

Contents

Preface

ix

Introduction

1. **Trends in landscape research and landscape planning: implications for PhD students** 1
Gunther Tress (The Netherlands), Bärbel Tress (The Netherlands), Gary Fry (Norway) and Marc Antrop (Belgium)

Developing integrative theory and concepts

2. **Defining concepts and process of knowledge production in integrative research** 13
Bärbel Tress (The Netherlands), Gunther Tress (The Netherlands) and Gary Fry (Norway)
3. **From holistic landscape synthesis to transdisciplinary landscape management** 27
Marc Antrop (Belgium)
4. **Ecosystem networks: a spatial concept for integrative research and planning of landscapes** 51
Paul Opdam (The Netherlands)
5. **Integrating physical and human dynamics in landscape trajectories: exemplified at the Aulnages watershed (Québec, Canada)** 67
Julie Ruiz and Gérald Domon (Canada)
6. **Challenges of interdisciplinarity for forest management and landscape perception research** 83
John L. Lewis (Canada)
7. **Landscape's ocular-centrism: and beyond?** 95
Hannah Macpherson (UK)

Developing integrative tools and methods

8. **Bio-regional pattern and spatial narratives for integrative landscape research and design** 107
Janet Silbernagel (USA)
9. **Theories, methods and strategies for sustainable landscape planning** 119
Jack Ahern (USA)

10. **Water quality modelling for decision-making: the drinking-water watersheds of Sydney, Australia** 133
Les McNamara (Australia)
11. **Integrating landscape and water resources planning with focus on sustainability** 143
Helena Sousa Ferreira (Portugal) and André Botequilha Leitão (USA)
12. **Changing conceptualization of landscape in English landscape assessment methods** 161
Laura Hurni Jensen (UK)
13. **European nature conservation policy: challenges for local implementation in Germany** 173
Alexandra Sauer (Germany)

Training and education for integration

14. **PhD students and integrative research** 193
Gary Fry (Norway), Bärbel Tress (The Netherlands) and Gunther Tress (The Netherlands)
15. **Educating the children of the mode-2 revolution** 207
Nick Winder (UK)
16. **Effective communication in integrative projects** 231
Richard Hobbs (Australia)
17. **Ten steps to success in integrative research projects** 241
Bärbel Tress (The Netherlands), Gunther Tress (The Netherlands) and Gary Fry (Norway)
18. **How to publish a peer-reviewed research paper from integrative landscape research** 259
Gunther Tress (The Netherlands), Bärbel Tress (The Netherlands) and Gary Fry (Norway)

Applying integrative concepts

19. **Linking preference for environments with their restorative quality** 279
Terry Hartig (Sweden) and Henk Staats (The Netherlands)
20. **Nature meets aesthetics on cultural grounds: a multidisciplinary study of grave mounds in Norway** 293
Mari Sundli Tveit (Norway)
21. **Sustaining urban ecosystem services with local stewards participation in Stockholm (Sweden)** 305
Stephan Barthel (Sweden)

22.	Integrating nature conservation and landscape management in farming systems in the Friesian Woodlands	321
	<i>Paul Swagemakers and Johannes S.C. Wiskerke (The Netherlands)</i>	
23.	Building landscape memory through combined sources: commons afforestation in Portugal	335
	<i>Ana Isabel Queiroz (Portugal)</i>	
24.	Integrating landscape ecology in environmental impact assessment using GIS and ecological modelling	345
	<i>Mikael Gontier (Sweden)</i>	
25.	Applying special heterogeneity indices in changing landscapes in the Czech Republic	355
	<i>Katerina Pixova and Petr Sklenicka (Czech Republic)</i>	
26.	Integration of ecological knowledge at a landscape level for conservation policies in agricultural areas	365
	<i>Maria J. Pacha (UK)</i>	
27.	Setting up an integrative research approach for sustaining wild rice (<i>Zizania palustris</i>) in the Upper Great Lakes Region of North America	377
	<i>Annette Drewes and Janet Silbernagel (USA)</i>	
28.	Established and recent policy arrangements for river management in The Netherlands: an analysis of discourses	387
	<i>Irene Immink (The Netherlands)</i>	
29.	From river to ridge: local governance and the implementation of improved water management	405
	<i>Julie Nimmo (Australia)</i>	

Conclusion

30.	Considerations for future education in integrative landscape research	423
	<i>Gunther Tress (The Netherlands), Bärbel Tress (The Netherlands), Gary Fry (Norway), Paul Opdam (The Netherlands), Jack Ahern (USA), Marc Antrop (Belgium), Terry Hartig (Sweden), Richard Hobbs (Australia), David Miller (UK), Janet Silbernagel (USA) and Nick Winder (UK)</i>	
	List of participants	433