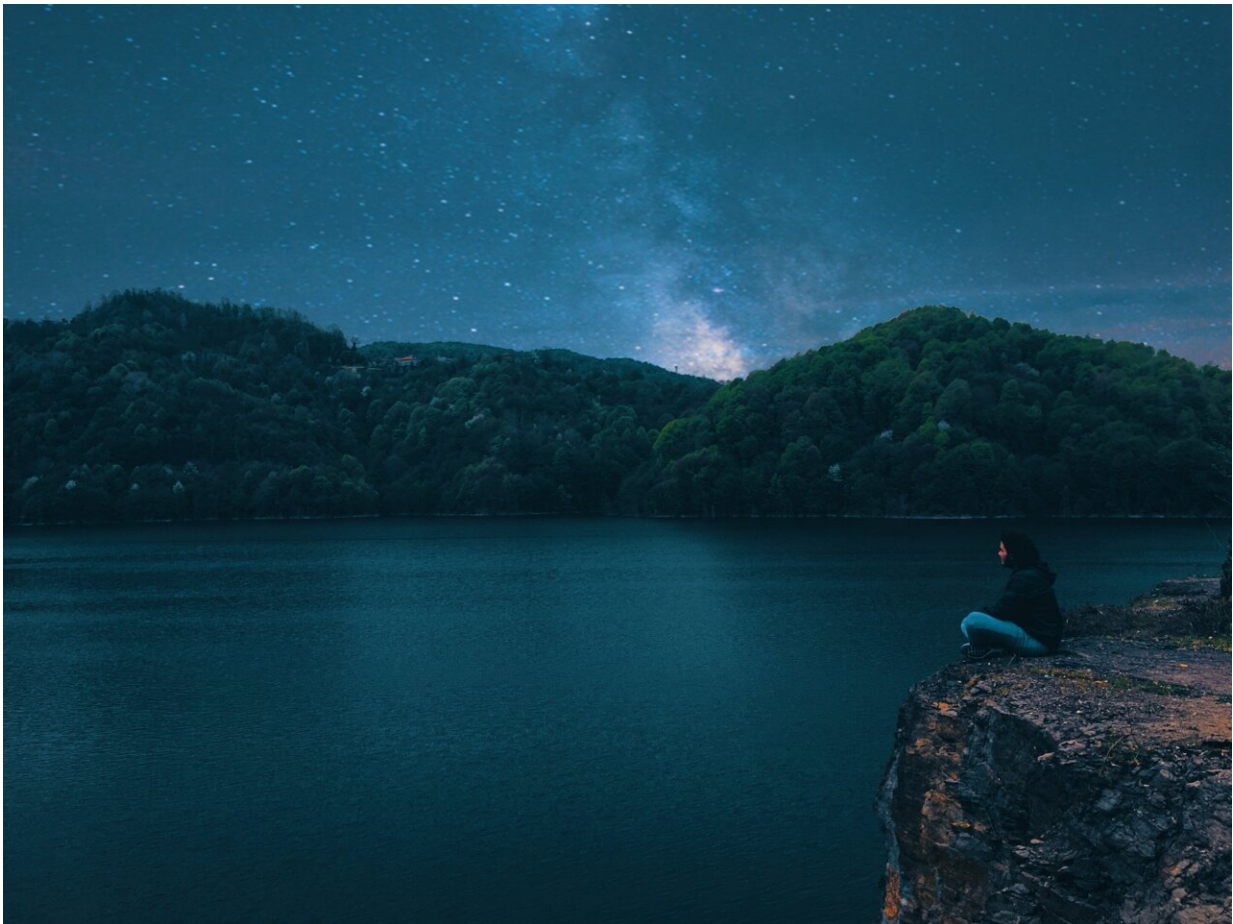


Climate crisis: How to make space for 2 billion trees on a crowded island like the UK

January 29 2020, by Nick Atkinson



Credit: Çağatay Demir from Pexels

The UK's official climate advisor, the Committee on Climate Change

(CCC), recently published a report outlining how to reduce the 12% of greenhouse gas emissions that come from land use by two thirds by 2050. Alongside recommending [cutting meat and dairy consumption by 20%](#), the report calls for [the annual creation](#) of up to 50,000 hectares of broadleaf and conifer woodland for the next three decades. This would increase forest cover from 13% to at least 17% – a level not seen in Britain since before the Norman invasion.

Reforestation at that rate would mean creating roughly the area of the city of Leeds every year for the next three decades. At typical stocking densities of 1,500 stems per hectare, the ambition is to establish some 2.25 billion additional trees. Given that the UK, as with most of Europe, is in the grip of ash dieback, a disease likely to prove fatal for many millions of native ash trees, the scale of the challenge is massive.

On a crowded and intensively farmed island like Britain, unlocking a million and a half hectares of land will be no mean feat. But it's not impossible—and is an unprecedented opportunity not only to tackle the climate crisis but also the biodiversity crisis that is [every bit as detrimental to our wellbeing](#).

Trees and farms

One million and a half hectares is just 6% of the mainland UK's land area. To give some sense of perspective on this, 696,000 hectares of "temporary grassland" [were registered in 2019](#). So if land supply is not the problem, what is? Often it's cultural inertia. Farmers are firmly rooted to the land and perhaps understandably reluctant to stop producing food and instead become foresters. But the choice need not be so binary.

The intensification of agriculture has caused catastrophic declines in many species throughout the UK by reducing vast wooded areas and

thousands of miles of hedgerows to small pockets of vegetation, isolating populations and making them [more vulnerable to extinction](#).



Credit: AI-generated image ([disclaimer](#))

Integrating trees with the farmed landscape delivers multiple benefits for farms and the environment. Reforestation doesn't have to mean a return to the ecologically and culturally inappropriate single-species blocks of non-native conifers, which were planted en masse in the 1970s and 1980s. Incentivised under tax breaks to secure a domestic timber supply, many of the resulting plantations were located in places difficult or in some cases impossible to actually harvest.

Productive farmland needn't be converted to woodland. Instead, that 4% of land could be found by scattering trees more widely. After all, more

trees on farmland is good for business. They prevent [soil erosion](#) and the run-off of pollutants, provide shade and shelter for livestock, a useful source of renewable fuel and year-round forage for pollinating insects.

The first tranche of tree planting could involve new hedgerows full of large trees, preferably with wide headlands of permanently untilled soils, providing further wildlife refuge.

Natural regeneration

Where appropriate, new woody habitats can be created simply by stopping how the land is currently used, such as by removing livestock. This process can be helped by scattering seeds in areas where seed sources are low. But patience is a virtue. If people can learn to tolerate less clipped and manicured landscapes, nature can run its own course.

A focus on deliberate tree planting also raises uncomfortable truths. Most trees are planted with an accompanying stake to keep them upright and a plastic shelter that protects the sapling from grazing damage. All too often, these [shelters aren't retrieved](#). Left to the elements, they break down into ever smaller pieces, and can be swept into rivers and eventually the ocean, where they [threaten marine wildlife](#). Two billion tree shelters is a lot of plastic.



Credit: Çağatay Demir from Pexels

The main reason for using tree shelters at all is because the deer population in the UK is so high that in many places, it is all but impossible to establish new trees. This also has serious implications for existing woodland, which is prevented from naturally regenerating. In time, these trees will age and die, threatening the loss of the woodland itself. Climate change, pests and pathogens and the lack of a coordinated, centrally supported approach to deer management means the outlook for the UK's existing treescape is uncertain at best.

An ecologically joined-up solution would be to reintroduce the natural predators of deer, such as lynx, wolves, and bears. Whether rewilding should get that far in the UK is still the subject of debate. Before that, perhaps the focus should be on providing the necessary habitat, rich in native trees.

A positive response would be to implement the balanced recommendations, [made almost a decade ago in a government review](#), of creating more new habitat, improving what's already there, and finding ways to link it together. Bigger, better, and more connected habitats.

But the UK is losing trees at increasing rates and not just through diseases. The [recent removal of Victorian-era street trees](#) in Sheffield and many other towns and cities is another issue to contend with. As the climate warms, increasing urban temperatures will mean cities need shade from street trees [more than ever](#).

Trees aren't the environmental panacea that the politicians might have people believe—even if they do make for great photo opportunities—but we do need more of them. Efforts to expand tree cover are underway across the world and the UK will benefit from contributing its share. Hitting the right balance—some commercial forestry, lots of new native woodland and millions of scattered [trees](#)—will be key to maximizing the benefits they bring.

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