

Lord Goldsmith
Minister for the Environment, Department for Environment, Food & Rural Affairs

By email

1 April 2021

Dear Lord Goldsmith,

Re: England Tree Action Plan – getting the broadleaf/coniferous mix right

Thank you for your continued engagement on the England Tree Action Plan.

A critical feature of the Plan will be its ability to support the right mix of trees. A narrow focus on quantity and commercial considerations could lead to large coniferous plantations that do not add biodiversity value and may even harm important ecosystems.

We recommend that the Plan should aim for an 85:15 broadleaf to coniferous mix for England. It should set an ambitious biodiversity baseline standard for participation in the England Woodland Creation Offer—beyond the UK Forestry Standard—and ringfence adequate funding for native broadleaf trees to ensure that this mix is met. This approach would reflect the native makeup of English woodland, which is overwhelmingly broadleaf. Broadleaf woodland will grow easily in English soils, be resilient to disease and play a full part in restoring natural habitats and species, at a time when 41% of our wildlife is in long-term decline.

A minimum of 85% broadleaf mix for England, reflecting the natural treescape, would also deliver tangible carbon benefits—comparable and perhaps greater than a more coniferous forestry. Two recent papers suggest that the orthodox assumption that coniferous woodland delivers more carbon benefits is overly simplistic.

[Liu et al, 2019 – Royal Society](#): The study compared monoculture woodland with more diverse woodland over two years. It found that the greater amount of tree species, the more carbon stored by the woodland as a whole, in trunks, roots, deadwood, mould and soil. This carbon sequestration increase was attributed to differing tree species allowing more sunlight into the woodland and to wildlife boosting plant abundance and improving soil quality. Overall, for each additional tree species, the total carbon stock of the woodland increased by 6.4%. This suggests that traditional mixed English broadleaf woodland would store significant amounts of carbon, potentially in greater quantities than denser, less diverse planting associated with coniferous woodland.

[Lewis et al, 2019 – Nature](#): The paper compares carbon capture from commercial monoculture plantations with that from naturally regenerated woodland. The paper concludes that carbon sequestration in naturally regenerated areas is potentially 40 times greater than in plantations, due to the reduced soil disruption and increased tree lifespan in naturally regenerated woodland, with older trees storing increasing amounts of carbon. This suggests that English broadleaf woodland, resulting from natural regeneration, would store significant amounts of carbon in the long term.

The long-term timeframe highlighted by Lewis et al is an important one. The Government's net zero plan covers the next three decades. A legacy of broadleaf woodland that will be able to sequester carbon for many more decades to come will be more useful in 2050 than coniferous woodland, planted to meet short term goals, reaching the end of its natural life. As a 2019 Policy Exchange 2019 [report](#) noted:

'Trees are a very long-term undertaking; hardwoods even more so. The strongly pro-conifer/softwood policy taken in the early 20th century still has repercussions for tree policy now. A better outlook should consider far longer-term issues and ask what type of trees, timber and harvests we want future generations to enjoy.'

Broadleaf woodland, when delivered through the 'right tree-right place' approach, offers a range of benefits for future generations, in addition to its long-term carbon sequestration role. The advantages of broadleaf woodland over coniferous in terms of biodiversity, community use and landscape aesthetics are well documented. There is also additional opportunity for retaining and creating new jobs and skills and trade in hard wood timber grown in the UK, which could be a quality product for export as well as a valued material in domestic supply chains.

[Modelling](#) by the Woodland Trust has shown how broadleaf woodland in England 'can deliver a far greater range of urgently needed outcomes, including carbon sequestration, a reduction in flood risk, improved health and wellbeing, and a restoration of ecological networks for wildlife' than the coniferous alternative. The ecological difference between the two forms of woodland is particularly stark. One fact serves for many in illustrating this difference: while mass coniferous planting resulted in an increase in land area covered by woodland in the decades after 1970, the UK woodland bird indicator fell by [over 20%](#) over the same timeframe. Plantation woodlands, in contrast to native broadleaf, create monocultures, often crowding out native species.

A strong expectation of broadleaf trees in the England Tree Action Plan would prevent a re-run of the ecological mistakes made in woodland planning during the 20th century and unlock landscape and community use benefits. It would also become a carbon sequestration resource that will deliver in the long term. It would show that the Government and the Tree Action Plan genuinely recognise that climate and biodiversity considerations are inseparable.

By contrast, another "sprint for spruce" could lead to serious harm.

Thank you for your consideration of this case for 85:15 broadleaf to coniferous mix for England, and the new carbon evidence that supports it.

Yours sincerely,



Dr Richard Benwell,
CEO, Wildlife & Countryside Link

This letter is supported by the following Link members:

