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REVIEWS AND ABSTRACTS

KONDRATIEV, A.Y. (Ed.) (1988) Bulletin of the Working Group on Waders. (Russian.) Pp. 46. Vladivostok: All-Union Ornithological Society (USSR Academy of Sciences) and Institute for the Study of Biological Problems of the North (Far East Branch of the USSR Academy of Sciences). 0.15 roubles. 300 copies printed.

The 3rd All-Union Wader Study Conference held in Moscow in October 1987 noted that progress had been made in various aspects of wader research in recent years but strongly felt that Soviet ornithology was progressively falling behind other countries in such projects as mapping main migration stopover sites and accumulating census data to assess their potential as wetlands of national or international importance. Man-made changes to wader habitats required more thorough quantitative investigation, as did the effects of shooting and collecting on wader populations.

With the aim of achieving more effective planning and co-ordination in these and many other tasks, the Soviet Working Group on Waders was set up at the 1987 Conference. All 74 delegates at the Conference were automatically elected members and others will doubtless be encouraged to come forward from the ranks of the still youthful (founded in the early 1980s) USSR Ornithological Society. The Rules of the new Working Group are set out on pp. 5-7 of this first Bulletin which is designed to be the main publication, appearing annually. The Group's 'Bureau' (Executive Committee) consists of V.E. Flint (Consultant), P.S. Tomkovich (Chairman), A.Ya. Kondratiev (Vice-Chairman and Co-ordinator for studies of wader bioenergetics), T.R. Andreeva (Secretary and Co-ordinator for food and feeding studies of

arctic and subarctic waders, M.E. Zhmud (Co-ordinator for the Ukraine and Eastern Black Sea region, also for population ecology), V.V. Morozov (responsible for the Group's publications and for informing the Wader Study Group about current Soviet literature on waders), V.V. Khrokov (Co-ordinator for Kazakhstan and Central Asia), A.K. Yurlov (Co-ordinator for study of the critically endangered Slender-billed Curlew *Numenius tenuirostris* in West Siberia). A further circle of co-ordinators includes I.I. Byshnev (Baltic Region and Belorussia), V.S. Sarychev (Central European part of the USSR), I.I. Chernichko (Programme for the study of Dunlin *Calidris alpina* movements), A.A. Vinokurov and E.I. Gavrilov (ringing and marking programme) and G.N. Molodan (Black-winged Stilt *Himantopus himantopus* study programme).

More volunteers are needed to take responsibility for various regions and study topics. It was considered essential to undertake a country-wide study programme and the Group proposed to focus on the widespread and familiar Lapwing *Vanellus vanellus*. The Executive Committee hopes to improve identification skills by building up a collection of photographs and skins; it will also assess records and journal editors are encouraged not to publish unusual wader records before they have been accepted by the Committee. There are to be more (following one at the 3rd Wader Conference) photographic exhibitions and competitions and nominations are invited for the best wader paper or book of 1988.

Before the next (4th) Soviet Wader Study Conference meets in Donetsk in 1990, it is clearly hoped that a start will have been made on better co-ordinated and more vigorous

efforts to tackle some of the following (Resolution of the 3rd Conference, pp. 3-5): accurate mapping of breeding ranges (species and subspecies), population-demographic, experimental, morphological and physiological-biochemical studies, bioenergetics, behaviour (courtship, feeding), movements, classification, wader biology in man-made habitats and associated applied aspects and effective census methods. Study programmes are to have clearly defined aims and objectives; ringing and marking programmes are to be greatly expanded (proper registration of all colour-marking schemes essential!); ageing and sexing techniques require improvement; a special study needs to be made of wader populations in wetlands of international importance; use should be made of the mass media to enhance awareness of the need for wader conservation; and finally, an important wader book is to be written - the relevant part of the new ten-volume Soviet handbook (*Birds of the USSR* edited by V.D. Ilyichev and V.E. Flint; three volumes had appeared by the end of 1988).

The first part of the Bulletin (pp. 3-11) deals primarily with constitutional and administrative matters, followed by a series of reports and short communications. V.S. Sarychev (pp. 12-13) describes a programme of co-ordinated wader studies in the central region of the European USSR, with special emphasis on waders in man-made habitats. Methods for studying population ecology of waders are discussed by M.E. Zhmud (pp. 14-16), Kentish Plover *Charadrius alexandrinus* and Redshank *Tringa totanus* being the model species chosen for such a study in the Azov-Black Sea region. T.R. Andreeva (pp. 17-20) requests wader guts (mainly from arctic and subarctic regions) to undertake identification of contents. A special plea is made to participants in expeditions on which large-scale collecting will be done not to miss the opportunity of improving knowledge of wader diets. The movements of *C. alpina*, based on an eight-year study in the southern Ukraine, are the subject of a report by I.I. Chernichko (pp. 20-24); the existence of a loop-migration is postulated - birds ringed in the Ukraine in spring apparently take a different route in autumn; ageing techniques and moult scores (with diagram) are explained. A.A. Vinokurov and E.I. Gavrillov (pp. 25-26) have taken responsibility for co-ordinating colour-marking (rings, tags, dyeing, etc.) schemes, while P.S. Tomkovich (p. 27) encourages Siberians to look out for waders colour-marked as part of a large-scale Australian programme. E.I. Gavrillov and V.V. Khrokov (pp. 27-29) present some impressive statistics from Kazakhstan where ringing is carried out on the lower reaches of the Ural, Turgay and Sarysu Rivers, Tengiz-Kurgaldzhin Lakes, Chokpak Pass (Tien Shan), Lake Sorbulak (near Alam-Ata), lower Ili and (colour-marking since 1987) Lake Alakol (Dzungarian Gate). A total of 69 140 (including 17 698 Little Stints *Calidris minuta* and 14 277 Red-necked Phalaropes *Phalaropus lobatus*) waders of 46 species was ringed between 1975 and 1987. Recoveries of foreign-ringed birds (14) and of others from winter quarters (11) and breeding grounds (3) are detailed. Also from Kazakhstan, V.V. Khrokov (pp. 41-42) reports on the second authenticated occurrence (September 1987) of Little Curlew *Numenius minuta* and notes that Red-necked Stint *Calidris ruficollis* (records from the late 1970s and during the present decade) merits the status of rare passage-migrant.

V.V. Leonovich (pp. 29-31) emphasizes the need

to study wader song (display) flights, much more information being required on over 15 species, including Ibisbill *Ibidorhyncha struthersii* and Slender-billed Curlew *N. tenuirostris*. A.S. Martynov (p. 31) elucidates census methods and provides a formula for calculating the density of Woodcock *Scolopax rusticola*. P.S. Tomkovich (pp. 32-33) suggests that breeding success of arctic waders can be predicted from a knowledge of lemming cycles. In Taimyr, successful breeding coincides with a peak in the lemming population: when the lemming population crashes, predatory foxes turn their attention to birds' eggs. In other parts of the Arctic, the character of the spring and weather conditions during laying and chick-rearing are an additional factor (see de Boer and Drent this volume).

The Spotted Greenshank *Tringa guttifer* is an endangered Soviet endemic with an estimated population of only 30-40 pairs, breeding certainly in south Sakhalin, perhaps also on the mainland north of the Amur Estuary and on the west coast of Kamatchka. Threats include habitat destruction (oil and gas exploitation), disturbance, shooting and predation of corvids. V.A. Nechaev (pp. 33-35) sees the establishment of permanent or temporary sanctuaries ('zakazniki') and the protection of all waders (except *S. rusticola* and possibly Whimbrel *Numenius phaeopus*) as measures demanding urgent implementation if *T. guttifer* is to be saved. P.S. Tomkovich (pp. 35-36) summarizes what is known about the movements of Spoon-billed Sandpiper *Eurynorhynchus pygmaeus*: rather little, especially with regard to spring migration. About 1% of the population has, however, been colour-ringed and all records are requested. In Sakhalin (V.A. Nechaev, p. 40), *E. pygmaeus* occurs mostly on the east coast, usually mixed with *C. ruficollis*; up to 200 in a mixed flock of c. 6 000 small waders in May-June 1979. At the Taury estuary (west of Magadan, Sea of Okhotsk coast) a single *E. pygmaeus* was sighted in August 1986 and three *T. guttifer* (with c. 20 Greenshanks *T. nebularia* and feeding on dead sticklebacks *Pungitius*) on 1 June 1987 (A.Ya. Kondratiev, p. 40).

The enigmatic '*Calidris paramelanotos*' is in P.S. Tomkovich's view (pp. 36-38) most probably a hybrid between Curlew Sandpiper *Calidris ferruginea* (bill-shape and colour of upper tail-coverts) and Sharp-tailed *C. acuminata* or Pectoral Sandpiper *C. melanotos* (general appearance, plumage and leg colour). All three species breed together in some parts of northern Yakutia and Chukotsk Autonomous Region, all are polygynous and the geographical and annual variation in sex-ratios of *C. acuminata* and *C. melanotos* would be a further encouragement to hybridization. American Golden Plover *Pluvialis dominica* (now also accepted by Soviet experts as a separate species) was recorded in north-east Siberia in the 19th century and up to 1939 and presumed by Portenko (1972) to nest there. Adults were collected in 1978 and 1980 and in 1987 observations in Chukotka (P.S. Tomkovich, pp. 38-39) showed vocal and morphological differences between *P. dominica* and *P. fulva*; while there was no confirmation of breeding by *P. dominica*, it is thought (and 1988 fieldwork strengthened the supposition: see *Zool. Zh.* 67: 1756-7) that this may well take place in some years.

Two colonies of *N. minutus* (c. 4 and c. 10 pairs) in the Pezhenka valley, Magadan region (some 40 km south of the Arctic Circle) were discovered in 1987; they lie about 1 500 km east of the only previously known breeding

grounds in central Yakutia (A.I. Artyukhov, pp. 40-41). The Buff-breasted Sandpiper *Tringa subruficollis* is not confined as a Soviet breeding bird to Wrangel Island: in July-August 1987, M.S. Stishov (p. 41) found an estimated breeding density on Ayon Island (Chaunskaya guba, western Chukotka) of 2.5 birds per km², exceeding that known for Wrangel Island.

This Bulletin concludes with a report by Pavel Tomkovich on the Wader Study Group Conference held in Gdansk (Poland), 25-28 September 1987.

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M.G. Wilson

Long, A.J., Poole, C.M., Eldredge, M.I., Won, P.O. & Lee, K.S. 1988. A survey of coastal wetlands and shorebirds in South Korea, Spring 1988. Report Asian Wetland Bureau, Kuala Lumpur, 163 pp. and 6 Appendices. (Available for US\$16 (surface) or US\$25 (air) from AWB, Inst. of Advanced Studies, Univ. of Malaya, Lembah Pantai, 59100 Kuala Lumpur, Malaysia.)

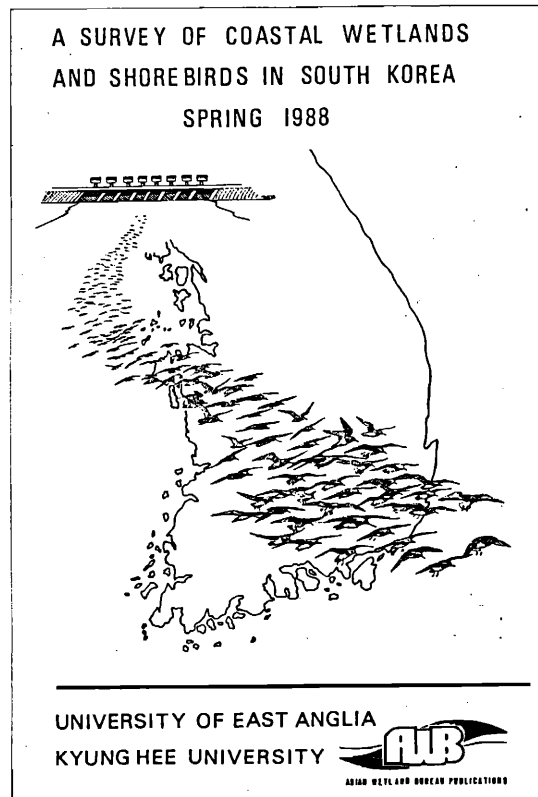
In spite of its position in the very heart of the West Pacific flyway, Korea has long been a blind spot on wader distribution maps. In connection with a barrage building scheme, the Nakdong estuary in south-easternmost South Korea was biologically mapped, but the extensive intertidal lands fringing the Yellow Sea along the west coast of Korea remained completely unstudied. That is until last spring. The discovery of the enormous biological richness of these areas (see below) may have been just in time, since the overpopulated and economically strong South Korea has a great demand for flat land. The National Masterplan 1984-2001 foresees the reclamation of no less than 5 000 km² of remaining intertidal area. In the year 2001, 67% of the coastal wetlands along the south and west coast is planned to disappear.

A team from the University of East Anglia and the Kyung Hee University of Seoul took up the challenge to see what is going on there, wetland-and-wader-wise. Between 10 April and 6 June they covered all major coastal wetland sites of the west and south coast in greater or lesser detail, a magnificent achievement in itself. They encountered no less than 170 000 waders (obviously a minimum estimate) and they located endangered groups of several rare waterbirds. Four new areas of international importance according to the RAMSAR criteria were identified and announced to the public: South Kangwha Island, South Yong Jong Island, Namyang Bay and Asan Bay. Large populations of Nordmann's Greenshank *Tringa guttifer* (135, the largest number ever recorded), Great Knot *Calidris tenuirostris* (35 000, the largest number hitherto encountered outside Australia) and Eastern Curlew *Numenius madagascariensis* (1 600, more than 10% of world population) were found on spring passage. The commonest birds were Dunlin *Calidris alpina* (75 000), Great Knot, Black-tailed Godwit *Limosa limosa* (17 000) and Bar-tailed Godwit *Limosa lapponica* (15 000), accounting for 84% of the total number of observed waders. The number of Great

Knots is of particular interest, since it indicates that during northward migration the west coast of Korea is the key staging area for Great Knot between Australia and the breeding grounds in Siberia. Perhaps South Korea is reached after a direct flight of some 5 000 km from NW Australia. Surprisingly few Red-necked Stints *Calidris ruficollis* (5 000) were found.

As well as applauding the fieldwork of the British-Korean team, the speed of production (only six months) of their comprehensive report must also be mentioned. The presentation is technical and perhaps a bit dry (though there is a photographic summary), but all the information is easily accessible, and many good maps explain the geography of the areas while fine bird drawings enliven the text. Of course this is just the start of new explorations. At the same time it is hopefully the start of a series of successful battles to preserve some of the wetland wonders of South Korea, so that the people in the land of the Morning Calm may long enjoy the sight of wader flocks in the evening sun!

Theunis Piersma



ROWELL, T.A. 1988. (Ed.) *The Peatland Management Handbook*. Nature Conservancy Council, Research & Survey Series No. 14. (£6.00 incl. p&p from NCC, Northminster House, Peterborough, PE1 1UA). ISBN 0-86139-467-4.

There can be few terrestrial habitats where bird conservation does not involve some sort of practical management. In all too many cases, management practices are more of an art than a science. This recent volume from the NCC presents 'all you need to know' about peatland management and places the science of peatland management on a firm footing. It describes solutions to a range of practical conservation problems for peatlands ranging from blanket bogs to fens, which have been distilled from the experience of a very large number of peatland managers throughout Britain. Given the importance of peatland habitats for breeding waders, it deserves wide notice in ornithological circles.

The report is highly structured which makes it easy to extract information for specific problems. Each of the 15 sections is further divided into a series of sub-sections. It is written primarily for an audience of nature reserve managers and lays emphasis on a range of commonly encountered practical problems. The report specifically considers management of British peatlands, but given the range of international experience in this subject, it is to be hoped that the promised future updates will also incorporate input from peatland managers elsewhere.

Early sections deal with control of water levels on peatlands through dam and bund construction, and the manipulations of soil levels. Further

sections successively treat the restoration of degenerate and cut-over peatlands, control of gully erosion, access provision, mowing of vegetation, management of *Cladium mariscus* and *Phragmites*, the use of grazing and burning in peatland management, scrub control, evaluation of management techniques and monitoring of vegetation.

Each section starts with general consideration of relevant principles and then presents a range of management options for use under differing circumstances with details of potential pit-falls where these are known. Of particular value to harassed nature reserve wardens will be many details of suppliers of materials (eg for dam/ boardwalk construction).

Constant stress is made of the essential need to monitor results of management and a 'feed-back report form' is provided to aid with collation of further information on the efficacy of suggested procedures. Whilst the report is primarily aimed at management of peatland vegetation, the need for monitoring equally extends to effects on breeding wader populations. With the current paucity of well documented studies in this area, it is to be hoped that all opportunities to relate practical peatland management to changes in breeding wader populations are also fully exploited and recorded.

The term 'essential reading' is often over-used by reviewers. For anyone involved in having to make practical management decisions relating to the conservation of peatland habitats, this volume really is essential reading!

David A. Stroud

WADER RECOVERIES FROM EASTERN AFRICA

Gerhard Nikolaus, J. S. Ash, G. C. Backhurst & D. J. Pearson

The wader migration system between southern and eastern Africa and western Asia has been discussed by Summers *et al.* (1987), who have demonstrated the existence of what might be referred to as a "flyway". Very large populations of some species use this flyway, which is distinct from the East Atlantic flyway of West Africa. Evidence for the East African flyway is presented here from the results of ringing recoveries.

Wader ringing has been concentrated at several sites in Eastern Africa in the past 20 years, particularly in Kenya at Mida Creek (00° 22'S, 39° 58'E), Lake Nakuru (00° 20'S, 36° 06'E) and Lake Magadi (02° 00'S, 36° 10'E); in Ethiopia at some of the Rift Valley lakes, particularly Abiata (07° 36'N, 38° 40'E) and Koka (08° 24'N, 39° 02'E); in Sudan at Juba (04° 52'N, 31° 30'E), Khartoum (15° 35'N, 32° 30'E) and Suakin (19° 08'N, 37° 17'E). Since most of the birds involved originate from Eastern Europe and Asia where ringing intensity is generally low, the recovery rates are very low compared with those areas with waders of a more westerly European origin. The data available to 31 December 1987 from the following sources (Ash 1981; Backhurst 1969, 1970, 1971, 1972, 1974, 1977, 1981, 1988; Nikolaus & Backhurst 1982) are summarised in the Appendix. Any additional data will be welcomed by G.C. Backhurst.

The two most ringed species are Little Stints *Calidris minuta* and Ruffs *Philomachus pugnax* with totals of 15 000 and 7 600 respectively. It seems that inland migrating Little Stints are closely associated with the Rift Valley, flying via the Persian Gulf and Caspian Sea to their Siberian breeding grounds (Figure 1). It is not known if birds flying along the Nile Valley link up with birds using the Rift Valley en route to Southern Africa, nor where they enter the Sudan.

Recoveries of Ruffs ringed in Western Europe (Figure 2) do not extend eastwards beyond the Sudan, where the majority of recoveries are from Asia. The breeding grounds for Ruffs in western Siberia are north of 64° N, and north of 68° N in central and eastern Siberia. It is therefore unexpected that most recoveries are from south of this line, especially since recoveries occurred during the breeding season. Two Ruffs from India are puzzling: they may have resulted from a change of winter quarters or they may indicate that at least some Ruffs do not fly on a loop migration to the west of the Himalayas. Possibly some Ruffs wintering in eastern and southern Africa migrate directly across the Indian subcontinent and the extensive Indian Ocean.

The Common Sandpiper *Actitis hypoleucos*