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REVIEWS

Studies on the Movement and Population Structure of Indian Avifauna: Annual Report 1, June 1980 - July 1981

by Ali,S. & Hussain,S.A. 1981 (?). 141pp. Bombay Natural History Society, Hornbill House, Shahid Bhegat Singh Road, Bombay 400 023, India. (No price given)

This report summarises the progress made during the first year of a 5-year study, sponsored by the Indian Ministry of Agriculture and the U.S. Fish & Wildlife Service, and funded by the U.S. Foreign Currency programme. The survey involves extensive vegetation surveys and invertebrate sampling programmes, as well as the trapping of very large numbers of birds in terrestrial, freshwater and estuarine habitats. Two main sites are being studied: the Keoladeo Ghana Bird Sanctuary in Bharatpur, in northern India, which is a major waterfowl refuge; and Point Calimere, a forest, marsh, estuary and salt-pan complex in south-east India. I will restrict this summary mainly to the information on waders in the report. At Point Calimere, observations on wader feeding include Dunlins <u>Calidris alpina</u> and Curlew Sandpipers (called <u>C.testaceus</u> in the report) taking earwigs; Little Stints <u>C.minuta</u> feeding on flies (<u>Musca</u> and <u>Drosophila</u>); Little Ringed Plovers <u>Charadrius</u> dubius taking flies; and also Diptera larvae, as were Kentish Plovers <u>C.alexandrinus</u> and Lesser Sandplovers <u>C.mongolus</u>; and Curlews <u>Numenius arquata</u> taking polychaete worms, and also probing the burrows of mudskippers. Between July 1980 and April 1981, 17,062 waders of 17 species were caught, using the methods employed by local professional bird trappers: clap nets, nooses and hand-knitted mist-nets. Included in the total were 9,876 Little Stints, 3,569 Curlew Sandpipers, 1,063 Lesser Sandplovers, 653 Redshanks <u>Tringa</u> totanus and 548 Broad-billed Sandpipers <u>Limicola falcinellus</u>. Information on breeding waders, especially Little Ringed Plovers and Kentish Plovers, is also given. Point Calimere appears to be an important wintering area and staging post for waders. Judging by the numbers caught in each month, its main importance is as a staging post.

At Bharatpur, local trappers were employed to catch ducks, using hand-made single shelf mist-nets at night, and waders by gonging (dazzle-netting), using a burning reed torch and gong at night, to enable the trapper to approach close enough to catch the birds with a throw-net. Between October 1980 and June 1981, 4,987 waders of 5 species were caught: 1,972 Wood Sandpipers Tringa glareola, 1,524 Ruffs Philomachus pugnax, 811 Little Stints, 450 Temminck's Stints Calidris temminckii and 230 Common Snipes Gallinago gallinago.

Birds were also netted at two subsidiary sites. At Harike Lake, a freshwater marsh in the Punjab in northern India, mainly ducks were caught, the only waders being 5 Ruffs and 1 Redshank. Netting here did, however, have hazards not usually associated with the activity in Britain. On one occasion, two Cormorants were stolen from the trappers at gunpoint by local fishermen. Thereafter, the trappers had to be provided with an armed guard!

The other subsidiary site, Chilka Lake in Orissa State on the East coast of India, is an important wetland, consisting of a 70 km long shallow lake, whose salinity varies seasonally. During February and March 1981, 1,732 waders of 26 species were caught, including 527 Curlew Sandpipers, 403 Little Stints, 341 Lesser Sandplovers and 124 Redshanks.

For each site, appendices listing the number of each species ringed are given. For Point Calimere and Bharatpur, details of recaptures and controls from previous years are also listed, although there is little information about within year recaptures.

I am impressed by the large number (nearly 24,000) waders ringed by fairly small teams of catchers during the first year of the study. Undoubtedly, the data that is being collected will add considerably to our rather sparse knowledge of the migration and wintering of waders (and other birds) in Asia. I look forward with interest to the future reports and papers from this study.

Nick Davidson.

Wintering Waders on the Banc d'Arguin: Report of the Netherlands Ornithological Mauritanian Expedition 1980

by W.Altenburg, M.Engelmoer, R.Mes and T.Piersma. 1982. Groningen. Available either by paying Df1.25 or £6 to giro account 4491165 of M.Engelmoer rek.M. Semarangstraat 8A, 9715 JW Groningen, The Netherlands; or by sending a £6 International Money Order to Netherlands Ornithological Mauritanian Expedition 1980 at the same address; or by paying Df1.25 or £7 (increase due to bank charges) to bank account no. 570906008 of the Algemene Bank Nederland, Groningen, for the Netherlands Ornithological Mauritanian Expedition 1980, address as above.

This expedition report is published as a paperback book, of 283 pages, with summaries in French, Dutch, Frisian and Arabic. It covers in detail the important scientific results of the expedition, presenting well summarised data, interpretation, and an extensive comparative literature. The chapters deal with geological, hydrographical and other environmental descriptions; the macrobenthic fauna; the wader counts; assessment of the importance of the Banc d'Arguin within the Western Palearctic; distribution of feeding waders; detailed foraging studies of Bar-tailed Godwits Limosa laponica, Grey Plovers Plovers Plovialis squatarola and Oystercatchers Haematopus ostralegus; discussion of waders and their food resources; full faunal listings; plus a description of the organisational and logistical aspects. The counts are the most comprehensive yet carried out, and the total of 2,250,000 waders counted in Mauritania is compared in terms of coverage with earlier counts, and also with other wintering areas in Europe and Africa, which are usefully reviewed. This figure represents some 30% of known coastal wintering totals from W.Europe and Africa, which are usefully reviewed. This figure represents exploitation are of particular interest, not only because of the numerical importance of the Banc d'Arguin, but also because few feeding studies have been carried out on tropical or semi-tropical coasts in comparison to temperate areas. In fact, the findings on macrobenthos density were surprising, with very low densities found and limited sediment reworking and stratification. Annual productivity proved difficult to estimate in view of limited information on the life cycles of species found. However, annual productivity was estimated at only 6 - 8 g ash-free dry weight (AFDW) m⁻², compared with 30 g AFDW m⁻² in the Wadenzee. Waders foraged for a high percentage of available time; and it now seems possible that the low wintering weights are a result of feeding factors. A complete revision of earlier ideas of waders having

This report is essential reading for anyone concerned with waders and their food resources. The quality of the original research programme, the presentation, and detailed interpretation and discussion, is outstanding. The occasional grammatical or spelling error is unimportant, and we are thankful that the Report is published in English, to reach as wide a readership as possible.

W.J.A.Dick