

Contents

<i>Preface</i>	page xi
<i>Acknowledgments</i>	xv

1 Needs and priorities for insect species conservation	1
Introduction: extinctions and conservation need	1
Planning priorities among species	4
Criteria for assessing priority	7
Overcoming lack of population data: going beyond numbers	19
Rarity and vulnerability	28
Species and related conservation units	35
Inferring and defining threat	39
Further focus and need	43
Community modules and insect species conservation	47
Summary	51
2 Plans for insect species conservation	53
Introduction: basic principles and scope	53
Scales and focus	58
Management options	63
Assessing progress	69
Summary	79
3 Habitat, population and dispersal issues	81
Introduction: concepts of habitat	81
Habitat models	85
Species, resources and population structure in management	90
Landscape features	98
Summary	100

4	Current and future needs in planning habitat and resource supply	103
	Introduction: space and time in insect conservation management	103
	Dispersal and connectivity	104
	Future needs: climate change	107
	Summary	120
5	Beyond habitat: other threats to insects, and their management	121
	Introduction: key threats to insects	121
	Alien species	122
	Pesticides	127
	Overcollecting	129
	Summary	142
6	Adaptive management options: habitat re-creation	145
	Introduction: improving habitats for insects	145
	Restoration	146
	Some management approaches	152
	Natural and anthropogenic habitats	160
	Habitat re-creation	161
	Summary	164
7	Re-introductions and <i>ex situ</i> conservation	167
	Introduction: the need for <i>ex situ</i> conservation	167
	Re-introduction	167
	Captive rearing	175
	Releases	183
	Re-introduction sites	187
	Summary	189
8	Roles of monitoring in conservation management	191
	Introduction: the need for monitoring	191
	Criteria for monitoring	194
	Approaches to monitoring	196
	Summary	204
9	Insect species as ambassadors for conservation	205
	Introduction: extending the conservation message	205

Temperate region insects	205
Tropical insects	209
Summary	211
10 Insect management plans for the future	213
Introduction: the audience and purpose for insect management plans	213
Constructing an insect recovery plan	219
Alternatives to a formal management plan?	223
Consultation and acceptance	225
After recovery?	229
Summary	230
<i>References</i>	233
<i>Index</i>	253