





Special Issue Reprint

Progress in Mathematical Ecology

www.mdpi.com/books/reprint/846

Edited by Sergei Petrovskii

ISBN 978-3-03897-312-6 (Softback) ISBN 978-3-03897-313-3 (PDF)



Mathematical ecology is an area of applied mathematics concerned with the application of mathematical concepts, tools and techniques, usually in the form of mathematical models, to problems arising in population dynamics, ecology and evolution. This Special Issue is designed to provide a snapshot of the state of the art in mathematical ecology. Topics of interest are (in no particular order) biological invasions, biological control, ecological pattern formation, ecologically relevant multiscale models, food webs, individual movement and dispersal, eco-epidemiology, evolutionary ecology, agroecosystems, regime shifts and early warning signals, synchronization and chaos. The list is inclusive rather than exclusive, and a few other relevant topics will also be considered.





MDPI Books offers quality open access book publishing to promote the exchange of ideas and knowledge in a globalized world. MDPI Books encompasses all the benefits of open access – high availability and visibility, as well as wide and rapid dissemination. With MDPI Books, you can complement the digital version of your work with a high quality printed counterpart.



Open Access

Your scholarly work is accessible worldwide without any restrictions. All authors retain the copyright for their work distributed under the terms of the Creative Commons Attribution License.



Author Focus

Authors and editors profit from MDPI's over two decades of experience in open access publishing, our customized personal support throughout the entire publication process, and competitive processing charges as well as unique contributor discounts on book purchases.



High Quality & Rapid Publication

MDPI ensures a thorough review for all published items and provides a fast publication procedure. State-of-the-art research and time-sensitive topics are released with a minimum amount of delay.



High Visibility

Due to our global network and well-known channel partners, we ensure maximum visibility and broad dissemination. Title information of books is sent to international indexing databases and archives, such as the Directory of Open Access Books (DOAB), and the Verzeichnis Lieferbarer Bücher (VLB).



Print on Demand and Multiple Formats

MDPI Books are available for purchase and to read online at any time. Our print-on-demand service offers a sustainable, cost-effective and fast way to publish MDPI Books printed versions.

MDPI AG Grosspeteranlage 5 4052 Basel Switzerland Tel: +41 61 683 77 34 www.mdpi.com/books books@mdpi.com

