Review: Conservation Planning: Shaping the Future

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The scope and purpose of Conservation Planning: Shaping the Future is to incorporate current theory in landscape ecology, mathematics and other disciplines into a research framework that assists conservation planners in the decision making process. In so doing, this book becomes a reference guide for scientists and managers interested in developing a conservation plan for any area in the world. The detailed and uncomplicated methods use the best available data and software, including Geographical Information Systems (GIS) and mathematical models, with the ultimate goal of stopping or even reversing environmental degradation.

The editors of this book consider the processes of plant, animal and aquatic communities that are required for a sustainable ecosystem. Biodiversity is declining at an alarming rate, and these ecosystems require protection, better resource management, and conservation. As a society, we are faced with the dilemma of how to best provide for the long-term viability of native species, communities and ecological processes in an era of rapid loss of natural areas. For this reason, conservation planners must consider human activities as they contribute to changing land-cover and aquatic environments resulting in decreased biodiversity. “People and their activities and uses of the landscape must be included in the vision and actions of conservation...” (p. 105).

Accurate models and maps of land cover, topography, location, quantity and quality of habitats are critical for the effective management of various species. The use of modern sensors and remote sensing data has led to greater accuracy and precision in land cover classification. Through technology and the use of systematic conservation planning, conservation planners are able to use limited resources efficiently to achieve explicit conservation objectives in the face of competition for natural resources. Systematic conservation planning is a constantly evolving discipline that must weave together ideas and techniques from mathematical, physical, biological, social, economic, and political sciences.

The methods presented in this book include models and maps of the animal-environment relationship to determine habitat quality for terrestrial, marine and freshwater fauna. This book would make an excellent text for an emerging graduate-level course in Conservation Planning within the Departments of Environmental Science, Geology, Engineering or an interdisciplinary program supported by these departments due to the precise and wide range of the topics covered in this book, along with exceptional tables, datasets, and colored figures depicting statistical information with different scenarios. Conservation Planning: Shaping the Future exceeds its intended purpose by providing excellent real-world examples for practitioners and students alike to build upon.

The editors provide an excellent list of references for each of the 15 chapters which cover a variety of themes within the field of Conservation Planning. This book is arranged in a cohesive, linear fashion progressing from foundational knowledge of the past to present and future capabilities through advances in technologies and techniques. The intended audience of

Review: Conservation Planning: Shaping the Future
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Conservation Planning: Shaping the Future, as stated by the editors, is conservation planners in nongovernmental conservation organizations and in city, county and state agencies, as well as government professionals in land management agencies.

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