

Beech trees native to Scotland after all, scientists discover

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Stirling's Professor Alistair Jump worked with Science and Advice for Scottish Agriculture on the research. Credit: University of Stirling

Beech trees should be considered native to Scotland - despite a long-running debate over their national identity, researchers at the University

of Stirling and Science and Advice for Scottish Agriculture (SASA) report.

The team examined the DNA of more than 800 beech [trees](#) at 42 locations across Great Britain and made direct comparisons with trees growing on mainland Europe.

The study - funded by the Natural Environment Research Council (NERC) - shows almost all of the beeches growing in Great Britain the researchers tested, are derived from native populations and, as a result, could not have been planted from abroad.

Professor Alistair Jump, of the University of Stirling's Centre for Environment, Heritage and Policy, said: "The beech tree has been experiencing an identity crisis in Scotland. Evidence shows that the European beech was mainly confined to the south-east of England after the last Ice Age. However, this tree now occurs throughout Scotland and has been considered 'not native' by many land managers.

"This tree can colonise ancient woodland in Scotland, and is sometimes removed because it poses a threat to the persistence of other [native species](#). Our study shows that beech should be considered native throughout Great Britain, including Scotland."

Dr Jennifer Sjölund, of SASA, added: "The beech tree has been planted in Scotland in the past but the planting was from native British stock and, although humans have speeded its northward spread, it would have naturally spread up the length of the country regardless.

"Our findings have significant implications on how we define native species and how we consider natural processes when deciding what we base woodland management plans on. It points to a need to look again at the identity and distinctiveness of native Scottish forests, which

historically haven't featured the beech tree."

The research, entitled 'Understanding the legacy of widespread population translocations on the post-glacial genetic structure of the European beech', is published in the *Journal of Biogeography*.

More information: *Journal of Biogeography*, DOI: [10.1111/jbi.13053](https://doi.org/10.1111/jbi.13053), onlinelibrary.wiley.com/doi/10.1111/jbi.13053/full

Provided by University of Stirling

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