

Oriental Honey Buzzard *Pernis ptilorhyncus* on Christmas Island, Indian Ocean, Australia

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Summary

An Oriental Honey Buzzard *Pernis ptilorhyncus* was seen and photographed on 10 December 2001 on Christmas Island, Indian Ocean, Australia. This sighting has been unanimously accepted by the Birds Australia Rarities Committee (BARC) (Case number 335) and constitutes the first record for an Australian territory. The diagnosis is discussed.

The sighting

At 0805 h on 10 December 2001, whilst near the airport on Christmas Island (CI), a large raptor was sighted. Initially, the bird was almost directly overhead at a height of approximately 80 m in excellent viewing conditions. At one stage it entered a thermal and rose rapidly for a short period. However, as both Nankeen Kestrels *Falco cenchroides* and White-tailed Tropicbirds *Phaethon lepturus* were continually harassing it, it rolled on several occasions, eventually leaving the thermal and gliding away. The bird was in view for a total of approximately 2 minutes.

Description

The following description is based on notes taken on the day of the sighting and information gleaned from transparencies of the bird flying overhead (Plate 6, front cover). Observations were through 10 × 50 binoculars. The 'CI bird' was a moderately large raptor, estimated at the time of the sighting to be slightly larger than a Little Eagle *Hieraaetus morphnoides*. One transparency included both the CI bird and a swooping male Nankeen Kestrel. Taking average measurements for male Nankeen Kestrels (Marchant & Higgins 1993), I estimated that the CI bird had a wing-length (approximate flattened chord) of 47–48 cm and a wingspan of 1.4–1.5 m. In flight-silhouette, it displayed long broad wings curving slightly forward to the carpal joints then slightly back to the wing-tips. The outer six primaries formed clear but not pronounced fingers. The wing narrowed slightly but abruptly along the trailing-edge of the remaining primaries before broadening again and bulging across the length of the secondaries, making the inner-wing noticeably broader than the outer-wing. The tail was long, but not as long as a harrier's, and rounded at the end. The bird was small-billed, small-headed and long-necked, giving it a somewhat awkward appearance. No crest was visible. Feet and legs were not noted in the field, but transparencies reveal legs that are neither heavy nor fine. The tail and inner secondaries were in moult, and the rectrices and middle primaries were worn. Flight was rather laboured, with slow purposeful wing-beats typical of a large raptor. When soaring on a thermal the wings were held in a very slight dihedral position. When gliding on a direct path the out-stretched wings were held flat except for the tips of the primaries, which were upswept. The bird was not heard to call.

The dorsum was mostly fawn-brown with a noticeably paler (fawn) rump patch. This patch was fairly narrow and irregular along its edge, suggesting that it may have been the result of wear. Ventrally the head and neck were russet-brown with the exception of the area anterior to and above the eyes, which appeared pale. The russet-brown of the neck continued onto the upper breast forming a gorget, which was most prominent when the bird was flying away from the observer. The remainder of the body was an unmarked paler russet-brown, as were the wing-coverts. The tail showed three evenly spaced narrow dark bands and a broader terminal band on a pale-grey base. The pattern across the flight-feathers was striking. Extending from near the leading-edge of the 'hand', across the pale-grey webbing of all flight-feathers to the body, were three continuous narrow dark bars. The innermost bar appeared to end at the base of the wing. However, this is because it was concealed by the coverts (Plate 6). All six fingers were black to a point below each notch, as was the leading-edge of the hand. A moderately broad band along the trailing-edge of the secondaries was also black. In contrast, the trailing-edge of the inner four primaries was pale, and here a fourth shorter narrow bar was visible. Images reveal a dark-grey bill, a pale-yellow cere, and unfeathered rich-yellow tarsi and feet.

Identification

Several medium to large South-East Asian raptors display a variable number of tail-bands, barring in the wings and brown body plumage. Additionally, because of widespread polymorphism in many (e.g. Ferguson-Lees & Christie 2001), and apparent mimicry in several large Asian raptors (Gamauf *et al.* 1998, van Balen *et al.* 1999), structure and jizz are of particular relevance. The small head with a relatively fine bill and the unfeathered tarsi eliminate a number of contenders such as hawk-eagles (*Spizaetus* spp.) and some small eagles (*Hieraetus* spp., *Aquila* spp.), which show fully feathered tarsi and relatively large heads. Similarly, snake-eagles *Circaetus* spp. have relatively large heads and short thickset necks (del Hoyo *et al.* 1994, Ferguson-Lees & Christie 2001). In contrast, many of the larger Old-World buzzards are small-headed. Both *Pernis* spp. and *Henicopernis* spp. show relatively long necks and long tails. However, *Henicopernis* spp. can be discounted, as both species are easily recognisable in flight because of comparatively short wings and remarkably long tails (Coates 1985, Beehler *et al.* 1986, del Hoyo *et al.* 1994, Ferguson-Lees & Christie 2001). The CI bird was therefore one of the honey buzzards (*Pernis* spp.).

Barred Honey Buzzard *P. celebensis* can be safely eliminated, as it has markedly shorter wings (Ferguson-Lees & Christie 2001). The CI bird was identified as an Oriental Honey Buzzard *P. ptilorhynchus*, rather than the similar Western Honey Buzzard *P. apivorus*, on the following characteristics: the presence of six clearly elongated primaries (not five) (Plate 6); the shorter and broader tail (Plate 6, cf. Forsman 1994); the broad wings that appear noticeably long towards the tips because of the elongated primaries; the absence of any darkening on the underwings in the region of the carpal joint (Western Honey Buzzards typically show a dark carpal patch, Forsman 1994); and the presence of a gorget (Ferguson-Lees & Christie 2001).

Age and sex

The CI bird was identified as an immature, first- or second-year bird of indeterminate sex, on the basis of patterning on the wing and tail, colouration of

the cere and forehead, feather wear and moult stage. Tails in first-year birds usually show four to five fine to moderate dark bands more-or-less equally spaced. However, the number of bands is variable and the dark subterminal band can be as thin as the other bands or somewhat broader (A. Gamauf pers. comm.). Tails in adult females show a broad dark subterminal band, a second narrower band at the tip of the undertail-coverts, and a third band partly concealed by the tail-coverts. Tails in adult males are similar to those of adult females; however, the pale band between the dark (sub)terminal band and the next band is very broad (Ferguson-Lees & Christie 2001, A. Gamauf pers. comm.; see Forsman 1994 for photographs). The three narrow evenly spaced tail-bands and a slightly broader terminal band on the CI bird fall within the range of variability observed in immature birds, and are inconsistent with typical adult plumage. Immature birds have prominent dark wing-tips, which reach down to the base of each projecting finger (at the primary notch) or beyond. The subterminal bar of the secondaries is neither very broad nor well defined, and all other wing-bars are thin and evenly spaced (A. Gamauf pers. comm.). In adults the tips of the notched primaries are also dark washed, but never to the same extent as in immature birds. In adult females there is an additional distal bar across the fingers (Forsman 1994). Females also display three well-defined dark bars on the secondaries, whereas males display two well-defined dark bars and a third incomplete bar (Ferguson-Lees & Christie 2001, A. Gamauf pers. comm.). The prominent dark wing-tips, and three well-defined *but narrow* bars across the secondaries (cf. photographs in Forsman 1994) of the CI bird are therefore also consistent with immature plumages. Finally, the pale forehead and yellow cere also suggest a young bird. Immature individuals, at least of the subspecies *P.p. orientalis*, *P.p. torquatus* and *P.p. ptilorhyncus*, display pale or even white foreheads (van Balen *et al.* 1999), whereas adult males are grey-headed and adult females usually show grey only around the eyes (Forsman 1994). Similarly, first-year birds display a bright-yellow cere, which becomes duller in second-year birds, whereas the cere of adults is greyish brown (A. Gamauf pers. comm.). As the CI bird was most likely hatched in the boreal summer (see below), in December worn plumage and evidence of secondary moult but not primary moult are also indicative of an immature. Given that the CI bird was in either its first or second year, on current knowledge the sex remains indeterminate.

Identification of subspecies

There is a considerable case for treating the migratory form (*P.p. orientalis*) of the Oriental Honey Buzzard as specifically distinct from the sedentary forms and then also for raising the geographically isolated *torquatus* to species level (Brown & Amadon 1968, del Hoyo *et al.* 1994, Ferguson-Lees & Christie 2001). Identification of the CI bird to subspecies may therefore be important for future stability of the Australian list. The CI bird was most likely *P.p. orientalis* on the basis of phenotype, long-winged appearance and large size. Colour and pattern are extremely variable across *Pernis* taxa. Besides the Barred Honey Buzzard, only the inhabitants of small islands, *P.p. ptilorhyncus*, *P.p. philippensis* and *P.p. palawanensis*, are very homogeneous. The phenotype of the CI bird is most common in *P.p. orientalis*, common in *P.p. ruficollis*, and also known in *P.p. torquatus* (A. Gamauf pers. comm.); in all three taxa this phenotype is observed more often in immature than in adult birds (Ferguson-Lees & Christie 2001, A. Gamauf pers. comm.). *P.p. orientalis* is the only long-distance migrant of all *P. ptilorhyncus* taxa. As a morphological adaptation it displays the longest wings, being especially long in the outermost primaries (see photographs in Forsman 1994). In comparison, the sedentary forest-dependent subspecies have shorter and more rounded wings

that are structurally more similar to the Barred Honey Buzzard (Ferguson-Lees & Christie 2001).

Not only does *P.p. orientalis* appear structurally long-winged, it is also the largest subspecies. My estimate of a wing-length of 47–48 cm falls within the range, and at the upper limit, of *P.p. orientalis* (male 408–475 mm, female 413–495 mm) (Ferguson-Lees & Christie 2001). My estimate also falls outside wing-length ranges for all other subspecies: *P.p. ruficollis* (male 363–417 mm, female 388–445 mm); *P.p. torquatus* (male 398 mm, female 455 mm); *P.p. ptilorhynchus* (male 380–390 mm, female 405–418 mm); *P.p. philippensis* (sexes combined 415–436 mm); *P.p. palawanensis* (male 397 mm) (Ferguson-Lees & Christie 2001). Therefore, the CI bird was around 20% longer in wing-length than most other subspecies. Although my estimate is subject to some error, both from any foreshortening of one bird relative to the other in the transparency, and the actual size of the Nankeen Kestrel relative to the average measurements of that species, there can be little doubt that the CI bird was of a large, long-winged subspecies. Further, given phenotype and wing-shape it was almost certainly of the subspecies *P.p. orientalis*.

Discussion

Being a long-distance migrant, the occurrence of this subspecies on CI is not surprising. Although *P.p. orientalis* is considered by some to be only an occasional winter visitor to Java and Bali (MacKinnon & Phillipps 1993), this is clearly not the case. Nearly 2200 were counted on migration over Bali in a one-month period from mid October (Ferguson-Lees & Christie 2001) and 6% of all migrating raptors detected at four points in Java during 1998 and 1999 were of this species (269 of 4770) (Nijman 2001). Further, there are several documented cases of vagrancy for *P.p. orientalis* (e.g. Shirihai 1994, Eriksen 1997), demonstrating that it has the potential to occasionally wander outside its normal range. In contrast, the sedentary form of the Oriental Honey Buzzard that occurs in Java (*P.p. ptilorhynchus*) is considered a 'very rare raptor' (van Balen *et al.* 1999). Identification to species level (*P. ptilorhynchus*) has been unanimously accepted by BARC (Case number 335, T. Palliser *in litt.*), as the first confirmed sighting of the Oriental Honey Buzzard for an Australian territory.

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Footnote: The first Oriental Honey Buzzard for mainland Australia has since been reported [see *Western Australian Bird Notes* 105, 4–5 (2003)].