in finding ways to accomplish their task. A mister, a shallow bird bath, a fountain with water flowing over rocks, a dripping faucet,

Immature Male Rufous Hummingbird
bathing in rain.



J. Turner

Immature Male Ruby-throated Hummingbird visiting *Erythrina* 'Bicwillii'.

or even a dog's water dish have all found use by resourceful hummers. Although bathing may occur at any time of day, it is more often observed in early morning when dew still moistens the foliage. Hummingbirds will splash with abandon even on a chilly day.

Hummingbird Research in Louisiana

Remarkable as hummingbirds are when one simply observes them going about their daily business, research in Louisiana reveals exciting details that can only be discovered through methodical long-term studies. Banding studies have brought to light heretofore unknown information about site fidelity, migration routes, and longevity. Breeding season projects that focus on the Ruby-throated Hummingbird have affirmed

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that both males and females return to the areas of their origin.

It was long thought that south-bound Ruby-throated Hummingbirds embarked from the Louisiana coast for their wintering grounds in southern Mexico, and elsewhere in Central America. More recently, ornithologists have suggested that much of the population actually migrates down the Texas Gulf Coast. Encounters of banded birds demonstrate that the Texas route is heavily used by hummingbirds originating north and east of Louisiana. Studies in Louisiana and elsewhere have established that migrating hummingbirds can travel more than 100 miles in a day.

Several banders, working in different parts of the state, collect data on the hummingbirds that spend the non-breeding

season in Louisiana. Initiated in 1979, when only seven species were known to have occurred in the state, this study has shown that seven species occur annually with another two species appearing sporadically. Rates of return in subsequent years for the more abundant wintering species are similar to the rates noted for breeding Ruby-throated Hummingbirds - 15%-20%!

One of the original goals of the project was to determine the sources of these birds. Of the more than 5,000 wintering hummingbirds banded, re-encounters on the breeding grounds have been sparse. Rufous Hummingbirds banded in Louisiana have been found on breeding grounds in British Columbia and Washington. A Rufous caught in Alberta was probably migrating from breeding grounds elsewhere. Another Rufous found in Sonora, Mexico, had probably spent the non-breeding season on its species' traditional wintering grounds after

having been banded as a winterer in Louisiana two years before.

A Black-chinned was caught on breeding grounds in Idaho. Migrant Black-chinneds from Texas and Arizona have also been documented in Louisiana gardens. One captured in Covington had been banded in Pascagoula, Mississippi, the previous day. Although site fidelity is well established for the wintering population, sometimes birds banded in the state choose other areas to winter in subsequent years. Birds banded in Louisiana have been recaptured in Texas, Mississippi, Alabama, Florida, North Carolina, Tennessee, Missouri, Michigan, and Pennsylvania, as well as the ones previously noted. Thus far, Rufous, Black-chinned, Calliope, Buff-bellied, Broad-billed, and Ruby-throated have been recaptured by other banders on wintering grounds. To date, no Ruby-throated banded as a winterer has ever been found on its breeding ground in Louisiana.

“Banding studies have brought to light heretofore unknown information about site fidelity, migration routes, and longevity.”

Buff-bellied Hummingbird feeding from Sultan's Turban.



The following list illustrates the relative abundance of species banded in Louisiana in winter from July 1979 to July 2011:

Broad-billed Hummingbird	31
Buff-bellied Hummingbird	371
Blue-throated Hummingbird	1
Ruby-throated Hummingbird	704
Black-chinned Hummingbird	785
Anna's Hummingbird	40
Calliope Hummingbird	190
Broad-tailed Hummingbird	86
Rufous Hummingbird	2845
Allen's Hummingbird	139
Black-chinned x Lucifer Hummingbird [hybrid]	1

Total 5156

The following banders would like to receive information about any non-Ruby-throated Hummingbirds and about Ruby-throateds between 15 November and the end of February:

St. Tammany and Tangipahoa Parishes

Linda Beall - 985-893-5150 [home],
985-377-6160 [cell],
lbeall@minilogic.com

Lafayette and the southwestern parishes

Dave Patton - 337-232-8410 [home]
337-232-8410 [cell]
wdpatton@cox.net

Shreveport and the northwestern parishes

Paul Dickson - 318-798-1000 [home],
paul@morrisdickson.com

Baton Rouge, the river parishes, New Orleans area, Houma, and Thibodaux

Nancy Newfield - 504-835-3882 [home],
504-338-3882 [cell],
nancy@casacolibri.net

Adult Male Rufous Hummingbird



G. Lavaty

In addition to studying the birds and their movements, other students have investigated the quantity and quality of the nectar from the most popular flowers. Preliminary results indicate that the quantity of nectar may not be as much of an attractant as the concentration of sugars.

Some interesting details can be found at:

http://losbird.org/news/0326_201_news.pdf,

<http://www.network54.com/Forum/439743/thread/1207751337/Nectar+Quest>

<http://www.network54.com/Forum/439743/thread/1211511912/Sweet+Stuff>

<http://www.network54.com/Forum/439743/thread/1285951725/Nectar+Notes>

More about Hummingbirds

Standard field guides are a good starting point for identifying hummingbirds. However, the two following books are designed specifically for learning to recognize the species that occur in the United States:

Hummingbirds of North America: The Photographic Guide by Steve N G Howell

A Field Guide to Hummingbirds of North America by Sheri L Williamson

The internet is a vast resource for hummingbird information:

<http://www.casacolibri.net/> - hummingbirds in Louisiana.

<http://www.hummingbirds.net/> - general hummingbird information.

<http://www.hiltonpond.org/> - hummingbirds in the southeastern states.

<http://www.network54.com/Forum/439743/> - an internet discussion group

<http://losbird.org/> - articles and reports of wintering hummingbirds

<http://www.museum.lsu.edu/~Remsen/HUMNETintro.html> - a listserv discussion group

<http://www.drjoephoto.com/> - wonderful images of Louisiana's birds

Help for Hummingbirds

Because they often visit residential gardens, hummingbirds that become injured are readily noticed by caring homeowners. Help can be found at:

Louisiana Wildlife Rehabilitators Association (LAWRA) <http://www.lawraonline.com/> [phone: 888-308-3922].

Wings of Hope Wildlife Sanctuary, Leslie Lattimore, e-mail: leslielatt@wildblue.net, <http://www.wingsofhoperehab.org/wildblue> [phone: 225-698-3168]

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