

## Marine and estuarine pollution

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### ABSTRACT

Symposia proceedings continue to be a major source of new data on the effects of various pollutants on marine organisms. The physiological responses of pesticides, heavy metals, petroleum hydrocarbons as well as factor interactions on marine organisms were the subjects of a three-day symposium. A summary of the ecological and physiological knowledge of mussels, including their use in pollutional studies, was edited by Bayne.

The concept and summary of the controlled ecosystem pollution experiment conducted near Victoria, British Columbia, were given by Menzel and Case. Regardless of the pollutant added, the initial effects were a rapid decline on the phytoplankton population followed by a rapid increase in growth of tolerant bacteria. Benthic animals were affected by those pollutants, which adsorbed on the surface of particulate matter that fell to the bottom.

An assessment of the current health of the oceans was assessed by Goldberg. Emphasis was placed on the effects of halogenated hydrocarbons, radioactivity, heavy metals, petroleum hydrocarbons, and litter on the marine environment. The importance of mussels and barnacles as sentinel animals for measuring pollution was discussed.

An assessment of secondary treatment of municipal and industrial wastes as an alternative to ocean disposal was considered in light of oxygen demand by Officer and Ryther. The authors conclude that the problem should be reevaluated in the light of the life histories of possible contaminants and pathogens before any corrective measures are made. A similar opinion was expressed by Bascom for the southern California area.

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