

AVAILABILITY AND UTILIZATION OF INVERTEBRATES AS SHOREBIRD FOOD ON A HUMBOLDT BAY MUDFLAT

L. F. CARRIN, N. D. HOLMBERG, AND S. W. HARRIS¹

ABSTRACT.—Monthly core samples were taken from the upper 15 cm of a Humboldt Bay mudflat, northern California, between August 1970 and August 1971. Field observations and net sweeps in residual tide pools, channels, and on incoming tides provided additional data. Invertebrate populations were higher in the mud core samples than in the overlying water. Within the mud profile, 93.5 percent of the individuals and 60 percent of the total biomass were contained in the top 5 cm. The most abundant species were *Leptochelia dubia* (a cheliferan), *Transennella tantilla* (a small clam), *Notomastus tenuis* (a polychaete), and amphipods. More invertebrates occurred in summer than winter. Examination of 7 species of shorebirds shot while feeding on the study area revealed that, within broad limits, they fed mainly on expected items when behavioral and morphological characteristics of the birds were considered.

¹ Department of Wildlife Management, Humboldt State University, Arcata, California 95521.