

Subterranean fishes are among the most interesting and scientifically relevant organisms, possessing unique combinations of features as a result of evolution under a peculiar selective regime, with permanent darkness as a major directive force throughout the hypogean realm. High divergence rates in relation to close epigeal relatives, homoplastic evolution of several characters and the simplified nature of subterranean ecosystems, render subterranean organism excellent subjects for evolutionary and ecological studies. Because of the special characteristics of this family environmental changes could pose a threat to their survival. A thorough knowledge of the ecology and biology of these animals is necessary for taking effective steps for their protection.

This book, which encompasses the state of knowledge, begins with an overview of the main evolutionary and ecological concepts applied to the study of subterranean fishes in the context of a retrospective and prospective of the field. In the subsequent chapters updated approaches, integrating new and previously known data, on general topics such as evolutionary genetics and development, behavior, biodiversity and conservation are presented. A worldwide checklist with 164 troglomorphic species represents a significant increase in relation to previous studies. Regional faunas, *in totum* or focusing on selected taxa, of countries such as China, India, Brazil, Mexico and the African continent are discussed in terms of biodiversity, natural history and distribution, and ecology. A comprehensive chapter on the Amblyopsidae summarizes information on almost every aspect of the systematics and biology of this family.

This book is dedicated to Dr. Thomas L. Poulson, for his pioneering and inspiring work on amblyopsid fishes and other subterranean animals.



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