The Biology of the Hudson-Raritan Estuary

A Teachers Guide
THE BIOLOGY OF THE HUDSON-RARITAN ESTUARY:  
A MARINE EDUCATION PROGRAM

Produced by the Staff of the 
Education Program 
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PREFACE AND ACKNOWLEDGEMENTS

The Hudson-Raritan Estuary encompasses the waters of New York Harbor and the tidally influenced portions of all of the rivers and streams that empty into it. The Estuary is an extraordinary resource and a biologically rich ecosystem. However, as the site of extensive human activity, it has experienced significant ecological stress. Presently, the Estuary is threatened by increasing pollution and overuse of its resources.

Although much information has been made available in recent years about human use of the marine resources of the Hudson-Raritan Estuary, it is scattered among technical and semi-technical reports, scientific journals, newsletter and magazine articles and other documents produced by federal and state agencies, private environmental organizations, and academic programs. Educational materials related to the Estuary are typically geared towards users such as commercial and recreational fishers, environmentalists, college students, or the general public.

Educational materials related to the Estuary for teachers and students are lacking. To address this need, the New Jersey Marine Sciences Consortium undertook a project funded by the Geraldine R. Dodge Foundation and the New Jersey Sea Grant College Program to develop an interdisciplinary marine education program on the biology of the Hudson-Raritan Estuary. It is the goal of this project to enable teachers to introduce middle and high school students to the important resources of the Estuary, allowing them to understand why the United States Environmental Protection Agency has designated the Hudson-Raritan Estuary one of national significance.

The guide was conceived as a package of instructional tools. Each chapter is followed by related student activities. These activities are summarized (Activities and Materials Overview) for instructors on a per chapter basis. In addition, the kit includes a glossary, species profiles for the fish, birds and invertebrates of the area and a selection of exemplary materials from other sources.

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