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## GRENADA HOOK-BILLED KITES: RECENT STATUS AND LIFE HISTORY NOTES

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The Grenada Hook-billed Kite (*Chondrohierax uncinatus mirus*) is a severely endangered bird, and there has even been speculation that this small raptor, endemic to the island of Grenada in the Lesser Antilles, West Indies, might already be extinct (King, Red data book, vol. 2, Aves, International Union for the Conservation of Nature and Natural Resources, Morges, Switzerland, 1978). Lack and Lack (*Ibis* 115:53–59, 1973), who made the most recent survey of the birds of Grenada, did not mention it. Prior to our work, the most recent sighting apparently was made on 1 August 1978 when a kite was seen soaring over xeric woodland in the southern portion of the island (J. Wunderle, pers. comm.).

From 22 to 29 June 1980 we visited Grenada to determine the kite's status and to study its natural history. We spent most of our time in the southern part of the island which is characterized by xeric woodlands. Here the vegetation is less than 5 m tall, most trees are deciduous and thorny, and ground cover is sparse. All of our sightings of kites were in this region even though we searched most accessible parts of the island.

On 23 June 1980 we saw a pair of kites soaring over a xeric woodland about 1 km east of Grand Anse at an elevation of 77 m. The pair appeared to be engaged in courtship flights in which they circled together closely, often dove at each other, and called frequently. Later that day, we observed the female feeding on small tree snails, *Bulimulus wiebesi*, in the same area. She walked along a limb 3 m above the ground in search of them. Upon finding one, she jumped to a small branch, hung upside-down and removed the snail from a limb with her bill. She then flew to a large limb nearby and extracted the snail from its shell, using the same technique as the continental Hook-billed Kite (Smith and Temple, *Auk*, 99:197–207, 1982). We also found evidence that these kites feed on another

small tree snail, *Endolichotus grenadensis*. We did not see this, but we found shells showing the damage characteristically produced when kites extract snails from them. We found no evidence, however, that the birds feed on the huge land snail, *Strophocheilus oblongus*, as reported by Bond (Extinct and near extinct birds of the West Indies, Pan-American Section, International Council for Bird Preservation, Res. Rep. No. 4, 1961) and we doubt that they can successfully extract such a large snail with their small bill (Smith and Temple, 1982). Our searches suggested that snails were most abundant in the island's southern xeric regions: their densities here were up to five times greater than elsewhere.

On 26 June 1980, we observed another pair of kites at an elevation of 30 m near Beaton on the southern coast of Grenada. They were constructing a nest about 15 m above the ground in a mombin tree (*Spondias* sp.) in the middle of a small coconut grove. Both sexes participated in nest construction, carrying sticks as far as 1 km from the surrounding hillsides to the nest tree. Human activity did not appear to disturb them: they even continued to build the nest while workers shelled coconuts under the nest tree.

From these and several other sightings of solitary, soaring kites, we estimate that we saw at least eight individuals during our stay. All were in the dry southern part of the island, which makes up about 5–10% of its total area. However, kites previously occurred in other regions of the island as well. As recently as 7 July 1971 one was seen in open secondary forest at an elevation of 600 m on Morne Fedon (O. M. Buchanan, pers. comm.).

The future of Hook-billed Kites on Grenada is threatened by several factors: continuing destruction of habitats that support snail populations; depletion of native snail populations through pest control efforts and the introduction of exotic snails, some of which are predatory on other snails; and shooting, which is legal during most of the year. In view of its present small population and these threats, the survival of the kite is doubtful.

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