spodocephala by Ogilvie Grant (1895) and Whitehead (1899). McGregor (1910), Delacour & Mayr (1946), and duPont (1971) continued to list this specimen as the only record for the species from the Philippines.

At the American Museum of Natural History (AMNH), I located Whitehead's specimen (AMNH 715921) not with *E. spodocephala* as expected, but with *E. aureola*. After careful comparison with material of both *E. spodocephala* and *E. aureola* of appropriate plumage, I concluded that Whitehead's specimen was indeed *E. aureola* and a representative of the nominate race *E.a. aureola*.

Bruce (1980) was the first to list *E. aureola* from the Philippines, but he did not mention why he included it.

As there are no other specimens of *E. spodocephala* from the Philippines, this species must be deleted from the Philippine list and *E.a. aureola* must be added. Since Severinghaus & Blackshaw (1976) consider *E. spodocephala* a common migrant to Taiwan, it may indeed one day appear in the Philippines.

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References:

Bruce, M. D. 1980. *A Field List of the Birds of the Philippines.* Traditional Explorations: Sydney, Australia.

Delacour, J. & Mayr, E. 1946. *Birds of the Philippines.* The Macmillan Co.: New York.

duPont, J. E. 1971. *Philippine Birds.* Delaware Museum of Natural History: Greenville.

McGregor, R. C. 1910. *A Manual of Philippine Birds.* Part 2: 413–769. Bureau of Science: Manila.

Ogilvie Grant, W. R. 1895. On the birds of the Philippine Islands — Part IV. The province of Albay, south-east Luzon, and the adjacent island of Catanduanes. *Ibis* Ser 7(1): 249–267.

Severinghaus, S. H. & Blackshaw, K. T. 1976. *A New Guide to the Birds of Taiwan.* Mei Ya Publications, Inc.: Taipei, Taiwan.

Whitehead, J. 1899. Field-notes on birds collected in the Philippine Islands in 1893–6. Part II. *Ibis* Ser 7(5): 210–246.

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Occurrence and ecological segregation of races of Black Kite *Milvus migrans* in northern Tanzania

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The Black Kite *Milvus migrans* has 7 races, of which 3 occur in Africa (Brown *et al.* 1982), namely *M.m. parasitus* (Daudin), *M.m. aegyptius* (Gmelin) and *M.m. migrans* (Boddaert), of which the first 2 have yellow bills as opposed to the black bill of the *migrans* race. Also the head of *migrans* is markedly whiter than that of the other 2 races (Brown *et al.* 1982). The African races generally occupy different geographical areas but where overlap occurs they may intergrade (Mackworth-Praed & Grant 1962).

However, *M.m. migrans*, which breeds in the Palaearctic and northwest Africa but migrates south in winter, occurs in the presence of local *M.m. parasitus* in

West Africa (Moreau 1972); but the 2 races remain segregated, *parasitus* scavenging in towns, *migrans* avoiding feeding in close association with human habitation. Moreau described *migrans* as not being "anthropophile". Observations reported here indicate that such ecological segregation is not an isolated event.

Between October 1983 and March 1984 a population of *M.m. migrans* and *M.m. parasitus* was observed in Arusha, northern Tanzania, East Africa. A large number of *parasitus* was first observed in Arusha town, landing on trees and buildings. They were seen feeding on garbage. Later, 2 roosts, one of *migrans* and another of *parasitus*, were discovered in the town, c. 1 km apart, both in tall trees.

The roost for *M.m. migrans* was in eucalyptus trees and comprised c. 600 individuals. Although essentially a night roost, c. 200 were seen at the roost during the day. When at the roost the birds occupied the top and outer parts of the trees, allowing a clear view around them. All were *migrans* except for less than 10 individuals of *parasitus* also observed in the roost.

The local *M.m. parasitus* roosted in a jambalum tree *Syzygium cumini*, c. 300 of them, with which 7-15 *migrans* also were counted. Unlike *migrans*, *parasitus* was not observed to occupy their roost during the day; only 2-3 would land on the jambalum tree in the day, but these visits to the roost were brief and appeared to be associated with foraging.

The 2 races had different roosting habits. Both flocked immediately before they went to roost in the evening, but *migrans* roosted earlier than *parasitus* by about half an hour (at 18:30). It is possible that flocking *migrans* while *en route* to their roost attracted a few *parasitus* individuals to fly and roost with them. Similarly the flocking *parasitus* going to roost later may have attracted late-coming members of *migrans* to join their roost.

The 2 races also fed in different areas. *M.m. parasitus* was commonly seen in town foraging on garbage throughout the day, while *migrans* foraged away from town, many being seen foraging on cultivated and open land c. 12 km away from the town, near the Tropical Pesticides Research Institute. No *parasitus* were observed in this area. The food of these *migrans* was not established, but the area is known to harbour rats, moles and arthropods.

These observations record ecological segregation between *M.m. migrans* and *M.m. parasitus* in northern Tanzania. That the observation in east Africa is similar to that recorded by Moreau in west Africa suggests that ecological isolation between the 2 races may be normal.

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References:

Brown, L. H., Urban, E. K. & Newman, K. 1982. *Birds of Africa.* Vol. I: 307–310. Academic Press: London.

Mackworth-Praed, C. W. & Grant, C. H. B. 1962. *Birds of the Southern Third of Africa.* Vol. I: 147–148. Longman: London.

Moreau, R. E. 1972. *The Palaearctic-African Bird Migration Systems.* pp. 206–208. Academic Press: London.

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