Phylogeny and Conservation

Phylogeny is a potentially powerful tool for conserving biodiversity. This book explores how it can be used to tackle questions of great practical importance and urgency for conservation. For example, what role should phylogeny play in delimiting units of conservation? Does phylogeny provide a good surrogate measure of biodiversity? How can phylogeny be incorporated into area-selection algorithms to maximise biodiversity coverage, and how much difference does it make? Using case studies from many different taxa and regions of the world, the volume evaluates how useful phylogeny is in understanding the processes that have generated today’s diversity and the processes that now threaten it. The novelty of many of the applications, the increasing ease with which phylogenies can be generated, the urgency with which conservation decisions have to be made and the need to make decisions that are as good as possible together make this volume a timely and important synthesis, which will be of great value to researchers, practitioners and policy-makers alike.

ANDY PURVIS is Reader in Biodiversity at Imperial College London. His research interests focus on the use of phylogenies to study macroevolution and extinction.

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THOMAS BROOKS is head of the Conservation Synthesis Department in Conservation International’s Center for Applied Biodiversity Science. His interests lie in species conservation, particularly birds, and tropical forest biodiversity hotspots.
Conservation Biology

Conservation biology is a flourishing field, but there is still enormous potential for making further use of the science that underpins it. This new series aims to present internationally significant contributions from leading researchers in particularly active areas of conservation biology. It will focus on topics where basic theory is strong and where there are pressing problems for practical conservation. The series will include both single-authored and edited volumes and will adopt a direct and accessible style targeted at interested undergraduates, postgraduates, researchers and university teachers. Books and chapters will be rounded, authoritative accounts of particular areas with the emphasis on review rather than original data papers. The series is the result of a collaboration between the Zoological Society of London and Cambridge University Press. The series editors are Professor Morris Gosling, Professor of Animal Behaviour at the University of Newcastle upon Tyne, Professor John Gittleman, Professor of Biology at the University of Virginia, Charlottesville, Dr Rosie Woodroffe of the University of California, Davis, and Dr Guy Cowlishaw of the Institute of Zoology, Zoological Society of London. The series ethos is that there are unexploited areas of basic science that can help define conservation biology and bring a radical new agenda to the solution of pressing conservation problems.

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Phylogeny and Conservation

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