

A Note to Our Subscribers

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L.S. Incze et al.: Relationships Between Effects of Environmental Temperature and Seston on Growth and Mortality of *Mytilus edulis* in a Temperate Northern Estuary

Due to a printer's error the abstract of the above mentioned paper has ceased to have any meaning. We would therefore like to ask all subscribers to cut out this corrected version and adhere it over the first column of the original abstract. May we please ask you to excuse this unfortunate error.

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Abstract

The growth and mortality of experimentally-rafted *Mytilus edulis* L. of known age at 7 locations in a northern estuary (Damariscotta River, Maine, USA) were related to environmental temperatures and to the presence or absence of various potential food sources. All particles were regarded as potential food substrates. Growth decreased appreciably at sites where water temperatures exceeded 20 °C, but mussels survived a wide range of elevated temperature exposures, ranging from 0 to 149 degree-days in excess of 20 °C. The maximum temperature was 25 °C. Mortalities of mussels at all sites exposed to water temperatures above 20 °C increased abruptly in late summer, when water temperatures were declining. Differences in degree-days of exposure to elevated temperatures did not influence the timing of mortality, which occurred synchronously at all sites, but did affect the extent of mortality, which ranged from 35 to 90%. The period of high mortality was preceded by a rapid decline in phytoplankton standing crop. Total particle concentrations decreased during this period, but the shift toward larger particles suggests that there was little, if any, decrease in total volume of material in the seston, at least through August. It is suggested that living phytoplankton provided the critical energy source for these mussels, and that the mortalities were caused by rapidly reduced ration at a time of metabolic stress. The role of temperature and the possible role of the gametogenic cycle are discussed. In addition, the feeding efficiency of *M. edulis* may have decreased during this period due to an increase in mean particle diameter. Chlorophyll was divided into a nanoplankton fraction ($\leq 20 \mu\text{m}$) and a larger fraction

