

## Why trees will provide the roots for the new agricultural revolution

Dr Gabriel Hemery FICFor: Chief Executive, Sylva Foundation and Fellow, Institute of Chartered Foresters

[1] I may have planted more than 100,000 trees in my career as a forester, co-founded an environmental charity, and written a book about trees, but some of you may wonder during the next 10 minutes, if I am in favour of woodland creation, and even question whether I like trees at all. I say this because what I offer today is a provocation and what I have to say is complex, just like our motivations and the barriers we must overcome to survive the climate emergency. I ask that you try to look beyond the rhetoric and clamour, and see with your own eyes the emperor riding by in his new clothes. Ultimately, I hope that some of you with a voice may stand with me and promulgate the truth.

[2] If the wealth of a nation is measured by its trees, then Britain is a fourth-world country. We may conduct world-renowned forestry science, have an exemplary public forest estate, and benefit from a respected professional body in the Institute of Chartered Foresters, but that's where the positive story begins to falter. By area, Britain is one of the least-wooded countries in Europe, but I believe that's not the best metric. Let's consider instead how many trees there are per person. Again, Britain is languishing at the bottom of the league tables with just 47 trees per person (France has three times that number). But that's not the whole story either; oh no, it's much worse! Tree wealth is unevenly distributed within Britain, with 34 million people across 50% of our parliamentary constituencies having the equivalent of just one tree shared between 125 people.

[3] So, the few trees that we have are very precious. It might surprise you therefore, to learn that among our woodlands—the majority of which are privately owned—more than one-third are thought not to be under any form of management. We have half a million hectares of moribund forest in Britain.

[4] Imagine the headlines: *'Farmers abandon one-third of wheat crop'*! Yes, that's the equivalent area of woodlands that are currently unmanaged. It's also three times the entire area under horticultural cropping.

When our car looks worse for wear, how many of us go to the bank looking for a loan to replace the engine or complete a respray. No, it's far easier to go buy a shiny new one on finance from the garage down the road.

Charities understand this world too – it's much easier to gain support for a new project than for one which is up and running, even if it's proven to be hugely impactful. And so it is with our trees. We're having trouble identifying all those private owners of moribund woodlands, and when we do, it's difficult motivating them to manage their

## Why trees will provide the roots for the new agricultural revolution

woodland in accordance with our exemplary forestry standard. So, how do we respond? 'Let's plant some new woodlands, that'll be much easier and it will please our supporters/voters!'

We've been trying to expand our tree cover for hundreds of years. In the 17<sup>th</sup> century, John Evelyn said, '*we had better be without gold than without timber.*' His appeal, backed by royal decree, made considerable impact, as did dozens of initiatives afterward, mostly notably the formation of the Forestry Commission in 1919. But here we are still, languishing and impoverished, our landscape littered with the legacies of abandoned forestry policies. You may think that I'm referring to the 'dark satanic conifer' plantings of the first half of the previous century, or even to the widely-spaced farm woodlands of the 1980s filled with worthless cherry trees grown with seed collected from foreign jam factories. But no, our biggest regret of all should be the planting done for planting's sake. For the creation of a woodland because it is green, because tree planting is a good news story and because it's easy to fund. This '*green fluff*' planted without purpose is little better than a crime, and one we can ill-afford in our crowded little country where on the one hand development threatens our green and pleasant land, and on the other we face an existential crisis.

'So, what do you want Gabriel?'

I can understand your frustration with what I'm saying. OK, let's begin to build a coherent vision together.

[5] The first idea is simple. It's obvious that we need more trees—the right trees, in the right place, for the right reason. We're delighted at Sylva to be working with Defra and partners to develop a new online platform to support woodland creation. The Committee on Climate Change challenged the UK to plant 30,000ha of trees every year until 2050, increasing woodland cover from 13 to 17%. Government has embraced this, which is brilliant.

[6] We've developed a new template for Woodland Creation which will help landowners consider the long-term risks and opportunities, with the default outcome being a well-managed and resilient new woodland with purpose.

I believe that we should have a dual initiative to also bring our existing woodlands back to life. That would provide a quick gain of 0.5Mha of revitalised woodland which otherwise could take decades to reproduce through new planting. My maths suggests that we should breathe new life into one half hectare of unmanaged woodland for

## Why trees will provide the roots for the new agricultural revolution

every one hectare of newly-planted woodland. That way we will not only expand our tree cover, but bring all our wooded land into good condition, for people and for nature.

[7] The biggest policy driver today is not to grow timber to build wooden warships, or pit props for the coal industry, but for the country to have net-zero emissions by 2050. To reach this goal we need an agricultural revolution. We have some great opportunities ahead with the creation of the Environmental Land Management scheme by government to replace the EU's Common Agricultural Policy but this must incorporate trees fully. The role of trees and forested land in sequestering and storing carbon is now well-recognised, and overseen by the Woodland Carbon Code, but convincing landowners to invest land in trees appears to be an uphill struggle (forgive the pun!).

[8] Last year, just 2,330ha of new woodland was created in England against the target of 30,000ha. Landowners are concerned about the legal and permanent land use change which comes from dedicating land to trees, while ever-tightening environmental controls and complicated bureaucracy are a huge turn-off to many, as we discovered in our recent British Woodlands Survey which polled more than 1,000 landowners, managers, and professionals.

[9] Jethro Tull—the agricultural revolutionist who farmed just five miles from Sylva's offices—was not always a great advocate for trees, detailing their deleterious impact of their roots on arable crops, but he also recognised the place within a productive farm ecosystem. The somewhat arbitrary boundary between agriculture and forestry can be easily adjusted to suit different economic and environmental needs, and its blend in the form of modern agroforestry has gained a growing number of advocates looking to the future of land management. Consider also that a hedgerow or shelterbelt is a form of agroforestry. Most farmers today realise the benefits which trees provide in protecting and enriching soils, managing water, enhancing biodiversity, and even increasing productivity. We should forget notions of agriculture vs forestry, but think instead about how trees can help deliver positive outcomes in how we manage our land in the face of very significant challenges.

[10] So how can trees provide the foundation for 21<sup>st</sup> century agriculture?

- Realistically, tree expansion should provide a financial return for the landowner, either directly from agricultural productivity, or in other forms such as tourism or fiscal incentives;

## Why trees will provide the roots for the new agricultural revolution

- Landowners should be able to derive value from ecosystem services so 'Natural Capital Accounting' needs to be ingrained in business and in government practice;
- I believe that other ecosystem services require standards similar to the Woodland Carbon Code (*e.g.* soils and water);
- Greater synergy is needed between different government departments and their agencies which currently can pull in different directions on some key issues;
- Agroforestry needs to be embraced by policymakers (*e.g.* supported fully in ELMs) and its development better supported through funding for science;
- In fact, trees must be properly incorporated in the new ELMs
- Policymakers need to heed stakeholder views regarding bureaucracy and regulation;
- How much longer should we fight natural processes, spending public money defending outmoded farming systems? We should accept trees as the climax vegetation in some landscapes (for example in our National Parks) but to do so, we must be bold and ambitious, changing hearts and minds, writing a new chapter in rural history;
- Natural processes (*e.g.* natural regeneration) may be valuable in our woodland creation toolkit, but we must avoid more 'green fluff', meaning we should ensure delivery of carbon sequestration and other socio-economic benefits hand-in-hand with environmental outcomes;
- Trees need to 'work' for us as much as they do for nature – the benefits need not be mutually exclusive!
- Let's forget hectares and develop a new lexicon and new metrics:
  - tree farming, farming with trees, riparian arteries, silvo-pastoral upland landscapes . . .
  - trees per person, tonnes of carbon sequestered, m<sup>3</sup> of floodwater prevented, tonnes of imported timber avoided, habitat created . . .

What could our new mantra be? 'Better for food, better for nature, better for people – trees for life.' Trees really can deliver for climate, nature, people and the economy, it is not a zero-sum game.

[11] I'll leave with you with my final slide which summarises how I think trees will provide the roots for the new agricultural revolution.