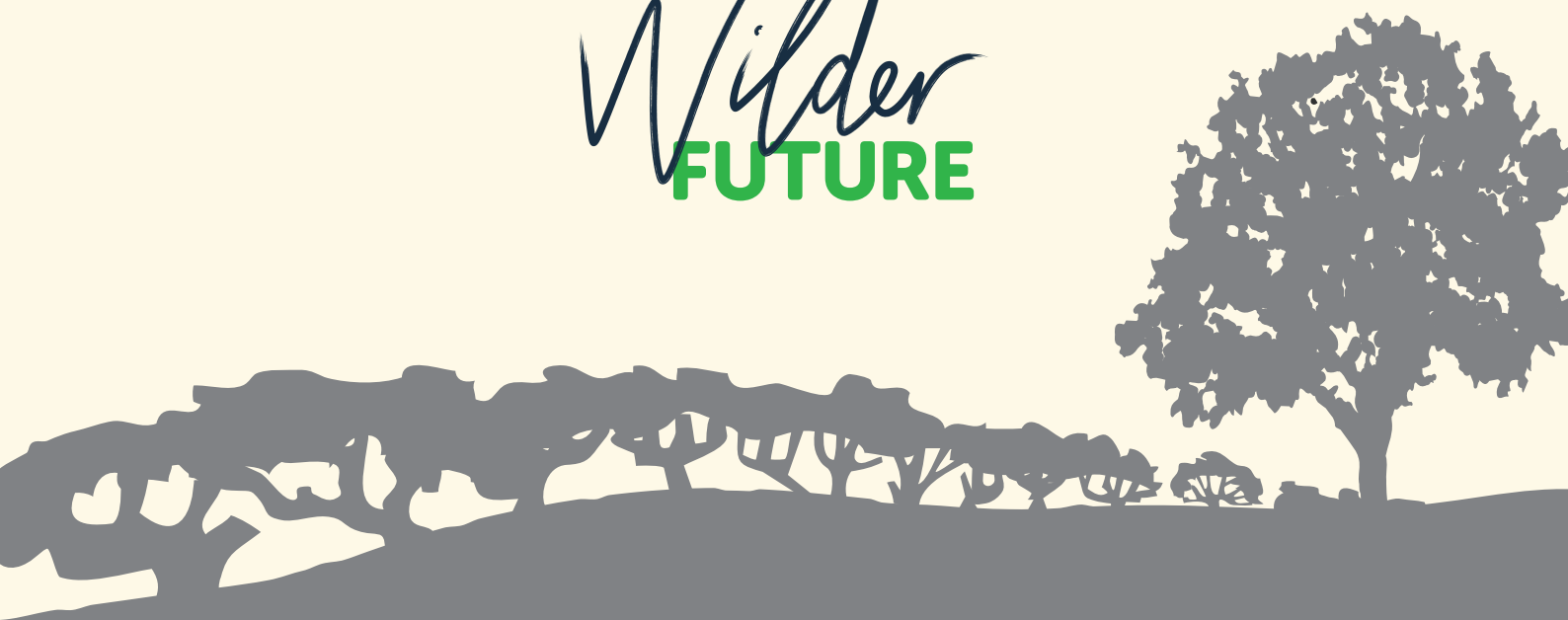


**Herefordshire  
Wildlife Trust**



# Trees & Climate Change Policy

*Wilder*  
**FUTURE**



# 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. HWT fully support this declaration and will 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. However, there is a significant danger that tree planting could disrupt or destroy natural habitats that already good for wildlife or already sequestering carbon. Planting the wrong trees in the wrong places can severely damage valuable wetlands, grasslands and woodland fringe habitats and impact on ground nesting birds, reptiles, butterflies and a host of other wildlife. It can also destroy

important archaeology and geology.

Herefordshire Wildlife Trust support the planting of the right trees, in the right places as part of the contribution to increasing tree cover. We also believe that even greater benefit for wildlife can be obtained by increasing tree cover by other means. The Marches Nature Partnership has recently agreed a target of increasing the tree cover by 50% by 2030.

We have prepared this policy statement to support and guide tree planting initiatives to maximise the benefit of tree planting and increased tree cover across Herefordshire, 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 woodland. In Herefordshire we have 17,785ha of woodland, of which only 6,375ha is Ancient Semi Natural Woodland (6,144ha are plantations on ancient woodland sites and 5,266ha are other woodlands). Herefordshire has between 10-20% tree cover (varying according to audit methods). Herefordshire Wildlife Trust believes that Herefordshire should aim to increase its tree cover (individual trees and woodlands) by at least 50% by 2030. This is a challenging target, especially in view of current Ash Dieback, since Ash provide significant levels of cover in most of our

woodlands and there are at least 500,000 mature ash trees outside woodlands.

The Trust believes 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. The Trust 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, the Trust believes 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.

Herefordshire Wildlife Trust recognises that environmental land management schemes, uncertainty regarding land values and the agro-forestry, business and tax incentives do not currently support landowners to adopt these approaches. We will work alongside other Wildlife Trusts to influence relevant national policy.



# 3. Delivery

Herefordshire Wildlife Trust believes that the greatest benefits for wildlife come from establishing a mix of connected woodlands, hedgerows, river and streamside trees, parklands, and orchard trees. Woodlands with at least 20% open space and a diversity of native tree species of differing ages offer the best opportunities for wildlife, while still providing carbon storage benefits. 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 are generally 'the right tree for the place'. Natural regeneration fosters genetic diversity and natural adaptation, building resilience to disease and climate change in our native woods and playing a crucial role in enabling our native species to adapt naturally to a changing climate. Natural regeneration takes a longer time to establish, but the intervening bramble and scrub stages bring other benefits for wildlife.

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## Herefordshire Wildlife Trust 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 understory of shrubs to develop and protect regenerating trees, planting to diversify where appropriate.
- on intensive ryegrass leys, amenity land and arable land – if left unmanaged, such land should revert to woodland, via tussocky 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.
  - Restore damaged and heavily managed hedgerows: reduce the frequency and severity of flailing; gap them up; protect them from stock grazing; and allow them to expand in width and height to provide more better structure and more shelter and food for wildlife.



## Herefordshire Wildlife Trust guidance on planting:

Make sure that you are planting the right tree in the right place, to avoid damaging good wildlife sites, or reducing 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.

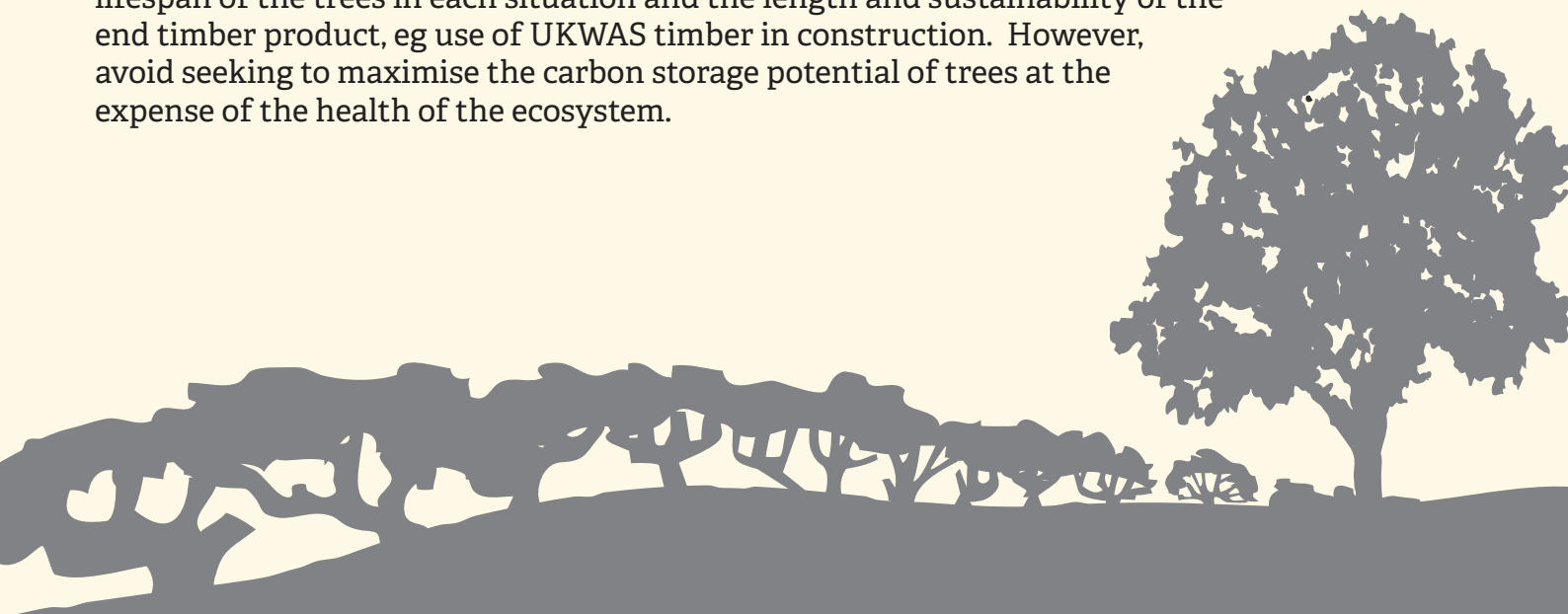
Do not plant on wildflower rich grasslands, wetlands or commons. Don't plant in peat bogs or fens or in expansive open wet meadows, which might be important for lapwings and curlew. Don't plant in scrubby or bracken habitats, especially on commons or woodland fringes, which may be important for reptiles, dormice and butterflies. All these natural habitats are also very effective at carbon sequestration. Also, check that your site is not of archaeological importance.

Make sure that you are selecting an appropriate tree species mix for your geographic location, rainfall, soil type etc. HWT recommend native broadleaved species for conservation objectives but understand that other objectives may be better met by non-native trees and shrub species. Planting of conifers is not recommended, despite their rapid growth, as the dark canopies absorb sunlight so cancelling out any positive impact (the albedo effort) and they tend to have less sustainable after uses. 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. Support is also available through the Woodland Trust's MOREwoods and MOREhedges schemes.

Check that the stock you are using is grown from seed of local provenance (ideally Herefordshire, but as a minimum England or Wales) as this will establish better and be less likely to import new tree diseases. UK & Ireland Sourced & Grown is a certified scheme that guarantees this provenance, helping avoid the spread of disease. 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 in the Midlands that favours species that are currently found within the southern Mediterranean.

All trees store carbon; so, it is crucial that woodland expansion efforts respond to both the climate and ecological emergency. For maximum carbon sequestration, consider the potential lifespan of the trees in each situation and the length and sustainability of the end timber product, eg use of UKWAS timber in construction. However, avoid seeking to maximise the carbon storage potential of trees at the expense of the health of the ecosystem.



## 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 and regeneration locations meet these principles, to help wildlife spread naturally through the landscape. You need to take expert advice, but 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 not on species rich grasslands, in wetlands or on existing valuable fringe habitats etc). Natural regeneration is most likely to be successful in these situations due to the abundance of tree seed.
- In places where the new woodland will have good links to existing hedgerows or provide good wildlife stepping stones between existing woodlands.
- Plant fruit trees in the gaps in our traditional orchards to extend the life of the orchard to benefit wildlife and provide fruit. Plant a full range of local traditional varieties to maintain genetic diversity for the future, which may be important in adapting to climate change.
- On ryegrass leys or on arable land, especially land that has been successively ploughed and has low organic matter and therefore carbon content. Even field margins established as small copses or widened hedgerows will count, making a difference for carbon and wildlife.
- Plant new hedgerows, especially where hedgerows have been lost. Make them as wide as possible and try to link them to other wooded features to create wildlife corridors. 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 not 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 provide ecological continuity. Trees in the open grow more rapidly, with wider crowns and more leaf, increasing their carbon capture and providing niche habitats for a raft of species specifically associated with open grown trees.
- Integrate trees into agricultural systems landscapes through agro-forestry. For more practical information on combining trees and agriculture see the Agroforestry Handbook. The Woodland Trust offers generous funding for suitable proposals.
- Integrate trees into our grazing systems – recreate wood pasture or wood meadows systems with and conservation grazing among open grown trees, individually, in groups and clusters.
- Within towns and cities trees within urban settings are important for enhancing the public realm, provide greater opportunity for people to connect with nature and take part in community action, as well as having benefits for shading, pollution control and amenity.
- In gardens – collectively gardens occupy 30% of the urban area in England, providing significant scope to increase tree cover and help people engage with climate change. Select small trees such as fruit trees, or berry bearing trees such as Sorbus species to benefit people and wildlife.

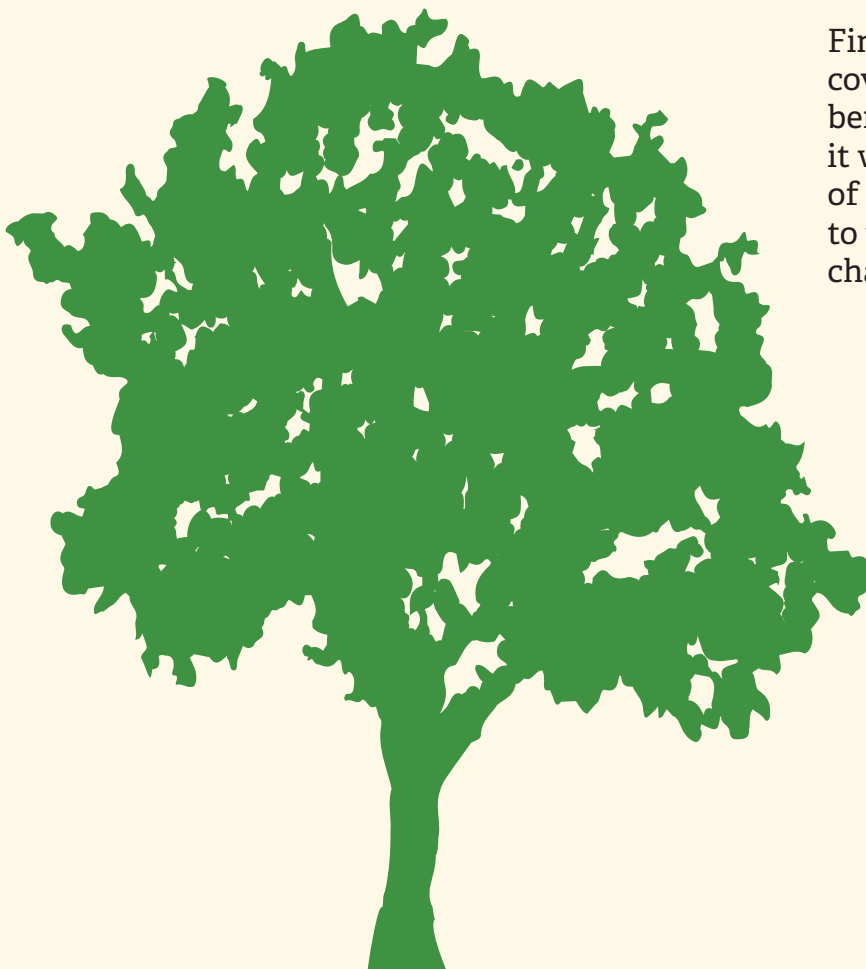
## Herefordshire Wildlife Trust advice on aftercare of trees

The care and after-use of trees is an important consideration for maximum carbon sequestration. More carbon is stored when woodlands are well managed, including through continuous cover regimes (rather than clear-fell and replanting) and when disturbance to the soil is minimised. Over half of the carbon sequestered by trees is stored in the soil. Studies also indicate that woodlands capture more carbon where there is a diversity of species and structure.

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 products with a shorter service life. The timber will then store carbon for longer after felling and can contribute to our reduction in plastic and other non-degradable, unsustainable or non-recyclable products.

So, aftercare is important:

- Squirrel control may be needed to prevent the damage or death of developing trees from bark stripping. Grey squirrel are presently at very high densities and have few natural predators.
- Deer control via fencing or culling or the use of tall tree tubes will 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.
- Silvicultural thinning of trees (both planted and naturally established) will be required to ensure we create healthy trees that can have a long life and serve a range of sustainable end-uses.
- Watering may be needed to establish trees, especially in hot, dry summers.
- Newly planted trees establish more successfully if the area around the root plate is free of competition from grass and other plants.



Finally, tree planting and increasing tree cover has the potential to bring multiple benefits for wildlife and people. However, it will only offset a very small percentage of UK carbon emissions, so we will need to take urgent action to address climate change on many other fronts.

# *Trees & Climate Change Policy*

Herefordshire Wildlife Trust, February 2020

Endorsed by the Herefordshire Local Nature Partnership



**Herefordshire**  
**Wildlife Trust**



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