

Contents

Preface	page ix
Acknowledgments	xiv
1 Biodiversity and the Environmentalist Agenda	1
1.1 Introduction	1
1.2 What Do <i>We</i> Mean by ‘Biodiversity’?	2
1.3 Why Think the Earth Is Running Out of Biodiversity?	6
1.4 The Environmentalist Agenda	15
1.5 Total Commitment vs. the <i>Ceteris Paribus</i> Environmentalist	22
1.6 Environmental Ethics and Intrinsic Value	22
1.7 The Structure of this Book	39
1.8 Further Reading	42
PART I INSTRUMENTAL VALUE DEFENSES	43
2 Ecosystem Functioning and Stability	47
2.1 The Basic Argument	47
2.2 Preliminaries	50
2.3 Relationships between Biodiversity and Ecosystem Functioning	51
2.4 Limitations of Experimental Design	60
2.5 A Summary of the Empirical Evidence	67
2.6 Questionable Relevance of the Experimental Evidence	77
2.7 Unpalatable Implied Commitments	86
2.8 Conclusions	91
2.9 Further Reading	92
2.10 Appendix: Economic Value of Ecosystem Functioning	93

vi CONTENTS

3	The Precautionary Principle	97
3.1	Introduction	97
3.2	What Is a Precautionary Defense?	98
3.3	Defining the Precautionary Principle	100
3.4	<i>Why vs. How</i> : Uses of the Precautionary Principle	101
3.5	The Precautionary Principle, Risk Assessment, and Cost–Benefit Analysis	107
3.6	Further Problems for the Precautionary Principle	118
3.7	Conclusions	130
3.8	Further Reading	131
4	Agricultural and Pharmaceutical Benefits	132
4.1	Introduction	132
4.2	A Precautionary Warning	133
4.3	Is Biodiversity Necessary for Food?	134
4.4	The Argument from Pharmaceutical Value	141
4.5	Conclusions	170
4.6	Further Reading	171
5	Nature-based Tourism and Transformative Value	173
5.1	Introduction	173
5.2	Demand Value of Biodiversity	175
5.3	The Transformative Value of Biodiversity	187
5.4	Conclusions	190
5.5	Further Reading	192
6	How Far Do Instrumental Value Defenses Get Environmentalists?	193
6.1	Introduction	193
6.2	The Ecosystem Function Defense	194
6.3	The Precautionary Defense	195
6.4	The Food and Medicine Defense	195
6.5	Nature-based Tourism and Transformative Value Defenses	200
6.6	Conclusions about Instrumental Value Defenses	200

PART II	INTRINSIC VALUE DEFENSES	205
7	Methodology in Philosophical Ethics	209
7.1	Approaches to Justification in Philosophical Ethics	209
7.2	The Role of ‘Thought Experiments’	223
7.3	Some Conceptual and Terminological Issues	227
7.4	Conclusions	232
7.5	Further Reading	232
8	Extensionism in Environmental Ethics	233
8.1	Introduction	233
8.2	The Animal Welfare/Animal Rights Distinction	234
8.3	Singer’s Utilitarian Sentientism	236
8.4	Regan’s Rights-based (Deontological) Sentientism	243
8.5	The Practical Charges against Sentientism	252
8.6	Can Sentientists Respond to the Practical Charges?	257
8.7	Biocentric Individualism and Environmental Ethics	272
8.8	Beyond ‘The Classical Modernist Paradigm’?	273
8.9	Further Reading	273
9	Ecoholism: Do Ecological Wholes Have Intrinsic Value?	274
9.1	Introduction	274
9.2	Some Non-starters and Common Problems	275
9.3	Extensionist Defenses of Ecoholism	283
9.4	Conclusions	299
9.5	Further Reading	300
10	Ecoholism 2: Callicott on the Leopold Land Ethic	301
10.1	Leopold’s Life and Style of Writing	302
10.2	Callicott’s “Triangular Affair” Paper	307
10.3	Callicott’s Later Interpretation of Leopold	314
10.4	Some Objections to Callicott’s Interpretation of Leopold	333

viii CONTENTS

10.5	Where Does Reading Leopold get us?	348
10.6	Further Reading	353
11	Should Biodiversity Be Conserved for Its Aesthetic Value?	354
11.1	Introduction	354
11.2	Russow, Sober, and the Duty to Conserve Artwork	361
11.3	The Superficiality Objection	370
11.4	The Problem of Unappealing Species and Ecosystems	374
11.5	Environmental Aesthetics and the Natural Environmental Model	377
11.6	Outstanding Challenges for an Aesthetic Defense of Conservation	383
11.7	Further Reading	386
12	How Far Do Intrinsic Value Defenses Get Environmentalists?	387
12.1	Introduction	387
12.2	Anthropocentrism	387
12.3	Sentientism	393
12.4	Ecoholism and Biocentric Individualism	394
12.5	Aesthetic Intrinsic Value	395
12.6	Conclusions	396
13	Conclusions and Personal Reflections	397
13.1	Jonathan Newman	397
13.2	Gary Varner	403
13.3	Stefan Linquist	408
13.4	Don't Agree to Disagree	416
13.5	Why Ought We Conserve Biodiversity?	417
	References	418
	Index	436