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- GREATHEAD, D.J. (1966) A brief survey of the effects of biotic factors on populations of the Desert Locust. *J. Appl. Ecol.* 3: 239-250.
- LAMARCHE, B. (1980) Liste commentée des oiseaux du Mali (1ère partie: Non-passereaux). *Malimbus* 2: 121-158.
- LAMARCHE, B. (1987) Liste commentée des oiseaux de Mauritanie. *Etud. Sahariennes Ouest-Afr.* 1 (4 & spéc.).
- MEINERTZHAGEN, R. (1959) *Pirates and Predators*. Oliver & Boyd, Edinburgh.
- MESTRE, J. (1988) *Les Acridiens des Formations Herbeuses d'Afrique de l'Ouest*. PRIFAS, Montpellier.
- MESTRE, J. & CHIFFAUD, J. (1991) *Activités du Projet Acrido-météorologie PRIFAS/FAC/AGRHYMET - Rapport de fin de Projet*. Ministère de la Coopération, Paris and CIRAD-PRIFAS, Montpellier.
- NEWBY, J. (1979) The birds of the Ouadi Rimé - Ouadi Achim Faunal Reserve, a contribution to the study of the Chadian avifauna. *Malimbus* 1: 90-109.
- THIOLLAY, J.-M. (1977) Distribution saisonnière des rapaces diurnes en Afrique Occidentale. *Oiseau Rev. fr. Orn.* 47: 253-294.
- THIOLLAY, J.-M. (1978) Les migrations de rapaces en Afrique Occidentale: adaptations écologiques aux fluctuations saisonnières de production des écosystèmes. *Terre Vie* 32: 89-134.
- U.S. CONGRESS, OFFICE OF TECHNOLOGY ASSESSMENT (1990) *A Plague of Locusts - Special Report*. OTA-F-450, U.S. Government Printing Office, Washington, DC.

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### European Crag Martin *Ptyonoprogne rupestris* in The Gambia

On 18 November 1990, a European Crag Martin *Ptyonoprogne rupestris* was observed flying around the cliffs at Kahi Badi Forest Park (13°43'N, 15°03'W) east of Kaur, The Gambia. The bird was not seen again on subsequent visits in December, nor in March the following year, nor at any other known cliff site, despite careful observation. Gore (1990) mentions an unconfirmed record of a bird identified as an African Rock Martin *Ptyonoprogne fuligula* from "Kaur" January 1972, presumably the same location, as there are no cliffs in Kaur itself and Kahi Badi is one of the few locations with cliffs in The Gambia. Morel & Morel (1990) discuss the occurrence of the Crag Martin and of the African Rock Martin in Senegambia. On the basis of distribution in Senegal, they

suggest that the 1972 Gambian record was actually of a Crag Martin.

Good views of the Kahi Badi bird were obtained. It was significantly larger than the European Sand Martin *Riparia riparia*, which was common at the time. The white windows in the tail were visible from above. Probably the most telling characteristics were the pale underparts with clearly delineated dark underwing coverts; the undertail coverts were dark and not clearly delineated.

The nearest known colonies of the African Rock Martin are, on the one hand, the Mauritanian Adrar, a rocky massif some 800km north of the Senegal River, inhabited by the pale desert race *P. f. spatzi* or *buchanani*. Heim de Balsac & Mayaud (1961) and Cramp (1988) suggest that these martins perhaps migrate but neither the direction nor the date and importance of such movements are known. On the other hand, the darker race *P. f. bansoensis* has been found along the rocky cliffs of the Senegal-Guinea border (Morel & Morel 1990); whether they are sedentary remains to be discovered. Both races might therefore occur in The Gambia.

Geographical variation of the African Rock Martin is "marked and complex" according to Cramp (1988), who recommends that it is best seen as a single polytypic species consisting of three distinct groups, two of which are relevant to this discussion. On the basis of colour both *P. f. spatzi* and *P. f. buchanani* belong to the *obsoleta* group (N Africa and Asia, slightly paler and smaller than Crag Martin), though on size *buchanani* would be assigned to the *rufigula* group (W, central and E Africa, distinctly smaller than the *obsoleta* group and much darker). *P. f. buchanani* would still be larger than a Sand Martin. Cramp (1988) suggests that the extent of the dark on the underwing coverts is a good field character for separating Crag Martin from the *obsoleta* colour group of Rock Martin. This appeared to be confirmed by the author's examination of specimens at the British Museum (Natural History) in which virtually no dark underwing coverts could be seen on the Rock Martin *P. f. spatzi* in sharp contrast to the Crag Martin.

We are left with possible confusion with *P. f. bansoensis*, of the *rufigula* group of Rock Martin. Three specimens of *bansoensis* collected by G.J. & M.-Y. Morel (pers. comm.) on the Senegal-Guinea border are as small as Sand Martins and are very dark. They would probably be easily separated in the field from Crag Martin. Although there is no evidence that *P. f. bansoensis* is sedentary, it is unlikely that it would move northwards where there is very little suitable habitat.

G.J. Morel (pers. comm.) suggests that Crag Martins, since they do not overwinter near Dakar, winter further south in the hills of the Senegalese border, or in Guinea, within the range of *P. f. bansoensis*. There is no adequate habitat in between. They would be easily overlooked since they are not numerous; none could be found in the rocky hills of northern Guinea in late January (G.J. Morel, pers. comm.).

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### References

- CRAMP, S. (ed.) (1988) *Handbook of the Birds of Europe, the Middle East and North Africa*, Vol.5. Oxford University Press, Oxford.
- GORE, M.E.J. (1990) *Birds of The Gambia*. Check-list no. 3 (2nd ed.), British Ornithologists' Union, Tring.
- HEIM DE BALSAC, H. & MAYAUD, N. (1962) *Les Oiseaux du Nord-Ouest de l'Afrique*. P. Lechevalier, Paris.
- MOREL, G.J. & MOREL, M.-Y. (1990) *Les Oiseaux de Sénégal*. ORSTOM, Paris.

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### An observation of copulation in the Buffalo Weaver *Bubalornis albirostris* in Senegal

Breeding behaviour and nest-building of the polygamous Buffalo Weaver *Bubalornis albirostris* have been studied in detail (Friedmann 1949, Crook 1958, Collias & Collias 1964), yet copulatory behaviour has only been noted once before. Crook (1958) reported a single Buffalo Weaver copulation during a month long study in southern Mauritania and in northern Senegal near Richard-Toll. He described the copulation as starting with the female and male giving a bouncing display, in which both birds assumed a horizontal position on a branch and moved the body up and down in a series of bounces. Following this, the female assumed a head-low position on a branch below the male, with the tail held to the side. The male then quickly mounted and gave repeated blows to the head of the female with his bill while copulating. The female immediately attacked the male when he completed copulation.

The copulation event I report here was observed while studying nest-building in Buffalo Weavers in Kaolack, Senegal, (Beaver in prep.) for 6 days in November 1987. The colony, consisting of six nests, was located in a small *Acacia* tree. The birds were in the early stages of nesting probably prior to egg-laying, since males were intensely building their nests, and females were bringing grasses and green leaves to the nesting chambers (see Crook 1958).

At the start of copulation, the female was located on a branch below the male. The male approached the female while holding a small stick in his bill. When he was about 15 cm above and behind her, she began a continuous, twittering call. The male continued approaching until he reached the female. He passed the stick to her and as she took the stick, he mounted and copulated with her. He then dismounted and perched above her. She dropped the stick and flew to the top of the nest structure, with the male following. The female then circled the nest and entered one of the chambers. The male remained outside and rearranged sticks vigorously on the nest surface. No other