Written evidence submitted by Friends of the Earth (TPW0016)

EFRA Tree Planting & Woodlands inquiry: Friends of the Earth submission

This evidence submission is from Friends of the Earth (England, Wales and Northern Ireland).

We welcome EFRA's tree planting and woodlands inquiry and this chance to submit evidence, and would be very happy to elaborate on anything we have submitted, including giving oral evidence should the Committee request it. We submit evidence below in response to questions 1, 2 and 5.

Q1) Are the UK Government's targets for increasing forestry coverage, and tree planting, for England and the UK sufficiently ambitious and realistic?

- 1. In short: no, they are insufficiently ambitious. Indeed, there does not as yet appear to be *any* Government tree target for England.
- 2. Since the England Tree Strategy consultation was published, we were pleased to see DEFRA publish a <u>Policy Paper on targets in the Environment Bill</u>, including the suggestion of a possible tree or woodland cover target ("...we would also like to develop our evidence and assumptions of whether statutory long-term targets for trees would be appropriate to drive this change.")
- 3. Yet the England Tree Strategy consultation didn't even consult on the question of targets. The draft Strategy failed to set any tree target for England, and the measures it proposed would at best raise England's woodland cover from only 10% currently to just 12% by 2050. What use is a strategy without a target? All good business plans contain clear and measurable targets.
- 4. The consultation document simply repeated the Conservative manifesto pledge to plant 30,000 hectares of trees per year across the UK by 2025, the end of this parliament. But this is a *UK-wide goal*, not one for England. As the consultation stated, "We recognise that England needs to play its full part and significantly ramp up planting, to contribute to the UK target" yet it failed utterly to set out what part England should in fact play.
- 5. Without an ambitious tree target for England, the Government will be dependent on Scotland, Wales and Northern Ireland to deliver on their near-term manifesto pledge. The March 2020 Budget announced funding for England to plant just 6,000 hectares of new trees per year during this parliament, meaning that other devolved nations will have to

- plant 24,000 hectares the other 80% for this short-term manifesto promise to be met. This is both unwise and unfair.
- 6. Nor did the consultation document propose any new long-term target for tree or woodland cover in England. It merely repeated previous aspirations to raise England's woodland from 10% currently to just 12% by mid-century. This was an <u>aspiration laid out in 2013</u> by former Environment Secretary Owen Paterson prior to the Paris Agreement, before the government adopted a net-zero emissions target, and prior to parliament declaring a climate emergency.
- 7. There was no mention in the consultation document of improving upon this outdated and inadequate long-term tree target for England.

 Maintaining the levels of funding pledged in the Budget out to 2050 would see England's woodland cover creep up from 10% currently to just 11.9% by 2050.
- 8. We have urged the Government to use the finalised England Tree Strategy to set a target to double England's woodland cover. We outline below the clear benefits of setting a target (at any level), followed by a summary of the extensive analysis we have carried out into why a target to double England's woodland cover is both necessary and feasible.

The need for a clear target for increasing England's woodland cover

- 9. As in any good business plan, a clear, quantifiable target provides a clear overarching goal for subsequent activities and funding, and towards which everyone government, landowners, foresters, civil society can aim.
- 10. Targets are also essential for accountability. Without a clear target, there is no way for civil society to monitor the government's progress.
- 11. A clear target also, crucially, provides greater certainty about the direction of travel. Setting a target for England's future woodland cover will help give UK tree nurseries the certainty to ramp up supply of saplings. This will have biosecurity benefits by meaning we are less reliant on tree imports, which carry a higher risk of spreading tree diseases. A clear tree target would also help the wider forestry industry greater certainty of travel means more people are likely to train to be foresters or conservationists, helping bridge the skills gap that currently bedevils the sector. The Institute of Chartered Foresters agrees with us that a clear tree target would be helpful in this regard.
- 12. Lastly, we note the Government suggested in their England Tree Strategy consultation that "setting local targets for tree canopy cover" as a way to "help the preparation and implementation of local Tree and

Woodland Strategies". If local tree cover targets are helpful to deliver local Tree Strategies, why not a national tree or woodland cover target to help deliver the national Tree Strategy? Indeed, if local targets are to be meaningful, surely they need to add up to a collective national ambition?

Why the government should set a target to double England's woodland cover

- 13. The finalised Strategy should set a target to double England's woodland cover, from the current 10% to 20% of England's land surface. Tree cover can be further increased through expanding the number of trees outside of woods, such as through greater uptake of agroforestry measures (see our responses to questions 28, 42 and 43 below). We should do so for the following four reasons:
- 14. There are huge carbon sequestration benefits. We estimate that doubling UK woodland cover could help absorb 10% of the UK's current greenhouse gas emissions annually – some 47 MtCO2e / year. This is based on calculations by the Royal Society (Royal Society and Royal Academy of Engineering, 2018, Greenhouse Gas Removal, https://royalsociety.org/-/media/policy/projects/greenhousegas-removal/royal-society-greenhouse-gas-removal-report-2018.pdf) that planting 1.2 million hectares of forest, ie taking woodland cover to 18% of the UK land surface, would deliver annual carbon sequestration of 15 MtCO2 per year. Doubling UK woodland cover (from 13% to 26%) could therefore sequester 37 MtCO2e per year. In addition, the Royal Society calculates that deployment of biochar (woody charcoal addition in soil) and greater use of wood in construction could sequester a further 10 MtCO2e annually. 47 MtCO2e is 10% of current annual UK greenhouse gas emissions of 460 MtCO2e (BEIS GHG stats 2019).
- 15. There are major benefits in terms of habitat creation and restoration. Trees and woods can support hundreds of other species of plants, fungi, insects, birds and mammals. Quite how beneficial trees and woods are for wildlife depends on quality of habitat creation the right tree in the right place; a majority of new woodlands being established with native tree species; and allowing natural regeneration to play a significant role rather than just relying on planting. Overall quantity of woodland habitat is also a consideration, however: small fragments benefit from greater connectivity; and it's worth remembering that England was at least 15% wooded at the time of the Domesday Book, and perhaps as much as 60% wooded at the end of the last ice age (a figure that assumes Franz Vera's hypothesis, that the country was a mosaic of woods, scrub, grasslands and bogs, to have been the case. Source: Benedict Macdonald, *Rebirding*, 2019, p.11 and p.137).

- 16. We have enough suitable land to double England's woodland cover without impacting on other priority habitats, designated sites or valuable farmland. In 2019, Friends of the Earth published in-house analysis showing that there is sufficient land to double England's woodland cover, without impacting on other Priority Habitats (such as blanket bog or species-rich grassland), designated sites (such as SSSIs) or valuable farmland (Grades 1-3). Our analysis used publicly-available GIS datasets, and focused on creating new woodland on Grade 4 farmland, most of which is poor-quality pasture. We assume an ongoing reduction in use of land for pasture as meat and dairy eating declines, as Government health guidelines recommend, thereby freeing up land.
- 17. In 2020, we commissioned fresh research from GIS mapping consultancy Terra Sulis, to deepen and build on our previous analysis. Terra Sulis' spatial modelling also factored in additional constraints, such as excluding non-Priority Habitat semi-improved grassland; sense-checking that all peat soils were screened out (by using proxies Grade 5 land and the Moorland Line and comparing results to unpublished Natural England maps of peat soils); and using CROME Crop Map data to exclude Grade 4 land that's regularly used for growing crops. At the same time, Terra Sulis factored in Grade 3b land using a gradient proxy derived from Ordnance Survey data. The results confirmed our initial conclusions that England's woodland cover can be doubled without affecting other precious habitats, designated sites or valuable farmland (Grades 1-3a). We attach a copy of Terra Sulis' final report to us, which we will publish later this year.
- 18. Lastly, we note that the Forestry Commission's own Low-Risk Areas for Woodland Creation maps show that there is sufficient suitable land to triple England's woodland cover. The dataset has been shared with us under licence; our analysis of the FC's data shows that there is sufficient suitable land for an additional 3.2m hectares of trees on top of existing woodland, which would take England's tree cover, from the current level of 10% (1.36m ha out of 13m ha total), to 35%. Like FOE's own analyses, the FC methodology excludes Priority Habitats, designated sites and valuable farmland, but makes use of unpublished soils datasets to arrive at a broader definition of Grade 3b land, thereby boosting the total further. (See also Q15 on why the Government should negotiate release of more soils data to inform woodland creation.)
- 19. There is widespread support from the public and from a wide range of organisations for doubling England's woodland cover, with many councils and landowners already embarking on ambitious woodland creation schemes. For example:

- 20. WaterUK, the trade association for the UK's water industry representing water companies who own over 400,000 acres of land in England and Wales has written to the Forestry Minister Lord Zac Goldsmith urging him to include a target to double tree cover in the finalised England Tree Strategy.
- 21. At least 10 councils in England have committed to double tree cover or woodland cover within their local authority areas. These councils are: Bath and North East Somerset, Blackpool, Bristol, Cherwell, Hackney, Leeds, Oxford, South Gloucestershire, Wigan and Wirral. They are a mixture of rural and urban councils controlled by the Conservatives and other major parties. Several of these councils have devised comprehensive tree and woodland strategies to demonstrate that doubling tree cover is feasible. Six councils wrote to Minister Lord Goldsmith on 20th April 2020 calling on the Government to set a target to double tree cover in the England Tree Strategy.
- 22. Over 170,000 members of the public have signed Friends of the Earth's <u>petition</u> calling on the Government to double tree cover.
- 23. The National Trust has pledged to create 18,000 hectares of woodland by 2030, increasing the woodland cover on its own estate from 10% to 17%. At that rate, the Trust would double its own woodland cover by the mid-2030s.

Q2) Are the right structures in place to ensure that the UK wide target for increasing forestry coverage is delivered?

- 24. Not at present. Principally, more funding is required. Payment rates for woodland creation need to be increased: it's clear that there has been low uptake of Woodland Creation grants under Countryside Stewardship. We note that budget has been found to pay higher rates for woodlands created under the HS2 woodland grant schemes (£8,500 per hectare of planting, as opposed to just £6,800 per hectare under Countryside Stewardship).
- 25. Grant funding for <u>agroforestry</u> (covered in more detail below) is not currently available in England, but has been available in several European member states under the Common Agricultural Policy, and is available in a restricted form in Scotland and Wales. An agroforestry grant for England should be made available as soon as possible to promote the development, innovation and trialling of new agroforestry schemes prior to ELM rollout.
- 26. Providing annual cash flows to woodland rather than just covering upfront capital costs is vital, particularly if Government is to better

incentivise <u>natural regeneration</u> (more on this below), and not just tree planting. Currently the major financial barrier to woodland creation is the opportunity cost of using the land for trees rather than other uses.

Q5) In relation to increasing forestry coverage in England, what should the Government be trying to achieve?

27. Government policy to increase tree cover needs to deliver for climate, nature and people. We have focused our evidence submission here on two methods for increasing tree cover in England (and the UK) that would do much to deliver on all these outcomes, but are currently under-supported by the Government: natural regeneration of trees, and agroforestry.

Natural regeneration of trees

- 28. Despite recent Ministerial interest in natural regeneration (the natural re-seeding of trees without the need for artificial planting), DEFRA and Forestry Commission officials appear to remain resistant. The UK performs extremely poorly internationally in terms of allowing land to naturally regenerate with forest cover. 93% of global forest area is covered by naturally regenerated forests, but only 11% of the UK's forest area is classified as naturally regenerated itself potentially an overestimate, as the Forestry Commission uses 'ancient seminatural woodland' as a proxy for 'naturally regenerated'. (Source: FAO, Global Forest Resources Assessment 2020).
- 29. Natural regeneration can be better supported by giving <u>annual</u> <u>payments for land left to regenerate, rather than just capital grants for saplings and planting.</u> In the past, under the English Woodland Grant Scheme, the Woodland Regeneration Grant existed to promote natural regeneration, but this was discontinued, for unknown reasons.
- 30. There needs to be a greater recognition of the <u>value of scrub</u>, with brambles and briars providing natural protection for saplings against grazing (sometimes negating the need for plastic tree guards or fencing and hence reducing these costs), as well as being valuable habitat in its own right for many species. Ending the prejudice against scrub inherent in the CAP with the RPA requiring land managers to remove 'ineligible features', ie vegetation, from fields to receive basic payments, is an essential first step post-Brexit. Where scrub has not yet become established, capital grants may be needed to install fencing to defend against deer and livestock, and land managers should be required to have appropriate grazing regimes in place that will allow for regeneration (e.g. discouraging overgrazing by sheep, but allowing for light grazing by native breeds of cattle).
- 31. There is <u>evidence</u> that restoring natural forests (at least in tropical biomes) is considerably better for sequestering carbon than simply relying on plantations particularly when those plantations are short-

- rotation and the timber products harvested are not long-term carbon stores. Another recent study <u>suggests</u> that logged tropical forests can recover quicker if some trees are actively re-planted rather than just rely on natural regeneration; this is hardly surprising, and points to the need for local seed sources to allow natural regeneration to take place.
- 32. Whilst there remains a lack of peer-reviewed literature on the relative carbon fluxes and C storage potential of naturally regenerated vs planted woodland, there is little doubt that natural regeneration leads to better outcomes from a biodiversity perspective as real-life examples like the Knepp Estate in Sussex have shown.
- 33. The Forestry Commission and Natural England should <u>fund further research</u> into the value of natural regeneration in temperate biomes for carbon sequestration and biodiversity. But <u>government must also take a 'common sense' approach</u>, and not wait for lengthy new studies to act natural regeneration is, after all, the way trees have always spread naturally, and were allowed to do so in England until relatively recently in history. It was the emergence of modern forestry after John Evelyn's *Sylva* (1662), and particularly after the formation of the FC in 1919, that has led us to think that all trees need to be artificially planted. It was the emergence of modern industrial agriculture post-1950 that scoured fields clean of scrub and led to sheep stocking densities in upland areas that guaranteed saplings would be nibbled to the quick. A Tree Strategy that tries to remedy these developments only by planting trees, or increasing forestry, is missing a huge part of the solution.

<u>Agroforestry</u>

- 34. Agroforestry is about adding trees to traditional farming systems to make them more productive. It can cover everything from expanding the size of hedgerows and planting shelter belts, to creating orchards and experimenting with 'alley-cropping' of fruit and nut trees in between crops. Agroforestry can make farms more resilient to weather extremes and deliver a multitude of public goods. Yet it has been poorly supported by DEFRA over the years.
- 35. Despite grants for agroforestry being made available in a number of European countries under the Common Agricultural Policy, including Scotland and Wales, no such grant has been made available in England. While agroforestry will probably be supported by the new Environmental Land Management Scheme, this will not be rolled out until 2024, nor in full operation until 2027.
- 36. The 2017 draft Defra Agroforestry review reported growing levels of interest in agroforestry amongst UK farmers, yet roll-out has been limited, with agroforestry in the UK covering only 3.3% of UK land area, compared to a European average of 8.8%.

- 37. The Committee on Climate Change (CCC) suggests that agroforestry, including hedgerows, could deliver 6 MtCO2e savings by 2050. Their calculations were based on the assumption that 10% of arable land, and 10% of cropland were converted to silvoarable and silvopastoral systems. It's of interest to note that the bulk of these CO2e savings are achieved by the CCC's silvoarable target (4.8Mt CO2e). Within the UK, according to CEH's Land Cover Map 2015, nearly 85% of UK arable land area is located in England, so agroforestry on arable land has the potential to make a significant contribution to England's targets.
- 38. In fact, the CCC's assessment may be greatly underestimating the true potential of agroforetry in the UK. France has adopted an agroforestry target of 50% of French farmers using agroforestry by 2025, as part of the French Agroforestry Plan. A national agroforestry strategy has previously been suggested in a report by the Soil Association, including a proposal that the UK should adopt an agroforestry target similar to France.
- 39. In addition to delivering on carbon sequestration, silvoarable delivers on most of the goals of both ELMS and the 25-year Environment Plan. Furthermore, some future projections of UK agriculture assume large increases in productivity of arable land, focussed on crop yields alone, without addressing the associated increase in the environmental impacts on soil and water this would imply. It is increasingly clear that large monocultures of arable crops with high levels of inputs are driving declines in farmland biodiversity and contributing to water pollution and soil erosion. Agroforestry would significantly ameliorate these impacts whilst diversifying farmers' incomes. Silvoarable systems have also been found to boost pollinators and natural predators, potentially cutting the need for chemical pesticides.
- 40. If a more comprehensive and holistic approach to productivity is taken it becomes clear that agroforestry has the potential to make agricultural land more productive: studies of different agroforestry systems, in countries with similar climates to the UK, have found Land Equivalent Rations (LERs) ranging from 1 to 2.01 offering the potential to free-up land, and reduce overall UK land-take for food and wood products.
- 41. The Chair's Report of the CCC Land Use Advisory Group noted that as "agroforestry is scarcely developed in the UK... the prime obstacles are unfamiliarity with the concept and the benefits it can offer." They concluded: "This indicates the principal policy to help stimulate farmers to move in this direction are education, training, demonstration and pilot projects and associated publicity" which led them to propose "information, education and demonstration farms for agroforestry" amongst their "five sets of actions for agriculture and land use".
- 42. It is widely acknowledged that a cultural divide exists between farming and forestry. Agroforestry has greater acceptance within the farming

community than many other forms of tree planting and represents an important opportunity to bridge this divide.

November 2020