Terrestrial Ecosystem Ecology Principles and Applications

Goran I. Ågren and Folke O. Andersson. 2012. ISBN 978-1-107-64825-8 Cambridge University Press, New York, NY. US \$ 59.00 (paperback) + shipping. Contact: publicity@cambridge.org

Human activities impact the environment and modify the cycles of important elements such as carbon and nitrogen from local to global scales. In order to maintain long-term and sustainable use of the world's natural resources, it is important that we understand how and why ecosystems respond to such changes.

This book explains the structure and functioning of terrestrial ecosystems, using examples ranging from the Arctic to the Tropics to demonstrate how they react under differing conditions. This

knowledge is developed into a set of principles that can be used as starting points for analyzing questions about ecosystem behaviour. Ecosystem dynamics are also considered, illustrating how ecosystems develop and change over a range of temporal and spatial scales, and how they react to perturbations, whether natural or man-made. Throughout the book, descriptive studies are merged with simple mathematical models to reinforce the concepts discussed and aid the development of predictive tools.

Sources, Sinks and Sustainability

Jianguo Liu, Vanessa Hull, Anita T. Morzillo and John A. Wiens. 2011. ISBN 978-0-521-14596-1 Cambridge University Press, New York, NY. US \$ 65.00 (Paperback) + shipping. Contact: publicity@cambridge.org

Source-sink theories provide a simple yet powerful framework for understanding how the patterns, processes and dynamics of ecological systems vary and interact over space and time. Integrating multiple research fields, including population biology and landscape ecology, this book presents the latest advances in source-sink theories, methods and applications in the conservation and management of natural resources and biodiversity. The interdisciplinary team of authors uses detailed

case studies, innovative field experiments and modeling, and syntheses to incorporate source-sink ideas into research and management, and explores how sustainability can be achieved in today's increasingly fragile human-dominated ecosystems.

Providing a comprehensive picture of source-sink research as well as tangible applications to real-world conservation issues, this book is ideal for graduate students, researchers, natural resource managers and policy-makers.

Biodiversity in Agriculture

Domestication, Evolution, and Sustainability

Paul Gepts, Thomas R. Famula, Robert L. Bettinger, Stephen B. Brush, Ardeshir B. Damania, Patrick E. McGuire and Calvin O. Qualset (eds.). 2012. ISBN 978-0-521-17-87-1 Cambridge University Press, New York, NY. US \$ 70.00 (paperback) + shipping. Contact: publicity@cambridge.org

The introduction of plant and animal agriculture represents one of the most important milestones in human evolution. It contributed to the development of cities, alphabets, new technologies, and – ultimately – to civilizations, but it has also presented a threat to both human health and the environment.

Bringing together research from a range of fields including anthropology, archaeology, ecology, economics, entomology, ethnobiology, genetics, and geography, this book addresses key questions relating to agriculture. Why

did agriculture develop, and where did it originate? What are the patterns of domestication for plants and animals? How did agroecosystems originate and spread from their locations of origin?

Exploring the cultural aspects of the development of agricultural ecosystems, the book also highlights how these topics can be applied to our understanding of contemporary agriculture, its long-term sustainability, the co-existence of agriculture and the environment, and the development of new crops and varieties.

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