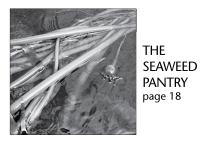


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Newsletter of the Haida Nation

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## Tree rings tell stories too

by Hilary Thorpe and Elizabeth Bulbrook

On a hot sunny Friday in the first week of July, a dedicated group of Haida mappers, forest ecologists, an archaeologist and other Islanders holed up in the <u>Kaay</u> Llnagaay to immerse themselves in a workshop on "dendrochronology", the science of tree rings.

Several years ago, while working on the Council of the Haida Nation's, 1000year Cedar Strategy, forester Lana Wilhelm was asked many questions about how ancient cedars grow. Together with archaeologist Elizabeth Bulbrook, Wilhelm started talking with University of British Columbia researchers to begin answering these questions. The questions prompted a workshop with the purpose to train local people on tree ring techniques most useful for cedar research and management. The learning took place in conjunction with a 2-day air photo training session run by Sarah Gergel and her graduate students from the Landscape Ecology Lab at UBC. Both sessions were funded by Environment Canada's Environmental Damages Fund.

The dendrochronology workshop was led by Lori Daniels, a professor from UBC who has been studying Western red cedar for nearly 20 years. Dr. Daniels stressed the importance of developing a local "chronology", a record of the relative tree ring widths for each calendar year that goes back as far in time as possible. Chronologies document the past climate—for example, if there is a drought, the ring will be narrow in that year—and also provide a pattern against which to cross date wood samples to determine their age. Since Red cedar is very long-lived, it would be possible to build a local chronology that goes back several hundred years.

One application of dendrochronology is to date Culturally Modified Trees (CMTs), which are also referred to as Red cedar



Lori Daniels and Gerry Morigeau examine a sample from a CMT that had been bark stripped 4 or 5 times since 1541.

Archeology (RCA). When trees are stripped of their bark, they form a scar but continue to grow. Using the methods learned during the workshop, participants were able to determine from CMT samples\* what year the tree was bark-stripped (sometimes even the season), how long the tree lived after and how old the tree was when it was bark-stripped.

If you have any questions about dendrochronology and its potential applications in Haida Gwaii, please contact Hilary Thorpe (250.559.8413; email: hilary.thorpe@ubc. ca). If you are interested in archaeology related cedar projects, contact Elizabeth Bulbrook (250.559.7707; email: bulbrook@haidagwaii.net).

\*Samples were taken from RCA sites that were logged in 2007 near Naden Harbour. The CHN opposed the destruction of these trees and had the Haida Heritage and Forest Guardians collect the disc samples from the licensee so that some information could be gained from this loss.