

# Seven Nests of Rufescent Tiger-Heron (*Tigrisoma lineatum*)

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Little is known about the nesting or breeding behaviour of Rufescent Tiger-Heron (*Tigrisoma lineatum*). Observations or records of seven nests near the research station Estacion Biologica Cano Palma in Tortuguero National Park, Limon Province, Costa Rica are documented here.

## Known Nest Information

Haverschmidt [3] provides the first description of nesting behaviour of Rufescent Tiger-Heron in his “Birds of Surinam” where he refers to three different nests. Hancock and Kushlan [2] describe a nest found in Corrientes, Argentina and refer to two nests in zoos. A nest in Panama is described by Dyrzcz [1]. The first Costa Rica record is from the late 1990’s from Tortuguero NP. The nest was collected by Julio Sanchez of the Dept of Natural History of the National Museum. Unfortunately, details of this nest have never been published. The following text is taken from the Handbook of the Birds of the World (Volume I) [4] and is consistent with the literature.

“Breeding. Little known. Nests quite high up in trees, although ground-nest recorded in captive birds; nest in large platform of sticks. In captivity: 3 eggs; incubation 31–34 days, by female only; chicks have white down. ... No information available on overall status and population size. Said to be a common breeder in parts of Nicaragua; estimated 15 pairs at R Canas in Costa Rica. Thinly spread over much of Colombia, but commoner in *llanos*; locally common too in *llanos* of Venezuela, and 64 individuals seen at Hato el Frio in 1984; uncommon in Peru.”

## Location

Estacion Biologica Cano Palma (EBCP) is located at 10 35’ 33” N and 83 31’ 40” W in Limon Province, Costa Rica. The station is located on a small blackwater canal named Cano Palma, The immediately adjacent forest is largely secondary evergreen swamp forest dominated by palms and subject to seasonal flooding. Nearby, at slightly higher elevations, terra firme forests predominate.

The canal is regularly travelled and traffic is increasing. Sustained drought or heavy rains within the catchment area can lead to one metre changes in the depth of the canal.

## Summary

All of the nests were observed within approximately one kilometre’s length of Cano Palma centred on EBCP. Cano Palma was searched repeatedly in Spring 2005 for another 4 km upstream and 1 km downstream but no additional nests of Rufescent Tiger-Heron were found. Additional searches along the larger canals and some smaller canals, and questioning of local knowledgeable guides, did not turn up any additional nests.

Nest placement and structure was very consistent. Large stick nests were constructed three metres or more directly over water on branches or fronds. Three different nests are illustrated in the Photographs. In all cases the nests were solitary. Except for the instances in zoos, where one nest was built on the ground, this is consistent with the known nests.

Because of the location of the nests, it was impossible to observe the number of eggs present. In five cases, only one young was observed. In one case, two young were observed. In the remaining case, it seemed that no birds had yet hatched. There was no evidence of predation. The three nests reported by Haverschmidt had a clutch size of 1. The nest from Corriente had at least two eggs. Two captive pairs of the subspecies *marmoratum* laid 14 clutches always of three eggs.

Nesting in the four most recently observed nests began in March. In the three prior records, nesting took place much later in the year. In Surinam eggs were reported in May and June, and an almost fully fledged nestling in September. The nest found in Corrientes contained a single nestling and an addled egg in January.

The one chick observed was covered in white down (see Photo 3). However, all young birds showed substantial amounts of white which diminished over time.

The majority of observations were made during daylight hours in 2004 and 2005. In daylight hours almost no activity was observed. No nest building was observed, no feeding of young was observed, no adult pairs at nest were observed. Birds were silent during the day. Young were left unattended for very extended periods of time.

Nest 3, described below, was visited on more than 20 separate occasions after sunset or before sunrise. In almost all cases, there was some notable activity. This included a second adult visiting the nest and communicating with the adult already there, though it was not clear which of the two left shortly afterwards. Most frequently this included the young bird vocalizing and an adult bird feeding the nestling. This pattern of daytime quiet and night-time activity is consistent with the published reports.

The herons seem undisturbed by boat traffic though they clearly recognize the sound of motors. In one instance, a young heron approached within one metre of observers on the opposite shore.

### **Nest Records**

Each nest observed by the first author is described below.

1. This nest was closely observed on 18 occasions between 2004 April 24 and 2004 June 4 covering 25 daylight hours including both early morning and late afternoon visits. The nest was occupied in early April but the exact date is not known. A single young bird was in the nest over the entire observation period. An adult bird was present during daylight hours on only two occasions. In no instance were there two adults present, or was the young bird ever fed by an adult during daylight observations.

2. This nest was visited on twelve occasions between 2005 March 24 and 2005 April 30. A single young bird was the only bird ever seen in the nest (see Photo 2). The nest was vacant on four visits between April 8 and April 30.
3. This nest was observed 53 times between 2005 March 31 and 2005 August 1. A single adult was on the nest between March 31 and April 17. A single young was observed on April 18. No other young were observed. The nestling was heard vocalizing on May 4, at night. The nestling was observed out of the nest on May 20. The bird was able to fly by June 13 and remained near the nest until July 27. No herons were seen at the nest site on July 29 or August 1.
4. This nest was observed three times between 2005 Mar 31 and 2005 April 11. A single adult was apparently brooding at all times. (See Photo 1)

The following nests were either observed by the second author or reported to the second author by local guides.

5. A nest was built by two adults in Sept or Oct 2003. One nestling was attended by one adult.
6. A nest was built by two adults in Aug 2003. Two nestlings were observed, both more developed than the nestling in Nest 5.
7. A nest was built late in the year, possibly November, by two adults in 2001. One nestling was attended by one adult. The branch supporting the nest collapsed and fell into the canal, leading presumably to the death of the nestling.

### Photographs



1. Nest 4 with adult, 2005 Mar 26, Cano Palma near EBCP



2. Nest 2 with young bird, 2005 Mar 31, Cano Palma near EBCP



3. Nest 3 with chick, 2005 Apr 18, Cano Palma near EBCP

### Thanks

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### References

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