



A MILLENNIUM OF CHANGE: DENDROCHRONOLOGY IN SCOTLAND'S BUILT HERITAGE AND CULTURAL LANDSCAPES

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This presentation reviews the dendrochronological evidence from Scottish historic buildings, archaeological sites and cultural landscapes, using tree-ring data which cover a 1000 year period, developed by several analysts over the last 40 years or so (eg Baillie 1977; Pilcher & Baillie 1980; Mills & Crone 2012; Crone & Mills 2013; Wilson et al 2012). This evidence records a millennium of enormous change in the timber supply and the woodland resource in Scotland. Prior to about AD 1450, native oak timber dominates the record, much of it long-lived material. From the mid 15th century, at a time when the state recognises the degradation of the Scottish woodlands, there is an enormous shift in much of the country to imported oak timber, which persists until the 17th century. At this time, Norway, one of the key exporters, cuts off its oak supplies and imported pine becomes predominant thereafter in Scottish buildings, although its provenance shifts through time. The reasons for the late-medieval demise of native oak timber supplies are considered in the context of possible inadequacies in resource management in the face of a worsening climate.

However, recent work indicates a probable under-recognition of native timber in post-medieval Scottish buildings, which is being tackled by the development of more regional chronologies for oak, pine and other native species used in construction. Our oldest surviving woodlands, usually relict cultural landscapes, become key sampling sites for this purpose. The tree-ring evidence for the exploitation of the native Caledonian pinewoods is briefly considered, with historic native pine timber as yet relatively little explored compared to oak and now being investigated further under the Scottish Pine 'SCOT2K' Project, at the University of St Andrews, which has both climate reconstruction and cultural heritage objectives.

References

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