L.X. 1991. Shorebird and wetland conservation in the Western Hemisphere. *Int. Counc. Bird Preserv. Tech. Publ.* 12: 279-290. (Nat. Conserv., 1815 N. Lynn St., Arlington, VA 22209, USA).

Hutt, M.B. 1991. Shooting of migrating shorebirds in Barbados. *Int. Counc. Bird Preserv. Tech. Publ.* 12: 77-91. (4a Pavilion Ct., Hastings, Christ Church, Barbados, West Indies).

Lambeck, R.H.D., Nieuwenhuize, J. & Van Liere, J.M. 1991. Polychlorinated biphenyls in Oystercatchers (*Haematopus ostralegus*) from the Oosterschelde (Dutch Delta area) and the Western Wadden Sea, that died from starvation during severe winter weather. *Environ. Pollut.* 71: 1-16. (Delta Inst. for Hydrobiol. Res., Vierstraat 28, 4401 EA Yerseke, Netherlands). PCBs were analysed in liver and brain lipids of 96 birds to examine the influence of age, sex and wintering area on levels, and the risk of intoxication due to starvation. It is concluded that it is doubtful that PCBs contributed to this winter mortality.

Loegering, J.P. & Fraser, J.D. 1991. Human impacts on Barrier Island Piping Plovers. *Va. J. Sci.* 42: 172. (Dept. Fish & Wildl., VPI&SU, Blacksburg, VA 24061-0321, USA). Charadrius melodus.

Marsh, C.P. & Wilkinson, P.M. 1991. The significance of the central coast of South Carolina as critical shorebird habitat. *Chat* 55: 69-92. (Dept. Biol., USC-Coastal Caroline Coll., Conway, SC 29526, USA). Data for 17 species.

Melvin, S.M., Griffin, C.R. & Maclvor, L.H. 1991. Recovery strategies for Piping Plovers in managed coastal landscapes. *Coastal Manage*. 19: 21-34. (Nat. Heritage & Endangered Species Program, Div. Fish & Wildl., Westborough, MA 01581, USA). *Charadrius melodus*.

Monroe, B.L. Jr. 1991. A reconsideration of the Massachusetts "Cox's Sandpiper". *Am. Birds* 45: 232-233. (Dept. Biol., Univ. Louisville, Louisville, KY 40292, USA). *Calidris melanotos*.

Morrison, R.I.G. 1991. Research requirements for shorebird conservation. *Trans. N. Am. Wildl. Nat. Resour. Conf.* 56: 473-480. (Canadian Wildl. Serv., Natl. Wildl. Res. Cent., Hull, PQ, Canada).

Rahmani, A.R., Mohapatra, K.K. & D'Silva, 1990. Marsh Sandpiper *Tringa stagnatilis* eating a frog. *J. Bombay Nat. Hist.* Soc. 87: 296-297.

Root, S.M. 1991. Swallow aggressively attacking Common Sandpiper. *Brit. Birds* 84: 570-571. (21 Aspin Park Drive, Knaresborough, North Yorkshire HG5 8EY, UK). Attack on *Actitis hypoleucos*.

Tomkovich, P.S. 1991. The Working Group on

Waders in the USSR. *Stilt* 19: 39-40. (Zool. Mus. Moscow University, Herzen St. 6, 103009 Moscow K-9, USSR). Description of wader research in the USSR.

Tomkovich, P.S. 1990. (Analysis of geographical variability in Knot *Calidris canutus* (L.)). *Bull. Moscow Soc. Naturalists, Biology Branch* 95: 59-72. In Russian. (Zool. Mus. Moscow University, Herzen St. 6, 103009 Moscow K-9, USSR).

Tonko, F. 1991. [Cockaigne for River Plovers: adventures with River Plovers in the pine barrens of Brandenburg]. *Falke* 38: 284-289. In German. (Dresdner Str. 133, O-8210 Freital, Germany). *Charadrius dubius*.

Westphal, U. & Mansard, M. 1990. (Marshland birds and agriculture). *Hamburger avifaun. Beitr.* 22: 65-75. In German with English summary. (Op de Bult 39, 2105 Seevetal 3. Germany).



Kepp, T., Melter, J. & Reinke, E. (OAG Münster) 1991. Report of the ornithological expedition to northern Cameroon, January/February 1991. OAG Münster, Germany. 40pp.

Available from Biologische Station, Coermühle 181, 4400 Münster, Germany for 7.50 DM (including postage) to German postal giro account Dortmund 56500-460.

Like several other groups of waderologists, members of OAG Münster are adopting a migratory role in order to study their birds (in this case the Ruff *Philomachus pugnax*) in different parts of their range. This study concentrated on describing the ecological conditions and numbers of waders in the Lake Chad basin. Because of the political and military conflict in Chad, plus theft of the expedition car, the study area was confined to northern Cameroon.

Although Lake Chad was a fraction of its normal 21,000 km², due to droughts in the early 1980s, access to the lake proved difficult. For practical reasons work was focused on the roosts in the rice fields and along the rivers, and the winter Ruff population of northern Cameroon was estimated at 250,000 -350,000. Counts are given for other species (Wood Sandpipers *Tringa glareola* were also common) and although localities are given for count sites, maps would also have been useful. The authors also provide a comprehensive species list of the birds seen.

About a hundred Ruffs were captured for biometrics and ageing. Field observations showed that the population was 75% males, thus contrasting with South Africa where there are more females. Despite difficulties faced by the expeditions, the results give a good impression of this little known area, and lays the ground work for future research.

R.W. Summers



Salathe, T (ed.) 1991. Conserving migratory birds. Int. Council for |Bird Preservation, Tech. Publ. 12. ICBP, Cambridge. ISBN 0 946888 20 5. Price £19.50.

Recent years have seen the increased formal recognition of the needs of migratory birds, especially by national governments. A variety of international conservation agencies now have programmes to enhance the conservation of migratory populations and their habitats. ICBP have produced this technical publication at a time when needs for conservation action at an international level are greater than ever, but when there are also a variety of current opportunities for action, and in many countries, a seeming public receptiveness and interest in the key issues.

This multi-author volume will be of significant value to all those with an interest or involvement in the conservation of migrants. The material in the book is arranged as a sandwich. The initial papers outline the ICBP Migratory **Birds Conservation Programme** (Salathe), with a very useful global review of threats to migratory birds (Biber & Salathe). More detailed regional studies consider the effects of pesticides on Palearctic migrants in the western Sahel (Mullie et al.), hunting and persecution of migrants in the Mediterranean (Magnin) and the shooting of migrant shorebirds in Barbados (Hutt).

Following this scene setting, the contents of the sandwich are thirteen papers outlining the success or otherwise of a range of conservation initiatives. Those of particular interest to wader workers include an account of federal research on the conservation of migratory "non-game birds" in the USA (Howe), a valuable review of the Asian-Australasian bird migration system (Lane & Parish) and a detailed paper on shorebird and wetland conservation in the Western Hemisphere (Hunter et al.), including a current review of the state of the Western Hemisphere Shorebird Reserve Network.

The concluding section covers future directions, with the emphasis strongly on legislative opportunities. The introductory paper by Biber-Klemm (International legal instruments for the protection of migratory birds: an overview for the West Palearctic-African flyways) gives a particularly useful review of relevant existing international legislation, from a lawyers perspective. This will be of special interest to anyone with responsibility for the implementation of such legislation. Other papers cover the role of the Bonn Convention for migratory birds (Boere) and priorities for the conservation of migratory waterfowl - touching especially on the role of both the Ramsar Convention and the International Waterfowl and Wetlands Research Bureau (Moser). Dugan's paper on conservation and sustainable development stresses that conservation problems usually depend on the solution of human socio-economic problems. Salathe concludes the volume with an outline of the forward plan for the ICBP Migratory Birds Programme for the period until 1994.

The book is a particularly useful review of current issues in the conservation of migratory birds, whether these be concerned with existing threats, current conservation programmes or existing legislation. It has been skilfully edited and the format contains something for everyone. The book will be of particular value to those professionally concerned with the conservation of migratory birds, although the review format of many papers highlight major deficiencies in current knowledge and thus will be of interest to researchers also. The wide taxonomic range of the book is useful in allowing comparisons to be made between the problems and current approaches to the conservation of a wide variety of different groups of birds.

A number of papers concentrate on educational initiatives as related to the conservation of migrants, whether these be in Mali (Taurant & Fofana), Turkey (Yazgan), Malta (Sultana) or in Ghana

(Ntiamoa-Baidu). These and other contributions (e.g. that by Dugan) serve to remind us that ultimately, the solution to conserving migratory birds lies in solving what are often intractable human problems. This involves working closely with human populations, especially in 'developing' countries. In this area especially, there are particular benefits to be gained from taking a wide, international approach to conservation problems. Not only is this biologically sensible, but such a strategy allows each country to learn from the experience of others. This timely volume can only assist with such a process and it will be welcomed by all with an interest in conserving migratory birds.

David A. Stroud

