

EXPLORATIONS IN ECOLOGY  
Group Contract, Winter Quarter 1993  
Faculty Sponsor - Peter Taylor

This program was about the science of ecology. The principal text was Ecology: Individuals, Populations, and Communities (M. Begon, J.L. Harper, and C.R. Townsend, 1990), which comprehensively covered ecological concepts and theory at a level intended for advanced undergraduates. All chapters were covered by assigned readings, written assignments (study questions, summaries, and/or other elected reviews), and meetings to review and discuss the material. The work on this text was the major element and foundation of this program. At the final meeting, a guest speaker presented and lead discussion about the Gaia Theory of global ecology and evolution.

A series of seminars were held to discuss reading in: The Machinery of Nature (P.R. Ehrlich), Where Have All the Birds Gone? (J. Terborgh), Tropical Nature (A. Forsyth & K. Miyata), and The Klamath Knot (D.R. Wallace), which provided a variety of perspectives on ecology that complemented the primary text. Several videotape-films were also shown, about Africa's Great Rift, Madagascar, coral reefs, and satellite monitoring of global ecological conditions. Two guest speakers gave talks about, respectively, a conservation initiative to protect neotropical migrant birds, and the ecological impacts of cattle grazing on vegetation in eastcentral Oregon.

Another series of seminars featured students' presentations of articles (two per person) from ecological journals, providing a forum to discuss ecological research studies and to apply concepts from the primary text.

Field studies were accomplished primarily to illustrate ecological concepts covered by the text. Another purpose was to introduce some field methods, including the writing of a field journal, the use of fieldguides and keys to identify local plants and animals, and ecological surveys. The field studies also included ecological tours of forested and intertidal habitats of the College's campus, birds of aquatic habitats of South Puget Sound, and habitats and birds of the Nisqually National Wildlife Refuge. In addition to a field journal for all fieldwork, a principal assignment was to survey topography, vegetation and associated biota on a forest site of the college's campus, to be accomplished during several weeks by teams of 3 to 5 persons, for oral presentation and a written report.