## THESIS ABSTRACT

HSU COHERENT AREA SEA GRANT PROJECT HUMBOIDT STATE UNIVERSITY ARCATA, CA 95521 CIRCULATING COPY
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TITIE:

Population Characteristics of Pacific Herring, Clupea harengus pallasi,

In Humboldt Bay, California

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Herring, Clupes harengus pallasi, population characteristics, including size, age structure and fecundity, were determined for spawning stocks in Humboldt Bay, California. Fish biomass values of 338,248 kg (372 tons) and 219,208 kg (241 tons) were calculated for seasons 1974-75 and 1975-76, respectively. Spawning occurred from early December to early March. Seasonal spawn intensities were 7,512 and 6,796 eggs/m<sup>2</sup> of eelgrass. Two and three year old herring accounted for 57.1 percent by number and 43.8 percent by weight of the 1975-76 spawning stock. A linear regression between body length and egg production had a Y-intercept of -63,920.0 and a slope, b, of 496.6.

