

BREEDING WADERS OF LOWLAND GRASSLANDS - A NEW WSG/BTO PROJECT

by Ken Smith

In the last few years the British Trust for Ornithology, Wader Study Group and Scottish Ornithologists' Club have been very heavily involved with surveys of breeding waders. In England and Wales the survey of Breeding Waders of Wet Meadows was carried out in 1982 and full details have been published (Smith, K. 1983. *Bird Study* 5:177-192). In Scotland the survey of Waders on Agricultural Land was completed last year (see *Wader Study Group Bull.* 39: 30) and Hector Galbraith will be publishing full results shortly. Both surveys have demonstrated the perilous state of some of our lowland breeding wader populations. In lowland England and Wales, Snipe *Gallinago gallinago* and Redshank *Tringa totanus* were shown to be particularly restricted in both their distribution and numbers. Although numbers were higher in Scotland, these birds were found to be using areas very vulnerable to agricultural change.

The survey results have provided the first comprehensive set of data on our lowland wader populations and they allow the importance of individual sites to be put into context. However there are still many major questions unanswered. In particular we have virtually no information at present on the 'natural' fluctuations in wader numbers on a particular site caused by winter and spring weather conditions; or on the detailed effects of changes in management. The BTO Common Bird Census indices give figures for Lapwing *Vanellus vanellus* nesting on farmland and, in 1982, the BTO Waterways Bird Survey (WBS) produced its first index for the Redshank. However, only a minority of WBS sites have any breeding Redshank and the index was based on data from a very restricted geographical area.

In order to answer some of the questions, and to try to collect sufficient information to produce an annual index, we are organising a

small monitoring scheme aimed specifically at waders breeding on lowland grasslands. The scheme will be a joint BTO/WSG project organised by myself, with help from Hector Galbraith in Scotland. The objectives are three-fold:

- 1) to collect information on year to year fluctuations in breeding wader numbers, with particular emphasis on Lapwing, Redshank and Snipe;
- 2) to monitor any long term trends in breeding numbers; and
- 3) on sites where major habitat changes occur in the course of the project, to monitor the effects of these changes.

It is hoped that, in first instance, the project will run for five years with between 50 and 100 sites covered in each year. These will be mostly grassland sites with a good geographical spread of the major grassland types. Hector and I will be selecting an initial list of sites which we hope can be covered, but the final list will depend on the number of people who wish to take part. If you would like to help, or have a site which you would be able to cover over the next few years, then please contact me at the BTO. The site must have at least one of the key breeding species (Lapwing, Snipe or Redshank) present, but we are not only interested in the better sites. We would like to include also some marginal sites, where year to year fluctuations are likely to be most important. The methodology will be similar to the previous breeding wader surveys and will require only three visits in the course of the breeding season.

If you would like to help with this very worthwhile project, please contact Ken Smith at the BTO, Beech Grove, Tring, Herts HP23 5NR, U.K.

ESTIMATING PRE-FLEDGING SURVIVAL RATES: A REQUEST FOR INFORMATION

by R.E. Green

Yates (*Wader Study Group Bull.* 33:11) suggested that pre-fledging survival rates of waders could be determined if pulli were measured when ringed so that their age could be estimated. The principle of the method is simple: a smaller proportion of chicks ringed soon after hatching would be expected to be recovered when full-grown than, say, of those ringed when half-grown, because of intervening mortality. In view of recent successful applications of this method in the Netherlands, I am investigating the feasibility of persuading British ringers to make measurements of wader pulli and of collecting the data efficiently.

Before such a scheme could begin the best set of measurements to make needs to be determined. Bill length, head-and-bill length, tarsus, wing and weight are all candidates. The method of measurement also needs to be specified, e.g. are measurements with rulers acceptable or must

vernier calipers be used. The accuracy of the measurement for the determination of age is obviously important but there are other important considerations. To be successful the scheme would need to coax the vast majority of ringers to co-operate. Therefore measurements which are difficult to make or which require special instruments will be avoided (even vernier calipers may be "special instruments" to many). I would be very grateful for any comments on the relative merits of different measurements, or on other aspects of the scheme. Any ringers who are likely to catch wader pulli of known age in 1984 and who would be prepared to try out some measuring techniques on them are urged to contact me as soon as possible.

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