Contents

Contributors		xi
Acknowledgements		xiii
	Introduction	1
	BERNARD J. CRESPI AND JAE C. CHOE	
1	Are behavioral classifications blinders to studying natural variation? WILLIAM T. WCISLO	8
2	Life beneath silk walls: a review of the primitively social Embiidina JANICE S. EDGERLY	14
3	Postovulation parental investment and parental care in cockroaches CHRISTINE A. NALEPA AND WILLIAM J. BELL	26
4	The spectrum of eusociality in termites JANET S. SHELLMAN-REEVE	52
5	Maternal care in the Hemiptera: ancestry, alternatives, and current adaptive value DOUGLAS W. TALLAMY AND CARL SCHAEFER	94
6	Evolution of paternal care in the giant water bugs (Heteroptera: Belostomatidae) ROBERT L. SMITH	116
7	The evolution of sociality in aphids: a clone's-eye view DAVID L. STERN AND WILLIAM A. FOSTER	150
8	Ecology and evolution of social behavior among Australian gall thrips and their allies BERNARD J. CRESPI AND LAURENCE A. MOUND	166
9	Interactions among males, females and offspring in bark and ambrosia beetles: the significance of living in tunnels for the evolution of social behavior	181
	LAWRENCE R. KIRKENDALL, DEBORAH S. KENT AND KENNETH A. RAFFA	
10	Biparental care and social evolution in burying beetles: lessons from the larder ANNE-KATRIN EGGERT AND JOSEF KARL MÜLLER	216
11	Subsocial behavior in Scarabaeinae beetles GONZALO HALFFTER	237
12	The evolution of social behavior in Passalidae (Coleoptera) JACK C. SCHUSTER AND LAURA B. SCHUSTER	260
13	The evolution of social behavior in the augochlorine sweat bees (Hymenoptera: Halictidae) based on a phylogenetic analysis of the genera BRYAN N. DANFORTH AND GEORGE C. EICKWORT	270
14	Demography and sociality in halictine bees (Hymenoptera: Halictidae) DOUGLAS YANEGA	293

X CONTENTS

15	Behavioral environments of sweat bees (Halictinae) in relation to variability in social organization WILLIAM T. WCISLO	316
16	Intrinsic and extrinsic factors associated with social evolution in allodapine bees M. P. SCHWARZ, L. X. SILBERBAUER AND P. S. HURST	333
17	Cooperative breeding in wasps and vertebrates: the role of ecological constraints H. JANE BROCKMANN	347
18	Morphologically 'primitive' ants: comparative review of social characters, and the importance of queen–worker dimorphism CHRISTIAN PEETERS	372
19	Social conflict and cooperation among founding queens in ants (Hymenoptera: Formicidae) JAE C. CHOE AND DAN L. PERLMAN	392
20	Social evolution in the Lepidoptera: ecological context and communication in larval societies JAMES T. COSTA AND NAOMI E. PIERCE	407
21	Sociality and kin selection in Acari YUTAKA SAITO	443
22	Colonial web-building spiders: balancing the costs and benefits of group-living GEORGE W. UETZ AND CRAIG S. HIEBER	458
23	Causes and consequences of cooperation and permanent-sociality in spiders LETICIA AVILÉS	476
24	Explanation and evolution of social systems BERNARD J. CRESPI AND JAE C. CHOE	499
Org	Organism index	
Sub	Subject index	