

response by apparently not recognising the danger posed by the non-native predators. The mongooses honed in on the calling doves relatively quickly, but could not climb the vertical trees. The cats appeared to hunt the forest floor generally and did not hone in on the calling doves, which tended to call continuously for c.10 minutes and then perch silently for a similar period preening, before calling again. This behaviour was repeated by both birds for the duration of my observations.

Local guide, K. Jawahir (pers. comm.) reports that mongooses and cats can climb diagonal branches/trunks to reach the doves, but the birds are apparently safe in vertical-standing trees. Hurricane Ivan severely damaged and modified the forest over much of Grenada, including Mount Hartman, damaging most trees and felling many trees and branches. Many of the trees leaned diagonally and appeared capable of being climbed by a mongoose or cat. Based on this, it appears plausible that predation of calling doves (and fledglings) may have increased following Hurricane Ivan, permitting new within-canopy hunting opportunities for mongooses and cats.

It is unknown if ground predators at Mount Hartman have become more abundant recently, but K. Jawahir considered this to be the case, and the high numbers observed during two hours suggest that they pose a significant threat to Grenada Doves. An invasive species predator control programme is urgently required if this Critically Endangered bird is to survive.

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Received 3 September 2007; final revision accepted 13 April 2008

#### A recent sighting of Ruddy Crane *Laterallus ruber* in Costa Rica

One species whose status in Costa Rica is particularly enigmatic is Ruddy Crane *Laterallus ruber*<sup>2</sup>. Like many Rallidae, it prefers tall grasses and weeds in marshes and wet pastures<sup>3</sup>. Ruddy Crane ranges from Veracruz (on the Caribbean slope) and Guerrero, both Mexico (on the Pacific coast), south to northern Nicaragua on both slopes, with an apparently extralimital population in Colima, Mexico<sup>3</sup>. Although not currently considered to occur in Costa Rica, *L. ruber* was included in the Costa Rican avifauna<sup>4,5</sup>, based on two sight records by P. Slud in the Guanacaste region in 1955<sup>4</sup>. In the most recent revision of the status of the country's birds, the Asociación Ornitológica de Costa Rica listed Ruddy Crane as possibly extinct in the country due to the lack of any reliable sightings in the last 20 years, thereby

making any positive sighting of particular interest.

On 10 May 2007 at c.13h00, a Ruddy Crane was observed near the 750-m trail marker (10°43'N 84°01'W) of the sendero Atajo, at La Selva Biological Research Station, prov. Heredia. This stretch of trail contains an open clearing of tall (>1 m) grasses adjacent to a small stream and is surrounded by tall second-growth forest. The crane emerged from the thicket and paused on the bank of the muddy creek. Using its wings, it hopped to a small, partially submerged branch 1 m from shore, then entered the water and swam 1 m to the other bank, whereupon it fluffed its feathers and quickly preened, before disappearing into the vines and tall grass.

The crane was viewed for c.1 minute by both authors at c.3.5 m and was identified by the yellow-greenish legs, solid black bill, smallish size (similar to White-throated Crane *Laterallus albigularis*, with which ACS has ample experience), and overall uniform grey-brown plumage with a noticeable lack of any flanks barring. The bird's overall dark plumage indicated that it was a probably a juvenile<sup>1</sup>. Costa Rica supports another 14 species of Rallidae, but only Uniform Crane *Amaurolimnas concolor* could possibly be mistaken for Ruddy Crane. However, Uniform Crane is considerably more bulky and has red legs. All other members of the family in Costa Rica possess distinctive plumage and leg and bill colours that should reliably distinguish them from Ruddy Crane.

Our sighting should renew interest in the species' current status in Costa Rica. Cranes are well known for being extremely elusive and difficult to observe, though Dickerman<sup>1</sup> noted that *L. ruber* can be exceptionally vocal in mid-afternoon.

The confirmed range of the Ruddy Crane encompasses both the Caribbean and Pacific lowlands, but Costa Rican sightings were previously limited to the Pacific slope, with White-throated Crane inhabiting the

Caribbean side, perhaps suggesting that the range of Ruddy Crane in Costa Rica might be limited by competitive exclusion by White-throated Crane. Our sighting indicates that *L. ruber* is more widespread in the country than previously thought. It is interesting to note that Slud's sight records in 1955 were also in early May, which may indicate some type of seasonal dispersal not yet described for the species.

#### Acknowledgements

We thank staff of La Selva Biological Station, Organization for Tropical Studies (OTS). The Ministerio del Ambiente y Energia (MINAE) provided permission to work in Costa Rica. We also acknowledge research funding from an OTS fellowship, Syracuse University Summer Research grant and Sigma Xi research grant to ACS. Lastly, we thank the editor and an anonymous referee for improving the manuscript.

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Received 15 June 2007; final revision accepted 13 February 2008

#### Seven nests of Rufescent Tiger Heron *Tigrisoma lineatum* in Costa Rica

Little is known concerning the breeding biology of Rufescent Tiger Heron *Tigrisoma lineatum*. Haverschmidt<sup>3</sup> provided the first description of nesting behaviour and referred to three different nests. Hancock & Kushlan<sup>2</sup> described a nest found in Corrientes, Argentina, and referred to two others in zoos. A nest in Panama was described by Dyrce<sup>1</sup>. The first Costa Rican record emanates from the late 1990s, from Tortuguero National Park. The nest was collected by J. Sánchez of the Dept. of Natural History of the National Museum, but details have never been published. Nesting data were summarised thus: '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'<sup>4</sup>.

#### Study site

Estación Biológica Cano Palma (EBCP; 10°35'N 83°31'W), prov. Limón, Costa Rica, is located on a small black-water channel named Cano Palma. 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 in the catchment area can lead to 1-m changes in the depth of Cano Palma.

#### Observations

Four nests of Rufescent Tiger Heron observed by SF are

described below. *Nest 1*.—Closely observed 18 times, 24 April–4 June 2004. Observations occupied 25 daylight hours including early morning and late afternoon. The nest was occupied in early April (exact date unknown). A single young was present during the entire period. An adult was present during daylight hours only twice and there were no observations of two adults present concurrently, nor was the young ever fed during daylight observations. *Nest 2*.—Visited 12 times, 24 March–30 April 2005. A single young was the only bird seen (Fig. 2) and the nest was vacant on four visits, 8–30 April. *Nest 3*.—Observed 53 times, 31 March–1 August 2005. One adult was present 31 March–17 April, and a single young was observed on 18 April. The nestling was heard vocalising on the night of 4 May and was first observed out of the nest on 20 May. By 13 June the young had fledged, but it remained nearby until 27 July. No herons were seen at the nest on 29 July and 1 August. *Nest 4*.—Observed three times, 31 March–11 April 2005. One adult was apparently brooding at all times (Fig. 1). The other nests were either observed by MGQ or reported to him by local guides. *Nest 5*.—Constructed by two adults in September or October 2003. Single nestling attended by one adult. *Nest 6*.—Built by two adults in August 2003. Two nestlings seen, both larger than that in Nest 5. *Nest 7*.—Constructed late 2001, possibly in November, by two adults. Single nestling attended by one adult, but the branch supporting the nest collapsed into the water, leading presumably to the nestling's demise.

#### Discussion

All of the nests were found within c.1 km of Cano Palma, centred on the EBCP. Cano Palma was searched repeatedly in spring 2005 over another 4 km upstream and 1 km downstream, but no additional nests of *T. lineatum* were found. Additional searches along larger channels and some smaller waterways, together with