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Paired radiocarbon measurements on European and North American oak from Historic Buildings in England

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English oak is the most common timber found in Historic Buildings in England, although conifer is used widely in the post medieval period and fine-grained oak panels were imported from around the Baltic from the middle ages. The network of ring-width reference chronologies for English oak over the past millennium is generally robust, and it is unusual to find long (> 100 rings) and well-replicated (> 5 samples) site chronologies that cannot be dated using dendrochronology is unusual.

Collaborative research with North American colleagues on a group of such chronologies, which on architectural grounds probably date to the eighteenth or nineteenth century CE, suggests that they are indeed of this date and were imported from the East Coast of North America (Crone et al. in prep). Radiocarbon wiggle-matching of single-ring samples was used on a number of these sites to validate the tree-ring dating proposed.

This presented the opportunity to compare these measurements with those on single-ring samples of English oak dated to the same calendar years. The weighted mean offset observed (5.4 ± 3.1 BP, n=46) is not statistically significant.

Crone, A, et al. in prep. American oak imports to the British Isles in the 18th and early 19th centuries: the dendrochronological evidence, Dendrochronologia

Student Submission

No

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