

Contents

Contributors, v

Preface, vii

Acknowledgements, viii

Part 1: Introduction

- 1 The Evolution of Behavioural Ecology, 3
John R. Krebs & Nicholas B. Davies

Part 2: Mechanisms and Individual Behaviour

Introduction, 15

- 2 Sensory Systems and Behaviour, 19
Rüdiger Wehner
- 3 The Ecology of Information Use, 42
Luc-Alain Giraldeau
- 4 Recognition Systems, 69
Paul W. Sherman, Hudson K. Reeve & David W. Pfennig
- 5 Managing Time and Energy, 97
Innes C. Cuthill & Alasdair I. Houston
- 6 Sperm Competition and Mating Systems, 121
Timothy R. Birkhead & Geoffrey A. Parker

Part 3: From Individual Behaviour to Social Systems

Introduction, 149

- 7 The Evolution of Animal Signals, 155
Rufus A. Johnstone
- 8 Sexual Selection and Mate Choice, 179
Michael J. Ryan
- 9 Sociality and Kin Selection in Insects, 203
Andrew F.G. Bourke
- 10 Predicting Family Dynamics in Social Vertebrates, 228
Stephen T. Emlen
- 11 The Ecology of Relationships, 254
Anne E. Pusey & Craig Packer
- 12 The Social Gene, 284
David Haig

Part 4: Life Histories, Phylogenies and Populations

Introduction, 307

- 13 Adaptation of Life Histories, 311
Serge Daan & Joost M. Tinbergen
- 14 The Phylogenetic Foundations of Behavioural Ecology, 334
Paul H. Harvey & Sean Nee
- 15 Causes and Consequences of Population Structure, 350
Godfrey M. Hewitt & Roger K. Butlin
- 16 Individual Behaviour, Populations and Conservation, 373
John D. Goss-Custard & William J. Sutherland

References, 396

Index, 447