June 11, 2016 Red-vented Bulbul Survey,

Heights area, Houston Texas.

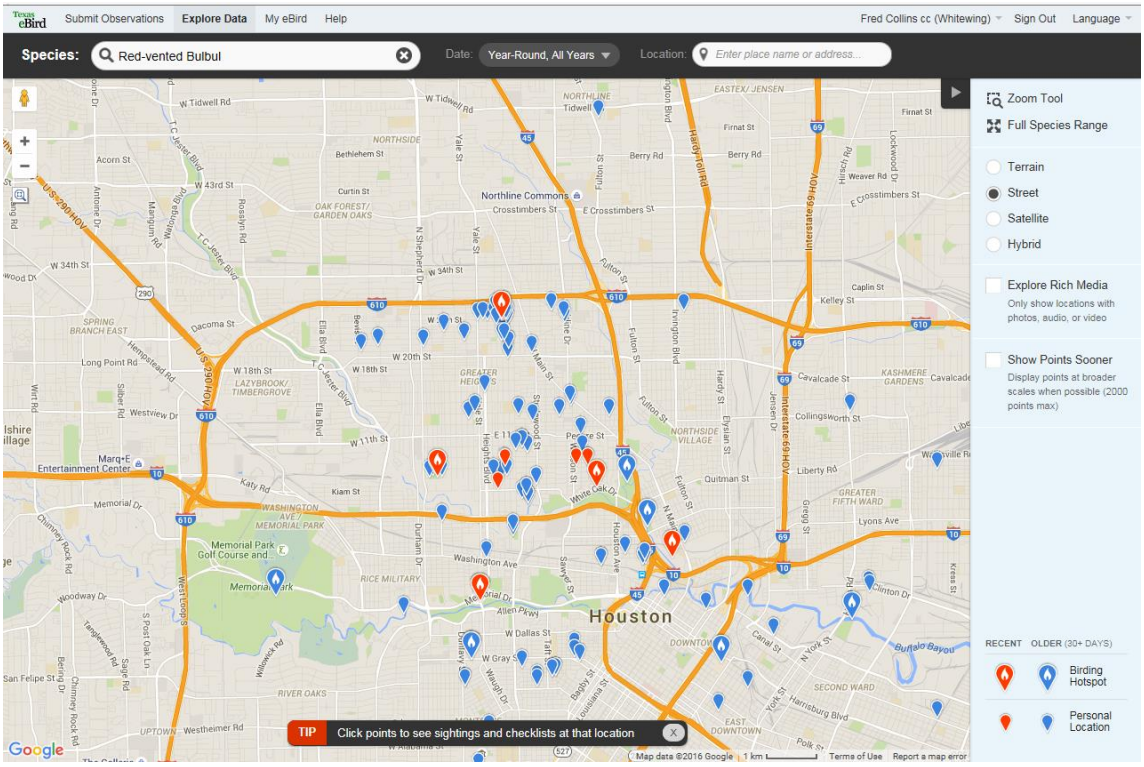
Citizen Science Project of the Houston Audubon Society

Fred Collins and Kendra Kocab, Bulbul Survey Detectors organizers.

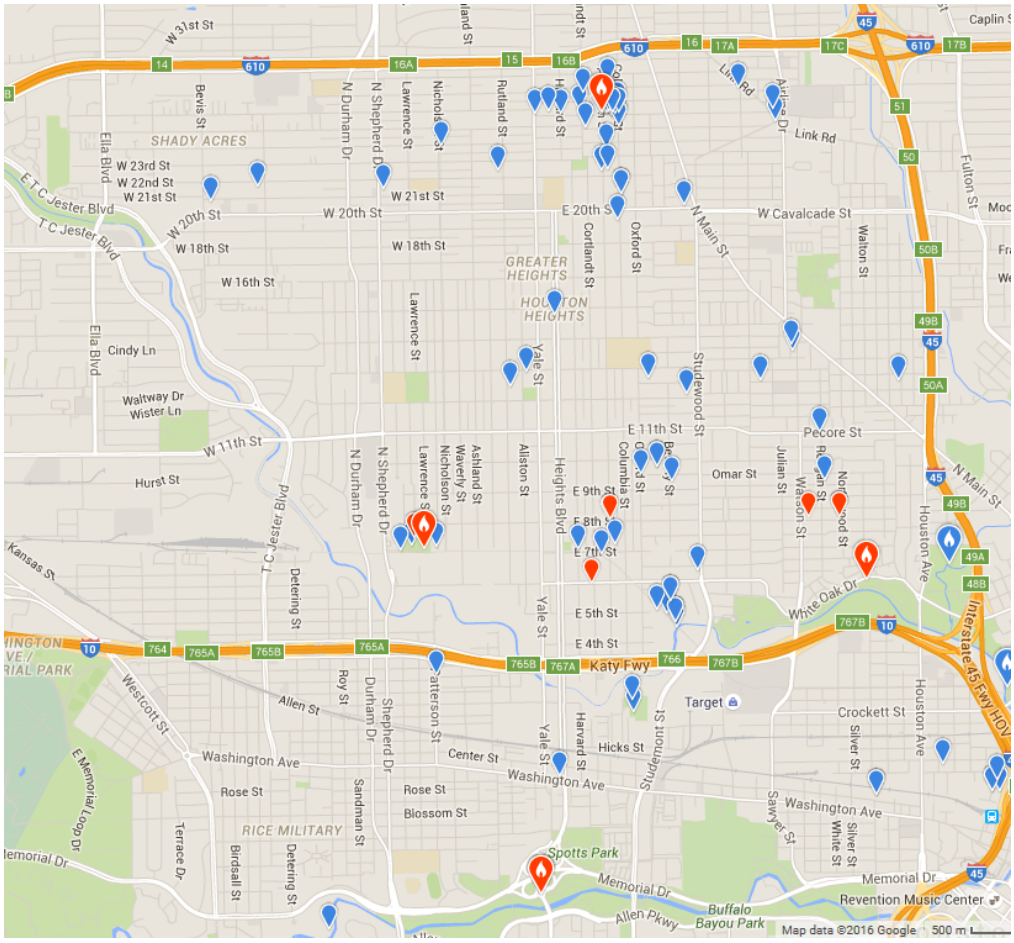
Introduction

The Red-vented Bulbul, which has become established in the Heights area of Houston, is a species native to the Indian sub-continent from Pakistan east to Bangladesh, Assam and Myanmar, and south to Sri Lanka. This species has become established on South Pacific Islands including New Caledonia, Fiji, and Samoa. It is also now found at various ports in the Persian Gulf and Red Sea. How it arrived in Houston is unknown, but in other places it is thought to have arrived via ships. It could have been introduced via escaped or released birds from the pet trade. It was first reported in Houston in 1958. However, the birds are not particularly noticeable and were not shown in any North American field guide until Sibley's Second Edition in 2014. John Berner, the regional reviewer for eBird Harris County, made a pioneering decision to include bulbuls in the regular Harris County list. This has allowed the cataloguing of numerous sightings from 2010 through 2016, many of which might otherwise have gone unreported. The plethora of recent sightings during the last five years suggests an increase in the Heights population and an expansion well beyond the Heights. Dan Brooks of the Houston Museum of Natural Science used citizen science-generated data collected between 2008 and 2012 to analyze the status of Red-vented Bulbuls in the Houston area. His results were published in the Wilson Bulletin in 2013. Based on the data from Dr. Brooks' paper and the information available on eBird, we felt tracking the birds in a more systematic fashion was needed. We hoped to answer two questions: Is the distribution of Red-vented Bulbuls in the Heights patchy or uniform, and what is the magnitude of the population?

Below is the eBird data for Red-vented Bulbuls prior to the survey, with the exception of three of the orange markers on this map that are reports by survey teams during the June 11, 2016 survey.



The picture below shows more detail of the area that was surveyed. Notice that there are areas ("holes"), with no sightings prior to the June 11, 2016 survey. Most noticeable is a large portion to the west, including Little Thicket Park in the northwest. Montie Beach Park in the east central portion of the survey area is another hole. There are also relatively few sightings south of I-10, north of Buffalo Bayou. There are recent sightings (as noted by orange markers) on Buffalo Bayou at the southern border of this area.

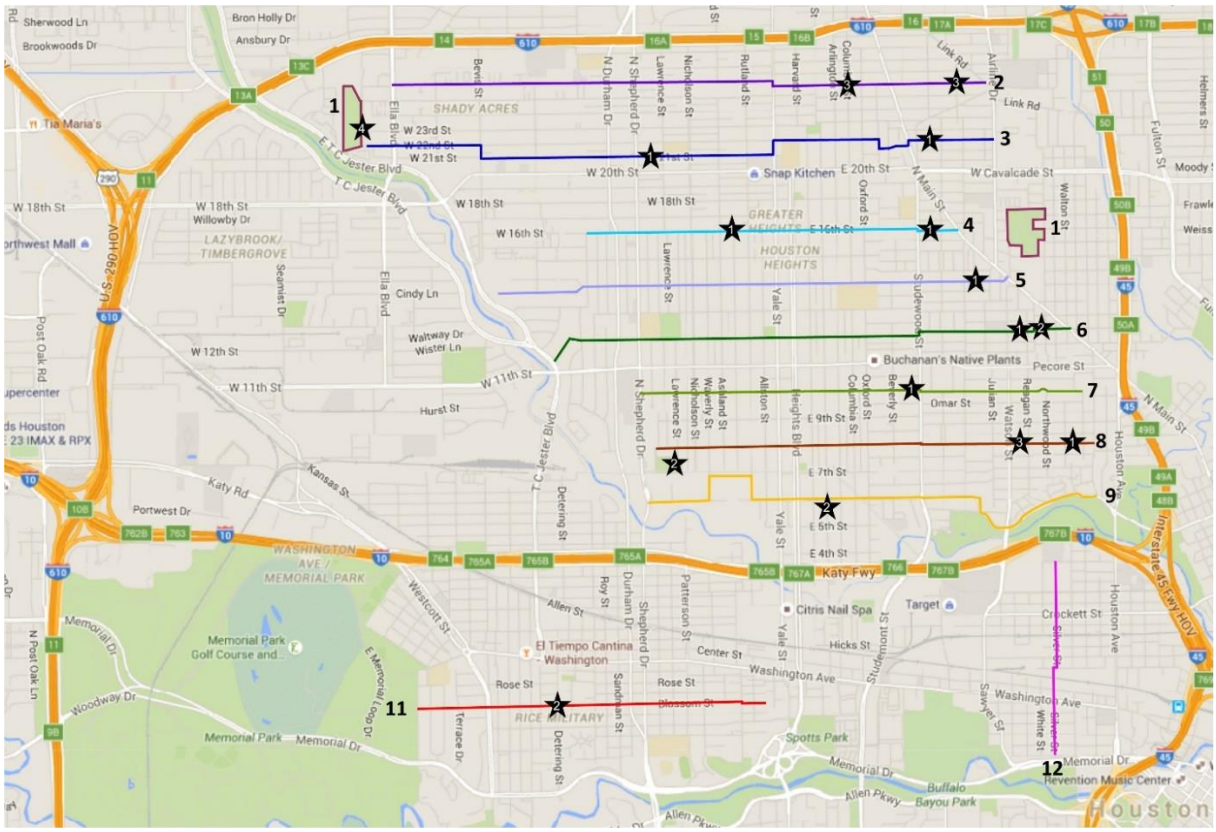


We hoped the survey would help determine if these holes represent a lack of birds, birders, or reports. We put out a call for people to participate and were pleasantly surprised that many local residents responded. One surveyor regularly birds Montie Beach Park and finds bulbuls there almost daily. He does not use eBird, so there are no accessible records of his sightings. We heard from several people that had bulbuls in their yards but were unable to participate on survey day. Records from these residents as well as other observations reported in Brooks' 2013 paper would help fill in the eBird map extensively.

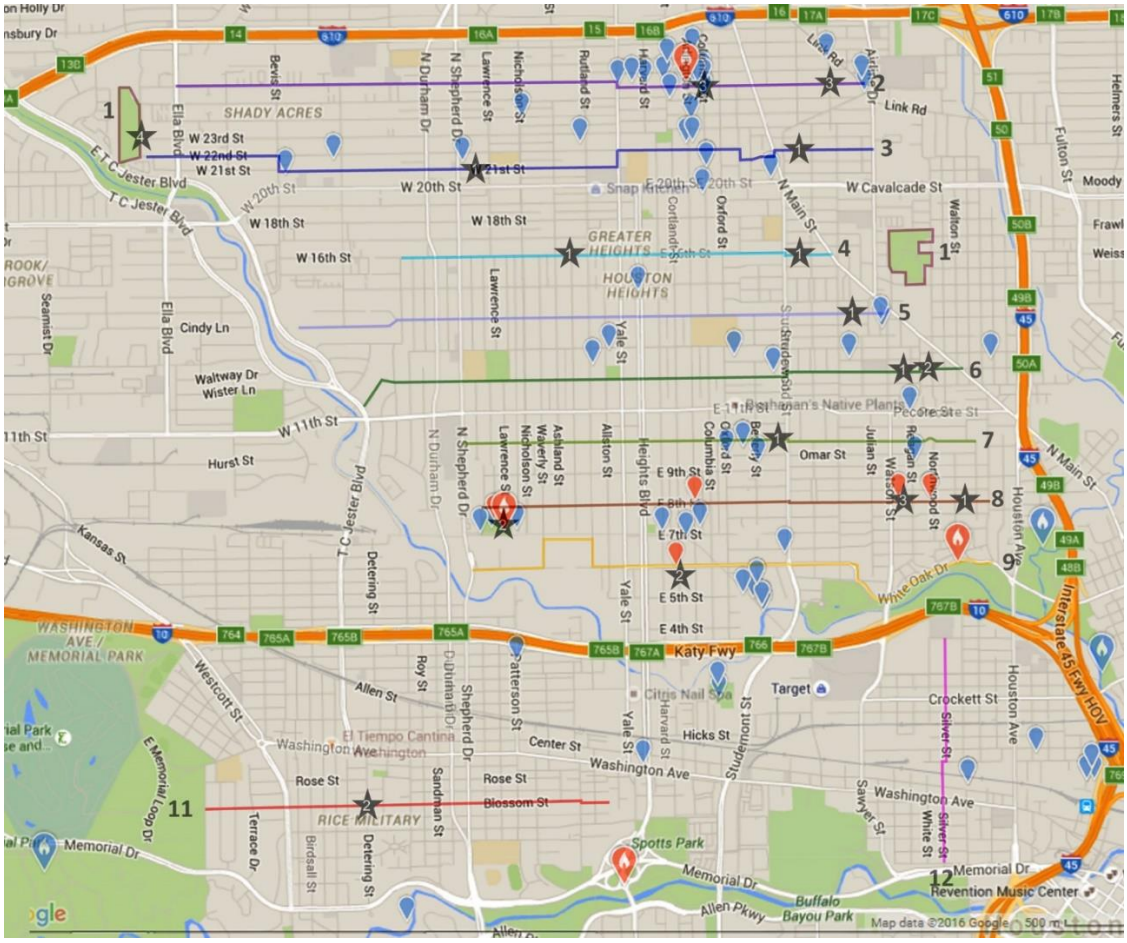
The Survey

Eleven of the 12 routes, covering the Heights and two areas south of I-10, were approximately two miles long and were worked from east to west. One route consisted solely of Montie Beach Park and Little Thicket Park to accommodate a volunteer who was unable to walk two miles. Route 10 was not covered and is not included on the map below.

The 11 routes that were surveyed are shown in the picture below. A star indicates the location of each bulbul observation along with the number of bulbuls found there. The survey was done on June 11, 2016 from 8:00 a.m. until 10:00 a.m., and 21 people participated. One additional surveyor was only able to run his assigned route on June 10 but did not locate any bulbuls. A total of 29 red-vented Bulbuls were found during the survey, averaging1.6 bulbuls per mile.



The map below is a composite of the eBird map, generated on June 13, plus the observations from the survey.



Survey Findings

Route 1 contributed a new sighting of four birds in Little Thicket Park in the far northwest corner of the Heights. While no bulbuls were found in Montie Beach Park, the surveyor of this route finds them there frequently, so we know they occur in the "hole" east of N Main St.. Route 2 only found bulbuls in previously reported locations but had the highest number of birds found during the survey with six. Route 3 had bulbuls slightly east of other previous sightings and others well west, where there was only one nearby previous record. Route 4 was in the central portion of the Heights through a major hole in the map. This route found two birds near each end of the route, filling in that hole. Those surveyors also talked to residents who asked them about a dark gray bird with a comb that they regularly saw in their yard. They were shown a photo of a Red-vented Bulbul, immediately recognized it, and were delighted to learn the name of their mystery bird. Route 5 was also at the bottom of the central hole in the map and encountered one bird. Route 6 found three birds at locations previously unreported to eBird. These surveyors live near this route. Both have birds in their yards regularly but had not reported them previously. Route 7 also found a new location which was near several other previous sightings. Route 8 had four birds at two locations, neither location previously reported. Route 9 had two birds at one location. The surveyors reported that traffic noise on this route was a major problem. These birds, along with a report from a local resident responding to the survey solicitation, are in areas on White Oak Dr. with no previous or nearby reports. Route 10 was not covered and is not on the map. Route 11 south of I-10 was created in response to a local resident who was familiar with bulbuls because they regularly occur at her residence. She detected one bird on the route in the center of a neighborhood with no previous eBird reports. Route 12, also south of I-10, was surveyed on June 10 by a resident who often sees bulbuls in his yard when fruit trees are ripe near that route. No bulbuls were detected during his survey.

Two survey routes discovered active nests. Route 2 had a nest in a pecan tree, while Route 3 found one in a sycamore tree. Route 8 suspected a nest in a magnolia tree but was unable to locate it. Finding two nests during the survey confirms that this time period is an active one for the species to breed.

Observers also reported birds perched in a wide variety of trees, bamboo and on utility lines. Observers noted the birds eating Chinese Tallow blooms and grapes.

Conclusions

The survey clearly answered the question: Is the distribution of Red-vented Bulbuls in the Heights patchy or uniform? The birds are more widely distributed than previous data had demonstrated. They are obviously utilizing patches of suitable habitat but the habitat is far more widespread than eBird records indicate. It would seem that observed birds are more often unreported than reported. Consequently, one could say the birds are common and widespread. They are found in all the parks where people regularly search, so one need not go wandering neighborhoods and people's yards to find them.

As for the second question about the magnitude of the population, we are not able to make any conjecture from the survey results. The final tally of 29 bulbuls is somewhat unsatisfying, as we had hoped to find several times as many. The birds are difficult to detect. They were not particularly vocal and were not very aggressive in playback response. We suspect many (if not most) did not respond at all. Time of year plays a factor in that, as well as time of day. Also, we will never know what effect this spring's tremendous rains had on population size, nest success, etc. The birds have a protracted breeding season stretching from March through September. No one currently knows if this population is double brooded.

Noteworthy

Bulbuls seemed to be more easily detected before 9:00 a.m. Nine of the 15 encounters with bulbuls during the survey occurred between 8:00 a.m. and 8:45 a.m. Of the six sightings that occurred after 9:00 a.m., three were at locations where bulbuls were known to occur by residents, prompting surveyors to go back and find them. Bird song generally dropped off significantly after 9:00 a.m.

It may be noteworthy to mention that records in eBird show that Red-vented Bulbuls in their native range in India occur in neighborhoods with similar frequency and numbers to our survey findings. Perhaps the apparent expansion beyond the Heights indicates that the habitat there is near capacity for the species.

Another interesting comparison is the abundance of bulbuls compared to other species on the route. Unfortunately, we did not ask other teams to keep tallies of all the birds they heard or saw, but on the route we covered White-winged Dove was most common (160), followed by European Starling (30), House Sparrow (30), Northern Mockingbird (25), Great-tailed Grackle (20), Eurasian Collared-Dove (15), Common Grackle (12), Chimney Swift (10), Blue Jay (8), House Finch (6), Mourning Dove (4), American Robin (4), Red-bellied Woodpecker (3), Inca Dove (2), Purple Martin (2), Red-vented Bulbul (2), Northern Cardinal (2), Rock Pigeon (1). So while Red-vented Bulbul numbers were low, they compared favorably with some common urban birds.

We learned a great deal about how future surveys should be conducted. Continuing surveys will provide important information about this exotic member of Houston's avifauna. We hope to conduct a less-structured fall census that will not have pre-defined routes. The dates for the "Fall Bulbul Bonanza" will be Saturday, September 17 and Sunday, September 18. This effort will encourage as many observers as possible to visit areas where bulbuls occur and try to find wandering flocks which likely number between 10 and 20 birds. Then, in

2017, we would like to expand with modifications route-based surveys on March 18 and June 3. We hope you will consider joining one or more of these surveys.

We would like to thank those who came out Saturday morning to participate in the survey: Skip Almoney. Julie d'Ablaing, Donna Diggons, Harry Gendel, Tim Goings, Mary Goldsby, Jonathan & Louise Holley, Robert Knetsch, Kathy Long, Bob McFarlane, Sue Orwig, Nina Rach, Vicky Rogers, Mike Schell, Kristen Schlemmer, Mary Waters, and Mary Anne Weber. We would also like to thank those who provided bulbul locations for the area: Diane Arnold, Jason Bonilla, Paul Randall, and Sandra Tirey.