TABLE OF CONTENTS

 Preface: wildlife disease ecology Glossary of terms

Part I. Understanding Within-Host Processes:

- 1. Pollinator diseases: the Bombus-Crithidia system
- 2. Genetic diversity and disease spread: epidemiological models and empirical studies of a snail-trematode system
- 3. Wild rodents as a natural model to study within-host parasite interactions
- 4. From population to individual host scale and back again: testing theories of infection and defence in the Soay sheep of St Kilda
- 5. The causes and consequences of parasite interactions: African buffalo as a case study
- 6. Effects of host lifespan on the evolution of age-specific resistance: a case study of anther-smut disease on wild carnations
- 7. Sexually transmitted infections in natural populations: what have we learnt from beetles and beyond?

Part II. Understanding Between-Host Processes:

- 8. Using insect baculoviruses to understand how population structure affects disease spread
- 9. Infection and invasion: study cases from aquatic communities
- 10. Parasite mediated selection in red grouse consequences for population dynamics and mate choice
- 11. Emergence, transmission and evolution of an uncommon enemy: Tasmanian devil facial tumour disease
- 12. Bovine tuberculosis in badgers: sociality, infection and demography in a social mammal
- 13. Mycoplasma ovipneumoniae in bighorn sheep: from exploration to action
- 14. Manipulating parasites in an Arctic herbivore: gastrointestinal nematodes and the population regulation of Svalbard reindeer

Part III. Understanding Wildlife Disease Ecology at the Community and Landscape Level:

- 15. The ecological and evolutionary trajectory of oak powdery mildew in Europe
- 16. Healthy herds or predator spreaders? Insights from the plankton into how predators suppress and spread disease
- 17. Multi-trophic interactions and migration behaviour determine the ecology and evolution of parasite infection in monarch butterflies
- 18. When chytrid fungus invades: integrating theory and data to understand disease-induced amphibian declines
- 19. Ecology of a marine ectoparasite in farmed and wild salmon
- 20. Mycoplasmal conjunctivitis in house finches: the study of an emerging disease
- 21. Heterogeneities in infection and transmission in a parasite-rabbit system: key issues for understanding disease dynamics and persistence
- 22. Sylvatic plague in Central Asia: a case study of abundance thresholds.