

Ecological Quality of Estuaries and Coasts

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Abstract

The environmental quality of estuaries and coasts was considered through examples taken from the baie de Somme, the baie des Veys (English Channel - north western France) and the Yorkshire coast (North Sea - Northeast England). The biogeomorphological approach was adopted. It relies upon the study of the macrobenthic fauna and flora as biological indicators, in soft substrates as well as on rocky shores, in conjunction with the measurement of environmental parameters.

This experimental approach in coastal ecology dealt with the study of intertidal population and community dynamics. In this context, the paper discusses the notions of dynamic equilibrium and biological diversity. These concepts were applied in the framework of a multi-scale approach. The multi-scale approach is dependent on the understanding of environmental conditions, which affect competition hierarchies. The notion of disturbance is then considered and discussed. The quality of ecosystems is postulated to reside in their integrity.

The paper further explores how science and management may be reconciled. It introduces new plans for future research and their possible implications. It then focuses on actions needed for the promotion of integrated coastal zone management. Great Britain and France are considered as case studies and new actions at European level are proposed.