

TREES AND CLIMATE CHANGE POLICY

1. Introduction

The last 18 months has seen a surge in public awareness and expectation for action on climate change and biodiversity declines. The activism of Extinction Rebellion and the Student Climate Network has brought these issues to the front pages and pushed the UK Government and other public bodies into declaring 'Climate and Ecological Emergencies'. Herefordshire Council declared a climate emergency in March 2019 and made a commitment to attain climate neutrality by 2030. Herefordshire Wildlife Trust (HWT) fully support this declaration and are keen to support Herefordshire Council in delivering solutions.

Trees are recognised as being very efficient at sequestering carbon, so the option of tree planting to help address climate change is being widely promoted, with different public bodies and organisations setting challenging targets. In addition to storing carbon, trees can help to ameliorate air pollution, mitigate flooding and aid soil retention and water cycling.

Trees can also be fantastic for wildlife, supporting fungi, mosses, lichens, invertebrate, birds and mammals. They can enrich existing wild places and provide essential stepping-stones to allow wildlife to move through our countryside. But - only if the right trees are established in the right places. Planting the wrong trees in the wrong places can cause severe environmental damage to valuable wetland and grassland habitats, degrade existing woodland habitats, impact ground nesting birds and will fail to gain the greatest benefit for wildlife.

Herefordshire Wildlife Trust support the planting of the right trees, in the right places and is issuing this policy statement to support and guide tree planting initiatives across Herefordshire to help maximise the benefit of tree planting for wildlife and people.

2. Policy Statement

The UK urgently needs to increase its woodland cover. We have the lowest woodland cover in Europe, at 13%, of which only 2% is ancient semi-natural woodland (ASNW). In Herefordshire we have 17,785ha of woodland, of which only 6,375ha is ASNW (6,144ha are plantations on ancient woodland sites and 5,266ha are other woodlands). Herefordshire has between 10-20% tree cover (the variation is due to differing audit methods). HWT believe that Herefordshire should aim to increase its tree cover (individual trees and woodlands) by at least 50% by 2030.

HWT believe that establishing new trees and woodlands should be a big part of the action to deliver nature's recovery and help mitigate the impacts of climate change. HWT wants this to bring the maximum gain for wildlife. Mosaics of wooded and open habitats can play an important role in re-building wildlife networks so important to climate change resilience for much of our native wildlife; this aim will be a key driver within Nature Recovery Networks.

Whilst understanding the drive to plant trees to be seen to achieve measurable targets, HWT believe that increasing our tree cover should also be achieved by protecting young

and growing trees, promoting existing saplings and through new natural regeneration. So, we should be thinking about tree establishment and protection not just tree planting.

HWT recognises that environmental land management schemes, uncertainty regarding land values and the agroforestry, business and tax incentives do not currently support landowners in adopting these approaches. We will be working alongside other Wildlife Trusts to influence relevant national policy.

3. Delivery

HWT believe that the greatest benefits for wildlife come from establishing a mix of woodland, hedgerow, parkland and orchard trees. Woodlands with at least 20% open space and a diversity of tree species of differing ages offer the best opportunities for wildlife, while still providing benefits for carbon storage. Tree establishment can be achieved by promoting existing or new regeneration or by planting or by a combination of both.

Trees that grow via natural regeneration tend to be of local provenance and 'the right tree for the place'. Natural regeneration takes a longer time to establish, but the intervening bramble and scrub stages bring other benefits for wildlife.

HWT guidance on promoting natural regeneration:

Natural regeneration is an easy, natural, cheap, low carbon and low resource method of tree establishment as there is little need for canes, ties and guards and time-consuming aftercare. This reduces the carbon footprint of the trees established and of the land used. This doesn't have to be re-wilding on the scale of the Knepp estate in Sussex, it can just be small corners and strips extending or linking other habitats. Here are some good areas to regenerate:

- In woodlands – protect the woodland from sustained deer grazing to allow an understorey of shrubs to develop and protect regenerating trees, planting to diversify where appropriate.
- on intensive ryegrass pasture, amenity land and arable land – if left unmanaged, such land should revert to woodland, via rank grassland and then scrub.
- In hedgerows – identify developing saplings in the hedgerow which can grow into mature trees and tag these so that they don't get cut when the hedge is flailed.
- Protect damaged and heavily managed hedgerows, gap them up, plant more hedges and allow them to expand in width and height to provide more shelter and food for wildlife.

HWT guidance on planting

Make sure that you are not planting trees in the wrong place, as you may damage good wildlife sites, or reduce carbon sequestration in the soils. Sadly, data on the location and quality of such sites in Herefordshire is out of date and not readily accessible, so check with your local ecologists. Do not plant on wildflower rich grasslands, wetlands or commons. Don't plant in expansive open wet meadows, which might be important for lapwings and curlew or in peat bogs or fens. All these natural habitats are very effective at carbon sequestration.

Make sure that you are selecting appropriate tree species for your geographic location, rainfall, soil type etc. HWT recommend native broadleaved species but understand that there is a place for conifers. Refer to the Forestry Commission Ecological Site Classification Decision Support System at <http://www.forestdss.org.uk/geoforestdss/>. Planting should be done in accordance with Forestry Commission guidance and can be funded through a number of grants, including the Woodland Carbon Guarantee.

Check that the stock you are using is grown from seed of local provenance (ideally Herefordshire, but as a minimum England), which will establish better and be less likely to import new tree diseases. HWT recommend that native tree species are sourced from the appropriate Forestry Commissions Geographical Seed Zones. Species planting mixes will be kept under review as the climate changes – the Forestry Commission projections show that in 85 years' time we may have a climate that favours species that are currently found within the southern Mediterranean.

For maximum carbon sequestration, consider the potential lifespan of the trees in each situation and ultimately to the need to ensure a sustainable end use for the timber.

So – where is the right place?

In 2010 Professor John Lawton produced a paper for the Government called 'Making Space for Nature'. This established 4 main principles for improving wildlife, which are still the guiding principles for Nature Recovery Networks. They summarise as: **more, bigger, better and better connected**. So, make sure that your planting meets these principles, helping wildlife spread naturally through the landscape. Here are some good places to choose:

- On the fringes of existing woodland to extend the woodland and for rapid colonisation by other woodland species (but check that this isn't on species rich-grassland or wetlands etc).
- In places where the new woodland will have good links to existing hedgerows or provide good stepping-stones between existing woodlands.
- Plant fruit trees in the gaps in our traditional orchards to extend the life of the orchard. Fruit trees are excellent for wildlife and provide fruit. Plant a full range of local traditional varieties to maintain genetic diversity for the future, which may be important in light of climate change.
- On recent ryegrass grass leys without any wildflowers or on arable land, especially land that has been successively ploughed and has low organic matter and therefore carbon content. Even field margins planted as small copses or wide hedgerows will count, making a difference for carbon and wildlife.
- Plant new hedgerows, especially where hedgerows have been lost from the landscape. Make them as wide as possible and where possible link them to other wooded features. They shelter predators of agricultural pests such as aphids, flea beetles and weevils.
- Along river corridors and in floodplains, plant bankside trees and establish wet woodland (but check you are not planting on valuable floodplain meadows, or open breeding habitat of curlew and other waders). Riverside trees have multiple benefits. They: shade and cool the river; combat temperature increases which deplete oxygen; sustain diverse invertebrates and fish; can alleviate flooding; and reduce soil erosion and nutrient run-off into the rivers.

- In open situations, including parkland, plant new trees to succeed our veteran trees. The UK has the highest density of veteran and ancient trees in Europe, but we need new, growing and maturing trees to replace them. Trees in the open grow more rapidly, with wider crowns and more leaf, increasing their carbon capture.
- Within towns and cities, particularly where trees will provide local climate benefits and pollution control. Trees within urban settings are important for enhancing the public realm providing greater opportunity for people to connect with nature

HWT advice on aftercare of trees

The care and after-use of trees is an important consideration for maximum carbon sequestration. If they produce high-grade timber, the trees that are felled are more likely to be used for building, construction and sustainable products, rather than firewood. The timber will then sequester carbon for longer after felling and can contribute to our reduction in plastic and other non-degradable, unsustainable or recyclable products.

- squirrel control will be needed to prevent the damage or death of developing trees from bark stripping. Grey squirrels are present at very high densities and have few natural predators.
- deer control via fencing or culling will also be required in most areas. We have 6 species of deer in the UK; only 2 are native and numbers are at a record high.
- sensible thinning of trees (both planted and naturally established) will be required to ensure we create healthy trees that can have a sustainable end-use.