REVIEWS

CRICK, H.Q.A. & JONES, P.J. (Eds.) 1992. The Ecology and Conservation of Palaearctic-African Migrants. *Ibis* 134, Supplm. 1: 1-132. Available from British Ornithologists' Union, c/o British Museum (Natural History), Sub-Department of Ornithology, Tring, Herts HP23 6AP. £11.00.

This special supplement of *Ibis* contains the proceedings of a conference held in April 1991, 20 years after the posthumous publication of R E Moreau's book *The Palaearctic-African Bird Migration Systems*. The 17 papers include two introductory overviews and the rest are grouped under four subheads: the Breeding Grounds (3), Migration (5), the Wintering Grounds (5) and Populations (2). Fourteen of the papers deal solely or primarily with passerines (waders are scarcely mentioned) and there is emphasis on trans-Saharan migration.

Bird ringing has featured prominently in many of the studies. A penetrating analysis of hunting pressure on migrant birds in Europe by McCulloch, Tucker and Baillie of the British Trust of Ornithology, has been based on ring recoveries, for example, and in other papers mistnetting and retrap data have complemented atlas, census and nest record card data in studies of migrants on their breeding grounds.

In **Yellow Wagtail *Motacilla flava* migration from West Africa to Europe: pointers towards a conservation strategy for migrants on passage**, Brian Wood draws on his extensive studies of Yellow Wagtails to provide useful insights into their ecology in West Africa. The data presented include body-mass statistics, sex ratios and roost recapture rates, all of which may be useful comparative material for southern African ringers who encounter these birds.

In **Migration patterns and habitat use by passerine and near-passerineü migrant birds in eastern Africa**, David Pearson and Peter Lack divide passerines that visit eastern Africa into six groups based on the latitude of their final wintering area and show how the seasonal patterns of rainfall are fundamental in determining the movements of the migrants. A useful read for all southern African ringers who find 'palaearctics' in their mistnets.

Those with a particular interest in Willow Warblers *Phylloscopus trochilus* and Garden Warblers *Sylvia borin* will enjoy Herbert Biebach's **Flight-range estimates for small trans-Sahara migrants**. This paper is a good mix of theory and field work. Using aerodynamic theory and body-mass–energy conversion formulae it seems that neither species has the flight range in still air to cross the Sahara and reach the Sahel zone where they can 'refuel'. We learn that minimum body-mass with no energy reserves is 6.5 g in Willow Warblers and 15 g in Garden Warblers. Body-mass figures are based on extensive mistnetting of Willow Warblers on two islands off the coast of Crete. However, as Moreau pointed out in a paper in 1969, there is no way of knowing whether the birds netted were representative (in body-mass) of the majority of migrants crossing the area; grounded birds might be

subnormal. To check on this the author searched for Willow Warblers caught in flight by Eleonora's Falcon *Falco eleonorae* and cached behind rocks. The fat reserves of these birds were analysed and the body-mass calculated; results showed that the mistnetted samples were representative of the birds passing through in their autumnal migration. The flight-range calculations therefore seem to be soundly based. The fact that Willow and Garden Warblers do nevertheless successfully cross the inhospitable barrier of the Sahara is evidently due to tail winds which are prevalent at the time of autumnal (southward) migration.

There is a lot of stimulating material in this volume and the reference section of each paper provides a useful guide to further reading.

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KANIA, W. 1989. Brood desertion by Great Tits *Parus major* caught at the nest. *Acta Ornithologica* 25: 77-105.

"In many ethological and ecological investigations there is a need to catch the owners of a particular nest. However, catching these birds may lead to their abandoning the nest. It is well known that the frequency of nest desertion varies in different species and depends on the stage of development that eggs or nestlings have reached, on the weather, the researcher's conduct, and other circumstances. Nevertheless, there is little definite information on this problem in the literature. The researcher thus has no alternative but to gain experience by himself, by trial and error. And errors here signify the abandonment of eggs or nestlings by the parent. I believe that people who have acquired knowledge at such a cost have a moral duty to share it with others".

So writes Dr Wojciech Kania, well-known Polish ornithologist, in the introduction to his paper. He analyses the consequences of 900 captures of Great Tits on their nests in two study areas in Poland. Males, caught while feeding nestlings, did not desert nests after capture, but incubating females abandoned nests in 14% and 29% of cases in the respective study areas, and twice as often at the start of incubation as at the end. Desertions were more frequent following capture after 17h00 (43%) than between noon and 17h00 (21%) or before noon (0-8%). Replacement clutches were deserted more frequently (55%) than others (22%). Females touched, but not caught, in order to read their ring numbers did not desert. In such cases the front of the nestbox was raised and "the edge of the nest depressed with the fingers to reveal the leg of the incubating bird, in some cases gently pulling the leg out from under the bird and rotating the ring. Sometimes the bird did not react, sometimes it jumped away to the rear of the box ... If the bird attempted to fly out of the nestbox, which is what happened most often, it was not impeded."

There is a great deal more in this very comprehensive paper and Kania makes good his obligation to share his experience in this field. It is an enlightening and cautionary account of what can happen when, for the sake of the study, the need to mark each bird