

## COASTAL NATURAL HISTORY

Group Contract, Summer 1981 (First half)

Peter B. Taylor, Faculty Sponsor

This group study program was about the seashore life of Washington's marine coasts. A variety of organisms, including algae, vascular plants, invertebrate animals, fishes, birds, and mammals, were observed in the field and laboratory. Representative habitats of the ocean coast and Puget Sound were visited. The development of observational skills, supported by rigorous field notes, was stressed. Coastal ecosystems of the Pacific Northwest were examined through the field trips and through reading, discussion, lectures, and films.

### Texts

The principal texts were: (1) Carefoot, T. 1977, Pacific Seashores: A Guide to Intertidal Ecology; (2) Kozloff, E.W. 1973. Seashore Life of Puget Sound, the Strait of Georgia, and the San Juan Archipelago; and (3) Waaland, J.R. 1977. Common Seaweeds of the Pacific Coast. Several other texts were recommended as field and laboratory references for identification of coastal organisms.

### Lectures and Films

The Faculty Sponsor introduced the intertidal habitats and organisms of the Washington coast by lectures and slides. Films shown were: The Beach - A River of Sand, Tides of the Ocean, and Signals for Survival (gull behavior).

### Seminars

Seminar sessions featured review and discussion of reading in Pacific Seashores based on review questions for which students wrote answers, review of the field trip to Rialto Beach, presentations of Species Resumes, and presentations of final field projects.

### Laboratory

One laboratory session featured the use of taxonomic keys and general familiarization with intertidal mollusks.

### Field Trips

Field trips were made to: TESC beach (protected beach, mixed materials-Puget Sound), Rialto Beach (three days--ocean beach and rocky headland-Olympic Peninsula), San Juan Island (three days--semi-exposed rocky intertidal, protected sandflat, marina floats), Nisqually National Wildlife Refuge (one day--salt marsh, tidal slough), and The Seattle Aquarium.

### Field Notes and Species Resumes

A system for recording field observations was prescribed, employing a Field Journal and separate Species Accounts. At least 30 Species Accounts representing specified diverse taxa was an assigned goal. Also assigned were "Species Resumes," summarizing natural history information compiled from published references for three species. Each student presented one orally to the class.

### Individual Field Study

A final assignment was a field study, carried out individually or cooperatively, to examine and report on a specific seashore site or habitat. The results were presented in the Field Journal and Species Accounts and in written and oral summary reports.