

# **THE HISTORIC BUILDING TIMBER SUPPLY IN SCOTLAND: THE EVIDENCE FROM DENDROCHRONOLOGY**

**C.M. Mills**

AOC Archaeology Group, Edgefield Road Industrial Estate, Loanhead, Midlothian, EH20 9SY (E-mail: Coralie.Mills@aocarchaeology.com)

Dendrochronology is a dating technique capable of providing absolute dates for historic timbers and can also identify the source (dendroprovenancing). The paper reviewed the results of dendrochronological research over the last 20 years on historic timber in Scotland (Crone & Mills, 2003). The original impetus was to provide dates, concentrating on oak. However, dating was only possible for certain periods and regions in Scotland. Also, interest grew in post-medieval buildings where pine is most common. The research has therefore addressed reference chronology building for native Scottish oak and pine as well as historic dating objectives.

The results demonstrate a switch from a native Scottish supply to a largely imported timber supply. From the prehistoric period to AD 1000 evidence is very patchy, although native supplies are used. The few Roman timbers seen were fast-grown oak and alder. The 7<sup>th</sup> century crannog at Buiston, Ayrshire, yielded mostly oak, with evidence for careful local management as coppice and mature stands. After a 9<sup>th</sup> century gap, tree-ring coverage improves dramatically from the mid 10<sup>th</sup> century. Until AD 1400 most structural timber is native Scottish oak from mature woodlands. However, through the 15<sup>th</sup> and 16<sup>th</sup> centuries native oak becomes rare and imported Scandinavian oak increasingly common in Scottish buildings. Several sites including Stirling Castle used Danish/Swedish sources but in the Lothians Norwegian oak was preferred. Fine cleft planking known as 'Estland boards' come from the Eastern Baltic (Poland, Ukraine and Belarus). Some 16<sup>th</sup> century imported Scandinavian pine boards have also been found at Stirling Palace.

In the 17<sup>th</sup> and 18<sup>th</sup> centuries pine beams largely replace oak, and so far those buildings dated have imported pine, either from Scandinavia or the Eastern Baltic. Re-used medieval native oak also turns up in these later buildings. It has proved more difficult to identify and date native oak and pine from the post-medieval period. More regional chronologies are being built, mainly from long-lived trees, to address this. Rural vernacular buildings are also being targeted to find more native material.

## *Reference*

Crone, A. & Mills, C.M. (2002). Seeing the wood and the trees: dendrochronological studies in Scotland. *Antiquity*. 76: 788-94.