

EDITED BY

JIANGUO WU

ARIZONA STATE UNIVERSITY

RICHARD J. HOBBS

MURDOCH UNIVERSITY

Key Topics in Landscape Ecology

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Key Topics in Landscape Ecology

Landscape ecology is a relatively new area of study, which aims to understand the pattern of interaction of biological and cultural communities within a landscape. This book brings together leading figures from the field to provide an up-to-date survey of recent advances, identify key research problems, and suggest a future direction for development and expansion of knowledge. Providing in-depth reviews of the principles and methods for understanding landscape patterns and changes, the book illustrates concepts with examples of innovative applications from different parts of the world. Forming a current “state-of-the-science” for the science of landscape ecology, this book forms an essential reference for graduate students, academics, professionals, and practitioners in ecology, environmental science, natural resource management, and landscape planning and design.

JIANGUO (JINGLE) WU is Professor of Ecology, Evolution, and Environmental Science at Arizona State University, Tempe, Arizona, USA. His research interests include landscape ecology, urban ecology, and sustainability science, focusing on hierarchical patch dynamics, pattern–process–scale relationships, spatial scaling, land-use change and its effects on ecosystem processes, and biodiversity and ecosystem functioning. He has published more than 120 scientific papers which involve mostly dryland ecosystems in North America and China. His professional service includes Program Chair of the 2001 Annual Symposium of the US Association of the/International Association of Landscape Ecology (US-IALE), Councillor-at-Large of US-IALE (2001–3), and Chair of the Asian Ecology Section of the Ecological Society of America (1999–2000). He is currently the editor-in-chief of the international journal *Landscape Ecology*.

RICHARD HOBBS is Professor of Environmental Science at Murdoch University, Western Australia, and has research interests in restoration ecology and landscape ecology. These focus on the conservation and management of altered landscapes, particularly the agricultural area of southwestern Australia. He is a fellow of the Australian Academy of Science and has been listed by ISI as one of the most highly cited researchers in ecology and environmental science. His professional services include President of the International Association for Landscape Ecology (1999–2003) and President of the Ecological Society of Australia (1998–1999). He is currently the editor-in-chief of the journal *Restoration Ecology*.

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