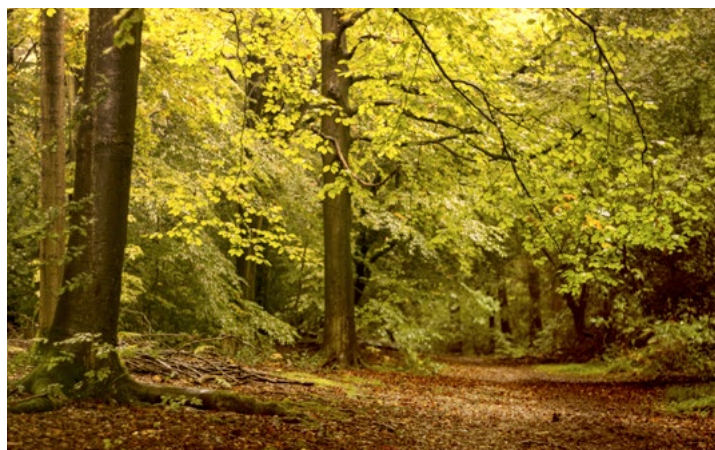


RFS

ROYAL FORESTRY SOCIETY



INSPIRING PASSION AND EXCELLENCE IN WOODLAND MANAGEMENT



THE ROYAL FORESTRY SOCIETY

FORESTRY AND CLIMATE CHANGE

INSPIRING PASSION AND EXCELLENCE IN WOODLAND MANAGEMENT



Planting trees is just one of a number of integrated measures needed to mitigate climate change

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Biosecurity protocols for purchasing seed should be robust



The palette of species used in UK woodland must be widened



The RFS has adopted a five-point plan on climate change

We must not wait to act on climate change until current rural land support mechanisms transition from the Common Agricultural Policy (CAP) to the Environmental Land Management Scheme (ELMS) and its equivalents in the devolved administrations in 2025.

Much can be done before 2025 to ensure there is a more supportive environment for woodland creation, that land managers are given greater flexibility on species choice on restock sites and forest soils are better protected. Governments must translate its intention to take urgent action into practical measures that private woodland owners can work with.

1. The RFS position

i. Put climate change at the core of forest policy:

There have been two major phases of forestry development in the last 100 years: afforestation (1919-1985) and biodiversity, recreation and water quality (1985-now). Both responded to the national priority at the time. Incentives were aligned with the respective objectives and the resulting pace of change was rapid. ***Climate change is now a national priority and should be at the core of forestry policy.*** The devolved administrations should formally adopt tree planting targets aligned with the Committee on Climate Change recommendations and support measures to climate-adapt existing woodland. Delivery mechanisms and regulations should be in support of these objectives without compromising the important biodiversity and heritage features of ancient woodland sites.

The approach must extend beyond forest management to include incentives which promote a greater use of timber in construction. Timber has the lowest embodied carbon of any mainstream building material. According to *Wood for Good*, 85% of all new homes in Scotland are built using wood, three times more than in England and Wales, a gap which should be closed.

ii. **Focus on climate change outcomes:** Land managers should be rewarded for delivery of climate change outcomes, where possible. ***They must be encouraged to be forward looking, and to manage woods and trees for the local climate expected in 50+ years, favouring species and provenances which evidence suggests will thrive.*** A climate-adapted wood will deliver carbon capture, a more resilient, biodiverse and healthy wood and contribute to flood alleviation. Land managers should have flexibility on how they achieve these outcomes, consistent with their own management objectives. Government should avoid prescriptive policies provided guidelines on biosecurity and biodiversity are observed.



Support must include incentives which promote greater use of timber in construction



iii. **Enforce strict biosecurity:** The risk of pest and pathogen introductions to the UK can be mitigated by minimising the movement of plants across borders. With a substantial increase in tree planting, this is only possible if nurseries have more confidence in forward demand for nursery stock, especially alternative species and provenances. Biosecurity protocols for purchasing seed should be followed and all nurseries signed up to the Plant Health Assurance Scheme.

iv. **Provide public funding for delivery of climate benefits:** A focus on delivery of climate change adaptation and mitigation outcomes will bring more woodland into the scope of natural capital payment schemes that reward delivery of non-market public benefit. Forestry and agroforestry deliver multiple public benefits and should have equivalent access to natural capital payment schemes - Environmental Land Management in England (ELMs), Sustainable Land Management (SLM) in Wales) - as agriculture within integrated land management plans.

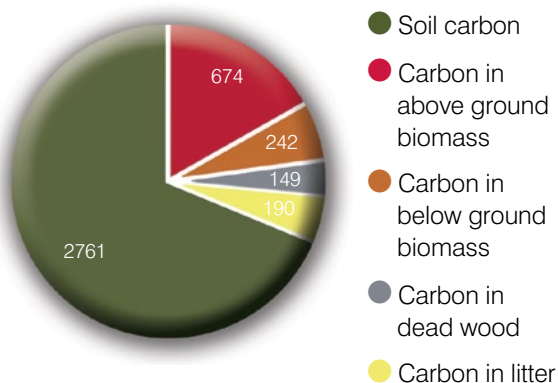
v. **Invest in the research and skills:** To create and manage new woodlands on a huge scale and future proof existing woods will require a considerably larger skilled workforce at all levels. More effort is required to attract school leavers into forestry and countryside management courses and to provide them with the training employers require. ***The current trend to shrink forestry education provision will need to be reversed, more apprenticeship opportunities provided, and forestry embedded in environmental and biological science courses.*** Land managers, including farmers with little knowledge of woodland, will require considerable training support and access to knowledge and experience based on sound evidence and reliable decision support tools.

2. Why we have reached this position

i. Climate change needs to be addressed urgently

There is a growing body of evidence that the pace of climate change is accelerating. The time available to mitigate the expected impacts and adapt to the future environment is much shorter than previously thought. In July 2019, the UK government amended the Climate Change Act (2008) to legislate for net zero greenhouse gas emissions by 2050, the first nation in the world to place such a challenging target on a statutory basis. This followed the Westminster Parliament declaring a 'Climate Emergency' in May 2019. The Forestry Commission (England) *position statement* (September 2019) acknowledges the need for urgent action. Woodlands are a very substantial carbon sink, with over 70% of forest carbon stored in the soil.

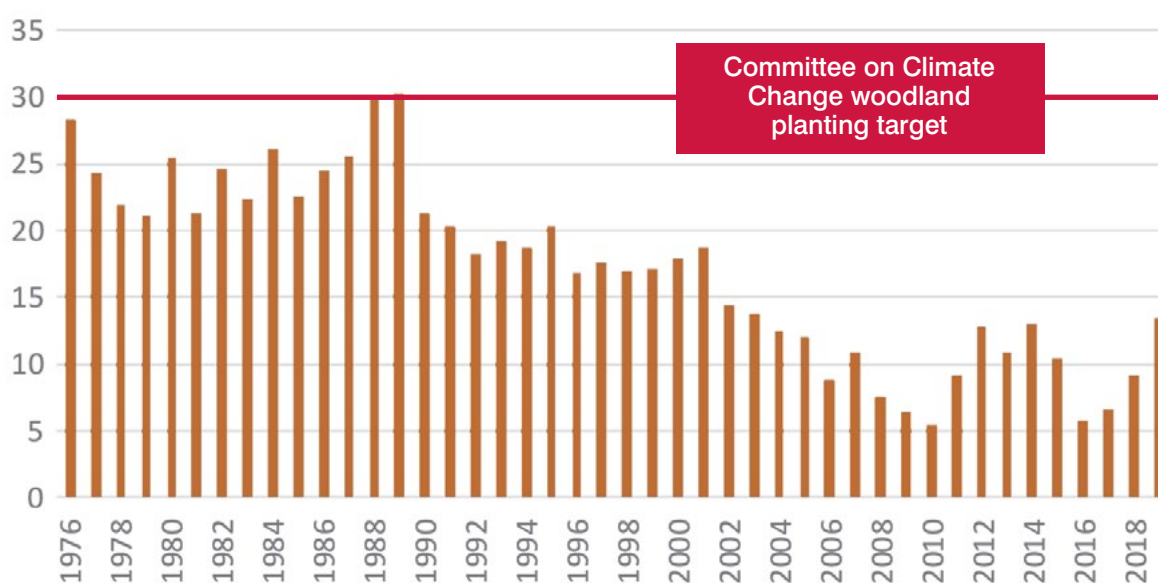
UK forest carbon stock 4,016 MtCO₂e



Source: Forest Research NFI 2019



Woodland creation UK 1976-2019 Thousand hectares



Source: Forest Research NFI 2019

ii. Trees are part of the solution

The Committee on Climate Change states the UK needs to plant a minimum of 30,000 ha (approx. 50 million trees) every year as one component of the measures required to reach net zero carbon emissions by 2050. This compares with a current woodland creation rate of less than 10,000 ha a year over the last five years. Scotland is making progress but **a dramatic change to the pace of woodland creation in England and Wales is urgently required. This requires a combination of structural change to the relative value of agricultural and other land uses, financial incentives which make woodland creation a viable and sustainable land use, a challenge to the land use permanence of new woodlands and a streamlined application and implementation process.** The Woodland Carbon Code and the Carbon Guarantee in England are welcome. A bias by regulatory agencies in favour of woodland creation is also a prerequisite.

Climate change is expected to lead to more frequent and severe periods of summer drought and winter rainfall. Flooding has become a major economic issue. The role trees and woods play in flood alleviation should be more firmly embedded in government policy.



The part trees play in flood alleviation should be firmly embedded in government policy



iii. Planting more trees is not enough

Planting more trees is not a substitute for measures to reduce carbon emissions. Neither will it achieve much unless both they and existing woodlands are well managed to be both environmentally and financially sustainable. This requires a long-term commitment to sound silvicultural practice as set out in the *UK Forestry Standard*. **Existing woods will still represent more than 75% of the total UK woodland cover in 2050. Neglected and undermanaged woodland is more likely to be vulnerable to pests and disease and climate-related stress. The rate of climate change is expected to be greater than woodlands can adapt to without human intervention.**

Adaptation of woodland to climate change means changes to conventional species composition, increased genetic variation within species, changes to forest age and stand structure and a greater focus on managing the health of the whole forest ecosystem including forest soils and ground flora. To achieve this requires significant change to commonly accepted woodland management practices and attitudes to risk. The case for change is set out in the *Climate Change Accord*, of which the RFS is a signatory along with 35 other forestry organisations. *Managing England's woodlands within a climate emergency* (Forestry Commission November 2019) is a welcome guide for practitioners that needs to be widely disseminated and adopted.

There is a pressing need for the forestry sector to develop and commercialise biodegradable tree shelters, or adopt alternative practices which replace single use plastic. Until then, land managers should be incentivised to recycle used plastic shelters.

iv. Faster progress requires action on three fronts

The Forestry Climate Change Working Group, whose work is supported by the RFS, identifies three areas where action is required:

- **Policy:** Government forestry policy must put climate change adaptation and mitigation at its core. Currently climate change is one of a number of existing policies which focus on delivery of biodiversity, water quality and recreation. Rapid change does not happen without a single-minded focus on an overriding goal.

- **Research:** There is a growing body of world class research in the UK on climate change adaptation and mitigation. Dissemination of applied research to forestry practitioners is vital. With more funding, more progress could be made in critical areas such as alternative species suitability, pest and disease resistance, and low impact silvicultural systems.

- **Practice:** Land managers need the knowledge, skills, confidence and incentives to make long term decisions on the structure, composition and management of woodlands so that they are resilient to environmental change. Although the evidence is that change on the ground is currently slow, this will change when the right policies and incentives are in place.

v. Current forestry policies in England and Wales are a barrier to faster progress

Current Forestry Commission policy in England is guided by the Broadleaf Policy (1985) and updated in *Managing Ancient and Native Woodland in England* (2010). **This guidance and the attendant grant structures pre date the evidence of accelerating climate change. For land managers seeking to adapt woods by growing a more diverse range of productive species, this unnecessarily restricts their options and puts many outside the scope of the Countryside Management Scheme.**

Land managers must be given greater flexibility within reason to select from a wider palette of site-suitable species and discouraged from planting species that evidence suggests will not be suitable within a normal rotation.

Agroforestry in its many guises makes a valuable contribution to climate change mitigation, biodiversity and farm income diversification and should be formally included in future natural capital funding schemes. (*see Agroforestry in England report*)

In Wales, the government needs to embrace the role of trees and woods in meeting its climate change targets and establish the organisational infrastructure, systems, processes and culture that will drive change.



3. Our commitment to the climate change challenge

The RFS will:

- Provide a well-respected and informed knowledge exchange service to its members on various aspects of climate change, including support and dissemination of applied research, and promotion of the science and art of woodland management
- Provide learning opportunities for both novices and professionals via training courses, conferences and online case studies, reports and articles.
- Use its own woods to evidence resilient woodland management practices for the benefit of forestry practitioners and the general public. Many RFS members already support trials and pilots in their own woods.
- Work together with other forestry organisations to provide expert opinion on climate change mitigation and adaptation to support government forestry policy development.
- Actively engage young people to promote forestry as an attractive career choice and provide students with outstanding career and learning opportunities.

Case Study

i. Hockeridge and Pancake Wood:

Hockeridge and Pancake is a 74 ha wood at the edge of the Chilterns AONB near Berkhamsted owned and managed by the RFS. The wood is a mix of ancient semi-natural woodland (ASNW) and plantation on an ancient woodland site (PAWS). It features 16 commercial tree species and 50 specimen trees. Many of these species are promoted by the Forestry Commission as possible alternatives to the very narrow range of productive species typically found in UK woods.

One of the key objectives for the wood is to maintain species and habitat diversity for its education value as a model of resilience and climate adaptation and capacity to generate timber and wood fuel income to pay for maintenance and educational activities.

It is difficult to secure financial support for this wood under Countryside Management to deliver multiple public benefits consistent with Climate Change adaptation.



Hockeridge Wood where managing for resilience is a key objective



For more than 135 years, the RFS has dedicated itself to sharing knowledge on the art and science of woodland management so that the accumulated wisdom and experience of landowners, foresters, arborists and others is transferred from one generation to another. *Find other RFS publications here.*

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