

Contents

List of contributors [ix]
Foreword [xiii]
Acknowledgements [xiv]

1 Introduction [I]
HEIDI C. HAUFFE AND VALERIO SBORDONI

Statistical approaches, data analysis and inference [23]

2 Statistical methods for identifying hybrids and groups [25]
ERIC C. ANDERSON

3 How to use MIGRATE or why are Markov chain Monte Carlo programs
difficult to use? [42]
PETER BEERLI

4 Nested clade phylogeographic analysis for conservation genetics [80]
JENNIFER E. BUHAY, KEITH A. CRANDALL AND DAVID POSADA

5 A comparison of methods for constructing evolutionary networks from
intraspecific DNA sequences [104]
PATRICK MARDULYN, INSA CASSENS AND MICHEL C. MILINKOVITCH

Molecular approaches and applications [121]

6 Challenges in assessing adaptive genetic diversity: overview of methods
and empirical illustrations [123]
AURÉLIE BONIN AND LOUIS BERNATCHEZ

7 Monitoring and detecting translocations using genetic data [148]
GIORGIO BERTORELLE, CHIARA PAPETTI, HEIDI C. HAUFFE AND
LUIGI BOITANI

8	Non-invasive genetic analysis in conservation [167]	BENOÎT GOOSSENS AND MICHAEL W. BRUFORD
9	The role of ancient DNA in conservation biology [202]	JON BEADELL, YVONNE CHAN AND ROBERT FLEISCHER
	From genetic data to practical management: issues and case studies [225]	
10	Future-proofing genetic units for conservation: time’s up for subspecies as the debate gets out of neutral! [227]	MICHAEL W. BRUFORD
11	Genetic diversity and fitness-related traits in endangered salmonids [241]	KATRIINA TIIRA AND CRAIG R. PRIMMER
12	Genetics and conservation on islands: the Galápagos giant tortoise as a case study [269]	CLAUDIO CIOFI, ADALGISA CACCONI, LUCIANO B. BEHEREGARAY, MICHEL C. MILINKOVITCH, MICHAEL RUSSELLO AND JEFFREY R. POWELL
13	Evolution of population genetic structure in marine mammal species [294]	A. RUS HOELZEL
	Future directions in conservation genetics [319]	
14	Recent developments in molecular tools for conservation [321]	CRISTIANO VERNESI AND MICHAEL W. BRUFORD
15	Theoretical outlook [345]	MARK BEAUMONT
	<i>Software index</i> [374]	
	<i>Species index (common name)</i> [376]	
	<i>Species index (Latin name)</i> [379]	
	<i>Subject index</i> [382]	

The colour plates are situated between pages 210 and 211