Record Nr. UNINA9910967034803321 Autore Allan J. David **Titolo** Stream Ecology: Structure and function of running waters / / by J. David Allan Dordrecht:,: Springer Netherlands:,: Imprint: Springer,, 1995 Pubbl/distr/stampa **ISBN** 0-412-35530-2 94-011-0729-7 Edizione [1st ed. 1995.] 1 online resource (XII, 388 p.) Descrizione fisica Disciplina 574.52632 577.6/4 Applied ecology Soggetti Freshwater ecology Marine ecology Biotic communities Population biology Conservation biology **Ecology Pollution** Applied Ecology Freshwater and Marine Ecology Community and Population Ecology Conservation Biology Lingua di pubblicazione Inglese **Formato** Materiale a stampa Livello bibliografico Monografia Note generali Bibliographic Level Mode of Issuance: Monograph Nota di bibliografia Includes bibliographical references and index. Nota di contenuto 1 Channels and flow -- 2 Streamwater chemistry -- 3 Physical factors

Nota di contenuto

1 Channels and flow -- 2 Streamwater chemistry -- 3 Physical factors of importance to the biota -- 4 Autotrophs -- 5 Heterotrophic energy sources -- 6 Trophic relationships -- 7 Predation and its consequences

-- 8 Herbivory -- 9 Competitive interactions -- 10 Drift -- 11 Lotic communities -- 12 Organic matter in lotic ecosystems -- 13 Nutrient dynamics -- 14 Modification of running waters by humankind --

References.

Sommario/riassunto Running waters are enormously diverse, ranging from torrential

mountain brooks, to large lowland rivers, to great river systems whose

basins occupy subcontinents. While this diversity makes river ecosystems seem overwhelmingly complex, a central theme of this volume is that the processes acting in running waters are general, although the settings are often unique. The past two decades have seen major advances in our knowledge of the ecology of streams and rivers. New paradigms have emerged, such as the river continuum and nutrient spiraling. Community ecologists have made impressive advances in documenting the occurrence of species interactions. The importance of physical processes in rivers has attracted increased attention, particularly the areas of hydrology and geomorphology, and the inter-relationships between physical and biological factors have become better understood. And as is true for every area of ecology during the closing years of the twentieth century it has become apparent that the study of streams and rivers cannot be carried out by excluding the role of human activities, nor can we ignore the urgency of the need for conservation. These developments are brought together in Stream Ecology: Structure and function of running waters, designed to serve as a text for advanced undergraduate and graduate students, and as a reference book for specialists in stream ecology and related fields.