

Avian Molecular Evolution and Systematics

EDITED BY **DAVID P. MINDELL**

University of Michigan, Ann Arbor

The use of molecular characters has had far-reaching impact on the study of phylogeny and evolution, enabling new approaches to long-standing questions. *Avian Molecular Evolution and Systematics* presents an overview of the theory and application of molecular data, focusing on phylogeny and evolutionary biology of birds. Leading contributors use these relatively new tools to elucidate important episodes in the evolutionary history of birds. Authors discuss the evolution of molecular markers, ranging from microsatellite DNA sequences to gene arrangements, for a broad spectrum of species and taxonomic categories. Methodological issues in systematics are explored, and new data and phylogenetic analyses are presented. Authors also focus on application of molecular population genetics data and phylogenies to broader issues such as the evolution of behavior, speciation, and conservation biology. This book is intended for ornithologists and evolutionary biologists, including advanced undergraduate and graduate students, faculty, and researchers interested in both organismal and molecular evolution.

KEY FEATURES

- Contains authoritative contributions from leading researchers
- Discusses the utility of different molecular markers for questions of avian evolution, involving populations and higher-level taxa
- Applies molecular-based phylogenies of birds and molecular population genetics data to broad questions of organismal and molecular evolution
- Compares and contrasts molecular and morphological data sets



Academic Press

Harcourt Brace & Company, Publishers

San Diego London Boston New York Sydney Tokyo Toronto

Printed in the United States of America

ISBN 0-12-498315-4



9 780124 983151