SHORT NOTE

An undescribed form of owl in Fiji

The only species of owl known in Fiji are the Common Barn Owl (Tyto alba) and the Grass Owl (Tyto capensis). The Barn Owl has been recorded on almost every island in Fiji large enough to sustain human habitation (Beckon, in prep.). In contrast, the Grass Owl, though widespread from Africa to Australia, is rare or possibly extinct in Fiji (Clunie 1972:13). As far as I can determine, the only definite Fiji records date back to the 1800s and came only from the Waimanu River valley on Vitilevu (Hartlaub 1879), the largest of the Fiji islands.

Along the north-west coast of Vanualevu, I saw two tytonid owls which had dark brown backs, in striking contrast to the pale brownish-grey back of the race of Barn Owl found in Fiji (T. a. lulu) and even darker than the back of the Grass Owl. In the pale coloration of their underparts and head, and in their roosting behaviour, the owls I saw were much like Barn Owls. Both of them were roosting during the day in woodland, as Barn Owls often do. Grass Owls are said to roost under long grass (Burton 1973:52).

On 7 September 1985 I saw a dark brown owl along the road between Naduri and Labasa on the northern coast of Vanualevu (Fig. 1) at 0807 hours.

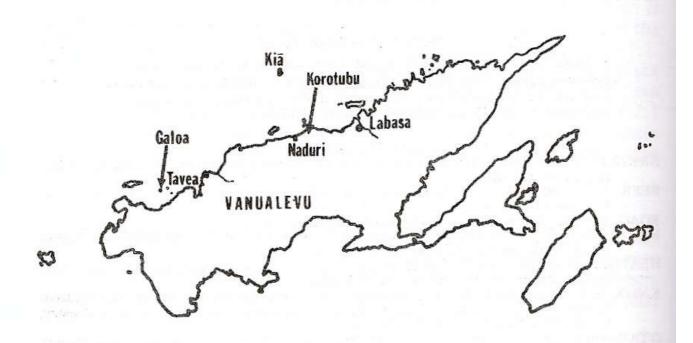


FIGURE 1 — Locations in Fiji where dark brown owls were observed (indicated by arrows) I had a brief but clear view of the owl perching on a branch scarcely 10 m from the gravel road in a patch of fairly dry, open woodland near the summit of the hill between the villages of Korotubu and Yalava. Its dark brown

back was facing the road, but as the bus in which I was travelling passed by, the owl turned its whitish face toward the bus.

On 13 September, some 60 km from my first sighting, I saw another such owl, and was able to sketch and observe it for about 30 minutes. I was surveying the birds of Galoa Island off the north-west coast of Vanualevu in the company of Jone Ravouvou, a local resident, when I found the dark brown owl roosting on a horizontal branch of a rain tree (Mimosaceae) in a forested area near Nukulekaleka Pt, the northernmost corner of the island. The owl eyed us warily from about 1730 until 1800. Then, when I approached to about 20 m, it flew off in alarm.

The upper surfaces of its wings were sooty brown (approximately colour 22, "burnt umber" – Smithe 1975), with "highlights" of lighter, more rufous brown (approximately colour 36, "amber", or colour 40, "cinnamon-rufous") appearing as a longitudinal or diagonal streak along the wing. As far as I could see its back and the upper surface of its wings had no mottling or spots. The dark brown of the back extended only up to the neck. The back of its head was mottled light brown much like typical Barn Owls in Fiji. The underparts were white with sparse small dark spots. The whitish facial disk was fringed with light brown above and blackish below. The bill appeared light tan; the feet, darker greyish brown. I did not see the lower legs well enough to know whether the distal tarsometatarsi were feathered as in the Barn Owl or essentially naked as in the Grass Owl.

DISTRIBUTION

Reports from local residents suggest that the range of this dark brown form of owl may extend beyond the north-west coast of Vanualevu. In the course of my field work in Fiji, I have interviewed Fijians on islands throughout the archipelago. I found that some Fijians recognise and and usually have distinct names for two differently coloured forms of owl on Tavea, Kiá, Yacata, and Cikobia, near Vanualevu; Waya, Wayasewa, and Naviti, in the Yasawa Group; and Beqa and Kadavu, south of Vitilevu. Fijians in the Lau and Yasayasamoala Groups consistently reported only the typical pale form of Barn Owl.

TAXONOMY

The dark brown owls cannot be a new subspecies of Barn Owl because they are sympatric with the typical subspecies in Fiji. The following possibilities remain: (1) they are variant Grass Owls, (2) they are outlying representatives of another species of *Tyto* in the Australasian region, (3) they are a new species, or (4) they represent an undescribed morph of Barn Owl.

Grass Owl variant: The dark brown owls are unlike typical Grass Owls in coloration and roosting behaviour. Their back is darker, underparts whiter, and back of the head lighter than those of Grass Owls, and they roost in trees rather than grass. If the dark brown owls nevertheless prove to be a form of Grass Owl, their discovery represents a significant range extension and an affirmation of the continued survival of a species not seen in Fiji since the 1800s.

Another Australasian Tyto: In general, the avifauna of Fiji is derived from the Australasian region. Two Australasian forms of Tyto might be regarded as potential colonisers to the Fiji islands: the Sooty Owl (T. tenebricosa) and the Masked Owl (T. novaehollandiae). The Sooty Owl, a forest-dwelling species

of New Guinea and eastern Australia, has a much darker head and breast and much larger eyes than those of the Fijian dark brown owl. It can safely be removed from consideration. The Masked Owl inhabits woodland near open country (Burton 1973:56), as does the Fijian dark brown owl. It exhibits considerable variation in colour across its range, from southern New Guinea to Tasmania, but none of the races displays the strong contrast between pale head and dark back characteristic of the Fijian dark brown owl. In addition, no known representatives of the Masked Owl inhabit the islands between Australia and Fiji. It therefore seems unlikely that the Masked Owl is the closest relative of the Fijian dark brown owl.

New species of Tyto: Since the 1940s it has been thought that the birds of the world are so well known that few if any species remain to be discovered (Mayr 1946:67). Yet as recently as 1976 a new genus of owl was found in a remote region of Peru (O'Neill & Graves 1977). In Fiji, owls - even Common Barn Owls - are relatively poorly known. Furthermore the northern coast of Vanualevu has hitherto largely escaped the attention of ornithologists. Although it is not inconceivable that a species of owl there might have been overlooked, a new species would be unexpected. My observations suggest that the dark brown owl is probably most closely related to the Barn Owl, but Ernst Mayr (pers. comm.) argues that the Barn Owl immigrated to the Australasian region so recently that there has not been time for double invasions. He therefore concludes that the dark brown owl could not be a new species.

Barn Owl morph: The Barn Owl exhibits considerable geographical variation, and it is polymorphic in colour in some parts of its cosmopolitan range (Bunn et al. 1982:26). However, no polymorphism has yet been described in the SW Pacific region. Amadon (1942:13) found only "very slight" colour variation among some 70 specimens of the subspecies T. a lulu from Fiji, Tonga, Samoa, and nearby islands. Nonetheless, on the basis of available evidence, it seems most likely that the dark brown owl is a colour morph of the Barn Owl.

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LITERATURE CITED

AMADON, D. 1942. Birds collected during the Whitney South Sea Expedition, L. Notes on some non-

passerine genera, 2. Am. Mus. Novit. 1176:1-21.

BUNN, D. S.; WARBURTON, A. B.; WILSON, R. D. S. 1982. The Barn Owl. Vermillion, South Dakota: Buteo Books.

BURTON, J. A. (ed.). 1973. Owls of the World. New York: E. P. Dutton & Co., Inc.

CLUNIE, F. 1972. Fijian birds of prey. Suva: Fiji Museum.

HARTLAUB, G. 1879. On a new species of Barn Owl from the island of Viti-Levu. Proc. Zool. Soc. London 1879:295-296.

MAYR, E. 1946. The number of species of birds. Auk 63:64-69.

O'NEILL, J. P.; GRAVES, G. R. 1977. A new genus and species of owl (Aves: Strigidae) from Peru. Auk 95(3): 409-416.

SMITHE, F. B. 1975. Naturalist's Color Guide. New York: Am. Mus. Nat. Hist.

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