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Titolo	Ecology of North American freshwater fishes [[electronic resource] /] / Stephen T. Ross
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Descrizione fisica	1 online resource (473 p.)
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Soggetti	Freshwater fishes - Ecology - North America Electronic books.
Lingua di pubblicazione	Inglese
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Note generali	Description based upon print version of record.
Nota di bibliografia	Includes bibliographical references and index.
Nota di contenuto	Part 1. Faunal origins, evolution, and diversity -- Origin and derivation of the North American freshwater fish fauna -- Reshaping North American fish faunas : the role of late Cenozoic climatic and tectonic events -- Part 2. Formation, maintenance, and persistence of local populations and assemblages -- Responses of populations and assemblages to biotic and physical factors -- The formation and maintenance of populations and assemblages -- Persistence of fish assemblages in space and time -- Part 3. Form and function -- Morphology and functional ecology of the fins and axial skeleton -- Form and function in the feeding of fishes -- Life history and reproductive ecology -- Part 4. Interactions among individuals and species -- Communication among individuals -- Interactions in resource acquisition I : Niches, competition, and trophic position -- Interactions in resource acquisition II : Predation, avoiding predation, and predator effects on ecosystems -- Getting along : Mutualism, facilitation, and coevolution -- Part 5. Issues in conservation -- Streams large and small -- Ponds, lakes, and impoundments.
Sommario/riassunto	The North American freshwater fish fauna is the most diverse and thoroughly researched temperate fish fauna in the world. Ecology of North American Freshwater Fishes is the only textbook to provide advanced undergraduate and graduate students and researchers with an up-to-date and integrated view of the ecological and evolutionary concepts, principles, and processes involved in the formation and

maintenance of this fauna. Ecology of North American Freshwater Fishes provides readers with a broad understanding of why specific species and assemblages occur in particular places. Additionally, the text explores how individuals and species interact with each other and with their environments, how such interactions have been altered by anthropogenic impacts, and the relative success of efforts to restore damaged ecosystems. This book is designed for use in courses related to aquatic and fish ecology, fish biology, ichthyology, and related advanced ecology and conservation courses, and is divided into five sections for ease of use. Chapter summaries, supplemental reading lists, online sources, extensive figures, and color photography are included to guide readers through the material and facilitate student learning.

**Part 1: Faunal origins, evolution, and diversity** Presents a broad picture—both spatially and temporally—of the derivation of the fauna, including global and regional geological and climatological processes and their effects on North American fishes.

**Part 2: Formation, maintenance, and persistence of local populations and assemblages** Focuses on how local fish populations and assemblages are formed and how they persist, or not, through time.

**Part 3: Form and function** Deals with the relationship of body form and life history patterns as they are related to ecological functions.

**Part 4: Interactions among individuals and species** Discusses the numerous interactions among individuals and species through communication, competition, predation, mutualism, and facilitation.

**Part 5: Issues in conservation** Focuses on several primary conservation issues such as flow alterations and the increasing biotic homogenization of faunas.

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