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Marine and estuarine pollution

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ABSTRACT

Continual interest in the problems of marine pollution has resulted in several reviews¹⁻⁵ and symposia proceedings.^{6,7} Pollutional effects in tropical marine environments differ from those in temperate seas because of lower oxygen solubility, higher temperatures at or near the threshold of organism, and lower toxicity thresholds.¹⁻² A high species-diversity ecosystem has been considered to be less sensitive to a pollutional stress than the North Sea, but the reverse has been found to be the case. Other studies³ in the Baltic indicated an increase in eutrophication in the past 40 years resulting in an increase in the number of invertebrates and higher fish yields; however, the deeper areas of the Baltic have been devastated by this change.

Mileikovsky⁹ reviewed the effects of pollutants on benthic communities and concluded that the greatest effect exerted was upon pelagic larvae of benthic organisms because of their greater sensitivity. There was a reduction in settling of larvae which could lead to a reduced population.

Comparisons of the contemporary algal flora with herbarium specimens collected between 1793 and 1864 at the same British localities were made by Edwards.¹⁰ The rapid industrialization of Durham County since 1864 has resulted in only a 16.6 percent decrease in species. Among the common species, more species of red algae have been eliminated than the other types; whereas, two species of greens and one red are now flourishing along the polluted coast.

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