
SY023-0017 - Tree-ring and Oral History Together Guide the Prehistory of Hoonah and Glacier Bay, Alaska



Wednesday, 9 December 2020



07:00 - 23:59

Live Chat with Presenter Ended 9 December 11:00

Abstract

The oral history of Glacier Bay, Alaska recounts the eviction of the Huna Tlingit from their ancestral homeland during the late 17th to early 18th century advance of the glacier that filled the Bay. Tree-ring records of both climatic conditions and ice advance add annual chronological resolution to this story. These details include the rate of ice advance down the bay, and major cooling events linked to volcanic eruptions that influenced the region and may have been recounted in oral histories reported as “winter following winter”. Other oral history records related to the traditional harvest and use of the inner bark of Alaska yellow cedar trees around Glacier Bay can be complemented by tree-ring science that can date when standing trees were harvested. The linkages of the tree-ring and oral histories is open for interpretation and thus provides a unique opportunity to investigate the meshing of the stories. During the summer of 2020, students and researchers at The College of Wooster, the University of Alaska, Fairbanks and a youth group (TRAYLS) in Hoonah Alaska partnered to begin investigating the linkages between the tree-ring and cultural record. Because of travel restrictions, the TRAYLS group cored old-growth trees at high elevation around the town of Hoonah, sent the cores to the Wooster Tree-Ring Lab for processing and interpretation and together the groups examined the records. Initial results of this work, along with previous tree-ring data from the region, has generated even more questions about the local climatic history inferred from tree rings. The TRAYLS group interviewed residents of Hoonah about their traditional use of Alaska Cedar. These independent perspectives on the Glacier Bay story and forest resource use could benefit from the shared knowledge of tree-ring science and its intersection with the native Huna Tlingit culture. Future collaboration will enrich the cultural and scientific experiences of both the TRAYLS group as well as undergraduate researchers at our institutions.

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