

Contents

1	History, Concepts and Prospects	1
1.1	Human Ecological Concepts: A Brief Overview	5
1.1.1	Environmental Determinism	5
1.1.2	Possibilism	6
1.1.3	Cultural Ecology	7
1.1.4	Ecological Anthropology	9
1.1.5	Human Adaptability	11
1.1.6	Cultural Materialism	11
1.1.7	Behavioural Ecology	13
1.1.8	Global and Political Ecology	15
1.1.9	Environmental History	16
1.2	Humans as Parts of Ecosystems	18
1.2.1	The General Framework	18
1.2.2	Theoretical Considerations	21
1.3	Human Ecology as a Biocultural Approach	33
1.3.1	Scope and Aims	35
2	Subsistence Modes	43
2.1	Modes of Production	47
2.1.1	Hunting and Gathering	49
2.1.2	Horticulture	51
2.1.3	Agriculture	52
2.1.4	Pastoralism	53
2.2	Strategies of Food Procurement	54
2.2.1	Foragers	55
2.2.2	Cultivators in the New Guinea Rain Forest: Tsembaga	67
2.2.3	Cultivation and Livestock Farming in the Andean Highlands: Nuñoa Quechua	70

2.2.4	Pastoralists in Semiarid Zones: Karimojong	75
2.2.5	Pre-Industrial Agriculture in European Temperate Climates	81
2.3	Conclusion: Biocultural Adaptations to Food Procurement	89
3	Subsistence Change	103
3.1	Strategies of Subsistence Change	109
3.1.1	Upper Pleistocene Foragers in Europe	109
3.1.2	The Transition to Food Production	113
3.1.3	Maize in North America	124
3.1.4	Dependency, Continuity and Change	128
3.2	A Transition Model	134
3.3	Conclusion: Causes and Courses of Subsistence Change	138
4	Resources and Social Organisation	151
4.1	The Social Framework of Resource Utilisation	154
4.1.1	Social Organisation of Subsistence in the European Early Middle Ages	159
4.2	Reconstruction of Nutritional Patterns	162
4.3	Biocultural Correlates of Differential Access to Resources	165
4.3.1	Ecological Context	165
4.3.2	Linking Dietary Patterns to Social Ranks	167
4.4	Conclusion: Status-Dependent Resource Use	178
5	Population Development and Regulation	183
5.1	Populations and Carrying Capacity	188
5.2	Mechanisms of Population Regulation	194
5.2.1	Environment, Disease and Population	195
5.2.2	Culture and Ecological Equilibrium	202
5.2.3	Population Regulation – Myth or Reality?	216
5.2.4	Subsistence, Change and Fertility	225
5.2.5	Cultural Goals and Reproduction	232
5.3	Conclusion: Subsistence and Population Structure	239
6	Synthesis – Towards a Biocultural Human Ecology	251
6.1	Introduction	251
6.2	Subsistence and Social Structure	254

Contents	XIII
6.3 Transitions	259
6.4 Resources and Fitness	261
6.5 Epilogue	264
 References	 267
 Subject Index	 295



<http://www.springer.com/978-3-540-26085-1>

Human Ecology

Biocultural Adaptations in Human Communities

Schutkowski, H.

2006, XIII, 306 p., Hardcover

ISBN: 978-3-540-26085-1