

First photographic documentation of *Dendrocolaptes sanctithomae* preying on a frog

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Abstract: While typically insectivorous avian species may occasionally consume small vertebrates, it is still a rarely directly observed phenomenon, limited to few species. Herein I report what is apparently the first incident of a northern barred woodcreeper (Dendrocolaptidae, *Dendrocolaptes sanctithomae*) catching a frog. The observation reported was made on the 3 August 2014 at Jalova Biological Station, Tortuguero National Park, Costa Rica. This observation is a useful addition to the scant knowledge on predation on vertebrates by tropical passerines.

Key words: Dendrocolaptidae, insectivorous, neotropical birds, passerines, predation, Tortuguero National Park.

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The northern barred woodcreeper (*Dendrocolaptes sanctithomae*) is a member of the Dendrocolaptidae family (Passeriformes) that ranges from southern Mexico to Colombia, Venezuela and Ecuador (IUCN 2014). As with other Dendrocolaptidae, *D. sanctithomae* is mostly insectivorous (Otvos 1967), but does eat some fruits and seeds (Lopes *et al.* 2003) and has been reported to occasionally prey on lizards (Del Hoyo *et al.* 2003). On 3 August 2014, in the late afternoon, an adult of *D. sanctithomae* was observed in the garden of the Jalova Biological Station in Tortuguero National Park, Costa Rica (80 574 ha; N 10° 21' 35" and W 083° 23' 38") climbing a tree holding in its beak a dead frog (Fig. 1). Though the species was not identified it may be an adult *Scinax elaeochrous*, a very common nocturnal arboreal frog which spends most of the day resting under the bark of the trees (Savage 2002). As the individual moved into the foliage it was not possible to see if the frog was consumed. To the best of my knowledge, this is the first recorded instance of *D. sanctithomae* preying on an amphibian.

Predation on frogs by *D. picumnus* and *D. platyrostris* has been documented in the tropics (Belton 1994; Del Hoyo *et al.* 2003) and feeding behavior studies of other Dendrocolaptidae species conducted in the Amazon Basin have revealed a dominance of lizards in the diet, with only two species depredating anurans (Kupriyanov *et al.* 2012). Other passerines have also been reported foraging on frogs and lizards (Poulin *et al.* 2001), though Lopes *et al.* (2005) have suggested the high frequency of vertebrate predation by passerines is not homogeneously distributed across the Neotropical region and may be more common in some localities than others. Finally, even primarily frugivorous birds belonging to other taxa, such as trogons and toucans, have been observed to change their usual diet to feed on both invertebrates and vertebrates (Delgado-V & Brooks 2003; Remsen Jr *et al.* 1993). Although an uncommon behavior, the ability to prey on small vertebrates seems to be widely distributed among many passerine families and shifts in diet composition of many tropical species might be associated with seasonal availability of fruits or seeds (David *et al.* 2015).

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Fig. 1. *Dendrocolaptes sanctithomae* catching a frog in Jalova Biological Station, Tortuguero National Park, Costa Rica (Photo: Michele Chiacchio).

Given the infrequency of observing depredation events it is possible that anuran depredation is more frequent than suggested, especially if it is an opportunistic behavior.

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