## BIOGEOGRAPHY Group Contract, Fall 1995 Faculty Sponsor: Peter Taylor

The primary subject was biogeography, drawing from associated fields of natural science, including ecology, evolutionary biology, phylogenetic systematics, and earth science. The texts were Biogeography (Brown & Gibson, 1983), After the Ice Age: the Return of Life to Glaciated North America (Pielou, 1991), The Diversity of Life (Wilson, 1992), Where Have All the Birds Gone? (Terborgh, 1989), and The Beak of the Finch: A Story of Evolution in Our Time (Weiner, 1994). The books by Wilson and Terborgh, respectively, addressed topics of conservation biology, which was a secondary subject of this program. Assigned reading was supported by review and discussion in class meetings. Lectures featured topics of biogeography and related aspects of conservation ecology, about (in chronological order) the Pacific Northwest, Olympic Peninsula, Mount Saint Helens (volcanic eruption and ecological recovery), New Zealand, Pacific salmonid fishes, and the Hawaiian Islands. Videos having strongly biogeographic content were shown about East Africa's Great Rift, Mount Saint Helens (eruption and recovery), New Zealand, Hawaiian Islands, and Galapagos Islands.

Two one-day field trips were conducted, respectively, to Mount Saint Helens Volcanic National Monument to observe ecological disturbance and recovery, and to the Olympic National Park (Hurricane Ridge), where a staff biologist led a tour featuring ecological and historical aspects of Olympic Peninsula biogeography.

As an ongoing general assignment, each student was expected to write weekly summaries, reviews, or syntheses of learning from all program activities. An early assignment was to compile two species resumes of one plant and one bird personally observed in this region. A midterm exercise featured application of biogeographic terms and concepts to questions based on lectures about the Olympic Peninsula, Mount Saint Helens, and New Zealand. A final assignment was to read and respond to interpretive questions about an article describing a new bird species (a bush-shrike, Somalia), which featured cladistic systematics and other concepts of modern biogeography.

A series of weekly seminars was based on students' presentations of articles of their choosing about topics of biogeography and/or conservation ecology.

A major research assignment for each student was to review literature to compile a biogeographic profile about a particular taxonomic group, perhaps also focused on a particular region, to be produced as a written report and oral presention to the class.