

A MULTIDISCIPLINARY EDUCATION

FUNDAMENTAL AND TIMELY RESEARCH

SHARING THE WONDER OF TREE RINGS



PHOTO: ROBERT KAWIKA SHEER

Undergraduate and graduate students at the Laboratory of Tree-Ring Research experience a multidisciplinary education, obtaining degrees through different departments. A Graduate Certificate in Dendrochronology is offered. Faculty hold joint appointments in units that span the UA campus:

- School of Anthropology
- Atmospheric Sciences
- School of Earth and Environmental Science
- Ecology and Evolutionary Biology
- Geosciences
- Hydrology and Water Resources
- School of Geography and Development
- School of Natural Resources and the Environment
- School of Public Health

WHY STUDY TREE RINGS?

Our research provides fundamental knowledge and timely applications that are important to Arizona and the world:

- Climate history from tree rings provide critical perspectives about recent and future hydro-climate variability and change.
- Forest fire history from tree rings is an important tool for park and wilderness managers in management and restoration of natural ecosystems.
- Tree-ring chronologies used in identifying ancient volcanic eruptions and earthquakes yield information about the timing of geologic events and processes.
- The history of environmental pollution recorded within tree rings aids in discovery of possible causes of human illness.
- Cultural history from tree rings help us understand how ancient people and societies interacted with their environment.



PHOTO: CHARLOTTE PEARSON

*Upper Left: Time lapse photograph of "star rings" and a 2,000 year old bristlecone pine snag in the White Mountains, California
Above: Wooden timbers of an excavated, ancient harbor in Istanbul, Turkey, tree-ring dated to the first millennium AD, are providing new insights on cultural and environmental history of the Mediterranean region.*



PHOTO: ALEX ARIZPE

THE TALES TREE RINGS TELL

People of all ages love trees, and the stories trees tell. Sharing these wonders is both educational and fun!

Laboratory of Tree-Ring Research outreach efforts include:

- Sky Island Science Investigators: field-based K-12 science classes with hands-on, inquiry-based activities and classroom visits.
- School field trips, group tours and school Science Nights events.
- Docent-led tours of the Bryant Bannister Tree-Ring Building
- Tree-ring teaching kits and educator resources.
- Expert information and advice given to local, state, tribal and federal agencies on cultural history, water supply, and ecosystem management.

For more information, visit: ltrr.arizona.edu/outreach

Or contact Pamela Pelletier:

(520)621-0984 or outreach@ltrr.arizona.edu



ABOUT THE LABORATORY

Established in 1937, the University of Arizona Laboratory of Tree-Ring Research is the world's premier and largest center devoted to dendrochronology – using trees and their annual growth rings to examine events and processes, both cultural and natural, with absolute time.

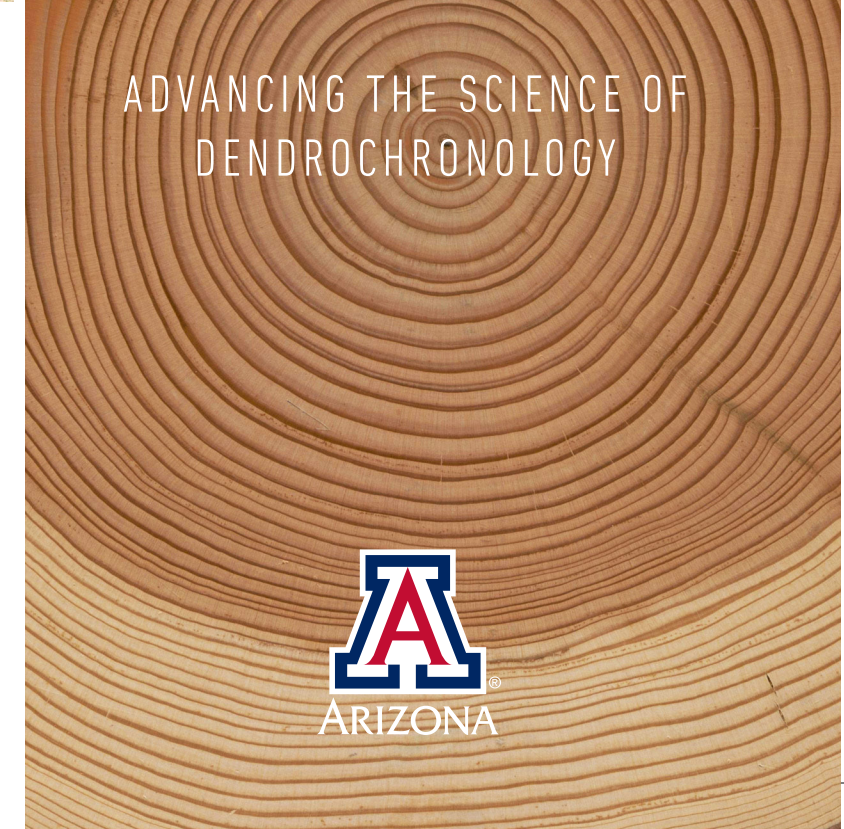
The field of dendrochronology was created by UA Professor Andrew E. Douglass, who used tree rings to date exactly when the ancient people of the Southwest built their cliff dwellings.

Today, the Laboratory contributes to many powerful insights into the long-term dynamics and history of the Earth and human societies.

Laboratory faculty teach courses and mentor undergraduate and graduate students. In addition to housing our labs, offices and collections, the Bryant Bannister Tree-Ring Building is designed to inform and inspire students and visitors to learn about dendrochronology and scientific discovery.

SUPPORT THE LABORATORY OF TREE-RING RESEARCH

The Bryant Bannister Tree-Ring Building was completed in January 2013. This 26,000 square foot state-of-the-art facility houses our offices, laboratories, and collections. Our exhibit hall incorporates interpretive exhibits for the public and an extraordinary 10-foot diameter giant Sequoia cross-section.



THIS IS AN EXCITING TIME TO SUPPORT THE LABORATORY OF TREE-RING RESEARCH.

→ UAFoundation.org/NetCommunity/Donations/Tree-RingLaboratory

 THE UNIVERSITY OF ARIZONA

 LABORATORY OF TREE-RING RESEARCH

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PHOTO ABOVE: DAN FRANCIS COVER PHOTOS (CLOCKWISE): ALEX ARIZPE, ELLIS MARGOLIS x2