

FISHES AND FISHING IN PUGET SOUND

Group Contract, Spring 1980 - Peter Taylor, Faculty Sponsor

Studies of the biology of fishes were combined with a survey of fishes and fisheries of Puget Sound. The diverse activities included reading, lectures, films, seminars, laboratories, field sessions, and special projects.

Texts and Reading -- Biology of Fishes by C. Bond (1979) was the principal text for assigned reading. Five group sessions were scheduled to review the content of the reading. Pacific Fishes of Canada, by J.L. Hart (1973) and Smith's Introductory Anatomy and Biology of Selected Fish and Shellfish (second edition) by A.A. Rich and L. Smith (1978) were principal references for other program activities. Several references were on reserved access in the library.

Lectures and Films -- Lectures by P. Taylor were on: résumé of the Salmonidae, Pacific salmon biology, Pacific salmon fisheries, and nearshore fishes and habitats in Puget Sound. Guest speakers from the Washington State Department of Fisheries provided sessions on Puget Sound fisheries: recreational shore fisheries enhancement (R. Buckley), lingcod fisheries enhancement (M. Canfield), management of ground-fishes (M. Peterson), predator-prey ecology of Pacific herring (K. Fresh) and management of herring fisheries (R. Trumble). Films shown were "Life of the Sockeye Salmon," "Tragedy of the Red Salmon," and "Aquaculture: Farming the Sea."

Seminars -- Two seminars were scheduled to discuss human needs to utilize and conserve fishes, trends of environmental conditions for fishes, and comparisons of food resources from the sea and the land.

Résumés of Fish Families -- Each student prepared for oral and written presentations a résumé of a fish family prominent in Puget Sound. The résumés contained information on the worldwide characteristics of each family and comments on Puget Sound species.

Laboratories -- Scheduled sessions and open lab time featured studies of external and internal anatomy and species identification of a variety of Puget Sound fishes. All specimens were collected by group or individual field activities and were examined in fresh condition. Each student recorded observations and drawings in a laboratory notebook. The lab work was highlighted by three intensive days at the Friday Harbor Laboratories (University of Washington), San Juan Island.

Field Activities -- Field sessions provided experience in collecting fishes: beach-seining, bottom-trawling, hook-and-line fishing, and night-lighting. The sites were in Southern Puget Sound and in the San Juan Islands. Several qualified students added SCUBA-diving observations. Each student maintained a field journal. A representative diversity of Puget Sound fishes were viewed at the Seattle Public Aquarium. The Edmonds Public Fishing Pier was also visited.

Special Projects -- Each student selected a topic about the biology on utilization of Puget Sound fishes to be researched for written and oral reports at the end of the quarter. The research was based variously on library resources, agency reports, interviews, and/or field work.