1. Record Nr. UNINA9910298276603321

Titolo	Myxozoan Evolution, Ecology and Development / / edited by Beth Okamura, Alexander Gruhl, Jerri L. Bartholomew
Pubbl/distr/stampa	Cham : , : Springer International Publishing : , : Imprint : Springer, , 2015
ISBN	9783319147536 3-319-14752-8
Edizione	[1st ed. 2015.]
Descrizione fisica	1 online resource (440 p.)
Disciplina	570 571.8 576.8 577.6 577.7 592 616.96
Soggetti	Invertebrates Evolution (Biology) Parasitology Developmental biology Aquatic ecology Evolutionary Biology Developmental Biology Freshwater & Marine Ecology
Lingua di pubblicazione	Inglese
Formato	Materiale a stampa
Livello bibliografico	Monografia
Note generali	Description based upon print version of record.
Nota di bibliografia	Includes bibliographical references and indexes.
Nota di contenuto	An introduction to myxozoan evolution, ecology and development -- Myxozoan affinities and route to endoparasitism -- Cnidarian origins of the Myxozoa -- Adaptive radiation and evolution within the Myxozoa -- Classification and phylogenetics of Myxozoa -- Approaches for characterizing myxozoan species -- Myxozoans exploiting homeotherms -- Cellular processes in myxozoans -- Tissue characteristics and development in Myxozoa -- Myxozoan life cycles:

practical approaches and insights -- Ecology and evolution of malacosporean-bryozoan interactions -- Annelid-myxosporean interactions -- Transmission of myxozoans to vertebrate hosts -- Fish immune responses to Myxozoa -- Host and environmental influences on development of disease -- Specificity of infection sites in vertebrate hosts -- Comparative epidemiology of myxozoan diseases -- Myxozoans on the move: dispersal modes, exotic species and emerging diseases -- Modeling the Effects of Climate Change on Disease Severity: A Case Study of Ceratonova (syn Ceratomyxa) shasta in the Klamath River -- Risk assessments and approaches for evaluating myxozoan disease impacts -- Mitigating myxozoan disease impacts on wild fish populations.

Sommario/riassunto

This book provides an up-to-date review of the biology of myxozoans, which represent a divergent clade of endoparasitic cnidarians. Myxozoans are of fundamental interest in understanding how early diverging metazoans have adopted parasitic lifestyles, and are also of considerable economic and ecological concern as endoparasites of fish. Synthesizing recent research, the chapters explore issues such as myxozoan origins; evolutionary trends and diversification; development and life cycles; interactions with hosts; immunology; disease ecology; the impacts of climate change on disease; risk assessment; emerging diseases; and disease mitigation. This comprehensive work will appeal to a wide readership, from invertebrate zoologists, evolutionary biologists and developmental biologists to ecologists and parasitologists. It will also be of great practical interest to fisheries and conservation biologists. The identification of key areas for future research will appeal to scientists at all levels.