



Conservation and the Genetics of Populations

Fred W. Allendorf and Gordon Luikart

This important book provides a thorough understanding of the genetic basis of biological problems in conservation. *Conservation and the Genetics of Populations* gives a comprehensive overview of the essential background, concepts, and tools needed to understand how genetic information can be used to develop conservation plans for species threatened with extinction.

Loss of biodiversity is among the greatest problems facing the world today, but thanks to new molecular technologies, statistical methods, and computer programs, genetic theories and methods are becoming increasingly useful in the conservation of biological diversity. Using a balance of data and theory, and basic and applied research, *Conservation and the Genetics of Populations* examines genetic and phenotypic variation in natural populations, the principles and mechanisms of evolutionary change, the interpretation of genetic data from natural populations, and how this may be applied to conservation. The book includes examples from both plants and animals, as well as from natural and captive populations.

Written in an accessible style, each chapter includes discussion questions and problems to aid understanding, and also features a "Guest Box" authored by leading people in the field. An associated website (www.blackwellpublishing.com/allendorf) contains solutions to questions, example data sets, and software programs to illustrate population genetic processes and methods of data analysis.

This book is essential reading for advanced undergraduate and graduate students of conservation genetics, natural resource management, and conservation biology, as well as professional conservation biologists working for wildlife and habitat management agencies.

Fred W. Allendorf is a Regents Professor at the University of Montana and a Professorial Research Fellow at Victoria University of Wellington in New Zealand.

Gordon Luikart is a Research Associate Professor at the University of Montana and a Visiting Professor in the Center for Investigation of Biodiversity and Genetic Resources at the University of Porto, Portugal.

Cover image: Photography © John Hyde, Wild Things Photography

Cover design by cyandesign.co.uk

Printed in Singapore

For information, news, and content about Blackwell books and journals in Ecology please visit www.blackwellpublishing.com/ecology

 **Blackwell**
Publishing

ISBN 1-4051-2145-9

