

CONTENTS

<i>Acknowledgements</i>	ix
-------------------------	----

PART 25

Lessons from the past	1
------------------------------	----------

98 How can a knowledge of the past help to conserve the future? Biodiversity conservation and the relevance of long-term ecological studies	3
--	----------

K. J. WILLIS, M. B. ARAUJO, K. D. BENNETT,
B. FIGUEROA-RANGEL, C. A. FROYD AND N. MYERS

99 Tropical forest recovery: legacies of human impact and natural disturbances	26
---	-----------

R. L. CHAZDON

100 Applied historical ecology: using the past to manage for the future	63
--	-----------

T. W. SWETNAM, C. D. ALLEN AND J. L. BETANCOURT

PART 26

Predicting the future of biodiversity	95
--	-----------

101 Forecasting global biodiversity threats associated with human population growth	97
--	-----------

J. K. MCKEE, P. W. SCIULLI, C. D. FOOC AND T. A. WAITE

102 Predicting biodiversity change: outside the climate envelope, beyond the species-area curve	105
--	------------

I. IBANEZ, J. S. CLARK, M. C. DIETZE, K. FEELEY,
M. HERSH, S. LADEAU, A. MCBRIDE, N. E. WELCH
AND M. S. WOLOSIN

CONTENTS

103	Estimating population spread: what can we forecast and how well?	126
	J. S. CLARK, M. LEWIS, J. S. MCLACHLAN AND J. HILLERISLAMBERS	
104	Is it meaningful to estimate a probability of extinction?	147
	D. LUDWIG	
105	Predicting global change impacts on plant species' distributions: future challenges	173
	W. THUILLER, C. ALBERT, M. B. ARAUJO, P. M. BERRY, M. CABEZA, A. GUISAN, T. HICKLER, G. F. MIDGLEY, J. PATERSON, F. M. SCHURR, M. T. SYKES AND N. E. ZIMMERMAN	
PART 27		
	Conservation outside of protected areas	203
106	Reconciliation ecology and the future of species diversity	205
	M. L. ROSENZWEIG	
107	Conservation where people live and work	229
	J. R. MILLER AND R. J. HOBBS	
108	How effective are European agri-environment schemes in conserving and promoting biodiversity?	244
	D. KLEIJN AND W. J. SUTHERLAND	
PART 28		
	The IT revolution and biodiversity science	283
109	The encyclopedia of life	285
	E. O. WILSON	
110	Automated species identification: why not?	293
	K. J. GASTON AND M. A. O'NEILL	
111	Information technology challenges of biodiversity and ecosystems informatics	320
	J. L. SCHNASE, J. CUSHING, M. FRAME, A. FRONDORF, E. LANDIS, D. MAIER AND A. SILBERSCHATZ	

CONTENTS

PART 29

Biodiversity, poverty and sustainable development 331

112 Parks and peoples: the social impact of protected areas 333

P. WEST, J. IGOE AND D. BROCKINGTON

113 Sustainable use and incentive-driven conservation: realigning human and conservation interests 365

J. M. HUTTON AND N. LEADER-WILLIAMS

114 A framework for improved monitoring of biodiversity: responses to the World Summit on Sustainable Development 386

R. E. GREEN, A. BALMFORD, P. R. CRANE,
G. M. MACE, J. D. REYNOLDS AND R. K. TURNER

115 Innovations for conservation and development 403

K. BROWN

PART 30

Paying for biodiversity 423

116 Economic benefits of rare and endangered species: summary and meta-analysis 425

J. B. LOOMIS AND D. S. WHITE

117 Valuing biodiversity for use in pharmaceutical research 440

R. D. SIMPSON, R. A. SEDJO AND J. W. REID

118 Is community-based ecotourism a good use of biodiversity conservation funds? 462

A. KISS

119 The non-economic motives behind the willingness to pay for biodiversity conservation 475

B. MARTIN-LOPEZ, C. MONTES AND J. BENAYAS

PART 31

The future of biodiversity research and biodiversity conservation 503

120 Conservation biogeography: assessment and prospect 505

R. J. WHITTAKER, M. B. ARAUJO, P. JEPSON, R. J. LADLE,
J. E. M. WATSON AND K. J. WILLIS

CONTENTS

121	Extinction and the loss of evolutionary history	547
	S. NEE AND R. M. MAY	
122	Conservation biology and real-world conservation	556
	J. G. ROBINSON	
	<i>Index</i>	579