

Bacteriophage Ecology

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Bacteriophages, or phages, are viruses that infect bacteria and are believed to be the most abundant and most genetically diverse organisms on Earth. As such, their ecology is vast both in quantitative and qualitative terms. Their abundance, and their impact on bacteria, makes an understanding of phage ecology increasingly relevant to bacterial ecosystem ecology, bacterial genomics, and bacterial pathology. This volume is the first on phage ecology in 20 years. Written by leading experts, it seeks to synthesize three key approaches toward studying phage ecology, namely determination of natural (*in situ*) phage abundance and diversity; experimentation in the laboratory as well as *in situ* experimentation on the dynamics of phage–phage, phage–bacterium, and phage–ecosystem interactions; and the development, using mathematical and computer models, of ecological and evolutionary theory based on phage populations and phage-containing bacterial communities. With strong emphasis on microbial population biology, and by distilling cutting-edge research into basic principles, this book will serve as an essential resource for graduate students and researchers, particularly for those with an interest in phage ecology or phage evolutionary biology.

Stephen T. Abedon is Associate Professor of Microbiology at The Ohio State University. He contributed to the editing of *The Bacteriophages* (2006) and founded the Bacteriophage Ecology Group at www.phage.org to encourage collaboration and to provide a central resource for the bacteriophage community.

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