IN MEMORIAM

Lee C. Wensel
Professor of Forestry, Emeritus
UC Berkeley
1940 – 2011

Lee Wensel, Emeritus Professor of Forestry, died on January 5, 2011, in Oakland, California.

Lee was born and raised in rural Pennsylvania, where as a boy he developed an interest in forests and wildlife. He spent many hours in the woods independently studying plants and animals and became fascinated with land management/ wildlife interactions. This interest led him to enroll in forestry at the Pennsylvania State University. Freshman forestry majors spent their first year at the Mont Alto campus, which was previously the site of the old Mont Alto Forestry Academy, where many of the founders of American forestry had taught or been initially trained. The historical significance of the Mont Alto campus stimulated his lifelong interest in the history of forestry. During the first summer of his undergraduate years, Lee worked as a compass man on a road survey crew laying out new logging roads in areas of old growth forest in the Gifford Pinchot National Forest in Washington. This experience led him to develop a lasting interest in surveying and provided an important practical background for his later teaching at the University of California Forestry Summer Camp.

A second summer experience, as a forestry aide in New Hampshire in the forest where Yale University had its Forestry Summer Camp, gave Lee an opportunity to meet many of Yale's forestry faculty. These contacts stimulated his interest in research and teaching as a career. During his senior year at Penn State he was selected as a teaching assistant in forest ecology, which furthered his interest in becoming a professor of forestry. Lee completed his B.S. degree in forestry at Pennsylvania State University in 1962 and enrolled as a graduate student in forestry at Purdue University, where he completed a M.S. in forestry in 1964. His graduate work at Purdue was focused on the application of mathematics and statistics to forest measurements. Lee pursued this interest in his research at the University of Minnesota, where he completed a Ph.D. degree in forestry in 1967. During his years as a Ph.D. student he worked as an instructor in forest inventory and measurements. His academic career, encompassing three leading forestry schools in the country, together with his work on the Yale Forestry School Summer Camp, put Lee in contact with some of the outstanding professors of forestry at a time when the profession was growing and embracing new concepts for the education of professional foresters. It was a formative time both for Lee and forestry education in America.

Lee joined the faculty of UC Berkeley's Department of Forestry and Resource Management in 1967. Upon his appointment, he embarked on a teaching career focused on forest measurements, inventory, and sampling. He is remembered by his students and faculty for his unusual patience in explaining difficult mathematical and statistical concepts to his students and his insistence that the field of forest measurement and statistics not be "watered- down" for forestry students. He wanted Berkeley students to be at the top when it came to an understanding of forest measurements and statistics. Lee taught for many years at the UC Forestry Summer Camp in Meadow Valley, California. He held the Summer Camp students to the same rigorous standards that he did the students on campus. These rigors were not only intellectual, since the field work he required involved real physical exertion. Lee was always in excellent physical condition and could match any of the students in timber cruising, locating plot centers with a compass and pacing, and in efficiency of tree measurements.

In his later years on the faculty he developed a graduate course on research concepts and methods that was fundamental to introducing forestry graduate students to experimental design and the process of developing their research topics. Lee was largely responsible for developing the first computer facility in the Department of Forestry and Resource Management and served as an informal consultant on computers for many of the faculty in the early days of electronic computing.

Lee's research covered the areas of tree measurement, sampling, and tree growth modeling (he always insisted that modeling be spelled with two l's). He initiated pioneering research on forest growth simulators in California in the 1970s. The forest growth simulators he developed for conifers (named CACTOS) and for redwood (CRYPTOS) became the standard growth simulators used by foresters in California to develop long-term sustained yield forest management electronic plans. His simulators are still in use today. He made a continuous effort to improve the simulators through periodic re- measurement of tree growth on his original 710 growth plots spread over most of the productive forest land in California. He also wrote new algorithms to be used in the upgraded models. This system of plots was developed on land belonging to various private forest companies. Lee's efforts in bringing these private firms together to share what was considered privileged information were nothing less than herculean. Subsequent to his development of the two models, Lee researched a way of dealing with the large error in volume measurement of large logs and taper in logs with reverse bark taper. Previously these logs were dropped from data sets in the calculation of tree volume. His research provided a means of dealing with these logs to provide more accurate projections of the volume growth of trees. Lee's research included development of a statistical sampling design, subsequently adopted by the State Board of Forestry, to determine the adequacy of tree restocking as required by California's Forest Practice Act.

He also conducted research on the response of Northern California conifers to changes in precipitation, well before the current interest in global climate change. Lee distributed much of his research findings on forest growth as research notes published by the Northern California Forest Yield Cooperative. These research notes reached a large audience of professional foresters in California who were involved in forest inventory and who had worked in one way or another in the collection of data for the CACTOS and CRYPTOS models. Lee believed that this was a significant route for the transfer of research results to the primary users of the research. He was also able to extend the findings of his research to forest scientists working in other parts of the country, as well as to an international audience, through refereed journal publications. His research brought invitations for him to speak on forest growth simulation at meetings in Germany and Australia.

Lee provided exemplary service to the Department of Forestry and Resource Management, the College of Natural Resources, and the University during his years on the faculty. Among other assignments, he served as chair of the Forestry Summer Camp, faculty advisor to the Forestry Club, and faculty representative to the Society of American Foresters. He revived the Forest Science Division's membership in the national Forestry Honorary Society, Xi Sigma Pi, and served as faculty advisor to the society. In all of these assignments, his service was distinguished by his dedication to the students, his hard work, and the professional manner in which he carried out his assignments. Lee provided service to a number of citizens' organizations, private timber companies, and public agencies. It is of particular interest to note that he asked to present a special workshop on the CACTOS model to members of the Quincy Library Group. This group, formed to resolve highly contentious environmental and forest management issues, developed a congressionally approved and funded project to test and demonstrate effective forest management on 1.5 million acres in the Lassen, Plumas, and Tahoe National Forests. Lee's growth models were used to project the likely outcome of alternative management approaches.

Lee enjoyed cycling and surfing with a boogie board, as well as sailing. He kept in great shape by cycling several miles to his office from his home in Oakland. Lee retired on August 31, 2000. After retiring, he and his wife Barbara traveled to England and France to explore the network of 18th and 19th century canals developed for moving materials before the building of railroads. They rented canal boats, learned to negotiate the system of locks, and traveled for many miles across both countries. Lee was also very active in the California Alumni Foresters Association after his retirement.

Lee died unexpectedly following complications from a surfing accident in Hawaii in 2010. He is survived by his wife Barbara Wensel, daughters Cyndy Lindauer and Sharon Taylor, and son Steven Wensel.

Joseph R. McBride
John A. Helms
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