

## NATURAL HISTORY OF WASHINGTON'S MARINE COASTS

Group Contract, Summer 1975 - Peter Taylor, Sponsor

### General Description

The purpose of this group contract was to reveal the richness, variety and importance of the marine and lowland life of Washington's Pacific Ocean and Puget Sound coasts. The observation and identification of organisms as viewed in their habitats and examined in the laboratory were primary activities. The role of observed life in supporting coastal ecosystems and their importance to people was emphasized through discussion, reading and lectures.

### Learning Objectives

Participants in this group contract were expected to achieve the following learning objectives:

1. Become generally familiar with the characteristic plants, animals and habitats of the Washington marine coasts.
2. Learn the process of identification and descriptive field study of coastal organisms, including skill development in writing field and laboratory notes.
3. Learn the nature of interrelationship of plants, animals, and man in the coastal zone.

### Texts

(1) Barbour, M.G. et al 1973. Coastal Ecology. Bodega Head. Univ. Calif. Press.  
(2) Robbins, C.S. et al 1966. Birds of North America. (3) Harrington, H.D. & L.W. Durrell. 1957. How to Identify Plants. Swallow Press. (4) Kozloff, E.N. 1973. Seashore Life of Puget Sound, The Strait of Georgia and the San Juan Archipelago. Univ. of Wash. Press.  
(5) Kozloff, E.N. 1974. Keys to the Marine Invertebrates of Puget Sound, the San Juan Archipelago and Adjacent Regions. Univ. of Wash. Press. (6) Scigel, R.F. 1972. Guide to Common Seaweeds of British Columbia. British Columbia Provincial Museum.

### Lectures and Films

Lectures were presented by the contract sponsor on Washington State coastal geography and geological history and on Puget Sound as an estuarine system. Lectures were also given by Al Wiedemann (faculty member--botany) on the physical development and vegetation of Oregon coastal dunes and by Gregory Garman (faculty member--marine biology--Centralia College) on the physiological ecology of estuarine fishes. Films shown were: "The Tides"; "The Beach--A River of Sand."

### Seminars

Five sessions were held to discuss reading in Barbour, M.G. et al 1973. Coastal Ecology. Bodega Head.

### Field Trips

1. Nisqually Delta, June 25. Salt marsh.
2. Willapa Bay and Long Beach Peninsula, June 30-July 2. Sessions were held with Joe Welch, Refuge Manager, Willapa and Washington Coastal Island National Wildlife Refuges, on the history and management of the refuges, and with Clyde Sayce, Director, Willapa Shellfish Laboratory (Washington Department of Fisheries) on the oyster industry in Willapa Bay. Habitats visited included open coast sandy beach, coastal dunes, salt marsh, bay sandflat and coastal jetty and cliffs.
3. Blakely Harbor, July 8. Puget Sound rocky intertidal habitat.
4. Rialto Beach near La Push, July 10-11. Open coast sandy beach and rocky intertidal.
5. San Juan Island, July 21-24. Bay sandflat (False Bay) and rocky intertidal (Cattle Point). Lecture by Dr. Eugene Kozloff, Friday Harbor Laboratories (University of Washington), on the natural history (terrestrial) of San Juan Island.

### Journals

Each participant was expected to write a journal containing field trip observations, laboratory observations, lecture notes and reading notes.

### Projects

Each participant was expected to select and study a habitat for descriptive analysis individually or with a few coworkers, to be presented in a written report.