

COASTAL NATURAL HISTORY

Group Contract - Summer 1986, 2nd Session
Peter B. Taylor, Faculty Sponsor

This five-week group study program was an introduction to the seashore life of Washington's marine coasts. A wide 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 through field trips, which were central to the content of this program. The development of observational skills, supported by rigorous field notes, was stressed. Coastal ecosystems of the Pacific Northwest were examined through the field trips, reading, discussion, and lectures.

The principal texts were Pacific Seashores: A Guide to Intertidal Ecology (T. Carefoot 1977) and Seashore Life of the Northern Pacific Coast (E. N. Kozloff 1983). Other texts and field guides were recommended for the identification of coastal organisms and for more information about them.

The intertidal marine habitats and organisms of the Washington coast were introduced through lectures and slides, in addition to assigned reading. The film The Beach - A River of Sand was shown. Reading assignments in Pacific Seashores, and review questions on the reading which were assigned for written responses, were discussed and amplified in weekly review sessions. The lectures and review sessions were also used to preview and debrief the field trips.

Three laboratory sessions were held to introduce: (1) the identification of barnacles; (2) the use of keys for the identification of molluscan bivalves; and (3) organisms of the marine plankton, and benthic hydroids.

Field trips were made to: TESC beach (mixed unconsolidated materials/ South Puget Sound); Westport and Cape Shoalwater (ocean beach and sand dunes/ Pacific Ocean coast); Rialto Beach, Olympic National Park (rocky shore and sandy-cobbly beach/ Pacific Ocean coast); Willapa Bay and Long Beach Peninsula (salt marsh, estuarine tidelands, sand dunes, and ocean beach); and Tongue Point (rocky point/ Strait of Juan de Fuca - an optional trip).

A system for recording field observations was prescribed, which featured writing notes in a field notebook followed by writing the observations in more organized, coherent style in a field journal at home or at basecamp. Also assigned were two "species profiles" which summarize natural history information compiled from references for two species, intended to establish a model for following up the field observations of formerly unfamiliar species.

A final assignment was a field study, to be carried out individually or with a partner, to examine and report on a specific intertidal site, habitat, or organisms, based on two or three (or more) periods of field observation. The observations were to be recorded in the field journal and presented as a written report with interpretation and discussion of the results in light of the ecological concepts covered in the reading, lectures, and review sessions of the program.