

**Behavior of the Lyre-tailed Nightjar (*Uropsalis lyra*) at Reserva Las Gralarias (RLG)**

**By**

**Jane A. Lyons**

Before the new Quito-Coast highway was officially opened, our birding tour group in August 1991 was able to travel on parts of the new highway and then shift over to the old road on our way back to Quito after birding the Mindo area. One of many highlights of that long happy day of birding the cloud forest was the special treat of seeing briefly a male Lyre-tailed Nightjar (LTNJ) flying along the same stretch of the traffic-less new highway that we travelled on.

Twenty-one years later at RLG in 2012, I saw a male of this spectacular species flying over and around our kitchen at dusk, flying straight then weaving around in loops with its long tail willowing in the air. Since then a male has been seen on numerous occasions flying at dusk, perched on our buildings and gates at dawn, and even in mid-morning in our forest at 2068 m (= 6785 feet) elevation. Even though they are considered a lekking species based on records at a cave entrance in Venezuela, I have never seen more than one male at a time and there are no published photos or videos showing more than one male. Only twice have I heard two males calling but they were not close together. So, from observations at RLG since 2012, we seem to have one female and one male that claim our buildings as their breeding territory.



Male Lyre-tailed Nightjar perched behind the guest house, 26 March 2019

Photo by Joe Ropelewski

The family Caprimulgidae, nighthawks and nightjars, is one of the most widespread yet least studied and mysterious of all bird families. The number of genera has ranged from 51 genera to now only 15 genera, indicating the complicated taxonomy of this family (Handbook of Birds of the World (HBW) p. 303). The ancient origins,

physiologies and behaviors are also only vaguely understood (HBW p. 302 – 331). Widespread in the Andean cloud forests and occasionally seen by birders, the Lyre-tailed Nightjar is never studied nor observed for long. In current literature there is only one published article about the actual nesting activity of this species in Ecuador and which describes observations made at a nest during only six nights. (Greeney and Wetherwax 2005). According to HBW, “Nightjars remain among the most poorly known of all birds” (HBW, p. 314).

The LTNJ is a strong, fast, rapid, acrobatic flier. They can jump/fly straight up for 2-3 m (= 6-9 feet) and land back in the exact place they started from. They can fly low to the ground and swoop around quickly and use their camouflage, and the male using his tail, to confuse anyone or anything that tries to see them. I once had a male fly at me within my reach but could barely even see him as he flew so fast. From my observations the male flies much more than the female, seemingly wanting to dazzle, impress or scare anything in his territory, while the female often is content to sit totally still and sally forth to nab a flying insect, then return to her previous perch. Large and active, they are very hard to actually see well in their dawn and dusk flights. They always look totally black in the late evening light.



Adult female LTNJ at RLG, 13 August 2019

Photo by Segundo Imba

Nightjars have no real defense mechanisms. Their bills and feet are weak and tiny. Their main defense is camouflage, hiding and fast flight for escaping. I have had a brooding female lunge at me from her nest site, with wings slightly spread and very large pink mouth wide open, growling briefly. It was in fact a bit scary, almost like a coiled snake striking. Over the years she has become accustomed to me and watches me carefully with her almost-closed eyes, but mostly just ignores me.





Female incubating an egg and ignoring me, 12 October 2018

Photo by Jane A. Lyons

### Courtship

Between March-September, mostly at dawn when it is not rainy, we hear a male calling his amazing song from around our buildings. His song can include up to 12 rollicking notes seemingly given all in just one breath. The energy involved in his extensive courtship attire, song and performance is truly impressive and no doubt so demanding that he cannot be bothered to participate in further nesting chores. So, the female alone rears her one chick.

During much of the year we see a female regularly on her various feeding and perching sites. During the day the female roosts at a 3-4 m height above the ground and nests at about 3 m above the ground, while the male roosts about 2 m above the ground.

When the male is near the female, he will perch low and even on the ground as the female also does. He then flies in low dazzling whirls and may or may not call. The female responds by jumping straight up and down and calling a series of popping sounds (reminds me of popcorn popping). The male will then sit next to the female, and she may or may not fly away. This is often done on the outside wall in front of my kitchen. We have also observed them on buildings at 3 m height where the male will waggle his tail and even vibrate/flutter the lower part of his tail seemingly to show off the white portion of the feathers. The whole LTNJ courtship routine is very much like a male Booted Racket-tail hummingbird trying to dazzle a female perched nearby by flying back and forth rapidly and showing off his bright white leg puffs and wagging quickly his perfect racket-tail.... before she flies away.

### Nesting

Our rooftop patio/LTNJ nesting zone: I have observed 3 nestings on the roof of this one building, the first nest site on the left, nest sites 2 & 3 on the right, inside the red circles.



Photo by Jane A. Lyons

The female's choices of a nest site were clearly well-planned. Each was located in a corner of the untreated concrete roof and adjacent to the low border wall, protected from above by a small awning roof and from all sides except from the front. She was 6 m above all the human (and dog) activity below her and protected a bit from the rain above her. She was well-camouflaged among the leaves and drying moss.



### Nest site #1

On the morning of 7 October 2018 I noticed from below a female LTNJ sitting on the edge of this roof. It was odd to see her just sitting there so I went up to see if something was wrong. Then I noticed the egg on the floor of the roof near her ( below).



7 October 2018



Photos by Jane A. Lyons

She incubated the bright white slightly oblong egg until it hatched, and then fed and protected the chick until it leapt off the roof as a fledgling on 22 November 2018, 47 days from the laying of the egg until the fledging of the chick.



With nestling well-hidden under her wing, 5 November 2018

Photos by Jane A. Lyons



On 22 November 2018, 47 days after the egg had been laid, the first fledgling tried to fly but landed on our patio with 2 dogs nearby. Fortunately, it was protected by staff there at the time, and I moved it to a different roof. The



female found it that evening, and the fledgling screamed in delight a high-pitched “wheeeeh wheeee wheeee” as the female tried to coax the fledgling to try to fly again.

By 26 November 2018 the two had flown back to the original nest site. On 27 November, at approximately one month old, the fledgling was large with wing feathers sprouting though the dense down and some head and chest feathers also appearing. The chick mimicked the female perfectly in its pose, and both remained totally frozen while I watched them.



Photo by Jane A. Lyons

On 2 December 2018 (some 37 days since hatching), the female and fledgling from nest site one had moved to a different roof for roosting under some shady leaves during the sunny hot day. The female continued to physically protect her offspring. It seemed as though their nightly flying practice involved flying from one roof to another.

In total, the female and young were seen together from egg-laying on 7 October 2018 until 17 January 2019, i.e., 103 days (3.4 months).

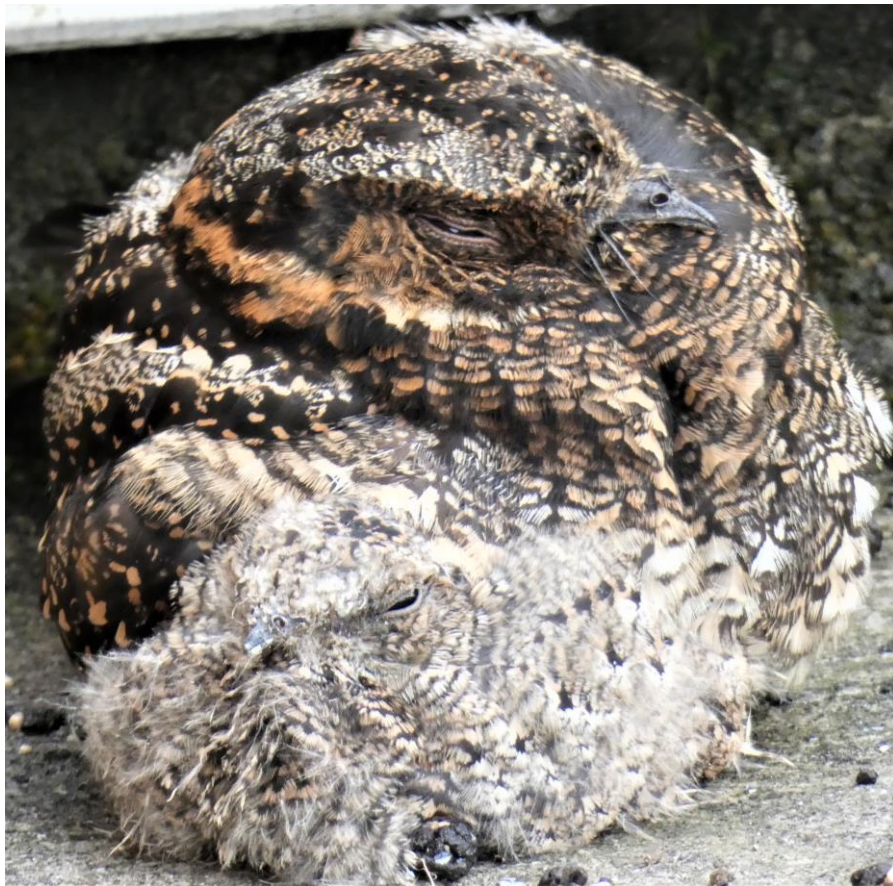
During this time no male LTNJ was seen or heard. It seems pretty clear that the female LTNJ holds a nesting territory, stays regularly in one spot, and when breeding season begins, the male comes to her territory to show off his newly molted plumage, lovely song and regained strength.

Our second LTNJ nesting began in October 2019.

Nest site #2



Incubating at nest site 2, on 6 October 2019



Fledgling at nest site 2, barely recognizable under its mother's plumage on 2 November 2019. It fledged 12 days later.

Photos by Jane A. Lyons



The LTNJ fledglings are similar to fledgling Common Nighthawks in the summer in Austin that are often found on the ground near flat-roofed buildings. The female LTNJ coaxes her fledgling from their roof-top nest site to leap/flap as far as possible, and it may end up in some sort of complicated situation, where she stays nearby and coaxes it to better hiding place.



Female LTNJ on wooden plank of dog pen, 14 November 2019 at 9.06am      Photo by Milton Delgado.

The young bird at nest site 2 fledged early on 14 November 2019. I found the adult female perched below the nest site at 6.30am where she stayed for almost 3 hours (above), apparently watching her fledgling. We looked to try to find the young fledgling, perhaps in the shrubbery somewhere nearby, but it was not on the roof nor anywhere we could find. Three more hours later she was still watching and waiting for her fledgling, this time at the edge of the road (below). Worried she would get run over, I encouraged her to fly to the other side of the road.



Female LTNJ at edge of road apparently still watching her nearby fledgling, 14 November 2019

Photo by Jane A. Lyons

From that point we did not see the two birds together again. But the female was seen again on her various perch sites, including the wall in front of my kitchen and a water heater high on the wall of her nesting building and even on an electric cable behind the nest site house.



Female LTNJ perched on water heater 30 January 2019

Photos by Jane A. Lyons



12 December 2019, female perched on electric cable at 8am.



Nest site #2, 3<sup>rd</sup> nesting

The third nesting was at the same nest site #2. On 25 March 2020 a male was quite active, singing loudly, perched on the roof, fluttering his tail. Three days later the female was on her favorite hot water heater perch. It was a very rainy season but by late June 2020 the female was back on her nest..



By 26 June 2020, the female was back on the roof at nest site 2, incubating a third egg laid since 7 October 2018.

Unfortunately, by 9 July 2020 the egg was found broken, with an embryo that had clearly not developed properly.



Broken egg with undeveloped embryo inside.

By 22 August 2020 I heard again the male LTNJ and saw him perched in front of my kitchen. He called beautifully with long 10-12 note songs 5-6 times without moving. The female was nearby on her normal perch site and was jumping around a bit as if excited. I did not find any active nest site in 2020. In 2021, the same happened during much of the summer, much singing and activity of both male and female, but so far no nest site has been found.

We will keep watching!

## References

del Hoyo, J., Elliott, A. & Sargatal, J. (eds). 1999. Handbook of the Birds of the World, Vol. 5. Barcelona: Lynx Editions.

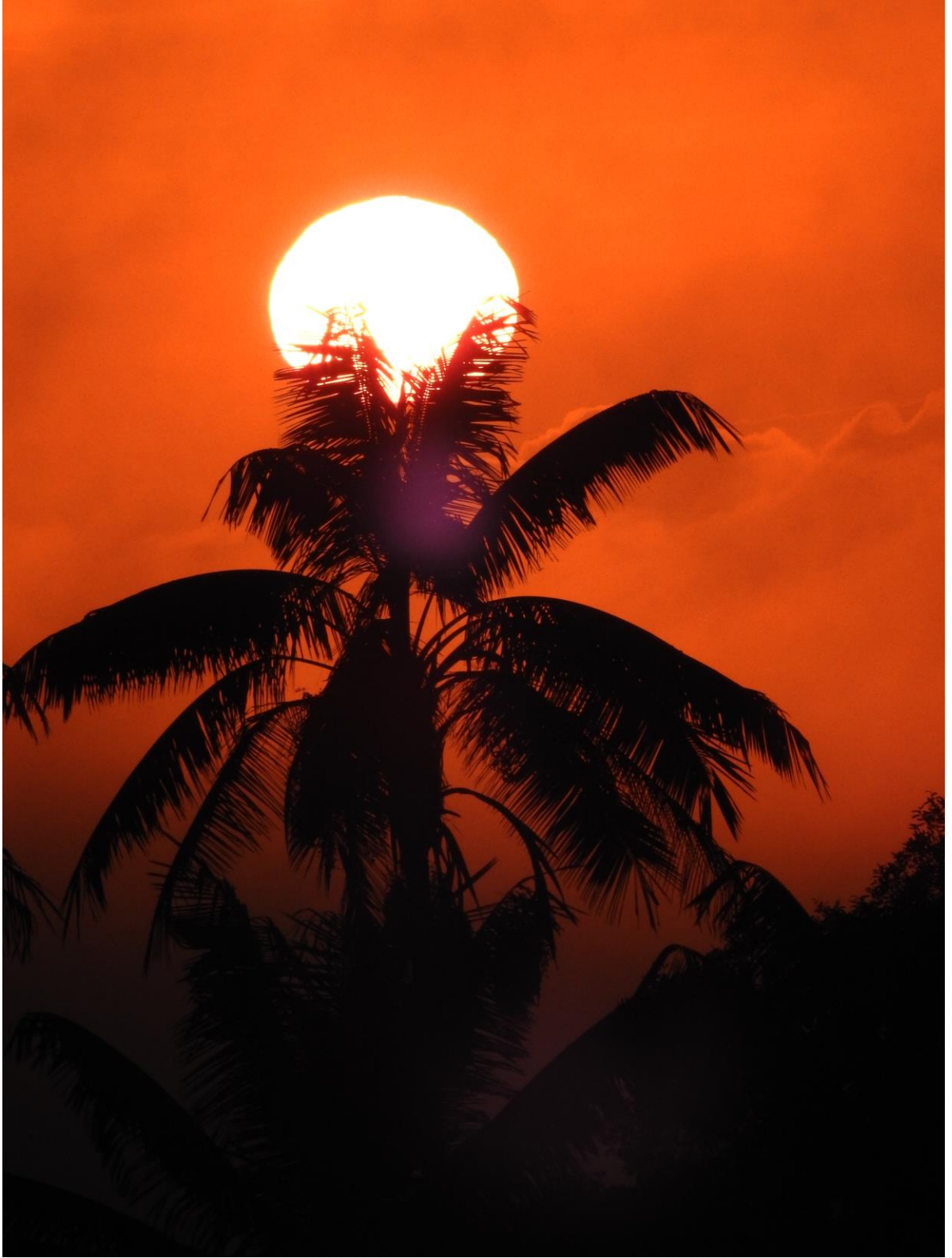
Fjeldså, J. & Krabbe, N. 1990. Birds of the High Andes. Svendborg, Denmark: Zoological Museum, University of Copenhagen and Apollo Books.

Greeney, H. F. & Wetherwax, P.B. 2005. "Brooding behavior and nestling growth of the Lyre-tailed Nightjar *Uropsalis lyra*". Cotinga 23: 44-47.

Hilty, S.L. & Brown, W.L. 1986. A Guide to the Birds of Colombia. Princeton, NJ: Princeton University Press.

Ridgely, R.S. & Greenfield, P.J. 2001. The Birds of Ecuador, Vol. 1. Ithaca, N.Y: Cornell University Press.





October 2021 sunset at RLG lower elevation

Photo by Milton Delgado

## NORTHERN MIGRANTS ON THE MOVE

By Jane A. Lyons

Our first-of-season migrant was observed on Wednesday, 6 October 2021 at 10.48am. As we were checking the fencing along our uppermost site at RLG, we spotted an Upland Sandpiper walking along the road at 2280 m elevation (= 7480 feet). Fortunately, it stopped to watch us, allowing some good binocular views and photos, and it even called as it flew farther away. At RLG we have seen only a few individuals of this northern migrant species over the years. These sandpipers are a grassland species that breeds in the northernmost states of the US, including Alaska and lower Canada, and then migrates mostly to the pampas of southern South America where they may spend up to 8 months before returning north. Our recent rains and resulting puddles on the road may have attracted this individual to stop-over en route to its vacation habitat farther south.



Migrant Upland Sandpiper at RLG 2280 m elevation

Photo by Milton Delgado