

## Donald Stuart Welch, 1894–1972

W. A. Sinclair



Donald S. Welch taught the science and practice of plant pathology for 37 of the 50 years of his association with Cornell University. He was a nationally recognized and widely sought authority on arboriculture and diseases of shade and forest trees. He died at his home in Ithaca, N.Y. on January 27, 1972.

Dr. Welch's early experiences in the lumber-oriented town of Norway, Maine, where he was born on March 12, 1894, led to his sustained interest in forestry and tree diseases. He was, however, largely self-taught in forestry and arboriculture. His formal education, at a time when plant pathology was predominantly concerned with diseases caused by fungi, emphasized botany and mycology. He received the B.S. degree from the University of Maine in 1917, the M.A. degree from Harvard University in 1921, and the Doctor of Philosophy degree from Cornell in 1925.

Cornell had a highly regarded program for the training of professional foresters when he was appointed Assistant Professor of Plant Pathology in 1925, and he soon developed a course in forest pathology. Later, after a de-emphasis of forestry at Cornell, he taught the introductory course in plant pathology as well as pathology of trees and shrubs for several years. His position involved resident teaching, research, and extension work. Annually he diagnosed hundreds of diseased tree and shrub specimens that came to his laboratory from foresters, arborists, horticulturists, nursery inspectors, woodlot owners, and rural and urban residents. He authored many research and extension publications on tree diseases.

The Dutch elm disease appeared in New York State in the mid-1930's. It was to be a major focus of his attention for the next 35 years. In 1934 he was chosen to direct a joint research project on Dutch elm disease involving Cornell's Departments of Plant Pathology and Entomology & Limnology, and the Boyce Thompson Institute for Plant Research. The resulting information on the biology of the fungal pathogen and its insect vectors still forms a basis of municipal programs for control of the disease.

Before entering Cornell for graduate work he was a scientific aide for 2 years at the Station for Experimental Evolution, Carnegie Institution of Washington. In 1933-34 he served as technical advisor on emergency conservation work with the U.S. Division of Forest Pathology. He was advanced to Associate Professor in 1939 and to Professor in 1941. In 1947, supported in part by a grant from the School of Forestry, University of Idaho, he served as collaborator with the U.S. Forest Service in research on the pole blight disease of western white pine in the Coeur d'Alene National Forest in Idaho. From 1954 until the late 1960's he served as consultant on forest pathology for the Maine Forest Service. After retiring in June 1962, he spent two years as consultant with the U.S. Forest Service, Division of State and Private Forestry, developing problem analyses for use in suppression of disease losses in northern hardwood forests. He also advised municipalities on problems related to Dutch elm disease suppression and management of shade tree resources. He served as Technical Advisor to the Elm Research Institute in 1970-71.

Former students, especially those who were advised by Dr. Welch during graduate studies, recall that he gave them great latitude to work out research problems. Given more to listening than to talking, he preferred to serve as a source of advice rather than as director of a student's research project.

Dr. Welch was a past president of the International Shade Tree Conference and a former member of the Board of Governors of Region 2 of that organization, a member and then honorary member of the Northeastern Forest Pest Council, a former member of the Council of The American Phytopathological Society, and a fellow of the American Association for the Advancement of Science. He was also a member of the Society of American Foresters, the Mycological Society of America, American Institute of Biological Sciences, New York State Arborists Association, Association of New York State Bird Clubs, Sigma Xi, Phi Kappa Phi, Alpha Zeta, and Phi Sigma.

Professor Welch married Catherine Graham of Guelph, Ontario in 1925. He is survived by Mrs. Welch, a daughter Catherine, and a son James.