

Health Maintenance and Principal Microbial Diseases of Cultured Fishes

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BOOK REVIEW. . .

Health Maintenance and Principal Microbial Diseases of Cultured Fishes. By John A. Plumb. Iowa State University Press, Ames, Iowa, USA. 328 Pages. US\$74.95.

The objectives of this book, as stated by the author, are "to emphasize salient points of host-pathogen-environment relationships, elucidate important aspects of infectious diseases, and explore how management can be used to help reduce effects of fish diseases." The focus on these objectives makes this volume somewhat unique from other fish health volumes. The book is a revision of a previous book by the same author published as *Health Maintenance of Cultured Fishes: Principal Microbial Diseases* by CRC Press.

The book is divided into three sections: Part I—Health Maintenance; Part II—Viral Diseases; and Part III—Bacterial Diseases. Part I—Health Maintenance is what makes this book stand apart from others. Aspects of animal health management, typically found in veterinary epidemiology programs for terrestrial animals, are discussed in terms that are particularly relevant to the fish culture environment. Issues such as those associated with the physical design of the culture environment, limiting or preventing exposure to pathogens, limiting horizontal transfer of pathogens, nutrition, water quality and seasonality of disease processes in poikilotherms are discussed in this section. The overriding concept that is stressed is that successful fish health management depends upon the practice of a number of interrelated

principles associated with the fish, the pathogen, and the environment.

Parts II and III provide a current review of important viral and bacterial diseases of cultured fish and wild fish, where applicable. Parasitic diseases are not discussed in detail, but the principles of health maintenance (Part I) do include material relevant to important parasites. Viral and bacterial diseases are organized by fish groups or families. These discussions include such information as geographical distribution, pathobiology, etiology and management. These discussions, as stated by the author, are not intended to be comprehensive presentations of each disease. They do, however, provide a timely review of the selected diseases. The reader is provided with a framework from which further information may be sought from the primary literature.

I believe this book will be an extremely valuable volume for fish health professionals as well as students of aquatic animal health and aquaculture. The discussion of principles of fish health management was presented with particular clarity. Such a discussion also is particularly relevant to the practicing aquaculturist. The author has done an excellent job of providing a volume that provides a discussion of how management can be used to reduce the impact of disease in fish culture.

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