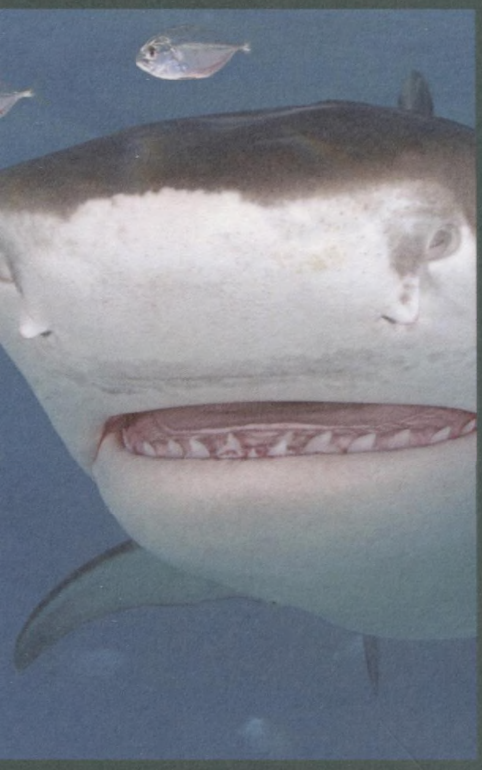
Ecologists have long struggled to predict features of ecological systems, such as the numbers and diversity of organisms. The wide range of body sizes in ecological communities, from tiny microbes to large animals and plants, is emerging as the key to prediction. Based on the relationship of body size with key biological rates and with the physical world experienced by aquatic organisms, we may be able to understand patterns of abundance and diversity, biogeography, interactions in food webs, and the impact of fishing, adding up to a potential "periodic table" for ecology. Remarkable progress on the unravelling, describing, and modelling of aquatic food webs, revealing the fundamental role of body size, makes a book emphasizing marine and freshwater ecosystems particularly apt. Here, the importance of body size is examined at a range of scales, yielding broad perspectives that will be of interest to professional ecologists, from students to senior researchers.



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Cover illustration: large tiger shark *Galeocerdo cuvier*
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British Ecological Society

Designed by Joanne Barker

CAMBRIDGE
UNIVERSITY PRESS
www.cambridge.org

ISBN 978-0-521-67967-1

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