

Contents

List of Authors

- | | |
|---|------------|
| 1 The study of quantitative genetics in wild populations | 1 |
| Loeske E. B. Kruuk, Anne Charmantier and Dany Garant | |
| 2 Four decades of estimating heritabilities in wild vertebrate populations: improved methods, more data, better estimates? | 16 |
| Erik Postma | |
| 3 Quantitative genetic approaches to understanding sexual selection and mating system evolution in the wild | 34 |
| Jane M. Reid | |
| 4 Individual behaviour: behavioural ecology meets quantitative genetics | 54 |
| Niels J. Dingemanse and Ned A. Dochtermann | |
| 5 The quantitative genetics of senescence in wild animals | 68 |
| Anne Charmantier, Jon E. Brommer and Daniel H. Nussey | |
| 6 The effects of others' genes: maternal and other indirect genetic effects | 84 |
| Andrew G. McAdam, Dany Garant and Alastair J. Wilson | |
| 7 Dominance genetic variance and inbreeding in natural populations | 104 |
| Matthew E. Wolak and Lukas F. Keller | |
| 8 Cross-pollination of plants and animals: wild quantitative genetics and plant evolutionary genetics | 128 |
| John R. Stinchcombe | |
| 9 Quantitative genetics of wild populations of arthropods | 147 |
| Felix Zajitschek and Russell Bonduriansky | |
| 10 Case study: quantitative genetics and sexual selection of weaponry in a wild ungulate | 160 |
| Loeske E. B. Kruuk, Tim Clutton-Brock and Josephine M. Pemberton | |

11 Epigenetic processes and genetic architecture in character origination and evolution	177
Alexander V. Badyaev and J. Bruce Walsh	
12 Evolutionary potential and constraints in wild populations	190
Céline Teplitsky, Matthew R. Robinson and Juha Merilä	
13 Molecular quantitative genetics	209
Henrik Jensen, Marta Szulkin and Jon Slate	
14 Bayesian approaches to the quantitative genetic analysis of natural populations	228
Michael B. Morrissey, Pierre de Villemereuil, Blandine Doligez and Olivier Gimenez	
15 Evolutionary dynamics in response to climate change	254
Phillip Gienapp and Jon E. Brommer	
Index	275