



The Louisiana
Winter Hummingbird Project
2013-2014 Annual Report

35th Anniversary

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Fading Echoes, and a Milestone

In the early 1990's, Louisiana experienced a boom for several years in the number of winter hummingbirds reported and banded, followed by a steady decline punctuated only by the occasional bump up in some numbers. Again in the winter of 2011-2012, there was a huge spike in the number of winter hummingbirds, and again we are seeing a steady decline from that spike.

As a general matter, the majority of wintering hummingbirds banded each year are young of the year, hatched the previous spring or summer. When we experience a boom, then, we have a large number of young birds that, if they survive migration, may return as adults. As a result, in the years following a spike in newly banded birds, our numbers of returnees usually rise even as the number of freshly banded birds drops.

Such has been the case again this year. The number of newly banded birds dropped again considerably, but the number of returnees actually grew slightly.

Year-to-year comparisons are complicated by the fact that the amount of effort varies from year to year. Unlike many banding stations where the goal is to regularly sample birdlife at a fixed location, using set hours and schedules, our banders must go where the hummingbirds are - whether one or ten, whether easy to catch or wily enough to avoid traps for hours. Moreover, as all the banders involved in this project are volunteers, some with employment obligations, banding activities must be scheduled when time is available. That proved especially difficult this season. Additionally, the banders must coordinate schedules with homeowner availability. All of these factors combine to make it impossible to directly compare effort from season to season.

Nonetheless, the general trend of fewer birds was apparent. While some individual sites hosted record numbers of birds, many had fewer birds than the last couple of years. As always, several new sites were added, while others dropped from the list due to relocations, host deaths, or other factors. In total, 393 new birds were banded in the 2013-2014 season - the eighth best season since the first time numbers ticked sharply up in the 2000-2001 season. The 113 recaptures represent

the largest number ever of returnee birds since the project began.

This report summarizes the activity of the past winter season by Nancy Newfield, Linda Beall, Dave Patton, Steve Locke, Paul Dickson, Marty Floyd, and Erik Johnson, continuing a project begun in 1979 to investigate the phenomenon of hummingbirds wintering in Louisiana. When Newfield began the study, hummingbirds anywhere in the southeastern U.S. in winter were believed either to be "vagrants," hopelessly lost, or Ruby-throated Hummingbirds that somehow 'forgot' to migrate, with a further assumption that any such hummingbird was likely doomed to die when freezing temperatures arrived. Years of study have proven that many of these birds survive the winters, and many return year after year to the same sites. Moreover, breeding season and migration studies show virtually all of our local breeding populations have left by mid to late August. Until recently, none of our winter-banded Ruby-throated Hummingbirds had ever been re-encountered during the breeding season. However, one banded by Beall in Covington in 2005 was found dead later that same year in Manitoba, Canada - so we know that some of our wintering Ruby-throated Hummingbirds come from a considerable distance!

The 1974 edition of *Louisiana Birds* by George H. Lowery, Jr. listed five species of hummingbirds known to occur in the state, including only a single record for Broad-tailed, three records of Buff-bellied, and only eight records for Black-chinned. At the time the project was initiated, two other species (Allen's and Anna's) had been documented; today, the state list stands at thirteen species of hummingbirds.

35 years and A Special Honor

A special note: this season marks the 35th year of the Louisiana Winter Hummingbird Project - the longest continually running banding study of hummingbirds in the United States.

In mid-January, an editor from the *Wall Street Journal* spent two days covering the project. The result was a front-page article describing some of our work, which can be found on our website at <http://www.casacolibri.net/images/WSJ-Article.pdf>

Methodology

Because the project targets specific birds, instead of mist-netting all birds in the area, remote-controlled cage or mesh traps are used with feeders inside to catch the birds for banding. Most hummingbirds are color-marked with water-soluble correction fluid, tinted in various colors; marked birds usually need not be recaptured during the same season to verify their identity.

Location

Nearly all birds were handled in the southern third of the state, from the Interstate-10 /12 line south. Patton covers the western part of the state, centered on Lafayette but extending to Baton Rouge. Beall covers the Florida Parishes east from Baton Rouge, concentrating primarily in the St. Tammany Parish area. Newfield covers much of Baton Rouge, the River Parishes, the New Orleans metropolitan area, and the Houma/Thibodaux region. Locke primarily bands with Newfield at sites in her area. Dickson covers the northern portion of the state when wintering hummingbirds are reported there. Floyd is a long-time bird bander from central Louisiana who has agreed to help monitor parts of the state that are traditionally less covered by others. Johnson is training as a hummingbird bander and he assists

in the area from Lafayette to Baton Rouge, as well as maintaining a long-standing database of reports of wintering hummingbirds in the state.

From previous years, we know that these wintering hummingbirds do not necessarily stay in the same yard or even its immediate environs all season. Nor do returning birds always seek out the same yard, though they often do, sometimes even preferring a feeder in the same location.

The Season

We define the “winter season” as beginning with the arrival of the first hummingbird of a species other than Ruby-throated, usually in late July or early August, with previous first reported dates ranging from July 22 to August 6. In most years the first report is of a Rufous Hummingbird, often a returnee from a prior season, though on occasion the first arrival is a Buff-bellied. Because the season overlaps much of Ruby-throated Hummingbird southward migration (and indeed, it extends into spring migration), we arbitrarily define any Ruby-throated Hummingbird seen after November 15 as a winter-season bird, and we include any identifiable young of the previous year in the winter tally as the first migrant Ruby-throated Hummingbirds return in the early spring. The season peaks in January and early February,

Banding By the Numbers

	Newly Banded	Returnees	Foreign Re-Encounters	Foreign Reports	Species Total
Ruby-throated Hummingbird (<i>Archilochus colubris</i>)	74	6	0	0	80
Black-chinned Hummingbird (<i>Archilochus alexandri</i>)	32	16	0	1	49
Broad-tailed Hummingbird (<i>Selasphorus platycercus</i>)	6	3	0	0	9
Rufous Hummingbird (<i>Selasphorus rufus</i>)	251	81	5	2	339
Allen’s Hummingbird (<i>Selasphorus sasin</i>)	3	0	0	0	3
Calliope Hummingbird (<i>Selasphorus calliope</i>)	14	2	0	0	16
Buff-bellied Hummingbird (<i>Amazilia yucatanensis</i>)	13	5	1	0	19
Total	393	113	6	3	515

Definitions: “Newly Banded” means a bird banded for the first time this season. “Returnees” are birds that were banded in previous seasons and returned to the original banding site (or elsewhere in the state) and that were recaptured by the original bander. “Foreign Re-Encounters” are birds banded at another site by another bander, but caught this season at one of our sites. “Foreign Reports” are those birds that were banded by the Louisiana team, either this season or in a prior year, but that were recaptured elsewhere this season outside the bander’s own area.

when the majority of the banding takes place. However, when a season is good, as the last two have been, we begin a heavy schedule early and keep it going into March. While our last new birds are usually banded in March, winterers are sometimes present into April and on rare occasions as late as early May.

Effort

As noted, seasonal effort varies based on several factors. Over this winter, the various banders spent more than 120 bander-days in the field catching and banding birds. They drove in excess of 5,000 miles (not including separate driving by assistants) between home and the various banding sites, and visited more than 100 different banding sites, several more than once.

In addition, scores of man-hours were spent by both banders and assistants alike in preparing for site visits: contacting homeowners, delivering “dummy” traps to acclimate the hummingbirds to the appearance of an enclosure around the feeder, and so forth. Furthermore, unlike larger bird bands, hummingbird bands are supplied to banders in sheets, and they must be individually cut and rolled by the bander ahead of time.

General Findings

In keeping with percentages from previous seasons when the number of hummingbirds was high, Rufous Hummingbirds made up the bulk of

the catch. In those years, Rufous accounted for nearly 66% of the total number of birds handled. Three years ago, that percentage had fallen to just over 33% of newly banded birds, even though a solid majority of returnees were Rufous. This season, Rufous accounted for 64% of newly banded birds and 66% of all birds handled.

This year Ruby-throated claimed second place for both newly banded (19%) and overall birds handled (16%). We see fluctuations in the proportions of Black-chinned to Ruby-throated in the winter population, which until this year was trending in the western species' favor. The 74 newly banded Ruby-throated and 80 total handled represents the third-best season for the species.

Newly banded Black-chinned numbers fell this season but the number of returnees doubled over last year. With 32 newly banded birds and 49 handled overall, though, the species remained, as expected, in the top three.

Other species make up less than ten percent of both birds handled and new bands. Buff-bellied rebounded to fourth-place this season. Calliope Hummingbird dropped to fifth-place, with Broad-tailed not far behind and Allen's Hummingbird in 7th (and last) place overall in terms of birds handled.

Both Broad-billed and Anna's Hummingbirds occur periodically in Louisiana, though not every winter. This season saw no reports of either.

Seasonal Comparisons of Birds Handled

<i>Season</i>	<i>New Birds</i>	<i>Returning Birds</i>	<i>Foreign Birds</i>	<i>Total</i>
2013-2014	393	113	6	512
2012-2013	653	106	6	765
2011-2012	815	61	7	883
2010-2011	240	74	3	317
2009-2010	231	81	4	316
2008-2009	210	63	3	276
2007-2008	319	77	7	403
2006-2007	456	57	11	524
2005-2006	301	77	7	385
2004-2005	355	111	11	477
2003-2004	510	85	7	602
2002-2003	481	53	9	543
2001-2002	482	55	2	539
2000-2001	416	32	3	451

Note: these numbers do not include Louisiana-banded hummingbirds reported elsewhere.

The One that Started It All

Black-chinned Hummingbird
Archilochus alexandri

In one sense, this is the species that kicked off the Louisiana Winter Hummingbird Project. As of 1974, there were only eight state records of this western counterpart to our abundant Ruby-throated Hummingbird, and yet, in the first year during which Newfield began attracting winter hummingbirds to her Metairie yard, she hosted no fewer than seven immature male Black-chinned Hummingbirds, separable by different patterns to the unfinished gorget. Convinced that many of the reports of “Ruby-throats that forgot to migrate” were, in fact, this or other western species coming to us for the winter, instead of failing to leave after the summer, she undertook what was originally proposed to be a five-year study. As noted in the introduction the 2013-2014 winter marks the 35th year of this project.

In Louisiana, sites that host Black-chinned Hummingbirds often host several at a time. An Algiers garden hosted four newly-banded birds, while one in Harahan had two new birds and a returnee and one in River Ridge had three new birds. With numbers of the species down a bit, the large concentrations seen in the past in the Houma-Terrebonne area were markedly absent.

Because of the marked similarity between female Black-chinned and Ruby-throated Hummingbirds, it is possible that many sight reports of Ruby-throated Hummingbirds in winter may actually be Black-chinned. Careful study over the years has provided several visual clues, however, that help the experienced observer distinguish the two in the field.

Like their Ruby-throated cousins, wintering Black-chinned sometimes wander from site to site during the winter.

Breeding Birds, Winter Birds

Ruby-throated Hummingbird
Archilochus colubris

To most people in Louisiana, “hummingbird” means the abundant Ruby-throated Hummingbird, our only documented breeding species and the only one present year-round in Louisiana. The year-round presence, however, masks the fact that our population of wintering birds is apparently completely separate from our population of breeding birds.

In addition to banding wintering hummingbirds, several of the banders are engaged in long-term banding studies of our breeding population of Ruby-throated Hummingbirds. To date, despite years of study, not a single Ruby-throated banded in the breeding season has ever been recorded in the winter, nor has any Ruby-throated banded during the winter ever been recorded after the breeding season is well under way. Indeed, the only documented connection between our wintering Ruby-throated Hummingbirds and a breeding season location is a bird banded in January several years ago that was found dead later the same year in Manitoba, Canada.

This dovetails with a theory that our wintering Ruby-throated Hummingbirds mostly come from distant locations and simply do not (or cannot) migrate as far as the main population. In particular, it may be that our winter birds are late-hatched and have not matured enough to complete migration into southern Mexico or Central America. Young Ruby-throated Hummingbirds banded in their first winter here often seem to be at the same stage of development as Ruby-throated Hummingbirds banded in migration in September, and they frequently seem to complete their molt on the wintering grounds after the first returning Ruby-throats have





already shown up, resplendent in their spring breeding plumage which no doubt was completed weeks earlier.

In recent years Ruby-throated numbers have been steady, but not remarkable, and have kept the species in a solid third-place standing among those occurring in Louisiana in winter. This year's numbers were up over last year's already good showing, which, coupled with a decrease in the number of Black-chinned, made Ruby-throated the second most abundant winter species in the state. One garden in Harahan hosted at least ten individuals of this species at one point in January, including this beautifully plumaged adult male (at right).

Notable Ruby-throats this year include two in the list of long-lived birds in "Here to There and Back Again," both being at least six years old when they were recaptured this winter.

Broad-taileds Continue to Surprise

Broad-tailed Hummingbird
Selasphorus platycercus

Louisiana's first Broad-tailed Hummingbird, documented in the winter of 1952-53, was the state's sole record for more than twenty years. Never found in numbers, the last three winter seasons have nevertheless been good for the species. In the boom year of 2011-2012, the banders handled twelve individuals, including one adult female returning for a second season to the same site in Algiers, and last year, there were 15 newly banded birds and one returnee, an adult male banded the past season as a young bird in Baton Rouge. Two of those newly banded birds, both immature males, were in a single yard. This year, both of those birds returned as beautifully plumaged adult males, including the individual pictured at right; never before have two returnee Broad-taileds come back to the same yard in one season in Louisiana!



Another individual brought the number of returnees to three, the largest ever recorded in the state. They joined six newly banded birds, bringing the total to 9 and the fourth-highest total on record.

Like Allen's Hummingbirds, Broad-tailed females and immatures can easily be confused with their Rufous counterparts, and adult males superficially resemble adult male Ruby-throateds. It is not uncommon for the banding team to arrive at a site prepared to band mostly Rufous only to find a Broad-tailed in the mix.

Hints of a Rebound?

Buff-bellied Hummingbird
Amazilia yucatanensis

For some years the Louisiana banding team has been concerned about a steep decline in the number of Buff-bellied Hummingbirds being recorded in Louisiana each winter. Last year's total of 8 new birds marked the lowest number since at least 1999-2000. This species is poorly-studied and we have no solid evidence for any reason why the number of wintering individuals has dropped. We do know that a good part of their breeding range, from south Texas into Mexico, has been in drought for several years, which may be interfering with reproductive success and/or migration.

This year saw a small uptick in the number of newly banded birds - to 13 - but whether that represents the beginnings of a trend reversal, luck in catching, or simply a fluke is hard to say. Because the numbers of new birds has been so low in recent years, recaptures are also at record lows, with only five returning Buff-bellied Hummingbirds recorded (plus one returning foreign-banded bird). For a species with unusually strong winter site fidelity, this is evidence of the ongoing drop in the number of new birds (fewer newly banded birds means fewer birds to return, especially factoring in mortality). This number is still well below the long-term average of between 20 and 25 newly banded birds (although that number is skewed upwards by one particularly bountiful season).



There were nonetheless several individuals notable for their history with us. One bird returned for its seventh consecutive winter in the same yard in Metairie, and another returned for its seventh winter in a yard in LaPlace. Both birds still have a ways to go before reaching our nine-winter record for the species, set many years ago at a different LaPlace residence. Notably both birds' bands were so worn that although they could still be read to confirm their identity, the bands were replaced with fresh bands with bolder numbers.

Another notable Buffy was "Rocky" (pictured above), who returned for a fourth winter in a Harahan yard after being initially banded along the Texas coast in the fall of 2010. Another Buff-bellied Hummingbird, noted three winters ago for moving between a home in Baton Rouge and another in Lafayette (and back), returned for its fourth winter at the Baton Rouge site, much to the delight of the homeowner.

In addition to these banded birds, two gardens hosted at least three of this species. We caught three at one site, but we were only able to catch one Buff-bellied at the other.

Because of its difficult and feisty nature, the Buff-bellied Hummingbird has become the symbol and mascot of the Louisiana Winter Hummingbird Project.

Bright, Bold, and Bad

Rufous Hummingbird
Selasphorus rufus

Almost invariably, each winter season begins with the first report of one of these bright, copper-brown birds fighting its way to a feeder among departing resident and early migrant Ruby-throated Hummingbirds. Since this has always been the most common species found in Louisiana in winter, its numbers are typically high - though as we get farther from our latest "boom" year, the numbers decline. Two years ago saw a dramatic



surge in the numbers of Rufous Hummingbirds banded, rising from a historic low of 80 in 2010-11 to 564 in 2011-12. A huge proportion of those birds were immatures, suggesting that at least among the population of Rufous that come here for the winter, the breeding season must have been successful. Last year's new band numbers were lower, but returnees surged. This year's totals show new banded birds dropping considerably (in part, no doubt, due to lower effort possible on the part of the banders) but returnee numbers remained high.

As expected, the majority of returnees were birds originally banded in 2011-12, but there were a few notable

exceptions. At least two returnees were originally banded in the winter of 2009-10, both as youngsters. Two others were originally banded in the winter of 2010-2011, just prior to the boom season.

No site had record numbers of the birds, but several had at least eight to ten over the course of the season, including ones in LaPlace, Baton Rouge, and Covington. 81 returnees marks the second-highest total of returning birds ever. It's worth noting in this context that not every bird at a site can be caught for banding, and that some birds disappear before we show up to band, or only appear after we've banded, so it's quite possible more sites hosted large numbers of Rufous than we were able to document by banding.



Here to There and Back Again

Notable foreign-banded birds, foreign reports, longevity, and distance movements

Our banding team now regularly re-encounters “foreign” birds - hummingbirds banded by another bander. For the fourth consecutive season, we were treated to a repeat return of a foreign-banded Buff-bellied Hummingbird. Originally banded in September 2010 along the Texas coast, this bird spent much of the winter of 2010-2011 in a garden in Harahan, returning to the same site in the winters of 2011-2012, 2012-13, and again this season (2013-2014).

Early in the fall, a new site reported an adult male Rufous, which proved to be already banded - a bird banded in November 2012 in Chunchula, Alabama. Another adult male Rufous originally banded in Diamondhead, Mississippi in January, 2012 was recaptured in Baton Rouge. But perhaps most exciting of all, a young male Rufous was captured just after Christmas in Covington, Louisiana, that had been banded in late September in western Texas, deep in the Big Bend area. This documents a clear west-to-east trek that at least one example of this species, and perhaps others, has taken to get to Louisiana.

Within the state, too, there is often movement from one site to another, so the banders sometimes handle each others' birds. A Rufous Hummingbird banded in December of 2012 at a Mandeville home turned up early this fall at a Covington site where it was handled by another bander. He later showed up at the original banding site, several miles away.

There were only a few reports of birds banded in Louisiana being reencountered elsewhere this season. Two were particularly exciting: One was a female Rufous banded in February of 2012 in Metairie that turned up in November at a site in Maryland. The other was a Black-chinned banded in Milton in February of 2013, which turned up in Arizona in September of 2013 and was recaptured again at its original banding site in February of 2014. A Black-chinned banded in Thibodaux as an adult in February of 2011 (meaning she hatched no later than the summer of 2009) was recaptured in Lafayette in February.

Sadly, not all of our foreign reports are of birds recaptured by other banders. A Rufous banded in Reserve in February of 2012 was found near death by a homeowner in Baton Rouge in December of 2013, and the bird expired within a short period. Regrettable as these losses are, they still nonetheless provide valuable data points as we gradually get a clearer picture of the migratory travels of these hummingbirds.

On a more positive note, five birds were clearly “All Stars” in terms of their longevity and site fidelity! Topping the charts is a female Rufous named “Ms. Pink”, who returned for her eighth winter in the same Slidell yard. Banded as a youngster in November of 2006, this bird has wintered every year since and is frequently among the first winter birds to return each season. Two Buff-bellied Hummingbirds, both banded as youngsters in the winter of 2007-2008, have returned for seven seasons each to their respective yards, becoming increasingly difficult to outwit. Perhaps most surprisingly, two Ruby-throated females banded as adults in early 2009 (meaning they were hatched no later than the summer of 2007) were recaptured at or near their original banding sites in February. One had never been recorded in the intervening years! We can only guess where this bird has been hiding on previous visits to the site.

Still a Star, Despite Its Name

Calliope Hummingbird

Selasphorus calliope

Formerly in the genus *Stellula*, meaning “Little Star”, this relative of the Rufous is never abundant in Louisiana, but banding numbers have fluctuated in the last fifteen years from a low of 2 to a high of 40. This year's count of 14 is on the low side but may have been affected by the amount of effort the banders were able to muster this year. Even 14, however, is not bad for a species that a few decades ago had never been recorded in the United States after October.

Like Broad-tailed, female and immature individuals of this species may pass for Rufous to the casual onlooker, although several characteristics (including wingtips that reach beyond the very short tail) make it possible to identify most individuals by careful observation.

A Confusing Look-alike

Allen's Hummingbird
Selasphorus sasin

So similar is this species to the Rufous Hummingbird that it was not described as a separate species until 1920. While most adult male Rufous present no identification problem even for a casual observer, the similarity between the females and young males of this species make identification a difficult task. Compounding the problem is that even some adult male Rufous apparently have a largely greenish back (as opposed to the standard coppery brown we expect). As a result, while we expect most wintering *Selasphorus* hummingbirds to be Rufous (and indeed, most of them do prove to be, on close examination), a small number are Allen's; while on rare occasion, a bird which visually clearly seems to be an Allen's is in fact a green-backed Rufous. Since the first unquestionable Allen's Hummingbird was documented in Louisiana in 1976, its numbers have never been high here, but this year's total of 3 represents the lowest number documented since 2000-2001.



In Gratitude and Recognition

Beyond the fact that this project is a team effort among several banders, it simply could not take place without the active participation and help of scores of people. From the dozens of hummingbird hosts who opened their houses and yards to us, sometimes at the crack of dawn, often feeding us along the way, to the assistants who wrangled equipment, trapped birds, recorded data and helped us locate new banding sites, to those who financially supported the team's efforts - none of this would be possible without you.

Erik Johnson maintained the annual database and tally of wintering hummingbirds across the state, reporting weekly on new birds. His efforts made it possible to keep tabs on newly arriving wintering birds. Kevin Morgan coordinates banding coverage for Baton Rouge and has also taken over data management for Newfield and her subpermittees. Beth Maniscalco coordinated banding coverage for Thibodaux and Lynn Becnel did the same for the Donaldsonville area. Frank Arthur, Sue Broussard, Sindy & Joel Chaky, Paul Conover, Tim Daigre, Danielle Ferraro, Joan Garvey, John Hartgerink, Jenny Hazelhurst, Hans & Angela Holbrook, Joan LeBlanc, Sammy Maniscalco, Craig & Sandra Mineo, Rose & Jack Must of Wild Birds Unlimited-Lafayette, the Northshore Bird Club, John & Margaret Owens, Lisa Robichaux, Ron Stein, Melanie & Pat Stephens, Gene & Edna Street, Tom Trenchard, Tom & Gerry Verburg, Melvin Weber, and Lizette Wroten all invested many hours in this project. We appreciate their special help very much.

The Louisiana Winter Hummingbird Project is especially grateful to Kevin Morgan, who prepared this report.

Photo Credits

Cover: Buff-bellied Hummingbird by John Hartgerink. Page 5: Black-chinned Hummingbird by Stewart Slack. Page 6: Ruby-throated Hummingbird by Lizette Wroten; Broad-tailed Hummingbird by Chandan Sharma. Page 7, Top: Buff-bellied Hummingbird by Lizette Wroten. Bottom: Buff-bellied Hummingbird by John Hartgerink. Page 8: Top, Rufous Hummingbird by Stewart Slack; Bottom: Rufous Hummingbird by Kimberly Lanka. Page 10: Allen's Hummingbird by Kevin Morgan