
Contents

List of contributors	vii
Acknowledgements	ix
1 Introduction	1
<i>John M. Fryxell, E.J. Milner-Gulland, and Anthony R.E. Sinclair</i>	
Part 1: The evolution of migration	5
2 Understanding the evolution of migration through empirical examples	7
<i>Katherine A. Cresswell, William H. Satterthwaite, and Gregory A. Sword</i>	
3 Theoretical reflections on the evolution of migration	17
<i>Robert D. Holt and John M. Fryxell</i>	
Part 2: How to migrate	33
4 Mechanistic principles of locomotion performance in migrating animals	35
<i>Anders Hedenström, Melissa S. Bowlin, Ran Nathan, Bart A. Nolet, and Martin Wikelski</i>	
5 Energy gain and use during animal migration	52
<i>Nir Sapir, Patrick J. Butler, Anders Hedenström, and Martin Wikelski</i>	
6 Cues and decision rules in animal migration	68
<i>Silke Bauer, Bart A. Nolet, Jarl Giske, Jason W. Chapman, Susanne Åkesson, Anders Hedenström, and John M. Fryxell</i>	
Part 3: Migration in time and space	89
7 Uncertainty and predictability: the niches of migrants and nomads	91
<i>Niclas Jonzén, Endre Knudsen, Robert D. Holt, and Berni-Erik Sæther</i>	
8 Migration quantified: constructing models and linking them with data	111
<i>Luca Börger, Jason Matthiopoulos, Ricardo M. Holdo, Juan M. Morales, Iain Couzin, and Edward McCauley</i>	
Part 4: Broader contexts	129
9 Migration impacts on communities and ecosystems: empirical evidence and theoretical insights	131
<i>Ricardo M. Holdo, Robert D. Holt, Anthony R.E. Sinclair, Brendan J. Godley, and Simon Thirgood</i>	

10 Pastoral migration: mobile systems of animal husbandry	144
<i>Roy H. Behnke, Maria E. Fernandez-Gimenez, Matthew D. Turner, and Florian Stammer</i>	
11 Conservation and management of migratory species	172
<i>Jennifer L. Shuter, Annette C. Broderick, David J. Agnew, Niclas Jonzén, Brendan J. Godley, E.J. Milner-Gulland, and Simon Thirgood</i>	
12 Conclusions	207
<i>E.J. Milner-Gulland, John M. Fryxell, and Anthony R.E. Sinclair</i>	
References	216
Index	257