



The soggy road to a climatically sensitive 8000-year Scottish pine chronology

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Despite promising dendrochronological work in the 1980s showing the potential of Scots pine for the reconstruction of past summer temperatures in the Scottish Highlands, little dendroclimatic work has been attempted since. This situation is partly a result of the sparse number of remaining patches of semi-natural pine woodland in the Scottish Highlands and the difficulty of extending, significantly, the living chronologies which generally only go back to the early 18th century. In this presentation, we present the first results of recent efforts to acquire preserved sub-fossil pine material from lake sediments in the Highlands. Carbon dating results indicate that preserved pine material cover the last 8000 years with intriguing clusters focused on the last ~1200 years and ~7900 years BP. No samples have been dated so far to the 3000-6000 year BP period. Although we are under no illusions that it may take many years to develop a continuous pine record for much of the mid-to-late Holocene, we highlight (1) the potential of developing a highly robust summer temperature reconstruction for Scotland and (2) the importance of such a record to not only place recent climate change in a very long temporal context, but also allow the dendro-dating of multiple historical structures built from local pine material.