

A new species of scops-owl from Sri Lanka

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On 27 February 1995, DHW first heard and made a tape-recording of an unfamiliar owl-like vocalisation at night in Kitulgala Proposed Reserve (P.R.), a rainforest in the wet zone of Sri Lanka. Over the next six years at this site and at Sinharaja Forest Reserve (F.R.), a large rainforest, DHW several times heard this mysterious call, which did not match that of any known Sri Lankan owl, but he was unsuccessful in observing its author. DHW played the tape-recording to other naturalists in Sri Lanka, only one of whom indicated he had heard the same call, but this person had assumed it was an arboreal amphibian. After comparing it with recordings of vocalisations of many Asian owls (in Marshall 1978 and White 1984), DHW believed that the unknown Sri Lankan vocalisation was most similar to that of the Reddish Scops-owl *Otus rufescens*, a species from the Malay Peninsula and Greater Sundas. In late 2000, DHW sent a tape-recording of the mysterious call to PCR, who agreed that the call sounded like an owl but that it did not match any of the species known to occur in Sri Lanka, and was most like *O. rufescens*. The possibility of a new species of owl in a country as well known ornithologically as Sri Lanka (where the last new bird species was described as long ago as 1868) seemed very remote. However, scops-owls are notoriously easily overlooked and some species are cryptically similar.

Eventually, at Sinharaja F.R. on 23 January 2001, DHW was successful in observing well for several minutes a bird in the act of giving this call, and he was also able to show the bird to E. L. Hagen. It was a very small rufous earless owl, quite unlike any other on the island or anywhere in South Asia. DHW then visited Kitulgala P.R. with colleagues, including wildlife photographer Chandima Kahandawala, who on 11 February 2001 obtained numerous excellent photographs of an individual bird from many different angles. From these photographs, we confirmed that the owl is strikingly distinct in numerous characters from any other Sri Lankan species. Among other scops-owls, it appears most similar overall to *O. rufescens*, and yet shows numerous differences from even that species. Although no ear-tufts are visible in life, we initially believed (but could not confirm) that it belonged to the genus *Otus* based on its overall appearance and vocalisations, an opinion that has been borne out by further study (detailed below). When we were certain that it was a new species, a press release resulted in numerous articles in various media, and preliminary papers on the discovery of the owl were published (e.g. Warakagoda 2001a–e).

A study was launched by DHW and colleagues, under the auspices of the Department of Wildlife Conservation (DWLC) and Forest Department (FD) of Sri Lanka, to investigate the status, distribution, biology, ecology and taxonomy of the new owl. Explorations were carried out in rainforests (all such forests in Sri Lanka



a



b



c



d

Plate. Serendib Scops-owl *Otus thilohoffmanni*, new species (a and c) and Reddish Scops-owl *Otus rufescens* (b and d). Original painting by Dr P. Samaraweera.

being in its wet zone), lower montane forests and montane forests of the wet zone, and moist semi-evergreen and riverine forests of the intermediate (climatic) zone. On 4 August 2001 a male of the species was mist-netted (Fig. 1; see also Appendix) in Morapitiya-Runakanda P.R. for further studies of the taxon's external morphology. It was photographed, ringed, and released at the exact site of capture. Biometrics, descriptions and photographs of this individual were sent to PCR for further comparative studies. Incidentally, this individual was relocated 2.5 years later in apparent good health at the same locality.

Searches at museums with significant holdings of Sri Lankan birds revealed no overlooked specimens of this taxon that could be used as the basis for a scientific description. Given the distinctiveness of the owl, we believe it is unlikely that any such misidentified specimens exist. Therefore it was essential to collect a specimen of the new owl, but we were reluctant to do so at this stage because its population and conservation status were unknown. By May 2002 the results of our project showed that the new owl occurred in at least five different forests, and at least 24 individuals had been detected. Permission to collect a specimen to be designated the type was then applied for and granted by the DWLC and FD. DHW and colleagues obtained the specimen in November 2002 at Morapitiya-Runakanda P.R., a site they had found to hold one of the larger populations known by then. For this distinctive new species, we propose the name:

Serendib Scops-owl *Otus thilohoffmanni*, sp. nov.

Holotype National Museum, Colombo, no. 381, female, from Morapitiya-Runakanda Proposed Reserve (06°29'N, 80°18'E, 100 m a.s.l.), Sri Lanka, collected 9 November 2002 by Deepal H. Warakagoda, Kithsiri Gunawardena, Nanda Senanayake, Udaya Sirivardana and Niran M. C. Caldera. The type specimen was prepared as a full skin and partial skeleton (the skull minus the bill was retained with the skeleton), and tissue samples were preserved from liver, breast muscle and blood.

Diagnosis A small, short-tailed, rather uniformly rufescent scops-owl with eye colour ranging from yellow to orange (according to sex), lacking apparent ear-tufts, with a weakly defined facial disk, and with weak tarsi feathered for less than half their length (Plate, Fig. 1).

The upperparts are almost uniformly rufous marked overall with small, short blackish chevrons, spots and/or bars, but lacking white spots, and the scapular spots are obsolete; the wings and tail have rufous outer webs and mostly blackish inner webs, with broad, evenly spaced, rather weak rufous and blackish bands; the underparts are somewhat paler rufous than the upperparts and fairly uniformly sprinkled with blackish triangular spots; the central belly and undertail-coverts are paler and unspotted. The head is rounded and fairly uniformly rufescent, with white supercilia (conspicuous to weak in live birds according to facial expression); no ear-

tufts; bar-like chevrons on the central crown; a uniform, slightly darker rufous facial disk, devoid of markings and lacking a dark facial disk border; feathers around base of bill concolorous with those of facial disk. The large eyes have yellow to orange irides, with a striking black outer ring. The orange of the iris is concentrated especially in the sides and lower part of the iris, shading to yellow in the rest of the iris. In males the orange is pronounced, the area apparently growing larger with age and eventually covering the whole iris; in the females the iris is entirely or largely yellow with much less orange than in the male. The inner eyelids are black, whilst the bare orbital ring is narrow and pinkish. The cere is fleshy pink and not strongly demarcated from the bill, which is ivory-white in live birds and notably long, narrow and relatively straight for its genus. In live birds, the tarsi and toes are pinkish white, the claws ivory white, all becoming pinker post-mortem. The tarsi, toes and claws are strikingly thin and delicate, the toes appear long, and the claws are relatively straight; less than the proximal half of the tarsi is feathered. In normal postures in life, the wingtips fall slightly beyond the tail tip.

In overall coloration, *Otus thilohoffmanni* resembles several other species, in particular *O. rufescens*, Sokoke Scops-owl *O. ireneae* (rufous morph), Sandy Scops-owl *O. icterorhynchus*, Pemba Scops-owl *O. pembaensis* (rufous morph), Mountain Scops-owl *O. spilocephalus* (rufous morph of races from the central Himalayas through south-east Asia), Flores Scops-owl *O. alfredi*, and White-fronted Scops-owl *O. sagittatus*. Among Sri Lankan species, the only species with which *thilohoffmanni* could be confused is the Sri Lankan race of Oriental Scops-owl *Otus sunia leggei* in the rufous morph.

Otus thilohoffmanni differs from *ireneae* (rufous morph) in its pale (vs. dark) bill and claws; lack of ear-tufts (vs. short but distinct ear-tufts); more profuse rictal and other facial bristles, and less defined facial disk; darker, less bright rufous overall coloration; lack of black streaks on the forehead and upperparts; much weaker, more rufous wing banding; blackish inner portions of remiges and rectrices; lack of weak fine dark barring below; and mostly unfeathered tarsi (vs. feathered to toes). It differs from *icterorhynchus* in lacking ear-tufts (vs. having long, prominent, upstanding ear-tufts), having almost uniform forehead and crown (vs. 'frosted' white forehead and crown-sides), having longer facial bristles and less distinct facial disk rim, lacking white diamond-shaped spots above, lacking prominent white scapulars with black tips, lacking prominent white banding on wings, having more and larger black spots on underparts, and lacking white spotting on breast and white barring on lower underparts.

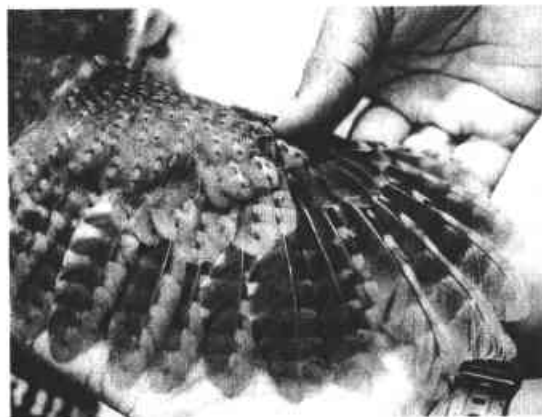
Differences from *pembaensis* (rufous morph) include the much smaller size of *thilohoffmanni*; lack of ear-tufts; lack of black border around facial rim; darker, more rufous, more uniform facial disk; near lack of pale scapular spots; lack of fine dark shaft-streaks and pale barring below; more distinctly barred uppertail surface, much smaller, pale bill; much less extensively feathered, weaker tarsi; and paler, weaker toes.



a



b



c



d



e

Fig. 1a–e. Photographs of male of *Otus thilohoffmanni* captured on 4 August 2001 in Morapitiya F.R. (a) face, (b) upperparts, (c) right upperwing, (d) right underwing, (e) underparts, tarsus and toes (Chandima Kahandawala).