Text reproduced from the Association of Pacific Coast Geographers Yearbook. Jensen, Granville J. (1990) Geography at Oregon State University. APCG Yearbook 52: 153–164.

Geography at Oregon State University

J. Granville Jensen

Emeritus Professor, Program in Geography Geosciences Department, Oregon State University Corvallis, Oregon 97331-5505

The Oregon State University Department of Geography was founded in 1946 with a distinctly pragmatic orientation, emphasizing applied aspects of physical, resource, and technical geography.

The Formative Period and Jensen Era, 1946-64

Courses in physical and commercial geography were sporadically offered at Corvallis by non-geographers from at least as early as 1882. During the Army Specialized Training Program from 1943 to 1945, courses in geography were taught by business professors Clifford E. Maser and J. Lloyd LeMaster, by history professors Sidney Phillips and Robert W. Smith, by local historian John E. Smith, and by high school geography teacher Estelle Rankin. The first tenured geography professors were authorized in 1946-47 as a result of a request by Dean of Business Clifford E. Maser that a three-term sequence in geography be added to the college offering.

As there was no department of geography, appointments of the first four geographers, who together established geography at Oregon State University, were assigned to the economics department in which geography came to form a tacitly separate unit. J. Granville Jensen, Ph.D. from Clark University and professor of geography at Rhode Island College with specialization in climatology, resource geography, and Latin America, was appointed as the first tenured professor of geography at Oregon State University and served as chairman from 1946 to 1964. With ample student enrollment, three additional appointments were authorized. In 1947, Richard M Highsmith, Jr., Ph.D. from Washington with specialization in agricultural geography and physiography, was appointed. Also in 1947, Wilfred G. Myatt, M.A. from Washington, with specialization in regional geography of North America, was appointed. In 1949, Oliver W. Heintzelman, Ph.D. from Washington with specialization in world regional geography and Europe, was appointed.

During the 1940s, to improve service to Oregon State and its students, the four geographers expanded course offerings in traditional regional geography under authority of the economics department, and in 1947 introduced courses in climatology, climatography, and landforms under authority of the Department of General Science. Formation of a department of geography at the time was precluded by realities of the Oregon State System of Higher Education, which had allocated degree programs in the social sciences, including geography, to the Eugene campus. Consequently, in order to provide for major students, a program in applied physical and technical geography was initiated within the General Science Department. The first major students earned bachelor's degrees in June 1949 and were placed in applied geography positions.

During the early years the departmental mission was directed more towards the instruction and education of students, less to research and publishing. Major attention was devoted to helping teachers understand geography and especially natural resources problems and realities through extension classes

and workshops offered in various Oregon sites as well as in summer courses and special programs on campus. For example, in 1949 a two-week-long summer workshop, "The Institute of Northwest Resources," was developed especially for teachers, utilizing distinguished invited specialists. In later years the "institute" became a two-week field study experience led by professors Jensen and Heintzelman. In 1966 and 1967 the department was funded for a National Defense Education Act summer institute on resource geography. In 1971 the National Science Foundation funded a summer institute on "Application of Systems Analysis to Viable Solution for Land Use Problems" led by professors Hollingshead and Jensen.

In 1950 the departmental project to prepare and publish an *Atlas of the Pacific Northwest* was begun with a modest grant from the Ford Foundation for cartographic expenses. Professor Richard M. Highsmith coordinated and edited the atlas. In the 1953 first edition, and several that followed, campus specialists such as those from forestry and fisheries were invited to prepare the text for their respective resource. The third and fourth editions (1962 and 1968) benefited from the cartographic skill of Jon Leverenz and contributions from various campus specialists. With the first edition (1973), all text contributions were by geography faculty save the historical chapter written by Kenneth Munford. Cartography was by Robert Bard. The sixth edition (1979), with joint editorship of Highsmith and A. Jon Kimerling, had the more sophisticated cartography of Kimerling. With the seventh edition (1985), Kimerling and Philip Jackson assumed joint editorship.

In 1952, the Oregon State Board of Higher Education authorized the geography program in applied physical and technical geography as the Department of Natural Resources with bachelor's and master's degree authority. The first master's degrees were awarded in 1953. In the ensuing years, however, the departmental name became undesirable because of the rise of administrative organizations with the same name in state governments as an administrative umbrella over such agencies as forestry, agriculture, and fisheries. A few universities also used the name "natural resources" to designate groupings of professional fields of resource sciences and management.

In the spring of 1964 Professor Jensen resigned as chairman, ending the first period of geography at Oregon State University. He continued full time in instruction until his retirement in 1977. Professor Richard M. Highsmith was selected as the second chairman for geography and served through 1980.

The Highsmith Era, 1965–80

During the Highsmith era, which began in the fall of 1964, significant advances and improvements in the status of geography were accomplished: approval to rename the department, authority to grant doctoral degrees; establishment of the Extension Land Resource Management Program, and securing of a major physical facility.

In 1965, the department submitted a formal proposal to rename the Department of Natural Resources to Department of Geography in the School of Science and also to function as a department in the School of Humanities and Social Sciences. The proposal gained approval through university channels, and in January 1966 the Oregon State Board of Higher Education approved the name change and joint department. Thus geography at Oregon State University came to be established as a joint department under a single chairman, offering bachelor's, master's, and doctoral degree programs in physical, resource, and technical geography in the College of Science and social science credit courses and programs in the College of Liberal Arts.

The programs of study for bachelor's and master's degrees authorized for the geography faculty as the Department of Natural Resources carried over to the Department of Geography; however, the proposal for doctoral degree programs had not gained approval. Consequently, in later 1966, a document was

prepared by the faculty detailing capability to provide doctoral study programs in fields of resource and physical geography. Campus curriculum committees and the administration favored the proposal and approved forwarding to the State Board of Higher Education. In April 1967 the State Board authorized the Department of Geography to offer doctoral programs in fields of resource and physical geography appropriate to the Land Grant University at Corvallis.

In 1967, when doctoral programs were authorized, the geography faculty numbered eleven full-time scholars plus a number of graduate assistants. In addition to the original four geographers—Jensen, Highsmith, Myatt, and Heintzelman—the faculty included: Robert E. Frenkel, biogeography and conservation; Robert Hansen, cartography and quantitative methods; Thomas J. Maresh, mineral and energy resources; Keith W. Muckleston, water resources policy; Ray M. Northam, transportation and urban; Michael Roberts, geomorphology; and Robert D. Rudd, climatology and remote sensing.

During the following decades of the 1970s and 1980s faculty size remained stable but a number of faculty changes occurred. Wilfred G. Myatt retired in 1969 and Oliver H. Heintzelman in 1974. Robert Bard was appointed as cartographer in 1969 and was succeeded in 1976 by A. Jon Kimerling. Ann Hollingshead, the first woman member, joined the faculty in 1970 but due to illness was replaced in 1973 by Mary Lee Nolan, a specialist in cultural geography and Europe. In 1971 James Lahey replaced Robert D. Rudd as department climatologist and in turn because of illness was succeeded in 1981 by Philip Jackson. In 1972 James Pease began important service on a joint appointment as a land resource management extension specialist and instructional faculty member. In 1974 Charles Rosenfeld was appointed to strengthen the faculty in remote sensing, hydrology, and geomorphology. With the 1977 retirement of Professor Jensen, Gordon Matzke joined the faculty adding his specialization in population, Africa, and biotic resources, and in 1982, with the retirement of Professor Highsmith, Steven Kale was appointed to develop the intern program and applied economic geography.

Chairman Highsmith added a new dimension to the Department of Geography with development of the Extension Land Resource Management Program in cooperation with the University Extension Service. Among other objectives the program was designed to do four things. First, it was to develop land use and resources planning for county extension education programs and provide materials for agents, planners, and state land officials. Second, it was to develop research and demonstration projects concerning land use and planning issues. Third, it was to provide liaison between educational institutions and planning agencies. Fourth it was to provide instruction and direction of graduate students in land use and rural planning. James R. Pease was appointed in 1972 as director and first specialist in extension land resource planning. Later, in 1978, Philip L. Jackson was added to the program and served until 1981 when he transferred to full-time departmental instruction and research. Also between 1975 and 1981 three fixed-term extension positions were assigned to the Department of Geography to assist specialists in program delivery.

In 1973 a professional cartographic service was established to provide a wide range of graphic research, drafting, and reproduction services to campus departments and government agencies. It was also intended to provide employment and experience for students. Robert Bard, the first director, managed the activities until 1976 when A. Jon Kimerling assumed the responsibility and expanded its capabilities to include sophisticated computer-assisted cartography.

A major accomplishment spearheaded by Chairman Highsmith was the securing of suitable physical facilities. Geography at Oregon State University first occupied two Quonset huts where Milam Auditorium now stands. Then in 1952 it moved to the third floor of Social Science Hall (the old Dairy Building) with some 7,000 square feet of space. By 1965, with increased faculty and graduate students, the need for specialized laboratory facilities and other space had become critical. Chairman Highsmith pressed for a specialized geography facility and finally joined with geology chairman W.D. Wilkinson in a

successful effort to gain authorization for construction of an Earth Sciences Building (Wilkinson Hall). The resulting building with two floors and a full basement level plus the attached 250-seat auditorium was completed in 1972. It provided geography with 17,000 square feet of space on the second floor for faculty offices, graduate student space, laboratories, and classrooms. Geology occupied the basement and first floor.

The Maresh Era, 1981-88

In January of 1981 Professor Thomas Maresh was named the third chairman of the Oregon State University geography department. He served until December 1988 when he became dean of the university graduate school. Dr. Gordon Matzke was selected as the fourth chairman for geography starting January 1, 1989.

During the period of the Maresh tenure the original orientation to applied geography and quality instruction continued. Moreover, important refinements and improvements were accomplished by the faculty that significantly enhanced the stature of the geography discipline at Oregon State University. The most notable advances included establishment of the geographic technology laboratory, addition of two new major fields of graduate study, reduction of faculty class instruction loads, increased research grant and contract production, the internship program, and major refinements in departmental management and support facilities.

With the leadership and expertise of Professors Rosenfeld and Kimerling, a geographic technology laboratory was equipped with a major array of sophisticated hardware and became an important asset for faculty and student research, instruction, and service to public agencies. The laboratory focused on remote sensing research, computer-assisted cartography, and geographic information systems development. Supplementing the laboratory, the department acquired complete world film coverage of satellite imagery.

In the 1980s geography graduate study opportunities were expanded with authorization of two fields of study. A geographic information management option, involving remote sensing applications, computer-assisted cartography, and geographic information systems, logically supplemented the department's applied orientation. The addition of economic geography as an approved minor field for graduate programs broadened study opportunities in social science aspects of geography and strengthened the College of Liberal Arts side of the Oregon State University geography program.

Faculty research accomplishments and publications became increasingly essential during the 1980s and significant assistance was provided in 1987 by approval of reduced class instruction loads. Some faculty teaching loads were reduced by one-third, support from external grants and contracts increased significantly over 1970s levels and faculty publications and papers presented increased two to three times. Moreover, increases in geography faculty research in cooperation with other campus departments enhanced the stature and respect for geography on campus. Notable examples of such faculty accomplishments include the major involvement of Keith Muckleston in the Water Resources Research Institute and with regional water management agencies. His many publications concerning water policy issues led to international recognition. James Pease gained recognition for his innovative direction of rural planning activities, for his numerous publications in interdisciplinary projects in cooperation with extension specialist scientists, and for his scholarly activities at the national and international level. Charles Rosenfeld's expertise developed the department's remote sensing laboratory and many contracts dealing with remote sensing applications, including research on Mount St. Helens and applications to hydrologic problems in several world areas. Jon Kimerling's research and publications in cartography led to his serving as editor of the journal American Cartographer (1984–87) and to his election as president of the American Cartographic Association in 1988. Robert Frenkel

contributed to the department's stature with his scholarly research on wetlands and on plant community structure and function. His research was funded in cooperation with various federal research agencies and other campus scientists. Mary Lee Nolan's research and publications on geography of Christian pilgrimages gained international recognition and helped improve geography's stature with humanities faculties. Ray Northam contributed research on coastal land use in cooperation with the Sea Grant Program and gave service to the Transportation Institute board of directors and to the Canadian Studies Program as its director. Philip Jackson directed contracts for research in applied climatology in reference to airborne pollution. Steve Kale worked closely with state economic development agencies and served as chairman of the geography section of the Oregon Academy of Science and as treasurer of the Association of Pacific Coast Geographers. Gordon Matzke served as campus representative for the Rhodes Scholarship and cooperated with international resource development agencies concerning African development problems.

In 1963 the Department of Geography first attempted an internship program to place students for a term with resource and planning agencies, earning university credit as well as gaining experience. One student was placed with Bureau of Land Management. Nevertheless, the internship idea was premature because of agency civil service conflicts and because the university was uncertain about granting academic credit. In 1977 the departmental internship program because a clear success when under the guidance of Gordon Matzke it began placing five to ten students a year. From 1983, under the guidance of Steven Kale, some ten to twenty students were annually placed in internships involving up to a dozen government resource and planning agencies as well as private sector companies.

Office staff expansion and refined management of the department were accomplished with addition of the office manager position relieving the chairman of many details common to major university departments. The fiscal budget was consolidated and stabilized and modern secretarial equipment was installed including a full array of word processing facilities among the computer hardware and software. Each faculty member was provided with computer capability.

In 1987 the Oregon State University graduate program in geography underwent a review by a blue ribbon committee composed of campus scholars and external reviewers. Significantly, the external reviewers' report judged the Oregon State University program to be the best applied geography program in the nation.

Geography Graduates and Placement

From the beginning in the mid-1940s to 1990 the Oregon State University geography faculty awarded 571 bachelor's degrees, 365 master's degrees, and 58 doctoral degrees. These high rates of productivity have been enhanced during each of the three leadership eras. In the Jensen era (to 1964) annual output averaged eight undergraduates and three graduate students. In the Highsmith era (1965–80) annual graduation rates were fifteen undergraduates, eleven master's students, and three doctoral students. In the Maresh era (1981–88) there were annually an average of twenty-two undergraduate degrees given as well as fourteen master's degrees and one or more doctoral degrees. The first Matzke years, 1989–90, added 44 bachelors, 29 masters, and 3 Ph.D. graduates.

The first bachelor's degrees were awarded by the geography faculty to eight students in the class of 1949, including Alan Mellis, who was placed in an applied geography position as industrial lands researcher with the Portland Chamber of Commerce and Talbert Sehorn who was placed with the Agricultural Conservation Agency and later became head of the Oregon office. Despite meager records it is known that about half of the 571 individuals with bachelor's degrees were placed in applied

geography positions with planning departments, resources management agencies, or private enterprises.

The first master's degree was awarded to Mr. John Beh in 1953 for his study of the "Proposed Pelton Dam, A Resource Development Problem," with major professor Jensen. After graduation Beh joined the U.S. Geological Survey as a resources specialist. Of the 365 master's degree graduates through 1990, about two-thirds took positions with public planning or resources management agencies and about a fourth were placed with private enterprises.

The first doctoral degree was awarded in 1970 to Anne H. Hollingshead for a dissertation entitled "A Systems Analysis Model for Minimizing Flow of Biotically Productive Land into Irreversible Uses," with major professor Highsmith. The second doctoral degree was awarded in 1972 to Frank T. Aldrich for his dissertation entitled "A Chronological Analysis of Grass Balds in the Oregon Coast Range," with major professors Frenkel and Jensen. About a third of the 58 doctoral graduates have entered academia, with the remainder divided between private enterprise and public agency positions. An important indicator of high quality among 1980s OSU geography graduate students is that two doctoral students received the Association of American Geographers Nystrom Award for outstanding doctoral research: Richard Marston in 1981 (major professor Rosenfeld) and Rebecca Roberts in 1982 (major professor Maresh).

1989: Administrative Reorganization of Geography

In 1989, geography at Oregon State University underwent a major administrative reorganization within the context of a system-wide budget-cutting mandate. As a result the Department of Geography and the Department of Geology were combined to form a new Department of Geosciences. Gordon Marzke was named director for geography and associate chairman of geosciences. Cyrus W. Field, senior professor of geology, was appointed director for geology and chairman of geosciences. Administratively housed entirely within the College of Science the new geosciences unit provided avenues for strengthening the scientific orientation of geographical studies at Oregon State University. As a result of position vacancies and impending retirements, economic geography was dropped so that strengthened programs in other areas of geography could be sustained. Authorization for undergraduate, masters, and doctoral programs remained unchanged. Geography's long established orientation to applied geography with emphases on physical geography, resource geography, and the fields of cartography, remote sensing, and geographic information systems continued.

Oregon State University: Geography Staff Since 1946

Name	Education	Appointment Years
Frank Aldrich	Oregon State, Ph.D., 1972	1966-67
Robert Bard	California (L.A.), Ph.D., 1972	1969-76
Hugh Campbell Brooks	Columbia, Ed.D., 1954	1950-51
Robert Dolan	Louisiana, Ph.D., 1965	1957-58
Robert E. Frenkel	California (B.), Ph.D., 1967	1965-
Robert G. Hansen	Michigan State, D.Ag., 1970	1963-70
Oliver H. Heintzelman	Washington, Ph.D., 1952	1949-74
Richard M. Highsmith	Washington, Ph.D., 1950	1947-82
Ann H. Hollingshead	Oregon State, Ph.D., 1970	1970-73
Philip L. Jackson	Kansas, Ph.D., 1977	1978-
J. Granville Jensen	Clark, Ph.D., 1946	1946-77
John Amos Johnson	Louisiana State, Ph.D., 1963	1963-64
Steven R. Kale	Nebraska, Ph.D., 1982	1982-89
A. Jon Kimerling	Wisconsin, Ph.D., 1976	1976-
James F. Lahey	Wisconsin, Ph.D., 1959	1971-81
John Leverenz	Wisconsin, M.S., 1960	1960-63
Thomas J. Maresh	Illinois, Ph.D., 1968	1967-
Gordon E. Matzke	Syracuse, Ph.D., 1975	1977-
Keith W. Muckleston	Washington, Ph.D., 1970	1964-
Wilfred G. Myatt	Clark, Ph.D., 1958	1947-69
Mary Lee Nolan	Texas A. & M., Ph.D., 1972	1973-
Ray M. Northam	Northwestern, Ph.D., 1960	1966-
James R. Pease	Massachusetts, Ph.D., 1972	1972-
Michael Roberts	Iowa, Ph.D., 1966	1966-68
Charles L. Rosenfeld	Pittsburgh, Ph.D., 1973	1974-
Robert D. Rudd	Northwestern, Ph.D., 1953	1957-70
Imre Sutton	California (L.A.), Ph.D., 1964	1962-64