

Report for 2003NV39B: A Study of Ancient Trees Rooted 120 Feet Below the Surface Level of Fallen Leaf Lake

- Conference Proceedings:
 - Kleppe, J.A., W.J. Norris (2004), A Study of Ancient Trees Rooted 120 Feet Below the Surface Level of Fallen Leaf Lake, presented at the 2nd Biennial Conference on Tahoe Environmental Concerns, May.

Report Follows

Problem and research objectives:

Large trees have been discovered rooted at a depth of 120 feet in Fallen Leaf Lake. It is important to determine whether or not they grew there or were transported from another location.

Methodology:

A sample of one of the trees that died simultaneously was recovered and a tree ring study initiated. The samples included the entire root ball and several “rounds” of 4 inch thickness representing cross sections of the tree for the first 20 feet in height.

Principal findings and significance:

The raised tree samples indicated that the tree was a yellow pine that died in AD 1215 \pm 40 years. There were counted 220 rings indicating that the tree was over 200 years old at the time it died. The tree was totally “water logged” and still had sap coming out of the root ball and other parts of the tree. Additional sampling is required to confirm the date of death and to match tree ring samples with other trees determined to be from this same period of time.

Information Transfer Activities

Several invited presentations were made to scientific as well as local interest groups.

- 2/3/03 – Invited presentation to DRI and local developers in Squaw Valley, about research results from studying the ancient trees rooted in Fallen Leaf Lake.
- 2/3/04 – “The Submerged Trees of Fallon Leaf Lake,” presented to Science, Technology, Engineering and Mathematics Class, University of Nevada, Reno.
- 5/03/04 – “Research at Fallen Leaf Lake,” presentation to Lake Tahoe Issues and Agencies Course, Tahoe Community College.
- 5/19/04 – “A Study of Ancient Trees Rooted 120 Feet Below the Surface Level of Fallen Leaf Lake,” 2nd Biennial Conferences on Tahoe Environmental Concerns, North Shore Lake Tahoe.



