Tiny Hawk Accipiter superciliosus attacking a Golden-green Woodpecker Piculus chrysochloros in central Amazonian Brazil

Tiny Hawk Accipiter superciliosus is one of the smallest raptors, measuring 24–27 cm and weighing just 61.5–86.2 g (males) and 116–152 g (females)\(^2\). It ranges from Nicaragua south to Bolivia, Paraguay and northern Argentina, in forests and their edges\(^6\). A secretive, poorly known species, it is easily overlooked. Very few data exist on its diet but, like most Accipiter, Tiny Hawk primarily hunts birds, mainly hummingbirds and small passerines\(^7,8\), either by still-hunting or checking perches used by displaying hummingbirds\(^7,8\). Its long legs and toes being an important tool for this\(^7\).

On 17 September 2008, between 1200h and 12h35, we observed a Tiny Hawk attack a female Golden-green Woodpecker Piculus chrysochloros at a primary forest reserve of the Biological Dynamics of Forest Fragments Project (BDFFP), c.80 km north of Manaus, Brazil (02°30’S 60°00’W; see Bierregaard et al.\(^3\) for detailed site descriptions). The woodpecker was in a large mixed-species flock, including Cinereous Antshrike Thamnomanes caesius, Dusky-throated Antshrike T. ardesiacus, Chestnut-rumped Woodcreeperv Xiphorynchus pardalotus, Buff-cheeked Greenlet Hylophilus muscicapinus and Fulvous Shrike-Tanager Lanius fulvus. During the attack, the shrike-tanagers vocalised loudly and repeatedly. The attack drew our attention through the loud calls emitted by the hawk while holding the prey. It was perched on a horizontal branch, holding the woodpecker in one foot and using the other to strike the woodpecker, while holding its wings partially open covering the prey—a behaviour called ‘mantling display’, common in raptors\(^4\)—and moved them whenever it called. The calls were tape-recorded and copies will be deposited at the Arquivo de Sons da Amazônia (ASA), Coleção de Aves, Instituto Nacional de Pesquisas da Amazônia (INPA), Manaus, Brazil.

The hawk did not use its bill during the attack. The woodpecker did not react, either by calling or moving, loosely dangling its head and neck. We observed the hawk and woodpecker closely for c.8 minutes. Finally, the woodpecker escaped, badly injured, on a short, descending flight, which was unexpected because we assumed the bird was almost dead. The hawk remained c.5 minutes silent but alert on the same branch, while a White-necked Jacobin Florisuga mellivora flew close by, watched by the hawk but without sudden movement. Thereafter, the hawk called and flew in the same direction as the woodpecker, and was not seen subsequently.

Although A. superciliosus is thought to specialise in taking hummingbirds based on a few observations of Rufous-tailed Hummingbird Amazilia tzacatl and Bronze-tailed Plumeleteer Chalybura urochrysa being taken in Costa Rica\(^7\), small passerines and rodents have also been reported as prey\(^9,10\). The capture of a relatively large non-passerine (88 g\(^2\), as observed here), has not previously been reported, but an adult Great Kiskadee Pitangus sulphuratus was hunted in Iguazú National Park, Argentina\(^4\). Golden-green Woodpecker would represent a higher caloric reward than hummingbirds. Although apparently unsuccessful, the attack observed suggests that Tiny Hawk may hunt larger birds, some even of its own weight and size. Predation by small raptors on large bird prey is also reported for Micrastur, with which Tiny Hawk exhibits clear convergent traits and appearance\(^2\). Predation by Barred Forest Falcon Micrastur ruficollis on birds such as Brown TinamouCrypturellus obsoletus\(^5\), Plumbeous Pigeon Patagioenas plumbea\(^2\) and Black-fronted Piping Guan Abriria jaettinga (A. Whittaker pers. commun.) has been reported in the Atlantic Forest, and a Collared Forest Falcon Micrastur semitorquatus took an Ocellated Turkey Meleagris ocellata in Guatemala\(^5\).

Spreading wings over the prey may help maintain balance during the attack and serve as a ‘mantling display’, also observed in other accipitrids\(^5\), which hide food from other predators, and may be accompanied by threat calls\(^2\), as observed here.

Acknowledgements

We thank TEAM (Tropical Ecology, Assessment and Monitoring Network) and BDFFP (Biological Dynamics of Forest Fragments Project) for supporting our studies. We are also very grateful to Andrew Whittaker, who kindly permitted us to mention his observations of Micrastur falcons, and Sergio Seipek for valuable suggestions and corrections to the submitted manuscript. This is contribution no. 16 in the Amazonian Ornithology Technical Series of the INPA Zoological Collections Program.

References


Thiago Vernaschi Vieira da Costa
Laboratório de Ornitologia, Instituto de Biociências e Museu de Zoologia da Universidade de São Paulo, Rua do Matão, travessa 14, n. 101, 05508-090 São Paulo, SP, Brazil. E-mail: tvvcosta@gmail.com.

Claudeir Ferreira Vargas
Instituto Nacional de Pesquisas da Amazônia, Coleções Zoológicas, Coleção de Aves, CP 478, Manaus, AM, Brazil.

Received 15 February 2010; final revision accepted 12 September 2010 (published online 16 March 2011)