

as a supplement to the *Wader Study Group Bulletin*, which will be supplied free of charge to group members. This should appear in the course of 1986.

No changes occurred in the Advisory Panel, which was approached for advice only once during the year. Please let me know your comments and suggestions regarding present and future projects.

Th. Piersma.

LIST OF PUBLICATIONS FOR 1985

This list includes all publications concerning Wader Study Group projects and also studies which have used the WSG ringing data archive or extensive reports from the WSG Colour Marking Register. This list includes papers published during 1985 and one omitted from the 1984 list.

- Bredin, D. 1985. Spring migration of coastal waders on the French "Centre-ouest" Atlantic coasts. (Abstract). *Wader Study Group Bull.* 45: 7-8.
- Buxton, N.E., Green, G.H. and Langslow, D.R. 1985. The breeding wader populations on the machairs and blackland of the Southern Isles, Outer Hebrides. *Hebridean Naturalist* 8: 5-9.
- Davidson, N.C. 1985. Origins and Destinations of Knots in north Norway in May. (Abstract). *Wader Study Group Bull.* 45: 8.
- Davidson, N.C. and Clark N.A. 1985. WSG project on the effects of severe weather on waders: fourth progress report. *Wader Study Group Bull.* 43: 4-5.
- Davidson, N.C. and Clark, N.A. 1985. The effects of severe weather in January and February 1985 on waders in Britain. *Wader Study Group Bull.* 44: 10-16.
- Davidson, N.C. and Piersma, Th. 1985. International wader migration studies along the East Atlantic Flyway: plans for spring 1986. *Wader Study Group Bull.* 45: 4-6.
- Ens, B. (ed.) 1985. *Entre le Sahara et la Sibirie*. WIVO Report No. 85-9.F. Pp. 32. WIVO, Ewijk, The Netherlands.
- Fuller, R.J., Green, G.H. and Pienkowski, M.W. 1985. Surveys of breeding waders in the southern isles of the Outer Hebrides - a progress report. *Wader Study Group Bull.* 43: 14-15.
- Fuller, R.J., Green, G.H. and Pienkowski, M.W. 1985. Surveys of breeding waders (Charadrii) in the Outer Hebrides 1983 & 1984. *Bull. Brit. Ecol. Soc.* 16: 163-166.
- Galbraith, H., Furness, R.W. and Fuller, R.J. 1984. Habitats and distribution of waders breeding on Scottish agricultural land. *Scott. Birds* 13: 98-106.
- Hotker, H. 1985. Migration studies of Ruffs wintering in Senegal. (Abstract). *Wader Study Group Bull.* 45: 7.
- Mawby, F. 1985. The spring passage on the Ribble and Alt estuaries, North-East England. (Abstract). *Wader Study Group Bull.* 45: 8.
- Moser, M.E. 1985. The BTO/WSG Winter Shorebird Count: some first results. (Abstract). *Wader Study Group Bull.* 45: 15.
- Moser, M.E. and Davis, T. 1985. Winter shorebird count. (Progress Report). *BTO News* 137: 6-7.
- Moser, M.E., Ferns, P. and Baillie, S.R. 1985. BTO/WSG West coast spring passage project - a progress report. *Wader Study Group Bull.* 43: 9-13.
- Pienkowski, A.E. and Pienkowski, M.W. 1985. The future of the WSG computer data archive. *Wader Study Group Bull.* 43: 3.
- Pienkowski, M.W. and Evans, P.R. 1985. The role of migration in the population dynamics of birds. Pp. 331-352 in *Behavioural Ecology: the Ecological Consequences of Adaptive Behaviour.*, (eds. R.H. Smith and R.M. Sibly). British Ecological Society Symposium 24. Blackwell, Oxford.
- Piersma, Th. 1985. International wader migration studies along the East Atlantic Flyway during spring 1985: second progress report. *Wader Study Group Bull.* 44: 17-18.
- Piersma, Th. 1985. Spring Migration Studies on the Banc d'Arguin, Mauritania. (Abstract). *Wader Study Group Bull.* 45: 7.
- Piersma, Th. 1985. First results of the WSG Spring 1985 East Atlantic Flyway Project. (Abstract). *Wader Study Group Bull.* 45: 9.
- Piersma, Th. and Davidson, N.C. 1985. International wader migration studies along the East Atlantic Flyway during spring 1985: first progress report. *Wader Study Group Bull.* 43: 6-8.
- Piersma, Th. and Smit, C. 1985. [Migration of waders along the east-side of Atlantic Ocean.] In *Dutch. Skor* 4(2):32-34.
- Reed, T. 1985. Estimates of British breeding wader populations. (Abstract). *Wader Study Group Bull.* 45: 11-12.
- Smith, K. 1985. Breeding wader monitoring. *BTO News* 136: 3.
- Summers, R.W. and Moser, M.E. 1985. The Winter Shorebird Count: a progress report. *Wader Study Group Bull.* 44: 16.
- Townshend, D.J., Galbraith, H. and Thomas, C. 1985. Current colour-marking schemes. *Wader Study Group Bull.* 44: 7-9.

WSG ANNUAL MEETING AND WORKSHOP ON THE CONSERVATION OF INTERNATIONAL FLYWAY POPULATIONS OF WADERS, OATRIDGE AGRICULTURAL COLLEGE, SCOTLAND, 12-14 SEPTEMBER 1986

The 1986 WSG Annual Conference and AGM will take place from Friday 12 September to Sunday 14 September at Oatridge Agricultural College in southern Scotland. A booking form is enclosed with this *Bulletin*. Oatridge Agricultural College is situated near Broxburn in West Lothian, about 15 miles to the west of Edinburgh in southern Scotland. The College was built in 1973 and is surrounded by its own 280 ha farm. Accommodation for up to 130 people is

mostly in single rooms, but there are also some twin and four-bedded room available. Meals will be 'canteen-style' and there will be a bar available on both Friday and Saturday evenings.

PROGRAMME

As in previous years the formal programme starts on Saturday morning with the Annual

General Meeting, but the programme that follows will be different in style from the WSG conferences of recent years. The remainder of Saturday will be devoted to a Workshop on the Conservation of International Flyway Populations of Waders. This is described in more detail below. As usual, Saturday evening will be left free for informal discussions and detailed investigation of the bar. There will be general talks about waders on Sunday morning. On Sunday afternoon there will be an excursion to the nearby Firth of Forth to look at waders on a variety of natural and man-modified sites around the this estuary-complex which supports internationally important numbers of waders.

Members should note that the time available for general talks will have to be strictly limited. We strongly urge any member wishing to give a talk to return an abstract of their talk on the enclosed form, together with their booking form, without delay: otherwise space may not remain available in the programme. Each talk in the programme will be allocated 15 minutes plus 5 minutes for questions, a total of 20 minutes. The usual projection facilities will be available.

As a further innovation to WSG conferences, and to give members as full an opportunity as possible of presenting their work, there will be facilities for the presentation of poster papers. Offers of posters should be made on the enclosed form.

Workshop on the Conservation of International Flyway Populations of Waders

A great deal of effort has been expended during the last 20 years aimed at understanding the migration patterns and wintering grounds of waders, especially those populations passing through western Europe. The results of this work have identified many of the most important wintering grounds and migration staging areas for waders along the East Atlantic Flyway, which extends from breeding areas in arctic Canada in the west to Siberia in the east, through western Europe to western and southern Africa. During the same period both international measures e.g. the 'Ramsar' Convention on the Conservation of Wetlands of International Importance especially as Waterfowl Habitat, and the EC Directive on the Conservation of Wild Birds, and national measures to safeguard wetlands of importance to waders and other birds, have been strengthened. Despite such safeguards, many important wader habitats and sites around the world remain threatened, and continue to be lost, through a wide variety of developments, land-claim and pollution.

During the last few years there has been a resurgence of studies on the migration systems of waders throughout the world, that has led to much new information of use in wader conservation becoming available. Major investigations now in progress on flyway populations of waders include the Wader Study Group Project on the Spring Migration of Waders along the East Atlantic Flyway, and studies on the West African part of the flyway; the Pan-American Shorebird Program; Interwader, in South-East Asia; and the Royal Australian Ornithologists' Union Wader Studies Program. Many of the projects operate internationally (as do the birds they study), linking those working on the conservation of waders in both northern and southern parts of the flyways. Some operate with the extensive involvement of the Wader Study Group in a co-ordinating role.

A major aim of many of these studies is to provide baseline information about the importance of wintering and migration staging sites and the links between them, that can be used to promote a cohesive strategy for improving the conservation of waders along their entire flyways.

There are many lessons from the differing approaches used by these various studies that can be shared by those involved in wader conservation. The stage reached by these various projects now makes it appropriate to bring together those involved, to exchange information and views on the current achievements, the gaps remaining in the understanding of flyway population phenology, and future directions for international and national efforts to conserve waders and their habitats. It is especially important for those working actively on waders to address the question of how to further understand the migration systems of waders, and to understand how such information can be, and is being, used to promote the worldwide conservation of waders. In arranging such a workshop, the Wader Study Group is functioning in its major role of promoting contact between wader workers throughout the world.

The Workshop will be in 3 parts:

1. Overviews of the current knowledge (and the gaps in it) of each of the 4 major flyways for waders (Nearctic, E. Atlantic, Africa/Asia, and Australasia/S.E. Asia).
2. Brief assessments of the current approaches to flyway conservation. Topics will include site threats, international conventions, sister-site networks, site safeguards in EEC, national site safeguards worldwide; and constructive approaches to conservation, including site creation and restoration, and the analysis of socio-economic aspects of site safeguard. These will be short reports, to introduce the opportunity for participants to discuss each topic.
3. A panel discussion on future directions for the conservation of flyway populations.

There will also be facilities for participants to present poster papers on any aspect of wader conservation.

The proceedings of the Workshop, including both the papers and the discussions, will be prepared for publication early in 1987, in association with the International Waterfowl Research Bureau (IWRB). To aid rapid publication contributors will be asked to provide copies of their papers no later than the date of the Workshop.

We are currently seeking funds to help cover the travel costs of participants from overseas: the details of final programme will depend on the extent of the financial support that we receive.

COSTS

The programme will run from Saturday morning to Sunday afternoon. We anticipate that most participants will wish to arrive on Friday evening, although flexible booking arrangements are available. The Registration Desk will be open from 1600 h on Friday (12 September). Participants should note that it will unfortunately not be possible to stay at the College on Sunday night. However, we will try

to arrange either bed-and-breakfast accommodation, or floor-space with local WSG members, for those who wish to stay on Sunday night: please indicate your requirements on the booking form.

Costs will be as follows:

Whole conference:

Friday dinner to Sunday lunch including all meals and accommodation £28.50

Part Attendance:

Saturday morning coffee to Sunday lunch including all meals and accommodation £20.50

Saturday coffee, lunch and tea £ 7.50

Sunday coffee and lunch £ 6.00

When registering, each participant will be required to pay a refundable deposit of £5.00 for their room key.

The excursion on Sunday afternoon will be in private cars: those going on the excursion may be asked for a small contribution towards the costs of petrol. If you have a car available for use on the excursion, please indicate on the booking form.

TRAVEL

Broxburn is well served by both road and rail. Edinburgh is about 5 hours from London (King's Cross) by rail. There is easy access to both the M8 and M9 motorways, and there is a local rail link from Edinburgh. Both Edinburgh and Glasgow have international airports. Further information about travel will be sent to those booking.

WSG SURVEYS OF BREEDING WADERS IN THE OUTER HEBRIDES IN 1985 - A PROGRESS REPORT

by R.J. Fuller

In 1983 the Wader Study Group and the Nature Conservancy Council organised a survey of breeding waders along virtually the entire western seaboard of the Southern Isles of the Outer Hebrides. This survey established the importance of this region of Scotland for breeding waders (Fuller, Green and Pienkowski 1985). Between 1984 and 1987 wader populations are being monitored on nine areas of machair and blackland on South Uist and North Uist. The total area being covered is 33 sq. km.

In June 1985 numbers of estimated pairs of breeding waders on the nine study areas combined, with percentage changes from 1984 in parentheses, were: Oystercatcher *Haematopus ostralegus* 701 (-8%), Ringed Plover *Charadrius hiaticula* 783 (-4%), Lapwing *Vanellus vanellus* 1073 (-17%), Dunlin *Calidris alpina* 802 (-13%), and Redshank *Tringa totanus* 604 (-13%). Breeding Snipe *Gallinago gallinago* were also present but the transect method used, described by Reed and Fuller (1983), was not appropriate for counting this species.

Breeding wader numbers were studied at two study areas where substantial drainage had occurred since 1983. There was no evidence of any clear trends in numbers associated with the drainage.

Preliminary observations were made on the role of cultivation as a factor influencing the

BOOKSHOP

The Scottish Ornithologists' Club Bird Bookshop, which specialises in ornithological and natural history books, will bring a wide selection of books for sale. If any participant would like to see a catalogue in advance, or would like to order a particular book, please contact the SOC, 21 Regent Terrace, Edinburgh EH7 5JT, U.K. (tel. 031 556 6042).

BOOKINGS

Booking forms are enclosed with this *Bulletin* and should be returned by 25 August 1986 to N.A. & J.A. Clark, Department of Zoology, University of Edinburgh, West Mains Road, Edinburgh EH9 3JT, U.K., to whom general enquiries about the meeting should be addressed.

Payment should be made in advance with the completed booking form. Payment should be by cheque made payable to "Wader Study Group". Alternatively send payment at the same time as booking, by British Post Office Giro to account number 471204404, marking the details "Conference 86".

Any enquiries specifically concerning the Workshop on Flyway Conservation should be addressed directly to the Workshop Conveners, Dr. N.C. Davidson & Dr. M.W. Pienkowski, c/o Nature Conservancy Council, Northminster House, Peterborough PE1 1UA, U.K.

distribution of waders on dry machair. Densities of waders on extensive dry fallow machair were lower than on nearby machairs with both cultivation and fallow. Examination of specific patches of machair suggested that conversion to fallow may be associated with decreases in Lapwings, Oystercatchers and Ringed Plovers while ploughing of fallow may result in decreases of Dunlin. More information on the changes in wader communities associated with changes in agriculture will be collected in future years.

In addition to the surveys on the machair and blackland, waders were resurveyed on an area of moorland on South Uist that had been partially reseeded since 1984. There was no evidence that the reseeded had influenced the numbers of birds. The broad distribution of waders at this site was the same as in 1984, with the birds showing a strong preference for the edge of a large loch.

In 1983 several checks were made on the accuracy of the transect method of counting waders by comparing the results with independent assessments of population sizes based on colour-marking of adults and nest finding (Jackson & Percival 1983). In 1985 further tests of this type were made at three locations in South Uist. In 1985, these tests showed that, in general, transects tended to over-estimate numbers of nesting waders