

SOME ASPECTS OF THE BIOLOGY
OF THE HYPONEUSTONIC PONTELLID
COPEPODS

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By

Lynda A. Hensler

Thesis Committee:

Garth I. Murphy, Chairman
Thomas Clarke
Edward D. Stroup

ABSTRACT

The surface copepods of the 0-10 cm and the 20-30 cm layers were sampled at five different locations in the Central Equatorial Pacific during May-June, 1969, and again during July-August, 1969. It was found that the upper 30 cm of the ocean was divided into two faunal zones. During the day the upper zone was characterized by an abundance of Pontella spp. which lent a deep blue color to the sample. More copepods, a lack of Pontella and a constant high proportion of immature calanoid copepods were found in the lower zone. At night the number of copepods increased in both layers primarily due to an increase in L. detruncata, P. plumata, Euchaeta, and Pleuromamma. The number of Pontella spp. decreased significantly at night.

Sea height up to 8 ft did not appear to affect the vertical distribution of the pontellid copepods but the other copepods were fair weather surface dwellers.

No species changes in the Pontellidae were found across the equatorial current system.