Looky here, a scientist concerned about using data from a physical object!

From: Jim Fairchild-Parks <jparks@LTRR.ARIZONA.EDU>
To: ITRDBFOR@LISTSERV.ARIZONA.EDU
Subject: crossdating difficult tree-ring series
Date: Thu, 30 Sep 1999 13:21:13 -0700
Reply-to: grissino@VALDOSTA.EDU

Forumites,

Ouch, my hackles are rising so high, it hurts. (Just what exactly are hackles, anyway?).

Yes, computer crossdating ring series with special problems is always dangerous. But this is where good old skeleton-plot dating with intensive and thorough visual examination of the WOOD becomes the way to go.

I don't know about Thuja, but with the Juniperus species in the U.S. I've worked with, rings piching in and out can be a problem. You can lose 50-100 rings that way, sometimes. However, a different radius of the sample may possess all those absent rings. It's nice to have a cross-section of the subject tree, though I know this isn't always possible.

I don't understand physiologically what's going on with the Canadian cedars, but dendrochronologically speaking, absent rings are absent rings, no matter what the reason for the rings not forming on any given portion of the tree. I'll leave the reasons to scientists like Frank Telewski.

I do know that with some dying trees -- like the pinyons from New Mexico that died in the Great 1950s Drought -- the ring series on the outside became so suppressed that individual rings were indiscernable. Fortunately, other trees growing in more favorable spots had distinguishable -- though still suppressed -- rings. Traditional skeleton-plot croosdating -- along with its concomitant intensive visual analysis -- made it possible to sort though these problems.

I am not, however, an America-centrist skeleton-plot-dating bigot! I have a true appreciation for computer crossdating where it is appropriate and indeed necessary. I myself was recently involved dating high-elevation bristlecone pine from northern Arizona, U.S.A.

The multi-millenial length of the chronology -- as well as the freedom from absent rings and the presence of frost-year marker rings -- made computer crossdating advisable. Of course every significant computer dating correlation was thoroughly checked out on the WOOD, and if the visual characteristics of the tree rings themselves did not support the computer dating, we threw out the date -- right out the window. Discarded computer dates collected on the parking lot beneath our offices and needed to be hauled off to the dump everyday.

I apologize for the aggressive (though sincere) tone of this message, but every few years I feel the need to rant and rave about the importance of WOOD and "pure" forms of crossdating.

Best Regards,

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