

THE FEEDING HABITS OF NEHU
(HAWAIIAN ANCHOVY) LARVAE

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ABSTRACT

Nehu larvae from S.E. Kaneohe Bay, Oahu, were collected with a 1-m net and a plankton purse seine. The food of the larvae was mostly small Copepoda. Newly feeding larvae ate mostly nauplii, but changed their diet to copepodids as they grew larger. Copepoda were selected over other food organisms that occurred in the bay. Larvae less than 20 mm in length fed only during the day. Smaller larvae contained more food items than larger larvae, but larger larvae contained a greater volume of food. From 12% to 88% of the day-caught larvae contained food; the incidence of feeding was higher in smaller larvae. Nehu larvae, and probably many other clupeid and engraulid larvae, do not have the very low feeding incidence often ascribed to these fishes. The average distance between copepod nauplii in S.E. Kaneohe Bay was very small (1.0-1.7 cm). The purse seine adequately samples nehu larvae both day and night, but the 1-m net undersamples during the day. The feeding incidences of larvae taken with the two nets were similar, however. This discredits the hypothesis that only clupeoid larvae that are starving, sick or moribund are caught in conventional daytime samples.