DRAFT

PROGRAM DESCRIPTION
FORESTS AND SALMON: RESOURCE MANAGEMENT IN THE PACIFIC NORTHWEST
Group Contract, Spring 1993

This program studied the biology, management and related social-political-economic issues of the two most prominent natural resources of the Pacific Northwest: moist coniferous forests and Pacific salmons. A major focus was the interrelationship of use and management of these resources in forested watersheds. The present-day situation and the past history of these resources were examined, including their importance for Native American culture. The primary modes of learning were lectures, seminars, and field trips; in addition, each student did individual or small group research on a topic selected after review of the full range of potential topics by the class.

Lectures, Texts, and Films--Lectures were presented by the faculty on the ecology and physiology of Pacific Northwest trees and forests and on the ecology and life histories of the Pacific salmons. Invited speakers presented lectures on commercial forest management and its regulation and on salmon and watershed management. Required texts and readings were Sharpe, Hendee, and Sharpe, *Introduction to Forestry* (5th ed.); Pearcy, *Ocean Ecology of North Pacific Salmonids*; Waring and Franklin, "Evergreen Coniferous Forests of the Pacific Northwest" (article). Recommended texts were Meehan, ed., *Influences of Forest and Rangeland Management on Salmonid Fishes and their Habitats*; Waring and Schlesinger, *Forest Ecosystems: Concepts and Management*; Randall et al., *Manual of Oregon Trees and Shrubs*; Pechenik, *A Short Guide to Writing about Biology*. Films and videos shown were Life of the Sockeye Salmon, As Long As the Rivers Run, and For Earth's Sake (biography of David Brower).

Book Seminar--Weekly seminars discussed the following books: Kirk with Franklin, *The Olympic Rain Forest: An Ecological Web*; Brown, *Mountain in the Clouds: A Search for the Wild Salmon*; Moir, *The Forests of Mount Rainier National Park: A Natural History*; Swan, *The Northwest Coast: or, Three Years' Residence in Washington Territory*; Kesey, *Sometimes a Great Notion*.

Topical Research and Seminar--A major assignment for each student, working individually or in a small group, was to research on a topic for oral presentation to the entire class and to prepare a written report of the findings. The research was based on library resources, public-agency documents, interviews and/or field study. Each presentation was accompanied by a written abstract and bibliography distributed to the class to serve as additional text material for the program.

Field Trips--Day trips were made to a state Department of Natural Resources stream research site (Porter Creek), the Weyerhaeuser Company's Forest Nursery and Tree Regeneration Center, a non-industrial managed forest, and the Nisqually Tribal Fish Hatchery. A three-day field trip to the Quinault River sector of the Olympic Peninsula included tours and presentations by representatives of the U.S. Forest Service and the Quinault Indian Nation; activities included hikes in old-growth forests and tours of pre-commercial and commercial thinnings, replanted clear-cuts, wildlife protection areas, and a salmon and steelhead hatchery.

Forest Survey--Students also did a brief ecological survey and timber cruise of a 70-acre forested site on the Evergreen campus, including understory and overstory vegetation analysis, tree diameter and height measurements, and volume calculations.

Faculty--Richard Cellarius (forest biology and management); Peter Taylor (salmon biology and management).

Suggested course equivalencies (in quarter hours): Total: 16
*6 -- Forest Ecology and Management
*6 -- Fisheries Ecology and Management
**4 -- Individual Research: [Insert name of topic]

* Indicates upper-division natural science credit
** Upper-division natural science credit depends on nature of research topic