

PREFACE

Anyone writing a book about the coastal birds of the British Isles is in the fortunate position of having a wealth of material from which to select. Two of the earliest monographs on individual species were Grieve's on the Great Auk published in 1885 and Gurney's on the Gannet in 1913. Nowadays, monographs are published more frequently, with books on the Shelduck, Arctic Skua, Puffin and Manx Shearwater all appearing in the 1980s.

An important landmark in seabird studies was the regular national population survey of Fulmars started by James Fisher in 1939. Long-term studies of the productivity and mortality at particular colonies were later started by university researchers, notably George Dunnet on Fulmars in 1950, John Coulson on Kittiwakes in 1954 and Bryan Nelson on Gannets in 1960. Following the formation of the Seabird Group in 1965, a national survey of all breeding seabird populations was undertaken in 1969/70 (Operation Seafarer). Studies of a range of species at large mixed colonies such as Skokholm were also started. At the latter site, Chris Perrins' students began to put the pioneering natural history observations of Ronald Lockley into their proper scientific context. Meanwhile, Niko Tinbergen's work on seabirds at Ravenglass, Walney and the Farne Islands was revolutionising the study of animal behaviour.

A central role in widescale population surveys is now played by the British Trust for Ornithology (BTO). By harnessing the skills and enthusiasm of amateur ornithologists, the BTO is able to achieve the kind of comprehensive coverage that is the envy of most other countries. The Seabird Group, itself an offshoot of the BTO, was responsible, with the Nature Conservancy Council (NCC), for the most recent survey of our breeding seabird populations in 1985-87. The results of this survey (the Seabird Colony Register) have just been published (Lloyd, Tasker & Partridge, 1991). The NCC, which has now been split into English Nature, Scottish Natural Heritage and the Countryside Council for Wales, has also become involved in seabird research of its

own. Its most notable recent contributions have been the study of the distribution of birds across the open ocean, through the work of the Seabirds at Sea Team, and the completion of an Estuaries Review containing a wealth of information about British estuaries (Davidson *et al.*, 1991). The Institute of Terrestrial Ecology (ITE), despite its name, has a number of staff working on coastal birds. Its best known seabird researcher is Mike Harris who worked on gulls in South Wales before moving to Scotland to study what some people would call real seabirds. A second generation of seabird researchers, trained by some of the people mentioned above, is now established in the universities, including Tim Birkhead, Bob Furness and Pat Monaghan.

Interest in waders has only recently become as strong as that in seabirds. Although breeding waders had been studied for many years by a few enthusiasts, such as Desmond Nethersole-Thompson and Bill Hale, wintering birds received little attention until the Wader Study Group was formed in 1970. This too was an offshoot of the BTO. Large numbers of waders began to be caught using cannon-nets on the Wash and elsewhere, thanks largely to the energy of Clive Minton. The tantalising ringing recoveries of these birds from abroad led to a number of British expeditions to places such as Iceland, Greenland, Morocco and Mauritania. University researchers also began to take an interest in waders, firstly at Aberdeen's Culterty Field Station on the Ythan Estuary under George Dunnet, then at Lindisfarne and Teesmouth under Peter Evans and in the Firth of Forth under David Bryant. The ITE also became involved through John Goss-Custard, who started work on Redshanks on the Ythan, and went on to study Oystercatchers on the Exe Estuary.

Wintering waders are now counted regularly by the Birds of Estuaries Enquiry, organised by the BTO. The population sizes of British breeding waders have also been estimated. The BTO, the Royal Society for the Protection of Birds (RSPB), the NCC and the Wader Study Group have between them organised surveys covering wet meadows in England and Wales, the machair, Scottish agricultural land, upland areas and salt-marshes. The Wader Study Group has now become a major international forum for work on waders and has organised several research projects such as that on the spring passage of Knots.

The RSPB has always provided financial support for research on birds, but has increasingly carried out work of its own. It has naturally enough concentrated on the biology of rare and declining species, and on management techniques for increasing bird numbers on reserves. The Wildfowl and Wetlands Trust has been actively involved in research for a great many years, and through the work of Myrfyn Owen, Malcolm Ogilvie and others has shown how ducks and geese exploit coastal habitats such as saltmarshes. Other notable work on coastal wildfowl

has been undertaken by Harry Milne and Ian Patterson who studied the biology of Eiders and Shelducks at the Ythan. The International Waterfowl and Wetlands Research Bureau has a mainly co-ordinating function, but by organising meetings and workshops has produced a number of valuable reviews, particularly of the sizes of national and flyway populations of wildfowl and waders.

During recent years there has been something of a decline in the scope and quality of research on birds carried out in Britain. This is reflected most vividly by the fact that our journals are to an increasing extent filled with the excellent work being carried out by our friends on the continent, particularly the Scandinavians and Dutch. This decline is a consequence of the diversion of British resources away from publicly funded research and into private hands. Much less work is done as a result, and most of what remains is related to projects that threaten natural environments, such as housing and leisure developments, including marinas and barrages. Our few professional ornithologists, including those in the BTO, NCC, RSPB, ITE and the universities and polytechnics, have little choice but to spend more time collecting information on the effects of such proposals, and either presenting a case on behalf of developers or trying to prevent the developments taking place at all.

It is also galling, following a decade that has for the first time seen environmental issues placed firmly on the political agenda, to see more and more money spent by both government and industry on public relations, and less and less on environmental research and monitoring. For example, coastal birds are ideal species for monitoring the health of coastal and marine environments, yet no regular program exists to determine the levels of any of the toxic contaminants that they contain. It is hard to find anything encouraging to say about the changes that have taken place in recent years, but there is just a glimmer of hope. More public funds can be generated for research by the imposition of taxes and fines on those who pollute and damage the environment (which includes nearly all of us). This is already being done by the National Rivers Authority, which is introducing charges to cover the costs of its monitoring and research programmes. This principle needs to be strengthened and extended.

The references at the end of this book provide an introduction to the wealth of literature available to anyone wishing to pursue a particular topic further. Species of birds that do not occur in Britain are occasionally referred to, but only if their biology is of general interest. One or two exotic habitats, such as mangroves, are also mentioned because they are important to British birds at certain times of the year.

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gull and wader populations of the Bristol Channel with me, especially Greg Mudge, Dave Worrall, Judy Anderson, Hanna Siman and Ryland Talbot. Needless to say, they did most of the hard work. It has also been a pleasure to study waders in the company of Harry Green and my colleagues in the Celtic Wader Research Group. The following people have helped in the preparation of this book by providing material: S. Angus, J. Cawley, P. Doody, G.R. Hosey, J.M. Edington, A. Fitchett, P. Fox, J. Frikke, J.D. Goss-Custard, H.E. Grenfell, M.S.C. Havard, P. Hawkey, G.R. Hosey, P. Howlett, F. Hunter, J. Laursen, D.R. Lees, C.J. Mettam, S.J. Moon, M.E. Moser, G.P. Mudge, H. Nicholls, H.Y. Siman, T.J. Stowe, R.J. Talbot, M.L. Tasker, L.M. Warren, M.J. Wells, K. Williams, V. Williams and D.H. Worrall. At Cambridge University Press, M.G. Walters, R.C. Smith and S. Trevitt have been encouraging and helpful. I would also like to thank Professors Denis Bellamy, Ray Beverton and Mike Claridge in whose departments I have worked whilst preparing this book. The following have read through parts of the text and I am most grateful for their comments: J.A. Fowler, R. Prys-Jones, P. Rothwell, R.W. Summers, L. Campbell and N. Harrison. Chris Perrins, as series editor, has made a great many improvements and corrections to the text. Shelley Hinsley also read through the whole of the text, and this book has benefitted from numerous discussions with her. Chris Rose has patiently coped with my requests for difficult combinations of features in some of the illustrations, and the results of his efforts speak for themselves. Any figures that do not have the originator's name at the end of the caption were prepared by myself.

I have used the following terms in accordance with their correct geographical definitions: Britain refers to England, Scotland and Wales; the United Kingdom to Britain and Northern Ireland; Ireland to the Republic of Ireland (Eire) and Northern Ireland; and the British Isles to the United Kingdom, Eire, the Channel Islands and the Isle of Man. Finally, I have used the flowering plant names recommended by Dony, Jury & Perring (1986).