

Natural History of Washington's Marine Coasts

Group Contract, Summer, 1976 (first half), Two Units of Credit, Sponsor-Peter B. Taylor

This group contract was about the variety, richness, and significance of marine and lowland life of Washington's ocean, sound, and bay coasts. Coastal organisms, including marine algae, vascular plants, marine invertebrate animals, fishes, and birds were identified in the field and in laboratory studies. The development of skill in recording field and laboratory observations was emphasized. Field trips to representative coastal sites were prominent activities of the program. The significance of organisms in supporting coastal ecosystems was featured through direct observation, reading, and discussion.

Learning Objectives

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

1. Become generally familiar with characteristic seaweeds, vascular plants, invertebrate animals, fishes and birds, and habitats of the Washington marine coasts.
2. Learn the process of identification and descriptive field study of coastal organisms, including skill development in recording field notes.
3. Learn the nature of interrelationships of plants, animals, and man in the coastal zone.

Field Notes

A system for recording field observations, patterned after the "Grinnell System," was prescribed, employing a field notebook, a Field Journal, and separate Species Accounts. A goal was set to include at least 50 species representing specified taxa.

Field Trips

In chronological order, field trips were made to: Blakely Harbor (one day - protected rocky intertidal), Nisqually Delta (one day - salt marsh), Willapa Bay (two days - bay sandflat, salt marsh, ocean beach, coastal dunes), Olympic Peninsula (three days - bay sandflat, ocean beach, and rocky coast), and San Juan Island (four days - rocky coast, bay sandflat). The Seattle Public Aquarium was visited (subtidal organisms, marine mammals). Dr. H.E. Clifton, U.S. Geological Survey, gave a field tour and presentation on geologic studies and interpretation of the Willapa Bay estuarine system, at Bay Center.

Lectures and Films

The sponsor presented lectures on coastal geography, geologic history, and estuarine systems. Dr. A. Wiedemann, The Evergreen State College, presented a lecture, slides, and a film on the Oregon coastal dunes. Films shown were: "The Tides of the Ocean," "The Beach--A River of Sand," and "Signals for Survival."

Texts

Principle texts used: (1) Barbour, M.G. et al 1973. Coastal Ecology. Bodega Head. University of California Press, (2) Kozloff, E.N. 1973. Seashore Life of Puget Sound, the Strait of Georgia and the San Juan Archipelago. University of Washington Press, (3) Kozloff, E.N. 1974. Keys to the Marine Invertebrates of Puget Sound, the San Juan Archipelago and Adjacent Regions. University of Washington Press, (4) Wiedemann, A.M. et al 1969. Plants of the Oregon Coastal Dunes. Oregon State University Bookstore. Additional books served variously as field guides and references for various coastal organisms encountered.

Seminars

Three sessions were held to discuss reading in Coastal Ecology. Bodega Head, by M.G. Barbour et al 1973. One session was held for presentations of biological resumes of selected species by each student.