

THE SPECIATION & BIOGEOGRAPHY OF BIRDS

IAN NEWTON



This book provides a fresh synthesis of knowledge of species formation in birds and of the factors that influence their geographical distributions. It draws on information from the earth sciences and palaeo-climatology, as well as from studies on the evolution, ecology, distribution and migration patterns of birds. Full account is taken of the recent findings in molecular (DNA) biology, as they bear upon questions of avian evolution and distributional history. No other book currently available covers this range of subject matter or attempts to combine it into a coherent whole.

The book is intended primarily for students and young researchers in avian evolution, biogeography and ecology. However, it is written in simple language throughout, in the hope that it will be easily understood by newcomers to these fields and by interested bird-watchers and other lay readers.

The book describes how bird species are formed, and how they are defined and classified by taxonomists. It describes how the number and types of bird species vary from region to region across the world, and how their current patterns of distribution have been influenced by earth history: by the movements of the continents and by the formation and loss of oceanic islands, by glacial and other climatic cycles, and by the influence of human activities. It also describes the role of contemporary ecological factors, such as climate, habitat and food-supplies, in influencing the current geographical ranges and migration patterns of birds worldwide.

The author is known for his research into various aspects of avian ecology and migration. He has written more than 250 research papers and five books, including *Population Ecology of Raptors* (1979) and *Population Limitation in Birds* (1998). He has served as President of the British Ecological Society, and of the British Ornithologists' Union, and is an Honorary Fellow of the American Ornithologists' Union.

Four allospecies of *Ficedula* flycatchers are illustrated on the front cover, clockwise from top: Atlas Flycatcher *F. (f.) speculigera*, Collared Flycatcher *F. albicollis*, Semi-collared Flycatcher *F. semitorquata* and Pied Flycatcher *F. hypoleuca*.



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