Tropical Ecosystems and Ecological Concepts.

EcoLOGY OF ESTUARINE FISHES: TEMPERATE WATERS OF THE WESTERN NORTH ATLANTIC.

There is an untested but ubiquitous refrain that 75% of marine fishes important to humans are "estuarine dependent." Regardless of this notion's quantitative and definitional vagaries, estuaries clearly matter greatly to the health of coastal ecosystems and their fish resources. Able and Fahay have devoted their careers to estuarine fishes and in this superb volume they summarize their own work and that of many others in a geographically hierarchical fashion, from the U.S. Atlantic coast down to Able's primary research base on the Mullica River in southern New Jersey.

The book has two main parts, the second being a species-by-species review of estuary-related usage by 98 fishes, but treated broadly to include basic information such as overall distribution, reproduction, larval supply and growth, seasonality and habitats, prey and predators, and migrations. All are accompanied by simple phenological, habitat, and life-stage tables that provide an early-life history shorthand. Many species accounts also contain useful identification sketches, maps, and data-rich graphs and figures, and some feature interesting anecdotal sidebars.

This second section contains well more than three-fourths of the volume and it could have stood alone, but it is prefaced by 11 excellent introductory chapters that comprise an outstanding synthesis of the state of knowledge of the physical and biological bases of Atlantic estuaries and of their ichthyofauna. Coverage includes fundamental topics such as basic categorizations of estuarine fishes, zoogeography, reproduction and development, larval dynamics, and migrations, in addition to welcome treatments of the importance of coastal upwelling, habitat restoration, and climate change. This first section ends with a meaty discussion of future directions. Although this nearly monumental work sums to a wealth of hard-gained knowledge, the authors pose enough important questions to show that estuarine fish science still has much to discover.

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THE HUDSON PRIMER: THE ECOLOGY OF AN ICONIC RIVER.

This gem gives informed readers a broad yet learned introduction to many aspects of the hydrology, ecology, and biota of the Hudson River, no mean feat in a relatively small paperback. Although the chapters introduce the watershed, flow dynamics, habitats, and even applied subjects such as pollution and invasive species, it is more the style that singles out this volume. In a short space, Strayer gives one a feeling for how science has been done in the Hudson and even in places why it should be done. Each chapter combines text that an educated general reader can understand with solid and illustrative figures showing how various physical, chemical, and ecological processes work. This is a very challenging task, since the educated general public is rarely asked to absorb information in this way. The book largely succeeds and it is to Strayer's credit that he takes many difficult subjects and often technical information and conveys it in understandable and digestible portions. Chapters are short, to the point, and even include a section at the end of recommended things to do. Most require just your eyes and ears, so this book will be great to carry around in your backpack as you ride the train or hike the trails, and maybe a future waterproof edition will grace a kayak or canoe.

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CONSERVATION BIOLOGY
SEABIRD ISLANDS: ECOLOGY, INVASION, AND RESTORATION.

Research and management of seabirds and their breeding islands are complicated. Their pelagic nature makes them difficult to study, so the details of migration, range, and natural history remain poorly understood. As a result, much of our present knowledge is extrapolated from a relatively small number of studies. Further, breeding islands are often difficult to access, requiring resources not readily available for long-term monitoring or management initiatives, creating strong geographic biases in available information.

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