

specifically aligned with *magicus* or any other taxon, but requires recognition as a distinct species.

NICOBAR SCOPS OWL *Otus alius*, sp. nov.

Holotype. Bombay Natural History Society No. 22578, adult male (see Plate 3, upper left) from Campbell Bay, Great Nicobar Island, 7°00'N, 93°50'E, India; collected 3 March 1966 by Humayun Abdulali.

Diagnosis. A medium-sized *Otus* with predominantly warm brown, mostly unstreaked and finely barred plumage; ear tufts evenly and finely barred, rounded, and of medium length; facial disk indistinctly paler than rest of plumage, lightly barred at its lower edge; dark border to facial disk not prominent; bill medium-sized and mostly brownish; white scapular spots rounded, nearly restricted to outer web, with broad black tips; most distal portion and much of rear edge of tarsus bare; toes and claws relatively large.

Otus alius is closest in morphology to some members of the *manadensis* superspecies of Marshall (1978), from all of which it differs in possessing scapular spots that are bordered above and below by broad black bands, giving a rounded shape to the white centres. It differs additionally from adults of all Asian taxa in possessing a combination of finely barred overall plumage, entirely lacking streaks above, and having a marked reduction of ventral streaking, over which the heavy tricoloured barring predominates; and in having relatively large claws. Although sample size is insufficient for statistical testing, its wing formula differs from all taxa Marshall (1978) placed in *magicus* (but not *O. enganensis* or *O. umbra*) in that P3 (from outermost) is longer, while the inner secondaries are shorter (Table 1), and like the latter two only, the bill is mostly brownish. Additional differences are given in the 'Remarks' section.

Distribution. Both specimens were collected near sea level at Campbell Bay, Great Nicobar Island. There are no other published reports of Scops-owls from Great Nicobar.

Description of the holotype. Capitalized colours are from Smithe (1975); colour comparisons were made under weak fluorescent light, with diffused sunlight from an open window.

Sides of forehead above supercilium finely barred Cinnamon (39), whitish, and Burnt Umber (22); base of central crown feathers Clay Color (26), central streaks Fuscous (21); base of poorly-marked whitish supercilium feathers paler than Cinnamon, with narrow, widely-spaced Burnt Umber bars; base of ear tufts Cinnamon, narrowly barred Dark Grayish Brown (20); ear tufts rather short, prominent, with broad feather tips; bases of facial feathers at sides of bill more rufescent than Cream Color (54); bases of rictal bristles Buff-Yellow (53), at least tips blackish; short feathers below and in front of eye vaguely dark-banded with pale Cream Color bases; facial disk behind eye Cinnamon with whitish shafts and dusky mottling, rear and lower portion whitish with fine Dark Grayish Brown barring and mottling, narrow, indistinct disk rim Dark Grayish Brown on lower and rear edges; only slight extensions to rear auriculars despite fresh plumage; chin feathers

coloured as feathers at bill sides; throat pale buff with fine dark barring near tips of longer chin feathers. Rest of crown, nape, and hindneck like central crown, but with streaking becoming obsolete and narrow dark bars prominent on rear crown.

Mantle through lower back close to Raw Umber (23) in aspect, dark bars ca. 2 mm wide, slightly paler than Fuscous, light bars ca. 1.7 mm wide, mostly Cinnamon but paler near bases. Scapular spots rounded, mainly white encircled by Dark Grayish Brown (blackish) bands, and surrounding base colour Amber (36), with fine Burnt Umber markings, scapulars Cinnamon near bases. Tertiaries have broad (ca. 4.1 mm) indistinct bands between Fuscous and Olive-Brown (28) and narrow (ca. 1.3 mm) Smoke Gray (45) bands; largest feathers of alula with bars ca. 2.5 mm, Cinnamon and paler, medium bars ca. 4.0 mm and stippled darker, narrow dark bars Fuscous; outer primary (P1) has lightest bands slightly paler than Cinnamon, medium bands slightly paler than Olive-Brown, and darkest bands Fuscous; light bands paler on inner primaries. Uppertail coverts closest to Raw Umber (23), with fine dark bars of Burnt Umber giving vermiculated aspect, uppertail surface with palest bands of Cinnamon, medium bands finely speckled with dark, giving Olive-Brown aspect, darkest bars Fuscous; banding pattern fairly strong on uppersides of rectrices.

Upper breast Cinnamon with ca. 1.5 mm distinct Fuscous bars distally, ca. 1.2 mm Fuscous shaft streaks; lower breast Cinnamon with narrow bars between Olive-Brown and Fuscous, on breast sides shaft streaks are Fuscous, a few as wide as 2.2 mm, some bars slightly paler than Cinnamon; centre of belly with more white, white bands ca. 4 mm broad, Cinnamon bands ca. 3 mm, blackish bars ca. 0.7 mm, narrow white shaft streaks; tips of bars on lower flanks deteriorate into vermiculations, otherwise they are broad Cinnamon bands with narrow white and fine blackish bars. Undertail coverts rufescent whitish for most of their length but with tips barred as is belly, although rufous bars are closer together. Tarsal feathers mostly Cinnamon with fine Fuscous bars; bare patch on upper hind tarsus, with a narrow bare strip along the upper third, feathering meeting ventrally on medial section; dorsally, feathering ends 8.6 mm short of joint formed by phalanges 1-2 of third digit.

Dried cere dull yellowish-brown; maxilla tip and distal half cutting edge blackish-brown, most of sides of maxilla dull yellowish-brown, base and culmen ridge paler and yellower; mandible dull yellow with cutting edge and base dark brown. Dried toes dark yellowish-brown, claws mostly dusky horn, black distally, grading near bases to paler yellowish-brown. Narrow ring of bare orbital skin blackish. No data on soft part colours of fresh specimens or living birds.

Description of the paratype. The female paratype is similar overall to the holotype, but is slightly larger, more boldly marked, with more white on lower underparts. Dark bands on forehead broader, facial disk slightly darker and more heavily marked behind eye; longest throat feathers with coarser and more widely spaced blackish barrings; mantle more coarsely barred, with larger, whiter spots basally; alula more contrasting; upper breast more strongly marked and lower breast more

TABLE 1

Summary statistics for measurements of *Otus* taxa presented as mean \pm standard deviation, *n*, *l*=length, *w*=width, *d*=depth. Shortfalls of primary tips from wingpoint: P1 S (outermost), etc.; tarsal feathering measured to joint between first and second phalanges of the third digit

Variable	<i>insularis</i>	<i>altilis</i>	<i>umbra</i>	<i>enganensis</i>	<i>albiventris</i>	<i>tempestatis</i>
Culmen (skull)	26.6 \pm 1.6, 6	21.9 \pm 0.3, 2	20.9 \pm 0.6, 2	24.2 \pm 1.6, 4	21.5 \pm 1.1, 24	21.0 \pm 1.3, 12
Culmen (cere)	15.5 \pm 0.5, 3	13.7 \pm 1.3, 2	13.7 \pm 1.3, 2	15.1 \pm 1.1, 4	13.2 \pm 0.9, 24	13.2 \pm 0.6, 12
Maxilla d	8.6 \pm 0.4, 3	7.4 \pm 0.3, 2	6.9 \pm 0.5, 2	8.4 \pm 0.4, 4	7.1 \pm 0.4, 24	6.8 \pm 0.5, 12
Maxilla w	8.9 \pm 1.3, 3	6.7 \pm 0.7, 2	6.8 \pm 0.1, 2	8.0 \pm 0.3, 4	6.6 \pm 0.7, 25	6.2 \pm 0.7, 12
Tuft 1	25.7 \pm 2.1, 5	20.4	17.6 \pm 2.4, 2	18.6 \pm 0.6, 4	30.4 \pm 3.1, 25	21.4 \pm 2.9, 12
Wing 1	166.0 \pm 4.0, 6	163.5 \pm 3.5, 2	144.0 \pm 1.4, 2	162.7 \pm 2.5, 3	156.4 \pm 6.0, 21	151.9 \pm 4.4, 12
P1 S	37.2 \pm 3.7, 6	36.6 \pm 1.8, 2	28.9 \pm 4.3, 2	42.9 \pm 4.4, 2	36.1 \pm 4.7, 20	38.7 \pm 3.3, 12
P2 S	13.0 \pm 1.5, 6	12.5 \pm 1.5, 2	9.5 \pm 0.7, 2	13.0 \pm 1.1, 3	11.8 \pm 2.0, 21	13.6 \pm 1.9, 12
P3 S	3.3 \pm 1.6, 6	1.6 \pm 0.8, 2	1.5 \pm 0.0, 2	2.6 \pm 0.8, 3	2.7 \pm 1.2, 21	3.9 \pm 0.8, 12
P4 S	0.0 \pm 0.0, 5	0.0 \pm 0.0, 2	0.0 \pm 0.0, 2	0.0 \pm 0.0, 3	0.1 \pm 0.4, 22	0.1 \pm 0.3, 12
P5 S	1.4 \pm 1.2, 5	2.7 \pm 0.3, 2	3.6 \pm 1.7, 2	3.1 \pm 0.7, 3	1.0 \pm 1.4, 20	0.5 \pm 0.7, 11
P6 S	8.2 \pm 2.8, 6	9.8 \pm 1.4, 2	12.2 \pm 0.3, 2	12.5 \pm 1.8, 3	6.9 \pm 1.6, 19	6.9 \pm 1.8, 12
P7 S	15.1 \pm 3.6, 6	19.4 \pm 1.2, 2	19.4 \pm 0.6, 2	20.5 \pm 2.0, 3	15.0 \pm 2.4, 19	14.1 \pm 1.8, 12
P8 S	22.3 \pm 2.2, 6	28.0	24.6 \pm 0.8, 2	26.8 \pm 3.7, 3	22.0 \pm 2.6, 18	22.4 \pm 2.0, 12
P9 S	26.6 \pm 2.7, 6	33.6	29.9 \pm 1.3, 2	33.1 \pm 4.6, 3	29.1 \pm 2.9, 17	30.1 \pm 2.4, 12
P10 S	31.5 \pm 2.7, 6	39.3	38.8 \pm 6.8, 2	40.5 \pm 3.2, 3	35.8 \pm 3.2, 15	35.9 \pm 2.1, 12
Tail 1	74.6 \pm 5.3, 5	75.8 \pm 2.0, 2	60.2 \pm 0.6, 2	77.3 \pm 3.6, 3	73.0 \pm 3.6, 24	74.2 \pm 3.0, 12
Central rectrix w	15.6 \pm 0.8, 4	19.2 \pm 0.2, 2	13.9 \pm 1.8, 2	18.4 \pm 1.3, 4	17.5 \pm 2.0, 22	14.5 \pm 1.8, 12
Tarsus 1	34.0 \pm 1.3, 6	29.1 \pm 0.7, 2	25.4 \pm 0.6, 2	27.7 \pm 2.6, 4	27.9 \pm 1.7, 24	27.4 \pm 1.7, 12
Midclaw 1	12.3 \pm 0.5, 6	12.2 \pm 0.6, 2	10.1 \pm 0.4, 2	11.7 \pm 0.7, 4	10.3 \pm 0.7, 25	9.0 \pm 0.7, 11
Midclaw d	2.8 \pm 0.2, 6	2.5 \pm 0.0, 2	1.7	2.3 \pm 0.1, 4	2.4 \pm 0.3, 22	2.3 \pm 0.3, 11
Midclaw w	3.1 \pm 0.2, 6	2.6 \pm 0.3, 2	1.8	2.7 \pm 0.1, 4	2.4 \pm 0.2, 22	2.2 \pm 0.2, 11
Tarsal feathering	26.5 \pm 1.9, 6	8.6 \pm 0.7, 2	7.2 \pm 0.6, 2	7.1 \pm 3.3, 4	5.3 \pm 1.6, 25	4.7 \pm 1.3, 12

TABLE 1
Continued

Variable	<i>manadensis</i>	<i>staoensis</i>	<i>mendemi</i>	<i>kalidupae</i>	<i>sulaensis</i>	<i>Moluccan magicus</i>	<i>beccarii</i>
Culmen (skull)	20.0 ± 0.9, 45	19.9	21.2 ± 0.4, 3	23.9 ± 0.6, 2	24.6 ± 1.3, 2	24.4 ± 2.0, 100	26.7
Culmen (cere)	12.8 ± 0.7, 44	14.9	13.6 ± 0.2, 3	15.3 ± 1.9, 2	15.9 ± 0.7, 2	15.5 ± 1.6, 100	16.2
Maxilla d	6.7 ± 0.5, 47	6.6	7.0 ± 0.7, 3	8.7 ± 0.1, 2	8.3 ± 0.3, 2	8.3 ± 0.8, 103	8.4 ± 0.4, 2
Maxilla w	6.1 ± 0.6, 45	5.7	6.3 ± 0.7, 3	8.3 ± 0.1, 2	6.9 ± 0.1, 2	7.4 ± 0.8, 103	7.8 ± 0.6, 2
Tuft 1	24.5 ± 3.5, 45	18.2	23.3 ± 1.1, 3	23.4 ± 5.4, 2	23.8 ± 1.9, 2	26.6 ± 3.6, 102	25.5 ± 0.1, 2
Wing 1	151.0 ± 4.6, 47	127	146.5 ± 4.1, 3	168.0 ± 0.0, 2	167.0 ± 8.5, 2	171.6 ± 10.8, 98	172.0 ± 2.8, 2
P1 S	36.2 ± 3.9, 40	28.2	37.4 ± 2.5, 3	37.9 ± 2.2, 2	37.4 ± 2.2, 2	38.7 ± 4.2, 68	39.2
P2 S	12.3 ± 3.0, 43	14.3	14.7 ± 0.6, 3	13.2 ± 1.5, 2	14.5 ± 1.3, 2	14.2 ± 2.8, 71	12.7 ± 2.2, 2
P3 S	2.8 ± 1.4, 43	6.0	4.0 ± 0.4, 3	0.8 ± 1.1, 2	3.5 ± 0.2, 2	3.9 ± 1.4, 69	2.9 ± 0.6, 2
P4 S	0.1 ± 0.3, 44	0.0	0.6 ± 1.0, 3	0.3 ± 0.5, 2	0.0 ± 0.0, 2	0.1 ± 0.4, 71	0.0 ± 0.0, 2
P5 S	2.0 ± 1.7, 38	—	0.2 ± 0.3, 3	1.3 ± 0.3, 2	1.3 ± 0.1, 2	1.1 ± 1.4, 66	1.3 ± 1.9, 2
P6 S	8.2 ± 2.6, 36	8.5	5.0 ± 0.1, 3	6.5 ± 1.2, 2	6.3 ± 1.7, 2	6.8 ± 2.1, 61	5.4 ± 0.8, 2
P7 S	14.8 ± 2.8, 39	15.1	11.9 ± 1.4, 3	14.1 ± 2.0, 2	14.7	14.3 ± 2.6, 58	12.2 ± 0.1, 2
P8 S	23.1 ± 2.8, 35	20.3	18.0 ± 0.7, 3	21.8 ± 2.7, 2	21.4	22.2 ± 2.7, 58	20.6 ± 0.8, 2
P9 S	29.3 ± 2.9, 33	27.3	24.3 ± 1.6, 3	28.0 ± 1.8, 2	29.0	29.6 ± 3.2, 55	—
P10 S	35.9 ± 2.9, 33	36.9	29.6 ± 0.6, 3	33.2 ± 3.8, 2	34.2	36.8 ± 3.5, 50	—
Tail 1	70.7 ± 3.9, 41	57.1	65.0 ± 1.3, 3	82.0 ± 0.4, 2	75.8 ± 2.0, 2	80.7 ± 6.4, 95	81.8 ± 2.6, 2
Central rectrix w	15.0 ± 2.3, 39	13.0	14.4 ± 0.7, 3	18.5 ± 1.4, 2	19.2 ± 0.2, 2	18.0 ± 1.8, 79	18.4 ± 0.8, 2
Tarsus 1	26.8 ± 1.7, 45	26.8	26.7 ± 1.2, 3	33.2 ± 0.0, 2	29.1 ± 0.7, 2	31.6 ± 2.8, 97	33.8 ± 0.1, 2
Midclaw 1	10.4 ± 0.5, 43	10.1	10.9 ± 1.1, 3	11.5 ± 0.8, 2	12.2 ± 0.6, 2	11.9 ± 1.2, 97	12.0 ± 0.0, 2
Midclaw d	2.1 ± 0.2, 46	1.9	2.2 ± 0.1, 3	2.5 ± 0.1, 2	2.5 ± 0.0, 2	2.6 ± 0.2, 90	2.5 ± 0.2, 2
Midclaw w	2.3 ± 0.2, 46	2.1	2.3 ± 0.1, 3	2.6 ± 0.1, 2	2.6 ± 0.3, 2	2.7 ± 0.3, 96	2.7 ± 0.1, 2
Tarsal feathering	5.4 ± 2.0, 42	4.5	14.9 ± 1.4, 3	5.1 ± 1.8, 2	17.2 ± 1.8, 2	8.8 ± 3.7, 94	8.8 ± 4.6, 2

variegated; flanks have white bands broadest and blackish bands heavier; upper tail more coarsely speckled, less banded; primaries with pale bands lighter; tarsal feathering paler and more speckled. Both types resemble each other more closely than either does any specimen examined of other taxa.

Measurements of the holotype (mm). Wing, flattened and straightened (161.0); central rectrix (74.4); tarsus (28.6); culmen from skull (21.7); culmen, from anterior edge of cere (12.8). For additional measurements and those of related species, see Table 1; sample sizes are insufficient for statistical testing.

Specimens. Great Nicobar: BNHS (holotype); BNHS 24411 (♀; paratype) from type locality (formerly Zoological Survey of India [ZSI] No. 33171, collected 2 April 1977 by S. S. Saha for K. K. Tiwari).

Etymology. The name *alius*, which is Latin for 'other' (this being another Scops-owl from the Nicobar Islands), encapsulates the family name of Mr Humayun Abdulali, who first collected this species, and contributed a great deal to Indian ornithology, and in particular that of the Andaman and Nicobar islands. The common name 'Nicobar Scops-Owl' is appropriate and already in use solely for this taxon (King 1997: 26).

Remarks

Additional differences

From *O. beccarii* ($n=2$ specimens examined and measured, and photographs of type; Biak I.), *alius* differs greatly by its less contrasting, paler, browner, less fluffy plumage; mantle more definitely barred; more slender bill; streaked forecrown; more definite eartufts; less distinct facial disk; somewhat streaked below; primary coverts and alula not dark and unmarked; and shorter, more prominently banded tail. The highly isolated *Otus beccarii* is so distinct in plumage that even Stresemann (1925) and Mayr & Meyer de Schauensee (1939) gave it specific status, while Marshall (1978) lumped it in *magicus* without examining specimens until his manuscript was in proof.

From *Otus insularis* (Seychelles, $n=6$; colour plate of type, Tristram 1880), *alius* differs markedly in its much smaller size, especially skull and bill (Table 1); less prominent dark eye patch; eartufts not mainly buffy and blotched; less rufflike head feathers; less prominent facial disk edge; lack of buff-spotted hindcollar; scapular spots not narrowly black-edged and lined; relatively longer wings; much shorter, slighter, more extensively feathered tarsi; and relatively longer tail with broader central rectrices (Table 1). *Otus insularis* diverges most from *alius* of any of the taxa considered here in its very heavy streaking below and heavy blotching above. All adult specimens and photos of three live birds are similar, but differ from other 'magicus' taxa, and *insularis* is separated by so great a distance (Fig. 1) that others regard it as distinct (Watson 1980, Collar & Stuart 1985). Originally described in a monotypic genus (Tristram 1880), it has even been considered a 'bakkamoena offshoot' (Peters 1940: 97).

Otus alius differs from *O. [magicus] sulaensis* (see Plate 3, lower right; Sula Islands, $n=2$) in its much more extensively feathered tarsus; less

prominent dark eye patch; less heavily barred auriculars and spotted lower throat; shorter bill (Table 1); more uniformly barred brown dorsum lacking spots and streaks; more evenly spaced bands on outer webs, and light banding on inner webs of outer primaries; scapular spots lacking large black central patches; more prominently banded tertials and upper tail, and smaller size. Judging from its highly distinctive vocalizations and morphology, *sulaensis* is probably a separate species (Hartert 1898, Finsch 1898, Coates & Bishop 1997, King 1997) but only two adult specimens exist.

For three other taxa from islands off Sulawesi (for which the combined world total of adult specimens is only six!), vocalisations are unknown and the taxonomy unsettled. From *O. [m.] kalidupae* (see Plate 3, lower left, Tukangbesi; $n=2$), *alius* differs in its darker brown colouration; less extensive tarsal feathering; less vermiculated venter; less finely patterned eartufts; more prominently banded upper tail; very different scapular spots; less strongly banded undersides of primaries, but stronger banding of uppersides; and smaller overall size (Table 1). From *O. [m.] mendeni* (Peleng I.; $n=3$; Eck 1976), *alius* differs in its less vermiculated and unspeckled dorsum (in grey morph); much longer tail and especially wing; less streaked and more barred venter; and much more extensive tarsal feathering (Table 1). From the unique specimen of *O. [m.] siaoensis* (Siau I. in Sangihe Is.; Schlegel 1873), *alius* differs in its much larger size, especially wings and tail; its lack of a conspicuous pale ochre collar; its much broader tail banding (Table 1); and its less richly coloured, more regularly barred venter.

Otus magicus sensu lato

Additionally to the characters listed above and below, *Otus alius* differs from most of the remaining races of *magicus* in having the tertials less broadly and prominently banded. It is about the size of the two small Lesser Sunda taxa (*albiventris* and *tempestatis*—grey morph of the latter is shown top right, Plate 3) and smaller than the remaining (Moluccan) taxa, samples of which were combined herein, but its feet and claws are relatively large for its size (Table 1). From *albiventris* (Lombok to Lombok; $n=25$), *alius* differs in its much shorter, more rounded, unstreaked eartufts; shorter, less profuse rectal bristles; and breast more uniform with rest of venter. *Contra* Sibley & Monroe 1993, *O. alfredi* (Flores; $n=3$) is not the red morph of *albiventris*, but belongs to the *O. spilocephalus* group (Hartert 1925, Stresemann 1925, Widodo *et al.* unpublished). From grey-morph *tempestatis* (see Plate, upper right, Wetar I.; $n=6$), *alius* has venter less mealy; less dark above the eye; and more coarsely barred eartufts; and from the red morph of *tempestatis* ($n=6$), it has narrower pale cinnamon (less orange) barring more prominently black-edged below.

From *O. m. magicus* (Amboina and Scram; $n=24$) *alius* differs greatly in having the dorsum much less heavily spotted pale, and the venter with greatly reduced streaks and much less speckled, lacking bold black markings; scapulars lack irregular black marks. From *Otus m. bouruensis* (Buru; $n=9$), *alius* is darker above, lacks whitish hindcollar, has more regular barring on primaries; less narrowly barred tail; paler eyepatch;