In Memoriam: Thomas P. Harlan

UA Laboratory of Tree-Ring Research
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Thomas P. Harlan — longtime research associate and dendrochronologist at the University of Arizona’s Laboratory of Tree-Ring Research [1], early member of the Southern Arizona Rescue Association, and Jefferson Award [2] winner — died Feb. 28 in Tucson. He was 77.

Born on a family ranch outside of Harper, Texas, in 1935, Harlan arrived at the UA in 1956 after completing his undergraduate anthropology degree at Texas Tech University. Two years later he was hired by the tree-ring lab to carry out tree-ring dating of timbers from Southwestern archaeological sites. He completed a Master of Arts degree in anthropology at the UA in 1962 on the dating of cliff dwellings near Flagstaff, Ariz. Harlan worked full-time for the UA tree-ring lab until his semi-retirement in 2000.

"Tom was a great mentor, colleague and friend to a couple of generations of dendrochronologists here at the tree-ring lab," said Thomas W. Swetnam [3], who arrived at the lab as a graduate student in 1980 and is now its director. "He was the first person I met from Tucson, and he showed me how to collect and cross-date tree rings. Tom was one of the most skilled and experienced field and laboratory dendrochronologists to have ever worked at LTRR."

Harlan traveled and collected tree-ring specimens extensively throughout western North America, as well as in Chile, Argentina, Sweden, Finland, New Zealand, Australia and Morocco. For many years his research involved building multi-millennia-length bristlecone pine tree-ring-width chronologies from the Great Basin region of North America in collaboration with LTRR scientists Valmore C. LaMarche Jr. and Charles W. Ferguson. This work was instrumental in establishing the accuracy of tree-ring-dated bristlecone pine specimens and chronology, which were used in the 1970s to recalibrate the radiocarbon dating method.

Working closely with LTRR scientist Marvin A. Stokes during the 1960s and 1970s, Harlan helped find and sample ancient trees in dozens of "classic" tree-ring sites throughout the western United States and northern Mexico. Harlan’s and Stokes’ exact cross-dating and measuring of these tree-ring specimens was a seminal effort in the development of regional-scale tree-ring-width chronology networks that were used by Harold C. Fritts, LaMarche, Stockton and other colleagues at the LTRR for the first calibrated and verified dendroclimatic and dendrohydrological reconstructions. Those tree-ring sites and ring-width chronologies continue to be used today, and they remain among the highest quality tree-ring-width data sets in the world.

Harlan taught the laboratory portion of the LTRR's introductory course on dendrochronology for many years. His positive influence on dozens of dendrochronologists who trained or studied at the lab was profound.
"We lost a great friend and mentor in Tom Harlan. And a man's man too, a tough hombre with a heart of gold," said David W. Stahle, a former LTRR graduate student and now a professor at the University of Arkansas.

In 1958, Harlan participated in a failed search for three lost Boy Scouts on Mount Wrightson in the Santa Rita Mountains of Southern Arizona.

Soon afterward he joined the fledgling Southern Arizona Rescue Association, an all-volunteer group devoted to search, rescue and recovery. During his time with SARA, Harlan participated in more than 3,000 searches or rescues on mountaintops, in caves, in the backyards of Tucson neighborhoods and in the ravines and deserts of southern Arizona and New Mexico.

In recognition of his decades of service in saving lives, Harlan received the Arizona Daily Star's 1982 Jefferson Award for public service and community leadership. Harlan served with SARA for 54 years. After he retired from the organization, he was elected a Life Member.

Following his semi-retirement from the UA in 2000, Harlan resumed his studies of bristlecone pine trees in the White Mountains of California. He was assisted by dozens of colleagues, volunteers and friends who shared his love of the ancient groves. These efforts included a multiyear search for remnant bristlecone pine specimens that could potentially fill in gaps in the 11,000-year climate history of North America. The work added more samples to the bristlecone pine chronologies. He and his colleagues also built a searchable digital database that organizes and documents the massive bristlecone pine collections obtained by many LTRR personnel since the 1950s.

Throughout his life, Harlan's unfailing willingness to pass on his expertise in tree-ring collecting, cross-dating and analysis, as well as search and rescue techniques and wilderness survival, influenced and expanded the lives of hundreds of co-workers, volunteers and research professionals from around the world.

"Tom was an old-fashioned Texas gentleman: soft-spoken, polite, hardworking, highly principled, and unwilling to deviate from those principles," said UA folklorist James "Big Jim" Griffith, a friend of Harlan's for more than 55 years. "That was the core. Add to that his passionate love for the wilderness, his deep commitment to 'doing it right,' his interest in just about everything, and his wide-ranging reading habits, and you get the Tom who was the perfect person to sit or stroll and talk with."

Harlan is survived by his wife, Annita, his elder brother, Richard, and his son, Thomas.

A memorial service was held in March. Gifts in his memory can be made to the Thomas P. Harlan Bristlecone Pine Award, a scholarship fund for students conducting tree-ring research on any topic relating to bristlecone pine trees. Checks should be made out to "UA Foundation â€? Harlan Award" and mailed to: Thomas P. Harlan Bristlecone Pine Award, Laboratory of Tree-Ring Research, University of Arizona, P.O. Box 210045, Tucson, Ariz. 85721.