Dendrochronology History

Archaeological tree-ring dating began in 1917 when Andrew Ellicott Douglass, the founder of dendrochronology, first examined prehistoric wood samples. Twelve years later, the "bridging of the gap" at Show Low, Arizona joined dated living-tree and "floating" archaeological chronologies and began routine archaeological tree-ring dating.

In 1937, the University of Arizona founded the Laboratory of Tree-Ring Research (LTRR) to continue Douglass' dendrochronological research. After World War II, the Laboratory collected all other Southwestern archaeological tree-ring collections - Museum of Northern Arizona, Gila Pueblo, Laboratory of Anthropology, Navajo land Claim and I. F. Flora - and the Robert E. Bell Collection of samples from the eastern United States. At the same time, LTRR's own Douglass Collection continued to grow through regular additions. As a result, the Laboratory has become the repository for all Southwestern archaeological tree-ring material and many samples from elsewhere.

LTRR houses more than 360,000 archaeological samples from the Southwest, the Great Basin, the Great Plains, the Midwest, Alaska, Mexico, and the Near East. These research collections provide the ultimate certification of the dates and constitute an unmatched reservoir of materials for further archaeological and dendrochronological research.

The gathering of archaeological tree-ring collections at LTRR provided the opportunity for a large-scale study of all Southwestern tree-ring material. Between 1963 and 1975, the "Dendrochronology of Southwestern United States" project organized and reanalyzed the existing collections, an exercise that quadrupled the numbers of dated samples and sites. As a result of these and subsequent analyses, the continuous regional ring chronology has been extended back to 322 B.C., and more than 60,000 dates have been produced from more than 5,000 sites.