

The newly revised and updated third edition of the bestselling book on microbial ecology in the oceans

The third edition of *Microbial Ecology of the Oceans* features new topics, as well as different approaches to subjects dealt with in previous editions. The book starts out with a general introduction to the changes in the field, as well as looking at the prospects for the coming years. Chapters cover ecology, diversity, and function of microbes, and of microbial genes in the ocean. The biology and ecology of some model organisms, and how we can model the whole of the marine microbes, are dealt with, and some of the trophic roles that have changed in the last years are discussed. Finally, the role of microbes in the oceanic P cycle are presented.

Microbial Ecology of the Oceans, Third Edition offers chapters on The Evolution of Microbial Ecology of the Ocean; Marine Microbial Diversity as Seen by High Throughput Sequencing; Ecological Significance of Microbial Trophic Mixing in the Oligotrophic Ocean; Metatranscriptomics and Metaproteomics; Advances in Microbial Ecology from Model Marine Bacteria; Marine Microbes and Nonliving Organic Matter; Microbial Ecology and Biogeochemistry of Oxygen-Deficient Water Columns; The Ocean's Microscale; Ecological Genomics of Marine Viruses; Microbial Physiological Ecology of The Marine Phosphorus Cycle; Phytoplankton Functional Types; and more.

- A new and updated edition of a key book in aquatic microbial ecology
- Includes widely used methodological approaches
- Fully describes the structure of the microbial ecosystem, discussing in particular the sources of carbon for microbial growth
- Offers theoretical interpretations of subtropical plankton biogeography

Microbial Ecology of the Oceans is an ideal text for advanced undergraduates, beginning graduate students, and colleagues from other fields wishing to learn about microbes and the processes they mediate in marine systems.

About the Editors

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