changed. We began to rely more on phone calls, newsletters and office calls. The 4-H members and leaders were understanding. They began coming to us more than we were going to them.

In the later years, leaders wanted answers to problems with children. They wanted to come to meetings to discuss them rather than have formal presentations. What should they do about the child who didn't bring materials? Or the child who wanted to play and be disruptive? Leaders who were successful working with children would share their techniques with other leaders and my role became one of facilitator.

What were UC's most significant extension contributions during these years, particularly in your area of expertise or to the industry you served?

PS: Significant impact was made in teaching nutrition and food safety through the 4-H project. A lot of research had been done on vitamins, minerals, fats, cholesterol, and so on, at UC Berkeley. We were sharing this new information with 4-H and the public.

The work done with adults and 4-H members on personal color during the '60s and '70s was also significant. We matched their skin, eyes and hair and deter-

Henry Vaux, Sr.

Former Dean of Forestry

Henry Vaux, Sr., a native of Pennsylvania, graduated from Haverford College in physics, then shifted gears and came to Berkeley in 1933 as a graduate student in forestry and later earned his Ph.D. in agricultural economics. Vaux joined UC Berkeley's forestry faculty in 1948. He was appointed Dean of the School of Forestry in 1955, after serving for 10 years, he returned to the faculty until he retired in 1978. Since Vaux came to Berkeley, the School of Forestry has gone full circle — from a division of the College of Agriculture, it separated into its own department and later school, then merged with College of Agricultural Sciences to create the College of Natural Resources.

In 1946, when California Agriculture was first published, California was entering a post-World War II era of optimism and prosperity. UC's College of Agriculture (the predecessor to the Division) was on the brink of a great expansion. As you remember that time, what did society expect from the College of Agriculture?

HV: From my perspective, the relationship between agriculture and forestry and wildland resources has shifted dramatically. The focus of the relationship at that time was strongly influenced by the range management and livestock operations on wildlands, and their relation to fire protection, because these brought livestock agriculture and forestry into rather direct conflict with each other.

That conflict really wasn't resolved for 10 or 15 years. But it came primarily as a result of the research and demonstration of Harold Biswell — a member of the forestry faculty who did pioneering work in this

mined the specific red that was best for them. Then we extended these colors, making a match-stick fan. An individual could wear any color if it was within this range of value and intensity. People who did this really appeared put together.

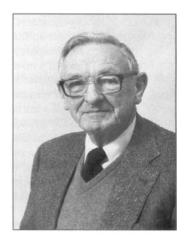
How have societal changes over the last 50 years influenced the Division?

PS: As awareness grew about the situation of minorities, the University made every effort to reach more minorities with its programs.

Looking toward the future, what is the most important task for the Division and for UC?

PS: I believe the 4-H program should be expanded to reach as many young people as possible. It's an educational program that gives youth tools they can use all their lives. The experience in public presentations is one of the best aspects of 4-H. The junior leader project, which teaches how to work with others, and the interviews for All Stars and awards, which help prepare them for job interviews, also are great opportunities for 4-H members. *—Jeannette Warnert*

> state on what is now called controlled burning of forests and in the face of very rigorous suspicion and opposition from the forestry community. Harold, with his dogged determination and unwillingness to get mad at anybody, eventually developed



doctrines, with the help of others, that are now accepted widely by the forestry community and have become part of state policy to use fire as a tool. This illustrates the shift in societal expectations from an orientation toward commodity production to one embracing environmental considerations as well.

How did you perceive your role as a faculty member when you were hired in 1948, and how did your job change over the years?

HV: When I came as a faculty member, I had the usual perception. You were supposed to get in and do some research and publish. Faculty members always had their feet to the fire organizing and executing research, although the character of research in forestry was somewhat different from that in the rest of the College of Agriculture because of the professional nature of the field. One of the difficulties forestry experienced, which was much less severe elsewhere in agriculture, was justifying research with a professional problem orientation as distinct from basic research. The striking thing is that over the past 50 years this problem hasn't changed. If anything, it is more difficult today than it was then.

What were UC's most significant research and extension contributions' during these years, particularly in forestry?

HV: The School had not had a long tradition of research at the time it was founded. Actually, there were only two members of the faculty in forestry already here who had strong research preparation and research accomplishment.

> Joe Kittredge was a remarkable person and a dedicated researcher in the field of forest influences and a leading figure in encouraging research on the part of forestry students. The other person who was well trained in research was Arthur Samson, who was in range management. Other people on the forestry faculty had come out of professional backgrounds and had never been intensively trained as research workers. That all changed during my tenure as dean because the older class retired and they were replaced by young Ph.D.'s who had the traditional academic preparation for research and interest and drive to accomplish it.

> This was certainly an outstanding contribution during the '50s: The establishment and development of Blodgett Experimental Forest as a research site and research tool. Prior to the emergence of Blodgett Forest, there was no comparable institution in California, and indeed, I think it's now the outstanding forest management research site in the West.

The area of remote sensing stemmed out of Professor Bob Colwell's initial work in photo interpretation, which gradually broadened into remote sensing and geographic information systems. That was a very important contribution both to the sophistication of the forestry program and to the community at large, because there was a huge market through Extension for the work that Colwell was doing in remote sensing.

How have societal changes over the last 50 years influenced the Division?

HV: One way of indicating change is in organizational terms. When I was dean, we started something called the Wildland Research Institute. This was about 1960. The Institute was within the Experiment Station, but designed to give more emphasis to wildland problems, which had not previously been a major focus of work in the Agricultural Experiment Station. Institute scientists performed some of the earliest and still, I think, the best wilderness research that's been done. After that initial thrust, the Wildland Research Center fell into a period of inactivity and so it didn't do much after that original study until around the mid-1980s. It has been revived and been very active and fruitful in the last several years through this Sierra Nevada Ecosystem Project and others. Thus the organization has responded to increasing societal concerns for the natural environment.

Looking toward the future, what is the most important task for the Division and for UC?

HV: The most important task for this College, to me, is to correct its lack of emphasis on a program of graduate professional education of comparable stature with the program for research and training of researchers. There's a huge need and employment field out there for graduates who are trained as professionals in environmental fields. And the College has all the resources necessary for high quality professional instruction. There's a clear difference between education for research responsibilities and education for professional responsibilities. Researchers think of problems in terms of a discipline that's already established with a structure and a content that's highly formalized. And research in this context is judged by standards that emerge from the formalized discipline. Professionals define problems in terms of what in practice are obstacles to success in solving problems of human beings by optimizing their environments.

–Ken Hall

Mary Ann Williams

Nutritionist

Mary Ann Williams came to UC Berkeley in 1951 as a graduate student. In 1955, she joined the faculty of the Berkeley department of nutrition and home economics, primarily studying essential fatty acids and their metabolic functions. She retired in 1991, but continues to teach part time at UC Berkeley.

In 1946, when California Agriculture was first published, California was entering a post-World War II era of optimism and prosperity. UC's College of Agriculture was on the brink of a great expansion. As you remember that time, what do you think society expected from the College of Agriculture? MW: I had been an undergraduate at Iowa State University, which is another very famous land grant college. And then I was also at Cornell. I think in that time, society expected abundant food and at a reasonable price. This was the postwar expansion period when new technology and economic optimism gave rise to the notion that everything was going to get better and better.

How did you see your role and how did your job change over the years from your initial expectations?