

COASTAL NATURAL HISTORY

Spring 1985

Group Contract

Course Description

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 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, lectures, and films.

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. Films/videotapes shown were: The Beach - A River of Sand, Signals for Survival (social behavior of gulls), The Harbor Seal, and Nori Aquaculture (seaweed culture). 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.

Two laboratory sessions were held to introduce: 1) barnacles and molluscan bivalves, and the use of keys for identification, and 2) seaweeds and plankton.

Field trips were made to: TESC (beach and tidalflat/South Puget Sound), Blakely Harbor (rocky point/Central Puget Sound - visited twice), Ocean City State Park (ocean beach and sand dunes/Pacific Ocean coast), Bowerman Basin (tidalflat and salt marsh/Grays Harbor), Tongue Point (rocky point/Strait of Juan de Fuca - overnight), Rialto Beach (rocky shores and sandy-cobbly beach/Pacific Ocean coast, Olympic National Park - overnight), and The Seattle Aquarium.

A system for recording field observations was prescribed, which featured writing a Field Journal and separate Species Accounts. An assigned goal was to record at least 30 Species Accounts representing diverse taxa. Also assigned were Species Resumes which summarized natural history information compiled from references for three species. Each student presented one orally to the class.

A final assignment was a field study, 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 recorded in the Field Journal and Species Accounts and presented as written, and oral reports with interpretation and discussion of the results in light of the ecological concepts were covered in the reading, lectures, and review sessions of the program.

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