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Titolo	Extremophile Fishes : Ecology, Evolution, and Physiology of Teleosts in Extreme Environments / / edited by Rüdiger Riesch, Michael Tobler, Martin Plath
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Descrizione fisica	1 online resource (329 p.)
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Soggetti	Poeciliidae Extreme environments - Microbiology
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Nota di bibliografia	Includes bibliographical references at the end of each chapters and index.
Nota di contenuto	Extremophile fishes: An Introduction -- Low-Oxygen Lifestyles -- The Adaptive Radiation of Notothenioid Fishes in the Waters of Antarctica -- Desert Environments -- Hypersaline Environments -- Life in the Fast Lane: A Review of Rheophily in Freshwater Fishes -- Hydrogen Sulfide-Toxic Habitats -- Cave Environments -- Pickled Fish Anyone? -- Temporary Environments -- Evolutionary Toxicology: Population Adaptation in Response to Anthropogenic Pollution -- Extremophile fishes: an integrative synthesis.
Sommario/riassunto	This book summarizes the key adaptations enabling extremophile fishes to survive under harsh environmental conditions. It reviews the most recent research on acidic, Antarctic, cave, desert, hypersaline, hypoxic, temporary, and fast-flowing habitats, as well as naturally and anthropogenically toxic waters, while pointing out generalities that are

evident across different study systems. Knowledge of the different adaptations that allow fish to cope with stressful environmental conditions furthers our understanding of basic physiological, ecological, and evolutionary principles. In several cases, evidence is provided for how the adaptation to extreme environments promotes the emergence of new species. Furthermore, a link is made to conservation biology, and how human activities have exacerbated existing extreme environments and created new ones. The book concludes with a discussion of major open questions in our understanding of the ecology and evolution of life in extreme environments.