



## Natural regeneration – The Tree Council position paper

The recent public debate about the value of planting trees as a carbon capture technology to help the UK achieve net zero emissions by 2050 has thrown up questions about the value of natural regeneration as a carbon capture tool, to be used alongside or, according to some sources, in the place of, tree planting.

Natural regeneration and tree planting are often positioned as opposing methods in establishing and protecting treescapes. However, both practices have their place and will be important as we are to greatly grow and protect the UK treescape, as well as contributing to efforts to achieve net zero carbon.

Practically this means:

1. Certain trees, such as those planted in our streets, urban and peri-urban settings, cannot be made possible through natural regeneration or re-wilding. But they are very important. We must **protect and advocate for more urban and street trees**. Local people continue to lead the way in protecting the rights and value of their local urban and street trees, which also have a key role to play in tackling climate change and greatly improving the quality of our urban environments. We must call upon our local authorities to replace trees when they die or are removed through active, planned planting initiatives – based on tree planting targets that achieve net growth in tree numbers every year
2. We must **protect our hedgerows**, leaving them to re-establish themselves naturally, and encourage farmers and landowners to leave a wider margin for their hedgerows to grow out and get ‘messier’, thus providing greater biodiversity and carbon capture benefit. We must also plant new hedgerows and re-connect existing hedgerows where possible.
3. **Planting of new trees** must be done according to the tree planters’ maxim, ‘**the right tree in the right place**’. If this is done, new trees will complement the historical ecological character of the area.
4. **We must support new research** into climate-resilient non-natives and their possible role - e.g. introducing Mediterranean species which may be more resilient to climate change
5. Some advocates of natural regeneration over active tree planting highlight the use of plastic tree guards and ties in tree planting which can remain in the environment contribute to harmful plastic waste. This is a valid concern and **we must call** for the development of more plastic-free options for tree tubes and ties to reduce and eventually eradicate plastic waste associated with planting of new trees, to make the process as carbon-friendly as possible.
6. An area where natural regeneration can help is through **re-establishing and extending our precious ancient and existing woodlands and forests**. Allowing trees to grow from the natural seed bank in the ground doesn’t cost anything and will encourage trees that are native to the local area, promoting a resilient woodland into the future. We support our partner and member organisations in advocating for this issue.

**Tree planting schemes and projects engage communities, children and individuals in trees.** This has benefits beyond simply getting more trees planted – for example, it engages and inspires people around trees, building a relationship that can inspire further action for trees.

## **Conclusion**

In order to meet the scale of the challenge we face in tackling climate change and preserving our precious treescapes for the future, we will need to use every tool we have in our toolbox. This includes both natural regeneration and the establishment of new treescapes through planting from seed, whips and standards. We shouldn't see these two approaches as oppositional to one another.

The Tree Council supports natural regeneration where it is believed it can have the most benefit and is

### **Natural regeneration vs. active woodland management**

#### **Case study: Priors Hill Copse**

It's important to note that natural regeneration is not always the best option for managing existing woodlands. Woodlands often require active management in order to thrive, and this can include removing trees in order to ensure no species dominates the woodland and that pathways remain clear for people to enjoy the space. For example, if a woodland becomes dominated by shade-resistant species such as holly, the woodland can become dark and enclosed, which makes the space less pleasant to visitors, and could prevent the existing trees from flourishing as they compete for the reduced light. In this case, trees might be cut down to open up the space and allow the trees to flourish.

In this case, 'natural regeneration' would not have helped the woodland to remain a vibrant, biodiverse space that was valued by local people.



more cost-effective, for example in cases where the seed stock is already present in the ground. For example, areas where woodland has been present in the last 100 years, where there are trees nearby and where favourable germination conditions exist. The Tree Council also supports the establishment of new and extended treescapes through planting, especially where it increases access to trees and green spaces in urban contexts.

## The science

An article by researchers from University of Melbourne and Griffith have called for the restoration of existing forests before planting new trees. New research also demonstrates the globally significant potential of allowing degraded natural forests to continue re-growing in order to reach their ecological potential. They call this 'proforestation' and they argue that existing forests are more resilient to shocks than newly planted or plantation forests.

It has been argued that allowing degraded natural forests to re-grow is a more effective, immediate and low-cost method for removing and storing atmospheric carbon than planting new trees. Researchers state that "with the imminent release of the new IPCC report, now is a good time to prioritise the protection, recovery and buffering of primary ecosystems *before* planting trees."

A report in 2017 argued that "natural climate solutions", meaning "conservation, restoration, and/or improved land management actions that increase carbon storage and/or avoid greenhouse gas emissions across global forests, wetlands, grasslands, and agricultural lands" can provide 37% of cost-effective CO2 mitigation needed through 2030 for a >66% chance of holding warming to below 2 °C. they also present other benefits include flood buffering and soil health. This would be effective alongside radical emissions reductions.

This year, a report was published in Science calling on the 'restoration' of global forests, through the planting of 0.9 billion hectares of additional canopy cover, which equates to 500 billion more trees. It identified "the restoration of trees remains among the most effective strategies for climate change mitigation."

### SOURCES:

IPCC Report on Climate Change and Land: <https://www.ipcc.ch/report/srccl/>

<https://pursuit.unimelb.edu.au/articles/planting-trees-is-no-substitute-for-natural-forests>