

Bird Census Techniques

Colin J. Bibby, Neil D. Burgess

Royal Society for the Protection of Birds
The Lodge
Sandy
Bedfordshire

and

David A. Hill

British Trust for Ornithology
The Nunnery
Nunnery Place
Thetford
Norfolk

Illustrated by Sandra Lambton, RSPB



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About the Authors

Colin Bibby is Director of Research at the International Council for Bird Preservation where he is interested in the role of birds as indicators for global biodiversity conservation. While Head of Conservation Science at the Royal Society for the Protection of Birds, he was a co-author of *Red Data Birds in Britain*. In both capacities, he has been struck by the small number of birds of conservation concern which have been counted adequately. He has counted birds in Britain and Europe, as a professional, as an amateur participant, and as an organiser of surveys for the British Trust for Ornithology. He was motivated to start this book by the belief that bird-watchers would contribute more to conservation if they put more effort into counting birds, but lack of guidance on methods was a handicap.

Neil Burgess graduated in Botany from the University of Bristol in 1983. He undertook a PhD on the evolution of the earliest land plants (400–430 million years before present) at the Natural History Museum in London, and Cardiff University in Wales from 1983 to 1987. He worked in Ecology, Research and Advisory Departments at the RSPB until 1991, producing botanical surveys of several RSPB reserves, and case studies of the methods and results of management of British habitats for birds (particularly wetland and heathland habitats). Since 1989 he has also been involved in scientific and conservation work in East Africa and since 1991 he has been employed by the RSPB International Department to manage conservation projects in Africa. This work forms part of the International Council for Bird Preservation's Africa Programme.

David Hill received his doctorate on the population ecology of wildfowl from the Edward Grey Institute of Field Ornithology at Oxford in 1982 and moved to the Game Conservancy as Head of Pheasant Research. Much of the work involved studies of marked birds, their behaviour and habitat preferences in relation to land use, largely farming, forestry and conservation. In 1987 he joined the Royal Society for the Protection of Birds as Senior Ecologist, a post which involved setting up monitoring and experi-

ments on reserves, bringing him into close contact with sampling different bird species and habitats. In 1989 he joined the British Trust for Ornithology and established their Research, Development and Advisory Service, with responsibility for setting up and running research contracts on estuaries, farmland, woodland and uplands, using the methods outlined in this book. He is a council member of the British Ecological Society and a member of the Scientific Advisory Committee of the Wildfowl and Wetlands Trust. He has been interested in wildlife since as early as he can remember and has published scientific papers and books on the ecology of gamebirds, wildfowl, estuary waders, bird communities of native pine forest and grazed forests, insects in coppiced woodland, population dynamics, population and resource modelling, and bird distributions in relation to land cover determined by satellite imagery. Since leaving the BTO in 1992, he now runs an ecological consultancy, Ecoscope Applied Ecologists.

Preface

The idea for this book came from a general perception amongst field workers of the British Trust for Ornithology (BTO) and Royal Society for the Protection of Birds (RSPB), that the methodology for various bird census methods was scattered throughout the scientific literature and difficult to access. Indeed many field-staff or volunteers were only familiar with one or two methods and there was often little attempt to standardise methods or to check that the counting was being undertaken in a systematic manner over wide geographical areas. It was also evident that there was a need amongst volunteers, junior researchers, students and scientists in the developing world for a practical guide synthesising all aspects of the various methods of counting birds, their uses, and the things which ought to be considered before, during and after counting birds.

Methods described in the literature for counting birds are many and various. In this book we have devoted whole chapters to the most widely used and most suitable methods, and attempted to amalgamate other counting methodologies into major groups. Examples of the use of methods are provided wherever possible and the relative value of various approaches for answering specific questions is also addressed.

We have not attempted to obtain and review all the available literature on bird counting. Instead we have extracted examples in the hope of providing guidance and making workers more aware of the problems involved in bird counting.