WSG PROJECT ON THE EFFECTS OF SEVERE WEATHER ON WADERS: PLANS FOR 1986/7

by N.A.Clark and N.C. Davidson

This project has now been running for 4 winters, during which time there have been several periods of very severe winter weather in western Europe. Through the heroic efforts of the many participants in finding and collecting decaying wader corpses in bitter weather, it has been possible to greatly extend understanding of when and where waders are affected by severe weather, and which parts of the populations are most at risk (see *WSG Bulletin* 44: 7-9 and *WSG Bulletin* 46: 7-8).

Much is still to be discovered about the impact of severe weather on waders. Unfortunately, changes of job, increased workloads and freezers now very full of corpses, mean that neither of the current project organisers will be able to devote sufficient time to the administration of the project for the forthcoming winter. Hence we are requesting participants not to collect data and corpses on a regular basis for the project during the 1986/87 winter. However last winter we found that it was very valuable to examine wader corpses when there was substantial localised mortality, as occurred on the Wash and the Stour in eastern England in early 1986. For this reason we ask all members to contact us immediately they notice increased mortality of waders during severe weather. We will then try to make arrangements for the collection and examination of corpses. It is particularly valuable to identify the age and sex composition of large samples (more than 20 birds of one species) that have died in severe weather.

Although the shortage of time means that we must put the project 'on ice' for the present, we hope that it will be possible to reactivate the project when time allows in the future. We would also be delighted to hear from anyone who would be prepared to take on the task of administering the project, but should warn them that an essential qualification for the task of examining corpses collected from the tideline is a very strong stomach!

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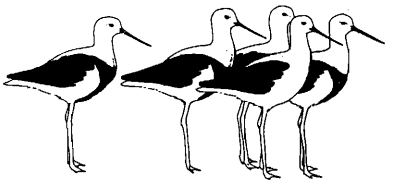
THE AUSTRALIAN WADER STUDIES GROUP: FUTURE RESEARCH OBJECTIVES

by Brett Lane

To better inform WSG members of the current and future activities of the AWSG, we are reprinting here, with some modifications for a wider audience, an article that first appeared in *The Stilt* No. 7 (October 1985), with kind permission of the Editor. This is part of a reciprocal arrangement between WSG and AWSG that is aimed at improving links and contact between the two groups. Further details of the AWSG can be obtained from the Administrative Secretary, Mrs. Brenda Murliss, 34 Centre Ave., Vermont, Victoria 3133, Australia.

The Australian Wader Studies Group (AWSG) is an independent group of wader enthusiasts of the Royal Australian Ornithologists Union (RAOU). Its aims are:

1. To develop and assist with plans for wader research in Australasia in conjunction with other interested bodies.
2. To co-ordinate and encourage counting, banding, feeding studies and other scientific programmes involving amateur and professional skills.
3. To encourage and assist with the publication of results.
4. To maintain effective communication between wader enthusiasts within Australasia and with similar groups overseas.



5. To formulate and promote policies for the conservation and management of waders and their habitat.

AWSG publishes *The Stilt* twice-yearly.

BACKGROUND

The Interim Committee of the AWSG appointed a scientific sub-committee to establish goals and priorities for the group's research and to formulate a practical research programme. These tasks have now been completed. The sub-committee decided that the ultimate aim of AWSG research should be to provide information to enable the effective protection and management of wader populations in Australia.

We discussed a number of possible directions for wader research in Australia. Population monitoring, migration studies, documenting the waders of northern Australia, banding, feeding studies and research into Audtralian-breeding species were all considered. Obviously the AWSG lacks the resources to organise research in all these directions. Given the ultimate aim, we decided that the current fate of waders in Asia was an important consideration in deciding our final programme.

Duncan Parish, the co-ordinator of the Interwader project in eastern Asia, has

estimated that about 50% of the wader habitat in Asia has been destroyed, and that a further 20% is threatened within the next decade. In addition, somewhere between 250 000 and 1.5 million waders are killed for food there each year, and there are no controls or information on the effects of this. Habitat destruction is nowhere near as extensive in Australia, but increased coastal development and recreation is likely to place increasing pressure on wader populations in the future, especially in the more densely-populated parts of the east and south coasts. Accordingly, population monitoring in Australia, to determine how wader numbers are changing, was made top priority.

We still have a long way to go in documenting the migration routes of waders within Australia. Only with this information can the important staging sites be identified and preserves. Given the conservation objective, this was also thought to be a high priority.

Our approach to the collection of information is discussed below.

POPULATION MONITORING

Objective

To monitor, at selected sites, year-to-year changes in population levels of migratory and Australian-breeding waders and to attempt to account for these in terms of reproductive success and mortality.

Methods

Counts. There will still be sample counts in summer (early February) and winter (mid-June) each year of selected sites to determine numbers of as many species as possible. This is essentially a continuation of National Wader Counts at a smaller number of sites. The sites have been carefully selected in consultation with state and regional representatives of the Group and cover habitats that are near natural and those that are subject to alteration by human activities. In this way, population trends associated with local changes can be discerned from any overall trends.

Banding. All wader banding groups will be encouraged to catch a sample of a hundred or more of as many species as is practical at the same discrete site(s) between December and February each year. The proportion of juveniles in catches will be an index of breeding success and the rate at which birds banded in previous yeas occur as recaptures in catches will give an indication of mortality rates.

Year-to-year changes in numbers detected by counts should correlate with changes in breeding success and mortality, as they have over the last 5 years of the RAOU Wader Studies Programme.

REGULAR COUNTS

Objective

To determine the timing of arrival, departure and migration in a sample of sites throughout the country. Also, to determine the timing of flocking and movements of Australian-breeding species and in the case of inland species, responses to drought and flood.

Method

Monthly or more frequent counts at selected sites over 2 years or more to show when waders move into and out of an area. Preliminary analysis of such counts from the RAOU Wader Studies Programme has shown that 2 or more years of counts are necessary to determine with any certainty how waders use a site through the year.

Several criteria have been established for the choice of sites, notably:

1. The site need not hold large numbers of waders;
2. Permanent inland sites are particularl valuable, for monitoring overlanc migration, and movements in response to rainfall;
3. The site must be discrete;
4. Sites should be easy to cover;
5. Counts must continue for a minimum of 2 years, and take place at least once per month.

The sub-committee agreed that any research over and above these 2 projects requires more resources than the group currently has available. The most limiting factor is the availability of volunteer time to organise projects and analyse results for reporting to participants and preparing publications. Annual reports of the 2 projects will appear in *The Stilt*.

Studies of feeding behaviour and diet were also considered important, since food and its availability determine where waders live and in what numbers. Studies of the relationship between food supplies and how waders use an area are essential for predicting the impact of habitat destruction and alteration, but such detailed research requires professional support. To encourage such assistance, a broad-sheet, publicising the need for thse studies, and the background information currently available, has been sent to appropriate university departments encouraging post-graduate students to research this subject.

Any one wanting more information about the AWSG research programme, or who who like to help, should contact Brett Lane at the address below.

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