

Contents

Foreword vii

Preface ix

Acknowledgments xiii

- Chapter 1 Introduction: Shaping the future with conservation planning 1**
F. Lance Craighead, PhD; and Charles L. Convis Jr.
- Chapter 2 Integrating conservation planning with human communities, ecosystem services, and economics 21**
Kai M. A. Chan, PhD; Natalie C. Ban, PhD; and Robin Naidoo, PhD
- Chapter 3 Scale and conservation planning 51**
Robert S. Unnasch, PhD; and Jason W. Karl, PhD
- Chapter 4 Land-cover data: The foundation for conservation planning 75**
Thomas J. Olenicki
- Chapter 5 Integrating land use and landscape change with conservation planning 105**
David M. Theobald, PhD
- Chapter 6 Selecting species as targets for conservation planning 123**
Brent L. Brock and Eric C. Atkinson
- Chapter 7 Identification of habitat and assessment of habitat quality for conservation of terrestrial animals 149**
Brett G. Dickson, PhD; Steven E. Sesnie, PhD; Erica Fleishman, PhD; and David S. Dobkin, PhD
- Chapter 8 Marine and freshwater conservation planning: From representation to persistence 175**
Natalie C. Ban, PhD; Stephanie Januchowski-Hartley, PhD; Jorge Alvarez-Romero, PhD; Morena Mills, PhD; Robert L. Pressey, PhD; Simon Linke, PhD; and Debora de Freitas, PhD
- Chapter 9 Identification and mapping of habitat cores 219**
Richard Church, PhD
- Chapter 10 Assessing habitat connectivity 245**
Peter H. Singleton; and Brad H. McRae, PhD
- Chapter 11 Conservation planning to ensure viability of populations and metapopulations 271**
Jessica Stanton; and H. Reşit Akçakaya, PhD

Chapter 12	Optimization models for reserve site selection and design	293
	<i>Justin C. Williams, PhD</i>	
Chapter 13	Integrating conservation planning with projected trends in climate change	317
	<i>Dominique Bachelet, PhD</i>	
Chapter 14	Mapping biological processes to the appropriate spatial modeling tools	343
	<i>Kevin M. Johnston, PhD; David Western, PhD; and Rodney Jackson, PhD</i>	
Chapter 15	Summary: Building a broader base for conservation planning	397
	<i>Frank W. Davis, PhD</i>	
	Afterword	405
	Index	407