

Written evidence submitted by The City of London Corporation(TPW0080)

ENVIRONMENT, FOOD & RURAL AFFAIRS COMMITTEE
INQUIRY INTO TREE PLANTING AND WOODLANDS

Memorandum from the City of London Corporation
Submitted by the Office of the City Remembrancer

1. The City of London Corporation protects and conserves 11,000 acres of green spaces in London and south east England – including Hampstead Heath and Burnham Beeches - and over 200 smaller ones in the Square Mile. They include important wildlife habitats, sites of scientific interest and national nature reserves and are protected from being built on by special legislation.
2. Amongst these, Epping Forest comprises some 6000 acres (2,500 hectares). It is supported by a further 1,800 acres (730 hectares) of Buffer Lands. The forest is of international importance for its woodland and heathland habitats and for the presence of certain species such as the Stag Beetle. Two thirds of the area of the Forest is designated as a Special Area of Conservation (SAC) as well as a Site of Special Scientific Interest (SSSI). It contains more ancient trees than any other single site in the UK, as well as being one of the largest areas of extant, managed wood-pasture and parkland in England where open-grown and pollarded trees are its key features.
3. The City Corporation protects and manages over 80% of all of the UK’s ancient Beech trees. Its other areas of management involve managing many tens of thousands of trees outside woodland across ancient common land. Of particular importance are the urban treescapes of Hampstead Heath, Queens Wood, West Ham Park and the City Gardens. All these contribute to very significant carbon storage for the City - up to 40% of its carbon emissions are sequestered each year by the City-owned Open Spaces.

Forestry coverage and tree planting targets

4. The City of London Corporation supports targets to increase tree planting as part of a response to both the climate change emergency and biodiversity declines of over 60% in the UK. However, to avoid damage to important habitats, climate and biodiversity goals must be tackled together. Targets for tree planting and carbon sequestration should be directly linked to considered biodiversity targets. Tree establishment should be by natural processes wherever possible and must demonstrate clear biodiversity net benefits. It must also demonstrate no harm to habitats of principal importance like the wood-pastures that are well represented in the City’s portfolio of nature conservation sites.
5. To address the need for greater biodiversity and public desire for access to the countryside and green space, tree planting targets need to be broader and more inclusive of all treed or wooded landscapes. A tree strategy for England should consider trees in the landscape and not only concerned with forestry policy and woodland expansion.
6. The City Corporation’s urban and wood-pasture treed sites demonstrate not only the huge capacity for carbon sequestration but for public recreation and enjoyment. For example, Epping Forest hosts an average of 4.2 million visits a year, making it the 5th most popular free visitor attraction in London. During this last year of the COVID pandemic, the Forest has seen the number of visitors grow by over 280%.

7. As such, tree numbers and tree densities should not become the dominant metric of tree planting targets. There must be robust biodiversity metrics and plans as well as access targets for public open space. The UK Forestry Standard (2017) should be revised to reflect this broader approach to tree establishment, favouring wood-pastures which can sequester more carbon than the same combined acreage of grasslands and woodlands (Upson et al 2016).¹
8. There is strong evidence that carbon sequestration and carbon residence time (or carbon years) – how long and safely carbon is stored – is not related in a simple way to tree numbers. Research by Cranfield University (Upson et al 2016) conducted over 17 years in Bedfordshire showed that a grazed wood-pasture site was 5% more effective in sequestering and locking up carbon than the same additive area of separate woodland and separate grassland parcels.² The study also emphasised the importance of considering the likely storage time of carbon in soils and trees and a new metric of carbon years. New planting or tree establishment proposals should be able to demonstrate their impact in terms of carbon residence time or carbon years. The longevity of the trees at City Corporation sites like Epping Forest and Burnham Beeches, hugely loved by visitors, are testament to the fact that carbon storage and beautiful, accessible landscapes, rather than dark and forbidding plantation landscapes, can go hand in hand.
9. Slow-growing species, like Oak and Beech, grown in the open and allowed to become large are likely to live longer and be less prone to disease and water stress. Such trees will store more carbon in the long term and are also more likely to retain it for much longer than faster-growing and short-lived species. Slower-growing species should not be disadvantaged in new woodland or tree establishment areas - especially not over non-native conifers. Faster-growing native species, like willow and birch, with their huge dependent insect diversity are important also and to be encouraged alongside the slower-growing natives. Many of these species will be natural colonisers of open grown and won't require planting if close to exiting treed areas.
10. As well as slow-growing species, importance of open-grown trees such not be neglected. These are trees of the greatest biodiversity importance, especially in mosaic landscapes with flowering shrubs (Green, T 2010; Sebek et al 2016).^{3,4} These landscapes also happen to be the inland destinations most popular with the general public, such as Epping Forest and Burnham Beeches.
11. Although open grown trees need space, up to 0.02ha each for full-canopied oaks, they should be near to other similar trees or aggregations of trees; whether in small groups, hedgerows or extended wood-pasture sites. Epping Forest, and its surrounding “buffer lands” of historic parks with old trees, has demonstrated how important landscape continuity is to the biodiversity of rare species like the saproxylic insects of decaying wood and hollowing trees.
12. Consideration should also be given to promoting edge habitats. Areas of mixed tree, grass and shrub habitats are also much richer in biodiversity than standard density (1100 stems per hectare) or monoculture plantations. Edges and transitions between different habitats are vital for insect and bird biodiversity.
13. Local Plan Green Infrastructure Strategy targets should be introduced for establishing more wood pasture and parkland and open-grown/solitary trees and shrubs in the right places,

¹ Upson, M.A., Burgess, P.J., Morison, J.I.L. (2016) Soil carbon changes after establishing woodland and agroforestry trees in a grazed pasture. *Geoderma* 283 (2016) 10–20.

² Ibid

³ Green, T (2010). The importance of open-grown trees: from acorn to ancient. *British Wildlife* (June 2010) vol 21: no.5 334 - 338.

⁴ Sebek, P. et al (2016). Open-grown trees as key habitats for arthropods in temperate woodlands: The diversity, composition, and conservation value of associated communities. *Forest Ecology and Management* 380 (2016) 172–181. <http://dx.doi.org/10.1016/j.foreco.2016.08.052>

especially in urban areas. As well as vital habitat to ensure biodiversity resilience, much of this should be accessible to the public to increase the area of public open space. The COVID-19 lockdowns have demonstrated the need for more open space, with the current lack of accessible areas contributing to over-use and damage of statutorily protected sites, like Epping Forest and Burnham Beeches, from excessive recreational pressure.

14. Tree establishment/planting proposals should be able to demonstrate net biodiversity gain. They should also justify why natural regeneration or the mixture of natural regeneration and planting would not be sufficient on the chosen site, as opposed to planting alone.
15. Connectivity metrics not density targets should be the driving target for biodiversity alongside the carbon sequestration target of total numbers of trees and longevity. Quality not just quantity of trees, and tree habitats, is vital for biodiversity, carbon sequestration and long-term storage. Aligned to connectivity is structural diversity. Open canopies should be encouraged rather than tree numbers and density targets.

Target Delivery

16. The City Corporation is concerned that to deliver such a programme of a sufficiently ambitious scope there are not the right structures in place nor the resources of skilled professionals. To ensure that suitable trees are planted in the right places and at the correct densities, new grant rules are required and new training for those providing the tree establishment services, including those in local authorities and private landowners. The scale of this work is unprecedented and needs a radical new approach. Natural processes need to be better understood, as does the important landscape role of wood pastures. A purely number-driven plastic-tubed approach would be counterproductive for both carbon sequestration and wildlife, as well as people's enjoyment of the countryside and town.
17. Well-resourced advisory services are required, ones which can properly engage with land-managers and the community to encourage the management, restoration and creation of wood pasture and parkland, ancient and other veteran trees and other open-grown trees in the wider landscape or urban communities.
18. The UKFS and the UK Carbon code need to be reviewed and refined to ensure latest scientific evidence, in what is a rapidly developing field of research. For example, this rapid development is reflected in recent scientific papers and assessments of the carbon sequestration value/potential of schemes and especially the carbon residence times of habitats.
19. Given the importance of wood-pasture and parkland as a national priority habitat, the City Corporation, which manages some of the most extensive areas of these in England, would like to see woodland creation grants that fund creation of priority wood pasture and parkland habitat. There also need to be increased financial incentives for the long-term management of such sites, which require much skill and time to maintain, especially where they provide multi-functional outcomes and where public access is welcomed. The City Corporation has been a leader in the re-establishment of extensive grazing in wood-pasture and also in urban situations, using innovative technology to achieve this, with the support of targeted grant aid. However, training is required to encourage the take-up of extensive grazing in this way. Management by extensive grazing allows for cash-flow of income throughout the lifetime of the habitat but especially during the establishment period. Therefore, we also consider that financial and advisory support should be increased and be concomitant with the scale of the required change of land use.
20. Greater collaboration must be encouraged at local level between organisations, experts and individual land-managers around a strong community vision for individual and scattered trees and other new wooded habitats. It should be a requirement of local partnerships, Local Nature

Recovery Strategies and Nature Recovery Networks to identify where dynamic, mosaic habitats such as wood pasture and parkland are located and where management, restoration and creation would best be delivered, especially in relation to historic landscapes (e.g. historic parks and gardens, treed commons and the uplands).

21. There should be recognition that, in some cases, the achievement of 25 Year Environment Plan ambitions for the restoration of priority open habitats, including wood pasture, may require tree removal. The City Corporation has had to carry out such vital work to restore infilled wood pastures and save ancient trees at Epping Forest and Burnham Beeches in recent decades.
22. Buffer Zones around existing open-grown trees and woodland edge habitats must be embedded in the policies with priority funding for carefully designed projects that protect edge and transition habitats. The City Corporation has again been at the forefront of this proactive protection, with its extensive buffer lands at Epping Forest protecting many kilometres of Forest edge and ancient green lanes through historic landscapes.

Previous tree planting ambitions

23. As noted above, treed habitats are not limited to forests. A much broader approach is required and one that is based on recent scientific evidence, such as studies by Bremer & Farley (2010) and Sebek et al (2016).⁵⁶ Natural processes need to be given more space and opportunity with better financial incentives and training support. Such processes will help drive the transformation of our landscapes into more diverse areas of scrub and native trees, vital for insects and our beleaguered farmland and scrubland birds, including the Lesser Spotted Woodpecker, Woodcock and Cuckoo to name a few of a growing list of Birds of Conservation Concern.⁷ Carbon will be sequestered, and wildlife will thrive in these new mosaics, provided important commons, heaths, peatlands and grasslands, like those the CoLC protects at Ashted Common and West Wickham and Coulsden in Surrey, are protected by proper management of their rare flora.

Policy priorities

24. The protection of large open-grown and ancient trees from development is critical. The City of London Corporation signed a Concordat with the Ancient Tree Forum in 2017, joining other organisations like the National Trust in recognition of the vital need to protect these trees for which Britain is internationally important.
25. Creating native wood pasture and parkland where trees are retained in perpetuity would provide a very long-term store for carbon through sequestration in the soils and the longevity of the trees. Although net zero is the target, there will be a need to continue to offset carbon dioxide production beyond 2050 and wood pastures and long-lived trees can continue to capture carbon well beyond this date. Large, old trees and their soils have previously been underestimated for their value for carbon sequestration (Bradley et al 2005)⁸.

⁵ Bremer, L.L. & Farley, K.A. (2010). Does plantation forestry restore biodiversity or create green deserts? A synthesis of the effects of land-use transitions on plant species richness. *Biodiversity Conservation* (2010) 19:3893–3915 doi: <https://doi.org/10.1007/s10531-010-9936-4>

⁶ Sebek, P. et al (2016). Open-grown trees as key habitats for arthropods in temperate woodlands: The diversity, composition, and conservation value of associated communities. *Forest Ecology and Management* 380 (2016) 172–181. <http://dx.doi.org/10.1016/j.foreco.2016.08.052>

⁷ <https://www.bto.org/our-science/publications/psob>

⁸ Bradley, R. I. et al 2005. A soil carbon and land use database for the United Kingdom. *Soil Use and Management*, 21: 363-369

26. Maintaining landscape diversity is another priority. Wood-pasture and parkland is one form of agroforestry and other forms, especially sylvo-pastoralism, would also be welcome. The City Corporation in its sector-leading Climate Action Strategy is looking at using more of its land in this form to sequester carbon and encourage wildlife.
27. It is important that genetic diversity is represented in all planting schemes in order to build the greatest resilience into the tree population for the future. Forests like Epping Forest have stood the test of time as a result of their genetic diversity and it is key that more sites like this are developed in the future which have structural, species and within-species genetic diversity.
28. The importance of parks for people in urban communities, demonstrated by their use during the COVID-19 lockdown, is fully recognised. The huge importance of the City Corporation open spaces to Londoners and others has demonstrated this as well as anywhere in the UK. More open, but tree rich, areas such as parks are more inclusive and put people at their ease. The City Corporation strongly supports the creation and best practice management of parks, especially in new residential areas.

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Policy recommendations

- **Prevention of infill of wood-pasture & parkland:** The City Corporation has experience of this issue and the expense of restoration of such habitats. Measures should be implemented to ensure that tree planting is not allowed to “infill” between ancient and old growth trees and the mosaic habitats of existing wood-pasture and parkland sites.
- **Preventing overplanting of woodland edges:** It is also essential that edges of existing woodlands need to be protected from overplanting – so that important edge habitats are not destroyed, and open-canopy conditions, glades and rides are promoted for biodiversity by suitable grant-aid.
- **Wood-pasture & Parkland restoration incentives increased:** Increased funding should be allocated to protect the UK’s existing carbon stores in natural habitats. Funding should not be directed towards new plantings at the expense of ecosystem restoration projects, such as those managed by City Corporation in its internationally-important open spaces. Restoration projects seeking to protect biodiversity and other ecosystem services should attract increased levels of funding. For example, in wood-pastures and parklands ancient trees need to be protected from over-shading root-competition by younger trees. Incentives for *halo-clearance* around such trees, as practised at City Corporation sites, needs to be continued and payments enhanced to ensure longer than the current 10-year support, in recognition of the need to maintain these stores of carbon and biodiversity in the long-term.
- **Incentives for extensive grazing:** grazing incentives to ensure the dynamics of mosaic and open-grown tree habitats also need to be provided using money saved by switching away from support of any intensive grazing, non-grass-based, high-input swards or predominantly indoor-based systems. Epping Forest and Burnham Beeches both provide excellent examples of how grant aid has assisted in restoring the landscapes of these beautiful sites.
- **Solitary trees and Trees outside woodlands:** Ancient and other veteran trees are also found outside woodland habitats and are important biodiversity stepping-stones and often cultural icons in rural and urban locations

- **Urban treescapes:** Mapping of habitats in urban areas so that they can be counted as contributing to carbon sequestration targets, as the City Corporation will be doing as part of its Climate Action Strategy over the next 6 years. Local authorities should be given the resources to complete such work as a mandatory part of local plans.
- **Local authority tree strategies:** It should be a duty within Local Authority tree strategies to use their powers to identify and protect important trees in advance on land allocated for development. Local authorities will need to be adequately resourced, with strengthened technical expertise, for this additional purpose. Such tree strategies should become a mandatory part of all Local Plan Green Infrastructure Strategies
- **Penalties as deterrents to tree loss:** Greater penalties to deter loss or damage to ancient woodland (including wood pasture and parkland) and ancient and veteran trees given their priority for a sustainable future. Also, appropriate metric for replacement that properly recognises the long-term nature of any true replacement of value for society.

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