

With regard to the recent placement of Helmeted Hornbills in the same genus as the Great Hornbill, the fact that this rare behaviour has so far been reported from only these two species is significant. A notable difference between the two species is, however, that the Helmeted Hornbill, unlike other *Buceros*, has a solid casque (vs. hollow casque) that may be better suited to withstand aggressive casque-butting interactions. It would be interesting to discover if such aerial casque-butting behaviour occurs in the other species of *Buceros* hornbills as well.

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REFERENCES

- Ali, S. and Ripley, S. D. (1987) *Handbook of the birds of India and Pakistan*. Oxford: Oxford University Press.
- Cranbrook, Earl of, and Kemp, A. (1995) Aerial casque-butting by hornbills (Bucerotidae): a correction and an expansion. *Ibis* 137: 588-589.
- Kemp, A. (1995) *Bird families of the world 1. The hornbills: Bucerotiformes*. Oxford: Oxford University Press.
- Poonswad, P. and Kemp, A. C. eds. (1993) *Manual to the conservation of Asian hornbills*. Hornbill Project. Bangkok: Faculty of Science, Mahidol University.
- Raman, T. R. S. (1995) Shifting cultivation and conservation of tropical forest bird communities in Mizoram, northeast India. Unpubl. M.Sc. Dissertation, Dehradun: Wildlife Institute of India (Saurashtra University, Rajkot).

What is *Psittacus borneus* Linnaeus?

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Linnaeus's name *Psittacus borneus*, in the combination *Eos bornea*, has long been used for the Red Lory of the southern Moluccas, and in my view has been wrongly applied. The name is based on a plate by George Edwards (1751: Vol. 4, pl. 173), 'Long-tailed Scarlet Lory', in his *A natural history of birds*. The plate is reproduced on the front cover of this issue, and depicts a dark pink bird with a yellow bill and a grey patch round the eye. The bend of the wing is lime green, as are the primaries, the tips of the secondaries and the tips of the greater wing coverts. The bastard wing is of the same colour. The tail has the outer feather on each side green, and the tips of all the tail feathers green. There is a patch of cerulean blue on the inner secondaries as in other species of *Eos*. Edwards based his description on a stuffed bird that he bought in a toyshop in London. He also explained that it was purchased from him by Sir Hans Sloane, who put it in his gallery, where a gentleman who assured Sloane that he had seen the species alive in Borneo saw it. Edwards had examined it critically, and was satisfied that it was not an artifact. Linnaeus's name (1758: p. 97) was based entirely on this description and plate.

For many years *Psittacus borneus* puzzled authors, and Finsch (1868: Vol. 2, p. 911) listed it among his dubious species, but Salvadori (1874: p. 27, footnote) expressed the opinion that it probably represented a variety of the Red Lory, then called *Eos rubra* (Gmelin 1788: Vol. 1, p. 335). This is a scarlet bird marked with black and blue. The undertail coverts and longest scapulars are blue, as is a band from the thighs to the undertail coverts. The first four primaries are black, with the base of the inner web red, and the others are red with black tips. The tail is dull red above, and beneath is golden red, with the base of the inner web of each feather bright red. Salvadori's suggestion was seized upon by Rothschild (1898: p. 509), who proposed that the name *bornea* be used in place of *rubra* on the grounds that some specimens of *rubra* have greenish

tips to the wings and tail. This, however, does not account for the differences between the two descriptions, and Rosemary Low (1977: p. 180) lists no such variety of the Red Lory that could be identified with *bornea*. She confirmed (pers. comm.) that she was unaware of any such variety. Thus *Psittacus borneus* was wrongly applied to the lory currently known by that name.

The oldest name that can be unequivocally taken to apply to the Red Lory is *Psittacus chinensis* P. L. S. Müller (1776: p. 77). This was based on Daubenton (1770-1786: pl. 519), 'Lory de la Chine'. This name, however, has never been in use for the species, and should not be resurrected now. The next available name is *Psittacus ruber* Gmelin (1788), based on the 'Moluccan Lory' of Latham (1781: Vol. 1, pt. 1, pp. 216, 274), in turn based on Sonnerat (1776: p. 177, tab. 112), Daubenton (1770-1786) and the 'Lori rouge' of Buffon (1770-1783: Vol. 6, p. 134). I recommend, therefore, that the name *Eos rubra* (Gmelin) be readopted for the Red Lory.

This leaves the question as to what, if anything, Linnaeus's name refers. It is no stranger to confusion. *Lorius borneus* Lesson (1831: p. 192), *Eos bornea* Souance (1856: p. 226) and *Eos bornea* G. R. Gray (1859: p. 52) all refer to the bird now known as *Eos reticulata* S. Müller (1841: pp. 107-108). Edwards's description cannot be identified with any extant species, which means that it must either be an error or refer to a now extinct taxon or undocumented population. If the latter, the locality of Borneo is probably wrong, and was probably a place from whence birds in trade were obtained. The genus *Eos* extends over the Moluccas and Western Papuan Islands, but does not occur anywhere near Borneo. Possibly the bird occurred on one of the Moluccas; there are a number of islands within the range of the genus where no representative species actually occurs.

REFERENCES

- Buffon, G. L. L. Comte de (1770-1783) *Histoire naturelle des oiseaux*. Paris.
- Daubenton, E. L. (1770-1786) *Planches enluminées*. Paris.
- Edwards, G. (1751) *A natural history of birds*. London.
- Finsch, F. H. O. (1868) *Die Papageien*. Leiden.
- Gmelin, J. F. (1788) *Systema naturae*. Lipsiae.
- Gray, G. R. (1859) *List of the Psittacidae in the British Museum*. London.
- Latham, J. (1781) *General synopsis of birds*. London.
- Lesson, R. P. (1831) *Traité d'ornithologie*. Paris.
- Linnaeus, C. (1758) *Systema naturae*, ed. 10. Holmiae.
- Low, R. (1977) *Lories and lorikeets*. London: Paul Elek.
- Müller, P. L. S. (1776) *Systema naturae*, Supplement. Nürnberg.
- Müller, S. (1841) Schetsen uit de oostlijke strekken des Indischen Archipel. *Verh. Nat. Gesch. Ned. Overz. Bézitt. Land- en Volkenk.* 81-128.
- Rothschild, W. (1898) Notes on some parrots. *Novitates Zoologicae* 5: 509-511.
- Salvadori, T. (1874) Catalogo sistematico degli uccelli di Borneo. *Annali del Museo Civico di Genova* 5: 1-429.
- Sonnerat, P. (1776) *Voyage à la Nouvelle Guinée*. Paris.
- Souancé, C. de (1856) Catalogue des perroquets de la collection du prince Masséna d'Essling, duc de Rivoli, et observations sur quelques espèces nouvelles ou peu connues de Psittacides. *Rev. et Mag. Zool.* (2)8: 56-64, 152-158, 208-226.

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Syntopy of Eurasian Tree Sparrow *Passer montanus* and House Sparrow *P. domesticus* in Inner Mongolia, China

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Both Eurasian Tree and House Sparrows (*Passer montanus* and *P. domesticus*) were found apparently breeding in the small village of Bao Dong, eastern Inner Mongolia (approx. 48°28'N 117°15'E) on 26 June 1992. The species occurred in about equal numbers in the village. During a brief visit to the village in the afternoon one Eurasian Tree Sparrow was seen carrying nest material into a space under a roof tile on one of the houses. House Sparrows were not seen carrying nest material or entering potential nest sites, but were 'singing'. The village is comprised mostly of mud houses, only a few having tiled roofs. The village is situated in grass steppe, with livestock rearing the only agricultural activity, with just a few houses having tiny vegetable plots. Trees are virtually absent from the area. It is some 20 km from Bao Dong to the nearest village.

We also visited many other hamlets, villages and towns from Manzouli (49°35'N 117°25'E), along the western side of Hulun Nur (Dalai Hu), and south to Wulun Nur (48°20'N 117°30'E), in the period 23 to 27 June 1992. At all other sites we saw only Eurasian Tree Sparrows.

Observations by DSM in the semi-desert Ordos highlands area of central Inner Mongolia from 17 to 21 June 1996 in the area Dongsheng (39°50'N 110°0'E), Juntuliang (Taolimiao-Alashan Nur) (39°51'N 109°25'E), and Hongjian Nur (39°5'N 109°55'E) revealed only Eurasian Tree Sparrows. In the Ordos area visited, the higher land was almost devoid of vegetation, being heavily overgrazed and lacking in trees, but in the lower areas trees (e.g. *Salix*, *Ulmus* and *Populus*) were far more numerous than in eastern Inner Mongolia, many being planted to control sand movement.

Details of the distribution of the two species in the Far East are still poorly known. Summers-Smith (1988) notes

there has been an eastwards spread of House Sparrows across Siberia, although it is uncertain whether the species is continuing to expand its range in this area. Cheng (1987) records House Sparrows of the race *domesticus*, and Eurasian Tree Sparrows of the race *montanus* as resident in northeast Inner Mongolia, around Hailar (49°12'N 119°45'E) and further east, suggesting probable sympatry (overlap of geographical range) - this being the southernmost location for nominate *domesticus* in China. It is not possible, however, to determine from Cheng's records whether the species are syntopic (occurring in the same habitat) in this region. Cheng (1987) only records Eurasian Tree Sparrows of the race *saturatus* from the Ordos.

Usually, where the two species are sympatric, the larger House Sparrow occurs in urban areas, the smaller Eurasian Tree Sparrow being in the countryside (Summers-Smith 1988, 1995). The general lack of trees in the steppes of eastern Inner Mongolia would, however, restrict both species to nesting in man-made structures and thus force syntopy.

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REFERENCES

- Cheng, Tso-hsin (1987) *A synopsis of the avifauna of China*. Beijing: Science Press.
- Summers-Smith, D. J. (1988) *The sparrows. A study of the genus Passer*. Calton: Poyser.
- Summers-Smith, D. J. (1995) *The Tree Sparrow*. Privately published.

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