

SHORT NOTE

Fiji Goshawk (Accipiter rufitorques) hunts by grass-probing

The Fiji Goshawk (*Accipiter rufitorques*) (male wing length c. 200 mm, mass 190 g; female wing 236 mm, mass 281 g) is endemic to the islands of Fiji where it co-occurs with two other diurnal raptors, the slightly larger Peregrine Falcon (*Falco peregrinus*) (male wing 289 mm, mass 500 g; female wing 324 mm, mass 850 g) and the considerably larger Pacific Marsh-harrier (*Circus approximans*) (male wing 404 mm, mass 542g; female wing 424, mass 980 g). Perhaps because it is the sole accipiter in Fiji it demonstrates considerable ecological amplitude in food habits (see Wattel 1973, Bierregaard 1978).

The Fiji Goshawk has a relatively shorter tarsus and tail and heavier tarsus, toes and bill than either the similar sized nearctic Cooper's Hawk (*A. cooperi*) and Australasian Brown Goshawk (*A. fasciatus*). Its morphology suggested to Wattel (1973) that it not only captured flying birds in true accipiter fashion, similar to longer toed and longer tailed accipiters, but also caught prey items by pouncing on the ground. Indeed, observations of prey captures and food remains indicate that, in addition to a variety of birds up to pigeon-sized, the Fiji Goshawk also take rodents, lizards, insects and even small fish (Wood 1926, Watling 1982, Clunie & Morse 1984, del Hoyo *et al.* 1994).

On 19 August 1991 we watched a year-old female (some adult feathers visible) Fiji Goshawk on the island of Viti Levu employ a rather causal and unusual hunting technique. We first saw this bird sitting on a telephone pole about 20 m from us. A flock of about 15 Red Avadavat (*Amandava amandava*), a small (c. 10 g) introduced finch, flew into the fallow field that was between us and the hawk. Tall grass covered much of the field, but due to the season of the year and rainy weather, the grass stems were compressed forming large mats. The avadavats landed on a mat of grass and disappeared beneath it, presumable to feed on the ground below.

The goshawk flew to this site and perching on top of the mat probed with one foot into the grass as though feeling for the unseen finches. The hawk kept its head cocked slightly skyward as though watching for something in the sky, perhaps another goshawk or other raptor. After nearly 40 sec of searching and probing into the grass mat it returned to the telephone pole. The finches moved to another patch of grass after a few minutes and the hawk followed. Once again, it began probing with one foot into the grass for the unseen finches at the point where the finches had entered the grass mat. It caught nothing and flew again to the telephone pole only to employ the same technique a third time when the finches moved again to yet a new grass mat. This was also unsuccessful and after returning briefly to the telephone pole the goshawk flew out of sight.

It was clear to us as we watched the hawk that it could not see the finches but only where they had entered the grass. The hawk stretched deep enough into the grass that its entire leg disappeared. This hawk might have been successful using

such a technique previously based on the somewhat routine manner in which it acted during its hunting forays and the opportunistic methods used. Such techniques have not been previously recorded for the Fiji Goshawk.

LITERATURE CITED

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